This is the fourth and final bariatric surgery Issue Brief in a series by the American Association of PPOs. Bariatric surgery rates have been increasing rapidly over the past decade, along with the rate of obesity. While the rate of complications and the cost of bariatric surgery have fallen, the rise in volume necessitates that health care executives take notice. The leadership of preferred provider organizations (PPOs) needs to understand the trends and the factors that influence use of surgery and the best outcomes. AAPPO’s series examines important elements that impact outcomes, and specifically looks at the PPO’s role in assuring successful weight loss. This in turn reduces extreme obesity’s common co-morbidities. The four AAPPO Issue Brief topics are:

- A Bariatric Surgery Framework For PPOs
- Multidisciplinary Care for Bariatric Surgery
- Engaging Patients to Improve Bariatric Surgery Outcomes
- Benefit Design Strategies

Each AAPPO Issue Brief examines research and practical elements and identifies important considerations for PPOs and their clients. The series is based on the premise that PPOs may either be at-risk for services, and thus have an interest in identifying the highest value approaches to bariatric surgery, or as non-risk PPOs they provide a qualified network to deliver the clinical services. Non-risk network PPOs have an important role in advising clients on high value contracting approaches and in delivering a cost effective and efficient network of providers.

This Issue Brief discusses benefit design for bariatric surgery. While not all PPOs deliver health care benefits, PPO clinical leadership may be called upon by customers to discuss benefit design or to weigh in on medical policy supporting various approaches. Proper design and implementation of bariatric surgery benefit policy is a priority for employers and plans (referred to here as purchasers) offering benefits. This Issue Brief examines evidence for various policy design strategies where available, and notes where additional evidence is needed to guide benefit policy.

About AAPPO
AAPPO is the leading national association of preferred provider organizations (PPOs) and affiliate organizations. More than 193 million individuals are enrolled in a PPO program, which means 69 percent of Americans with health care coverage receive their health care services through a PPO delivery system. A PPO network of providers may be an embedded part of a traditional insurance program or it may be contracted as an element of a self-insured program that includes a third party administrator of claims and care management programs. PPOs also provide network services to newer types of insurance products such as consumer directed health plans.

Who Pays for Bariatric Surgery and Under What Conditions?

Benefit Coverage and Payers

The evidence to date, described in earlier AAPPO Issue Briefs, shows that bariatric surgery is the most effective approach to massive weight loss needed for patients with severe obesity. Surgery results in remission of diabetes in the majority of cases. Surgical treatment for obesity is cost effective due to its impact on co-morbid conditions such as hypertension and diabetes. In the working age
population, bariatric surgery has been shown to promote improvements in productivity.

As noted in earlier Issue Briefs, the rate of bariatric surgery has increased dramatically over the past decade, from less than 40,000 in 2000 to over 220,000 in 2008. This is in spite of variable benefit policy and coverage and lack of uniform criteria for both medical necessity and pre-operative requirements.\(^5\) Bariatric surgery is the subject of both benefit exclusions and benefit mandates in different states and different populations. The 2002 inpatient data (the most recent available) shows that private insurance coverage paid for 83\% of surgeries, Medicare 6\%, Medicaid 5\%, other government sources 3\% and self pay 3\%.\(^6\) This payer breakdown may have changed as government programs have added bariatric surgery as a covered benefit or changed criteria, and price reductions may have increased self pay clients.

Anecdotal reports suggest that bariatric surgery is a covered benefit in the majority of plans offered by large employers. The extent of coverage in mid and small size firms is not known. Also not known is the type of co-pay, co-insurance or deductible requirements that are imposed when bariatric surgery is covered in commercial populations. The National Business Group on Health (NBGH), an organization representing Fortune 500 large employers, indicated that coverage is typically 80\% after co-pays and deductibles.\(^7\) Researchers have reported other arrangements requiring up front payments by the patient. Unlike many other non-cosmetic procedures, bariatric surgery also has a high proportion of self pay clientele.

In terms of public programs, a 2004 analysis found that medically necessary weight loss surgery is covered by Medicaid in 44 states, excluded in five and not mentioned in two states (including the District of Columbia).\(^8\) When medical necessity criteria are met, bariatric surgery is a covered benefit for the Medicare population. Medicare covers bariatric surgery as a treatment for severe obesity for patients with body mass index (BMI) greater than or equal to 35 and a co-morbid condition, when the medical necessity and an effort at medical weight loss has been documented in the patient record. Medicare also covers bariatric surgery as treatment for diabetes in patients with a BMI greater than or equal to 35.\(^9\) The Centers for Medicare and Medicaid Services (CMS) specifies that Medicare coverage is dependent on the surgery being carried out in approved facilities.

The design of health benefits is the subject of some controversy, largely because there are no uniform clinical indicators that predict which patients will achieve medically necessary weight loss following surgery.\(^10\) Health plans and employers have devised a variety of requirements around administration of the bariatric surgery benefit, many designed to assess patient motivation for surgery or control access to the benefit. Because coverage of bariatric surgery is uneven across employers and plans, many purchasers have adopted benefit design strategies aimed at controlling adverse selection that could drive up their costs disproportionately.

