

## Healthgrades Bariatric Surgery Report 2013: Your Choices Influence Your Outcome

The most recent data on obesity in the United States show that more than one-third of adults are obese.<sup>1</sup> This equates to more than 78 million U.S. adults. A recent study forecasts that in 20 years, the number of severely obese adults will more than double.<sup>2</sup> Most recently, in June of this year, the American Medical Association officially designated obesity as a disease. This acknowledgement strengthens the discussion about treatment options, including bariatric surgery (weight-loss surgery).

Healthgrades adds to the discussion by giving patients information about the different types of procedures and comparing outcomes at different hospitals. Our risk-adjusted assessment of bariatric surgery complications compares hospitals on a level playing field. It shows patients the relative quality of hospitals that perform these surgeries. This helps patients evaluate their options and discuss them with their doctor.

### Make an Informed Decision

This year's assessment included hospitals performing three different surgeries for obesity in states where data are publicly available. Healthgrades looked at vertical sleeve gastrectomy, laparoscopic adjustable gastric band, and laparoscopic gastric bypass. Healthgrades identified four key issues for consumers when thinking about bariatric surgery.

- 1 Bariatric surgery can be safe and effective.** While all three surgical options had similar complication rates, they differed in the amount of weight loss. As a result, it is important for patients to understand their options in terms of risks and benefits.
- 2 Respiratory issues were the most common complication.** Patients should discuss these risks with their doctor and care team. Together, they should have a plan to prevent them and to deal with them if they occur.
- 3 Hospitals with more experience had better results.** The hospitals that performed higher numbers of the procedures had significantly lower complication rates.
- 4 Quality matters.** Hospitals rated with 5 stars by Healthgrades had 71% lower complication rates than 1-star hospitals and 46% lower rates than 3-star hospitals after adjusting for patient risk factors. Before deciding on when and where to have surgery, patients should use this data to understand hospital relative performance.

Patients and their doctors can make decisions together to help assure the best outcomes possible. Choosing the right hospital for bariatric surgery is a decision that has significant consequences to a patient's long-term health. To help guide that decision, patients should understand each hospital's performance, including the number of surgeries it performs, surgical methods, and complication rates.

This year, Healthgrades identified 140 hospitals whose complication rates were significantly lower than expected given their patients' health conditions. In addition, Healthgrades recognized a subset of these hospitals as the top 10%—the best of the 5-star performers—and named them as Healthgrades Bariatric Surgery Excellence Award™ recipients for 2013.

### CHOOSING THE RIGHT PROVIDER FOR BARIATRIC SURGERY IS CRITICAL

Patients having bariatric surgery at hospitals with 5-star performance in bariatric surgery are:

**71%**

*less likely to experience in-hospital complications* than patients at hospitals with 1-star.

If all hospitals from 2009 through 2011 had performed at the level of hospitals with 5-stars:

**6,417**

*patients could have potentially avoided a major in-hospital complication.*

### WHO IS A GOOD CANDIDATE FOR BARIATRIC SURGERY?

Bariatric surgery may be an option for you if:

- Your body mass index (BMI) is 40 kg/m<sup>2</sup> or higher (severe obesity).
- Your BMI is 35 kg/m<sup>2</sup> or higher (moderate obesity) and you have a serious weight-related health problem, such as diabetes, heart disease, or sleep apnea.
- You are motivated to complete all pre- and post-surgical activities including self-care, doctor appointments, nutritional and psychological counseling, and patient support group meetings.
- You are committed to lifelong lifestyle and behavioral changes including healthy exercise and dietary habits and possible vitamin supplementation.

Your surgeon will determine if you are a good candidate for bariatric surgery, and advise you on which procedures and approach are best for you based on your specific circumstances.

### FIND BARIATRIC SURGERY RATINGS FOR HOSPITALS IN YOUR AREA

[www.healthgrades.com/find-a-hospital](http://www.healthgrades.com/find-a-hospital)

## Surgical Treatment Options for Obesity

To address the obesity epidemic, the U.S. Preventive Services Task Force (USPTF) recommends an intensive, multidisciplinary treatment program for obesity.<sup>3</sup>

Bariatric surgery may be the only option that effectively treats severe obesity in people for whom more conservative measures, such as diet, exercise and medication, have failed. Weight-loss surgery reduces the amount of calories your body can consume by reducing the size of the stomach and changing the way the body absorbs nutrients.