Proponents of bariatric surgery argue that the medical necessity of bariatric surgery for patients meeting guidelines is incontrovertible. For this reason, they argue, the surgery should be available without exclusions, benefit limitations or access barriers. Countering this is the prevailing concern by employers and plans that bariatric surgery has the potential for over-utilization, particularly for people who either do not fully meet BMI criteria, people who are unlikely to achieve or sustain clinically meaningful weight loss or for whom medical weight loss may be sufficient. There is also a concern that the early very successful weight loss results achieved in clinical trials from bariatric surgery might not be achieved if the surgery is offered to a broader population that includes less adherent, less motivated patients.

Rather than debate medical necessity over individual cases, some employers and insurers simply exclude bariatric surgery. For plans that do include bariatric surgery as a covered benefit, many require rigorous preoperative screening, medical necessity documentation and often, pre-surgery weight loss attempts.\(^11\) Proponents of this strategy note that these requirements assess patient motivation, and thus ensure the benefit will be delivered to the patients with the greatest likelihood of success.

In a collaboration with Towers Perrin, NBGH examined the issue of bariatric surgery and recommended several benefit design strategies designed to maximize the beneficial outcomes of the benefit for those employers who offer it. NBGH noted that if an employer offers health benefit coverage for bariatric surgery, it should:
• Ensure that only eligible patients are approved for surgery: physicians have determined medical necessity and that the patient will benefit from the procedure;
• Require that eligible patients receive a comprehensive multidisciplinary evaluation, including a medical, nutrition, psychological and weight history assessment;
• Require that only experienced, high volume surgeons who demonstrate a minimal number of post operative hospitalizations and mortality rate are approved to conduct the procedure, preferably at Bariatric Centers of Excellence.¹²

NBGH also recommends that employers examine plan design features related to bariatric surgery in the areas of provider qualifications, facility certification, member support, prior authorization and cost sharing. Several of these categories of benefits are discussed below and others have been addressed in prior AAPPO Issue Briefs.

EVIDENCE BASED BENEFIT DESIGN

Provider Qualifications and Facility Certification

The issues of provider qualification and facility certification were discussed and cited in AAPPO Issue Brief 1. Good surgical outcomes are associated with physician training on a specific procedure and higher volume of surgeries. Similarly, outcomes are better at facilities with specialized experience treating people with severe obesity and performing bariatric surgeries. Larger health plans have adopted policies to designate certain in-network facilities as Centers of Excellence (COE). COEs can be designated either by the plan (see the AAPPO Case Study on Blue Distinction) or by independent evaluators (see the AAPPO Case Study on the Surgical Review Corporation COE Designation).

With this Issue Brief, a case study of the State of Maine benefit design demonstrates how one large employer has used benefit design to leverage higher value bariatric surgery outcomes. State employees who meet medical necessity criteria can access bariatric surgery at designated COEs in Maine with no co-pay or deductible. Employees who select a non-COE facility are responsible for the deductible.¹³

Member Support and Weight Loss Counseling

Patient engagement is an essential predictor and factor in successful weight loss following bariatric surgery. There is a strong evidence base showing that diet, exercise and follow up visit compliance are strongly associated with greater weight loss. Timing of the benefit may also be important to its’ effectiveness: some studies suggest that support programs after surgery may be most meaningful to participants.¹⁴ Issue Brief 3 describes the evidence and best practices associated with patient engagement and offers case studies. The case studies of Healthyroads and HealthPartners illustrate wrap-around programs that complement COE services with coaching, education and patient support.

Issues to consider in benefit design are timing, duration and mandates related to member support and counseling engagement. COE and practice guidelines recommend diet and exercise counseling as a critical component of bariatric surgery therapy.¹⁵ Others have observed that mandated counseling of a prescribed length and participation rate can result in a barrier to care. For example, a 2006 study found a 50% attrition rate for patients required to participate in a preoperative dietary counseling regimen versus those who were not required to do so; at one year following surgery the non-counseling group actually had greater excess weight loss (EWL) and lower BMI than the required group. The authors concluded that there was no beneficial clinical impact resulting from screening out less motivated patients.¹⁶ More flexible benefit offerings for psychosocial support may have the added value of identifying modifiable behavior that can influence weight loss after surgery.¹⁷

There is little dispute that the actual behaviors of engagement - exercise and diet compliance are essential to weight loss. The issue of contention with “support” programs is whether they in fact support the patient, or whether they impose barriers that result in program attrition detrimental to patient health. Benefits for patient
support and counseling should be constructed to rigorously promote appropriate patient selection and engagement. The burden of proof for various support interventions embedded in benefit design should be whether they increase exercise and/or diet compliance and whether they are associated with greater weight loss.