Bariatric surgery is part of a complete obesity treatment plan that includes lifelong healthy lifestyle habits and regular follow-up medical care. To reap the full benefits of these major surgical procedures, consumers should find an accredited program that offers pre-operative education, lifestyle modification (diet and exercise), support groups, and follow-up care.

### How Bariatric Surgery Improves Overall Health

Bariatric surgery's health benefits are driving its popularity. It facilitates long-term weight loss, often 50-70% of excess body weight. It can also reverse complications of obesity, including type 2 diabetes, sleep apnea, high cholesterol, and high blood pressure. Improvements in diabetes can appear just days after surgery, before major weight loss occurs. Additionally, more patients achieve long-term resolution of diabetes with bariatric surgery than with other weight-loss measures.<sup>4</sup>

These benefits improve patients' quality of life and overall health, and reduce the risk of heart disease, stroke, and early death. They may also reduce future healthcare costs, making bariatric surgery a cost-effective solution for health insurers.<sup>5</sup> Together, these advantages drove a 16-fold increase in the number of bariatric surgeries performed in the United States over a 10-year period, growing from 13,386 surgeries in 1998<sup>6</sup> to 220,000 in 2009.<sup>7</sup>

### Procedure Types and Surgical Methods

Bariatric procedures are either predominantly restrictive or malabsorptive procedures, or a mix of the two. The two primary types of bariatric procedures work in different ways to reduce the number of calories available to the body.

- **Restrictive procedures** (sometimes known as gastric stapling, vertical sleeve gastrectomy, stomach stapling, or stomach banding) promote weight loss by reducing stomach size, which limits the amount of food you can ingest.
- **Malabsorptive procedures** (commonly known as gastric bypass) involve reducing stomach size and attaching it directly to the middle of the small intestine (the jejunum). This diverts food past most or all of the first section of the small intestine (the duodenum) where your body absorbs most calories.

In addition, bariatric surgery can involve two different surgical methods: **open**, meaning a large cut or incision in the abdomen, or **laparoscopic**, meaning several smaller, less invasive cuts or incisions in the abdomen.

Healthgrades found that of the 204,069 procedures from 2009 through 2011 across 18 states where data was available (Table 1):

- 93.38% were laparoscopic procedures.
- 6.62% were open surgeries.

### 18 STATES EVALUATED FOR BARIATRIC SURGERY

For bariatric surgery, Healthgrades used data from 18 states representing 55% of the U.S. population, where hospital patient outcomes data are publicly available (all-payer claims data from 2009 through 2011):

- Arizona
- California
- Colorado
- Florida
- Iowa
- Maryland
- Massachusetts
- Nevada
- New Jersey
- New York
- Oregon
- Pennsylvania
- Rhode Island
- Texas
- Utah
- Virginia
- Washington
- Wisconsin

### SUMMARY OF FINDINGS

From 2009 through 2011, across the 18 states studied:

**204,069**

*in-hospital bariatric procedures performed*

**6.49%**

*of patients experienced one or more in-hospital complications*

### OBESITY BASICS: WHAT IS IT? HOW IS IT TREATED?

Experts say there is an obesity epidemic in this country. But [what is obesity?](#)

[www.localhealth.com/article/obesity](http://www.localhealth.com/article/obesity)

How is it measured? [Take this quiz](#) and see how much you know about obesity.

[www.bettermedicine.com/topic/obesity/obesity-basics-what-is-it-how-is-it-treated](http://www.bettermedicine.com/topic/obesity/obesity-basics-what-is-it-how-is-it-treated)

### COULD WEIGHT-LOSS SURGERY SAVE YOUR LIFE?

If you are obese, surgery to lose weight may be safer than carrying around those extra pounds. But is losing weight worth the risks associated with surgery?

[Take a look at the latest research.](#)

[www.bettermedicine.com/article/could-weight-loss-surgery-save-your-life](http://www.bettermedicine.com/article/could-weight-loss-surgery-save-your-life)

## Choose a Hospital With Proven Outcomes: Bariatric Surgery Excellence Award Recipients and Hospitals With 5-Star Performance

Choosing a hospital with proven outcomes is a critical step consumers can take to improve their likelihood of a safe bariatric surgery experience and their best outcome. To help consumers make this choice, Healthgrades objectively evaluates hospital performance in bariatric surgery. For the current report, Healthgrades analyzed clinical outcomes of 204,069 bariatric surgery discharges from 467 hospitals in 18 states (representing 55% of the U.S. population) where data are publicly available from 2009 through 2011.

Healthgrades measured hospital performance based on risk-adjusted in-hospital complications—preventable problems patients had during their hospital stay. Out of the 467 hospitals evaluated, 120 hospitals (25.7%) performed better than expected (5 stars) in bariatric surgery. Your chance of having a complication during bariatric surgery is up to 71% lower at these hospitals that perform better than expected compared to hospitals that perform worse than expected.

Healthgrades identified 48 of these 5-star hospitals as 2013 Bariatric Surgery Excellence Award™ recipients for their exceptional performance in bariatric surgery. These hospitals are the top 10% of hospitals rated for bariatric surgery. They have the lowest bariatric surgery complication rates in the 18 states where data are publicly available.

## How Healthgrades Evaluates Hospital Performance in Bariatric Surgery

Developing the Healthgrades Bariatric Surgery ratings involved four steps:

- 1 The predicted number of complications was obtained for each hospital using logistic regression techniques.
- 2 The predicted number of complications for each hospital was compared with the actual number of complications observed.
- 3 A test was conducted to determine whether the difference between the predicted and actual figures was statistically significant.
- 4 A hospital's performance was categorized into one of three performance categories based upon the outcome of the statistical test.

Healthgrades used the following performance categories:

- ★★★★★ **Better than Expected** – Actual performance was better than predicted and the difference was statistically significant.
- ★★★ **As Expected** – Actual performance was not significantly different from what was predicted.
- ★ **Worse than Expected** – Actual performance was worse than predicted and the difference was statistically significant.

Lastly, Healthgrades selected the top 10% of hospitals achieving a 5-star rating as Healthgrades Bariatric Surgery Excellence Award™ recipients. For details on the rating methodology, see the *Healthgrades Bariatric Surgery Ratings 2013 Methodology*. For details on the award methodology, see the *Healthgrades Specialty Excellence Award™ 2013 Methodology*. You can find both methodologies at [www.healthgrades.com/quality](http://www.healthgrades.com/quality).

## MINIMIZING YOUR RISK OF COMPLICATIONS

1 Learn more about your own personal risks.

Our report found that more than 6% of individuals undergoing bariatric surgery experienced an in-hospital complication. Discuss your individual surgical risks with your doctor and understand:

- What the clinical team can do to minimize those risks.
- What you can do before surgery and during your hospitalization to minimize your risks.

2 Ask questions and be your own advocate.

- Have your healthcare provider explain your condition and medications every step of the way.
- Ask for the results of all your tests and know your goal result for each test.
- Write down the name of the doctors and other healthcare providers participating in your care, and understand their roles to promote coordinated care.
- Make a list of all your medications, why you take them, and the dosage. Carry this list with you. Be sure to ask whom to call if you have a question about your medication.
- Understand your care plan and goals while in the hospital and after discharge.

## DEFINITION OF OBESITY IN ADULTS

$$BMI \geq 30 \text{ kg/m}^2$$

## BMI AFFECTS COMPLICATIONS

Patients with a very high body mass index (BMI) have additional considerations including:

- The need for open versus laparoscopic surgery.
- BMI  $\geq 50 \text{ kg/m}^2$  (super obesity): greater risk of an unsuccessful surgical outcome.
- BMI  $\geq 60 \text{ kg/m}^2$  (super-super obesity): potentially longer surgery, recovery and follow-up times.

## CALCULATE YOUR BMI

Body mass index (BMI) is a way to determine candidates for bariatric surgery. [Calculate your BMI.](http://www.bettermedicine.com/article/determining-your-body-mass-index) [www.bettermedicine.com/article/determining-your-body-mass-index](http://www.bettermedicine.com/article/determining-your-body-mass-index)

## LOSE WEIGHT: SUCCESS SECRETS

Research shows a successful weight-loss plan is both a mind and body undertaking. It involves not only monitoring calories in and out, but also dealing with the psychology of habit change.

[Learn more about weight-loss success secrets.](http://www.bettermedicine.com/topic/obesity/living-with-obesity) [www.bettermedicine.com/topic/obesity/living-with-obesity](http://www.bettermedicine.com/topic/obesity/living-with-obesity)



## Bariatric Surgery Outcomes

### Hospitals Can Foster the Best Patient Outcomes

The potential benefits of bariatric surgery are numerous; however, all surgeries have risks. The short-term surgical and post-operative risks include breathing problems, hemorrhage (bleeding), infection, and death. Long-term risks include nutritional deficiencies and device complications requiring more surgery. In addition, obese patients often have other conditions, such as heart disease, high blood pressure, diabetes, and lung problems, which increase their surgical risks.

As a result, it is important for providers to ensure that only appropriate patients undergo weight-loss surgery. Successful surgical results also depend on a patient's willingness to adopt ongoing lifestyle habits, including a long-term plan of healthy eating and regular physical activity.

To produce the best outcomes, it is critical that bariatric surgery programs:

- Ensure appropriate patient selection
- Identify and reduce (where possible) individual patient risks
- Have surgeons with adequate experience. Each surgeon should have performed at least 125 bariatric surgeries in his or her lifetime and a minimum of 50 cases in the last 12 months.<sup>8</sup>
- Have an overall 12-month facility volume of at least 80 cases

## Key Findings

### Procedure Type Does Not Affect Risk-Adjusted Complication Rates

From 2009 to 2011, the percent of bariatric surgeries performed laparoscopically far exceeded open surgical procedures. Over 93% of all bariatric procedures were laparoscopic and 6.62% were open (Table 1). The risk-adjusted complication rate for open surgical procedures (13.4%), however, was greater than the average rate across all types (6.49%).

Table 1: Frequency of Bariatric Surgery Procedure Types and In-Hospital Complications

Procedure Type	In-Hospital Complication Rate	Observed-to-Expected Complication Ratio	Total Cases 2009-2011	Percent of Cases 2009-2011
Laparoscopic Banding	3.37%	0.96	43,964	21.54%
Laparoscopic Sleeve	5.41%	0.99	24,787	12.15%
Other Laparoscopic	7.07%	1.00	121,799	59.69%
Open	13.40%	1.06	13,519	6.62%
<b>Totals All Procedures</b>	<b>6.49%</b>	<b>1.00</b>	<b>204,069</b>	<b>100%</b>

## RESTRICTIVE BARIATRIC SURGERY PROCEDURES

### Adjustable Gastric Banding (AGB)

- Also called Lap-Band® surgery or gastric band surgery.
- An inflatable band is attached around the top portion of the stomach and tightened like a belt to form a small pouch that serves as a new, much smaller stomach.
- Your doctor adjusts the diameter of the inflatable band and size of the stomach by adding or removing saline (salt water).
- Weight loss is more gradual and less overall, compared with gastric bypass procedures, but reduction in other obesity-related conditions is similar.<sup>9</sup>
- Is popular due to its simplicity, adjustability, reversibility, and low complication rates.
- Is usually performed with laparoscopic techniques, reducing the risks of serious surgical complications.
- The stomach and small intestine still function normally, reducing the risk of poor nutrition, which can occur with malabsorptive procedures.

### Vertical Banded Gastroplasty (VBG)

- Uses a combination of staples and a band to create a small stomach pouch.
- A dime-sized opening at the bottom of the "new" stomach opens into the rest of the larger stomach.
- Plastic or mesh band is wrapped around the opening to help prevent the opening from stretching, and to delay emptying, which helps you feel fuller longer by allowing food to stay in the stomach longer.
- Not shown to be as effective as malabsorptive (gastric bypass) procedures.

### Vertical Sleeve Gastrectomy

- Combines the nutritional benefits of a restrictive procedure with the weight-loss benefits of a malabsorptive (gastric bypass) procedure.
- Involves removing part of the stomach and using staples to create a smaller tube-shaped stomach.
- Achieves significant weight loss quickly and improves both type 2 diabetes and high blood pressure<sup>10</sup>
- Controls hunger better than other restrictive procedures.
- Performed laparoscopically and does not leave a foreign object (mesh or band) in the body, reducing the risks of certain serious surgical complications
- The stomach and small intestine still function normally, reducing the risk of poor nutrition, which can occur with malabsorptive (gastric bypass) procedures.

## Respiratory Complications Are the Most Frequently Occurring Complications

The most frequently occurring complications among patients undergoing bariatric surgery were respiratory, or breathing, complications. This includes pulmonary insufficiency (lungs failing to function adequately after surgery) and lung collapse.

Hemorrhage (excessive or uncontrolled bleeding), gastrointestinal complications, and operative lacerations (arteries, nerves, or other structures inadvertently cut or damaged during surgery) were also among the most frequent in-hospital complications. In-hospital mortality (death) was rare (0.05%) with 4.9 deaths for every 10,000 cases (*Table 2*).

**Table 2: In-Hospital Complications Associated With Bariatric Surgery**

In-Hospital Complication	Rate
Pulmonary (Lung) Collapse/Atelectasis	0.96%
Hemorrhage Complicating a Procedure	0.80%
Surgical Complication of Gastrointestinal System	0.76%
Accidental Operative Laceration	0.63%
Postoperative Pulmonary Insufficiency	0.59%
Mortality	0.05%

## Hospitals With Highest Volume Had Lowest Complication Rates

The number (volume) of bariatric procedures a particular hospital performs was an important indicator of in-hospital complications. As volume increased, risk-adjusted complications showed a statistically significant decrease. As mentioned above, risk adjustment makes comparisons of clinical outcomes by hospital more valid and meaningful by accounting for sicker patients.

- Hospitals with the highest volume (defined as hospitals performing 375 cases or more during the three years of study) had the lowest rate of risk-adjusted in-hospital complications overall with an actual-to-expected ratio of 0.97 (3% fewer complications than expected) (*Table 3*).
- Hospitals with the lowest volumes (defined as hospitals performing less than 75 cases during the three years of study) had the highest rate of risk-adjusted in-hospital complications with an actual-to-expected ratio of 1.40 (40% more complications than expected) (*Table 3*).

**Table 3: In-Hospital Complication Rates by Volume of Procedures Performed**

Procedure Volume Range 2009–2011	Total Cases of All Hospitals in Volume Range	Actual Rate of In-Hospital Complications	Expected Rate of In-Hospital Complications	Actual-to-Expected Ratio
< 75	5,519	8.66%	6.19%	1.40
75-149	9,033	7.36%	6.51%	1.13
150-374	37,486	6.68%	6.53%	1.02
375+	152,031	6.32%	6.49%	0.97

## Fewer Complications at 5-Star Rated Hospitals

- After adjusting for patient risk factors, patients having bariatric surgery at hospitals with 5-star performance were, on average, 70.55% less likely to experience complications than patients having bariatric surgery at hospitals with 1-star performance and 45.93% less likely to experience complications compared to those with 3-star performance (*Table 4*).

## MALABSORPTIVE BARIATRIC SURGERY PROCEDURES

### Roux-en-Y Gastric Bypass (RGB)

- Both a malabsorptive and restrictive procedure.
- Involves stapling the stomach to create a small pouch that holds less food.
- The new stomach pouch is attached directly to the middle of the small intestine (jejunum). This allows food to bypass much of the stomach and the first section of the small intestine (the duodenum), reducing the amount of calories and nutrients that the body absorbs.
- Helps most people lose weight quickly and successfully, but is usually not appropriate if you are severely obese or have had prior abdominal surgery.
- Is often an open surgery, but in some cases RGB is a laparoscopic procedure.
- Compared to open surgery, laparoscopic RGB is safer and can reduce surgical complications such as heart and lung problems, as well as the length of your hospital stay.
- Risks include vitamin and mineral deficiencies that can lead to long-term complications, such as osteoporosis and anemia. Ongoing nutritional supplementation may be necessary.

### Biliopancreatic Diversion With a Duodenal Switch (BPD-DS)

- Both a restrictive and malabsorptive procedure that is effective for very severe obesity.
- Is a complex procedure that involves removing a large part of the stomach using the VSG procedure (see above), creating a bypass around a large part of the small intestine, and diverting bile and other digestive juices.
- The result is reduced digestion and significant weight loss.
- Effectively improves type 2 diabetes and can result in larger long-term weight loss than some other procedures.
- Is not widely accepted as a first-line treatment in less severely obese patients due to its complexity and long-term risks.
- Like RGB, the risks include vitamin and mineral deficiencies that can lead to long-term complications, such as osteoporosis and anemia. Ongoing nutritional supplementation may be necessary.

## SURGICAL TREATMENT FOR OBESITY

Read more about bariatric surgery including gastric bypass surgery and gastric stapling surgery. [www.bettermedicine.com/article/surgical-treatment-for-obesity](http://www.bettermedicine.com/article/surgical-treatment-for-obesity)

- This means that if all hospitals performed at the level of hospitals with 5-star performance across the 18 states, 6,417 bariatric patients could have potentially avoided an in-hospital complication (Table 4).

Table 4: Bariatric Surgery Complications

Hospital Bariatric Surgery Performance Rating	Actual In-Hospital Complication Rate	Expected In-Hospital Complication Rate	Actual-to-Expected Complication Ratio
1-Star	12.15%	6.94%	1.75
3-Star	6.00%	6.29%	0.95
5-Star	3.31%	6.43%	0.52
18 State Average	6.49%	6.49%	1.00
Relative Difference Between 5-Star Compared to 1-Star			70.55%
Relative Difference Between 5-Star Compared to 3-Star			45.93%
Complications Potentially Avoided If All Hospitals Performed at 5-Star Level			6,417

## Bariatric Surgery Results Vary

A comparison of three bariatric procedures, vertical sleeve gastrectomy (VSG), laparoscopic adjustable gastric band (LAGB), and laparoscopic gastric bypass (LGB), suggests differing levels of weight loss. LGB resulted in the highest level of weight loss after one year.<sup>11</sup>

This report shows that LGB patients averaged the highest weight loss at 69% after one year compared to 60% and 34% for VSG and LAGB, respectively. Experts define successful weight-loss surgery as a 50% loss of your excess weight five years after surgery, although weight loss varies by procedure type and complexity.<sup>4</sup>

Table 6: Bariatric Surgery Results Vary

Bariatric Procedures	Weight Loss After One Year	In-Hospital Complication Rate	Mortality Rate
Vertical Sleeve Gastrectomy (VSG)	60%	6.3%	0.07%
Laparoscopic Adjustable Gastric Band (LAGB)	34%	2.4%	0.07%
Laparoscopic Gastric Bypass (LGB)	69%	10%	0.10%

Interestingly, the in-hospital complication rate was also higher (10%) for LGB compared to VSG (6.3%) and LAGB (2.4%). All three procedures shared a similarly low mortality rate of 0.1%, 0.07%, and 0.07% for LGB, VSG and LAGB respectively.

## Plan Ahead and Prepare for Your Health

Weight-loss surgery has been effective for thousands of people, but it takes preparation. If you, or a loved one, are considering weight-loss surgery, your top priority is to find the best care available.

Start by finding a bariatric program that provides excellent care. The American Society of Metabolic and Bariatric Surgery recommends that a program must perform at least 80 cases annually.<sup>8</sup> However, research suggests that high-volume centers performing at least 100 cases annually may provide the best outcomes.<sup>12</sup>

## WHAT IS GASTRIC BYPASS SURGERY?

Gastric bypass surgery involves bypassing a part of the small intestine that absorbs nutrients. For this reason, these surgeries are referred to as malabsorptive procedures. [Learn more about gastric bypass surgery.](#)

[www.bettermedicine.com/treatments/gastric-bypass-malabsorptive-surgery-procedure](http://www.bettermedicine.com/treatments/gastric-bypass-malabsorptive-surgery-procedure)

## KEEP THE WEIGHT OFF FOR LIFE

You've followed a disciplined weight-loss program to reach your healthy goal weight. [Now how do you keep the excess weight off for life?](#)

[www.bettermedicine.com/topic/obesity/maintain-a-healthy-weight-for-a-lifetime](http://www.bettermedicine.com/topic/obesity/maintain-a-healthy-weight-for-a-lifetime)

## HOW CONSUMERS ARE PAYING FOR SERVICES

Healthgrades found that from 2009 through 2011, patients with commercial insurance represented the majority undergoing bariatric procedures.

Commercial insurance accounted for 70.3% of the patients undergoing a procedure, followed by government insurance at 24.8%, and other and self-pay at 4.9%. Medicaid showed the greatest increase in patient coverage from 2009 to 2011 with a 49.37% increase.

Table 5: Bariatric Surgery Volume by Payer

Payer	Total Cases 2009-2011	% of Total Cases 2009-2011	%Change from 2009-2011
<b>Commercial Insurance</b>		70.3%	-16.31%
Blue Cross	29,499	14.46%	-22.63%
Blue Cross HMO	11,712	5.74%	-25.33%
Commercial/Self-Insured	26,950	13.21%	1.76%
HMO/PPO	75,238	36.87%	-17.83%
<b>Government Programs</b>		24.8%	17.85%
TRICARE	3,607	1.77%	-24.76%
Medicaid	18,098	8.87%	49.37%
Medicare	26,966	13.21%	5.89%
VA/Government	1,971	0.97%	34.78%
<b>Other</b>		4.9%	-18.06%
Self-pay	9,787	4.80%	-18.77%
Unknown/Other	99	0.05%	33.33%
Worker's Compensation	142	0.07%	2.13%
<b>All</b>	<b>204,069</b>	<b>100%</b>	



Then, find a surgeon in the program who is highly qualified to perform weight-loss surgery. A surgeon who specializes in weight-loss surgery is a bariatric surgeon. Your bariatric surgeon should have plenty of experience, with at least 125 cases over his or her lifetime and at least 50 in the last 12 months.

Finally, make sure your surgeon is a good match for you. Ask the surgeon about your options, what your personal benefit might be, and how to prepare for such a life-changing event.

You can search for information about a particular hospital or bariatric surgeon at [www.healthgrades.com](http://www.healthgrades.com).

Evaluating your options, discussing them with your doctor, and researching the performance of the care teams and facilities in which you can have bariatric surgery are all steps you can take to better your outcome.

## REFERENCES

- 1 Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity in the United States. 2009–2010. NCHS data brief, no 82. Hyattsville, MD: National Center for Health Statistics. 2012.
- 2 Finkelstein EA, et al. Obesity and Severe Obesity Forecasts Through 2030. *American Journal of Preventive Medicine*. 2012; 42(6): 563-570.
- 3 Screening for and Management of Obesity in Adults: U.S. Preventive Services Task Force Recommendation. [published online ahead of print June 26 2012]. *Annals of Internal Medicine*. 2012. <http://annals.org/article.aspx?articleid=1200996>.
- 4 Poirier P, et al. Bariatric Surgery and Cardiovascular Risk Factors: A Scientific Statement from the American Heart Association. *Circulation*. 2011; 123: 1683-1701.
- 5 Cremieux PY, et al. A Study on the Economic Impact of Bariatric Surgery. 2008; 14(9): 589-596.
- 6 Zhao, Y. (Social and Scientific Systems, Inc.), and Encinosa, W. (AHRQ). Bariatric Surgery Utilization and Outcomes in 1998 and 2004. *Statistical Brief #23*. January 2007. Agency for Healthcare Research and Quality, Rockville, Md. <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb23.pdf>
- 7 American Society for Metabolic and Bariatric Surgery Fact Sheets: Metabolic & Bariatric Surgery. Available at [www.asmb.org](http://www.asmb.org). Accessed 6/22/2012.
- 8 COEMBS Designation Requirements. Surgical Review Corporation. <http://www.surgicalreview.org/coembs/requirements/>. Accessed July 2, 2013. (SRC administers the COE program for ASMB).
- 9 Picot J, et al. The Clinical Effectiveness and Cost-Effectiveness of Bariatric (Weight Loss) Surgery for Obesity: a Systematic Review and Economic Evaluation. *Health Technology Assessment*. 2009; 13(41): 1-190, 215-357, iii-iv.
- 10 Gill RS, et al. Sleeve Gastrectomy and Type 2 Diabetes Mellitus: A Systematic Review. *Surgery for Obesity and Related Diseases*. 2010; 6(6): 707-713.
- 11 Carlin AM, et al: The Comparative Effectiveness of Sleeve Gastrectomy, Gastric Bypass, and Adjustable Gastric Banding Procedures for the Treatment of Morbid Obesity. *Annals of Surgery*, 2013 257(5) 791-797.
- 12 Nguyen NT, Paya M, Stevens CM, et al. The relationship between hospital volume and outcome in bariatric surgery at academic medical centers. *Ann Surg*. 2004 Oct;240(4):586-93. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1356460/>
- 13 Banka G, et al. Laparoscopic vs Open Gastric Bypass Surgery: Differences in Patient Demographics, Safety, and Outcomes. *Archives of Surgery*. 2012; 147(6): 550-556.
- 14 Sudan R and Jacobs DO. Biliopancreatic Diversion with Duodenal Switch. *The Surgical Clinics of North America*. 2011; 91(6): 1281-1293, ix.

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## Healthgrades Bariatric Surgery Excellence Award™ Recipients 2013

The following hospitals are recipients of the Healthgrades Bariatric Surgery Excellence Award™ in 2013, indicating that they are among the best 10% of hospitals meeting minimum volume requirements. Some of the hospitals have multiple locations. In these cases, results for all locations were used in the analysis and each of the facilities is designated as a recipient of the award.

**Table 7: Bariatric Surgery Excellence Award™ Recipients 2013**

State	Bariatric Surgery Excellence Award™ Recipient 2013	City
<b>California</b>	El Camino Hospital	Mountain View
	<i>Including:</i> El Camino Hospital Los Gatos	Los Gatos
	Fresno Heart and Surgical Hospital	Fresno
	Good Samaritan Hospital	San Jose
	Kaiser Permanente Hayward Medical Center	Hayward
	<i>Including:</i> Kaiser Permanente Fremont Medical Center	Fremont
	Kaiser Permanente Oakland Medical Center	Oakland
	<i>Including:</i> Kaiser Permanente Richmond Medical Center	Richmond
	Kaiser Permanente South San Francisco Medical Center	South San Francisco
	Kaiser Permanente West Los Angeles Medical Center	Los Angeles
	Memorial Medical Center	Modesto
	Mercy San Juan Medical Center	Carmichael
	Palmdale Regional Medical Center	Palmdale
	Pomerado Hospital	Poway
	Providence Saint Joseph Medical Center	Burbank
	Santa Barbara Cottage Hospital	Santa Barbara
Scripps Green Hospital	La Jolla	
Scripps Mercy Hospital	San Diego	
<i>Including:</i> Scripps Mercy Hospital Chula Vista	Chula Vista	
<b>Florida</b>	Heart of Florida Regional Medical Center	Davenport
	Ocala Regional Medical Center	Ocala
	<i>Including:</i> West Marion Community Hospital	Ocala
	Sacred Heart Hospital	Pensacola
	University of Miami Hospital	Miami
<b>Maryland</b>	Johns Hopkins Bayview Medical Center	Baltimore
	Saint Agnes Hospital	Baltimore
<b>Massachusetts</b>	Berkshire Medical Center	Pittsfield
	Newton - Wellesley Hospital	Newton
	Southcoast Hospitals Group - Charlton Memorial	Fall River
	<i>Including:</i> Southcoast Hospitals Group - St. Luke's Hospital	New Bedford
	Southcoast Hospitals Group - Tobey Hospital	Wareham
	UMass Memorial Medical Center - University Campus	Worcester
	<i>Including:</i> UMass Memorial Medical Center - Hahnemann UMass Memorial Medical Center - Memorial Campus	Worcester Worcester



<b>State</b>	<b>Bariatric Surgery Excellence Award™ Recipient 2013</b>	<b>City</b>
<b>New Jersey</b>	HackensackUMC Mountainside Hospital	Montclair
	Saint Peter's University Hospital	New Brunswick
	Southern Ocean Medical Center	Manahawkin
<b>New York</b>	Faxton St. Luke's Healthcare	Utica
	Forest Hills Hospital	Forest Hills
	John T. Mather Memorial Hospital	Port Jefferson
	North Shore University Hospital	Manhasset
	<i>Including:</i> North Shore University Hospital Syosset	Syosset
	Westchester Medical Center	Valhalla
<b>Nevada</b>	North Vista Hospital	North Las Vegas
	St. Rose Dominican Hospitals - Rose de Lima Campus	Henderson
<b>Pennsylvania</b>	Barix Clinics of Pennsylvania	Langhorne
	Temple University Hospital	Philadelphia
	<i>Including:</i> Temple University Hospital - Episcopal	Philadelphia
<b>Texas</b>	Bayshore Medical Center	Pasadena
	<i>Including:</i> East Houston Regional Medical Center	Houston
	Citizens Medical Center	Victoria
	Las Palmas Medical Center	El Paso
	<i>Including:</i> Del Sol Medical Center	El Paso
	Memorial Hermann Memorial City Medical Center	Houston
	University General Hospital	Houston
	University Medical Center	Lubbock
	Victory Medical Center - San Antonio	San Antonio
Wise Regional Health System	Decatur	
<b>Virginia</b>	Bon Secours - Maryview Medical Center	Portsmouth
	Sentara CarePlex Hospital	Hampton
<b>Wisconsin</b>	Ministry Saint Joseph's Hospital	Marshfield