This type of weight loss, an adjunct, not a substitute for bariatric surgery, is supported by evidence.

In short, peri-operative weight loss can reduce operative time and complications; evidence suggests that presurgical weight loss of 5-10% of body weight is beneficial at reducing complications. However, there is little evidence showing that benefit requirements that the patient attempt weight loss for a specific duration of time will result in better outcomes. Benefit policy requirements for a long term medical weight loss program may have the impact of deferring surgery, but such requirements appear unlikely to deter the need for surgery through resolution of a weight problem.

Prior Weight Loss

Commonly found medical necessity criteria for bariatric surgery is BMI greater than or equal to 40 or BMI greater than or equal to 35 plus one or more co-morbid conditions. By definition, a patient meeting these criteria has not succeeded at long term weight loss. Many have made multiple prior weight loss attempts, but have not successfully maintained the loss. Benefit policies tend to have requirements around three types of weight loss:

- **Weight Loss Attempts**: Most plans require documentation of prior weight loss attempts. This information may be of value in identifying eating disorders, as untreated eating disorders may impact surgery outcomes. Research shows that the vast majority of individuals seeking bariatric surgery have attempted weight loss and that prior attempts are not related to successful EWL resulting from bariatric surgery.

- **Medically supervised weight loss for a specified period**: many plans require a medical attempt prior to surgery, often for a specific period of time. Evidence suggests this requirement does not contribute to improved surgical outcomes – for people with severe obesity, medical weight loss rarely results in needed massive sustained weight loss or resolution of co-morbidities. And as noted, most individuals regain the weight. Studies have shown that the number of weight loss attempts or maximum weight loss prior to surgery does not predict weight loss after surgery.

- **Immediate pre-surgical weight loss to reduce surgical risks**: Unlike mandated medical weight loss of a specified period, most bariatric surgeons and many health plans require patients to undergo rapid weight loss immediately prior to surgery. This results in short term benefits of reduced liver size and slightly reduced surgical risk.

As discussed in Issue Brief 1, there are multiple types of restrictive or malabsorption procedures. The procedures can be carried out through open or laparoscopic approaches. The field has generally evolved towards laparoscopic delivery due to lower rates of complications and faster recovery and overall cost effectiveness. Surgeries that impact absorption of nutrients (such as Roux-en-Y) result in greater weight loss but are more complex to perform. Gastric banding has a low rate of complication but can result in lower weight loss and the need for additional follow up. Employers and insurers have an interest in the type of surgery performed as a means to ensure value for benefit dollars spent.

As with many other elements of bariatric surgery, there is controversy about the types of surgery that should be covered and the impact of coverage limitations. Few purchasers mandate a specific type of surgery, but many exclude surgeries considered to be investigational. To the extent insurers have any role directing patients to a specific type of surgery, it is indirectly, by directing patients to COEs. COEs are then accountable for ensuring that physicians are appropriately trained and qualified to recommend and perform appropriate bariatric surgeries. Evidence based guidelines are available to assist purchasers in understanding considerations in the surgical and follow up period.
**Cost Sharing**

No information was located on the types of cost sharing typically included in health plan benefits. Anecdotally it appears that the range of cost sharing alternatives vary widely. They include plans that cover 100% to plans that require patients to pay either a specified dollar amount or a specified percentage. Many plans do not cover all of the required assessments for preoperative evaluation, causing patients to bear significant out of pocket costs.

There is little evidence on the impact of cost sharing either on uptake or avoidance of surgery. It can be assumed, based on other purchasing behavior, that cost to the patient does influence demand for surgery. Of course other factors influence demand as well. Current uptake of bariatric surgery is quite low compared to the number of people who qualify based on BMI. Researchers have attempted to quantify the demand for bariatric surgery to determine if once offered as a benefit, uptake would drive massive demand. Thus far uptake of bariatric surgery has been less than .9% of eligible individuals. Researchers in one study estimated that 9% of the full time US workforce or approximately one third of the obese workforce would qualify for bariatric surgery based on BMI. Based on a simulation of demand under various economic scenarios those researchers predicted that with an out of pocket cost of $5000 or less the demand for surgery would increase to approximately 2% of the eligible population.27

Purchasers (employers and plans) do need to be aware that the potential use of the benefit is variable and may be hard to predict. Demand depends in part on benefit coverage, characteristics of the covered population, availability of bariatric surgery services, industry, wages, word of mouth and other factors. Benefit cost calculations should develop predictions for the purchasers based on a variety of benefit uptake scenarios.

**Benefit Design Issues for Health Plans and Employers**

Even when purchasers (employers or plans) recognize the medical necessity of bariatric surgery, many are concerned that offering access to an expensive benefit can result in adverse selection of the plan or employer.28 That is, patients who need the benefit will migrate to the plan or employer offering the most advantageous benefits. In fact this may be true: some consumer web sites advise patients considering bariatric surgery to assess benefits available through their or their spouses’ coverage and consider changing to the plan with the best surgery benefits.29 There are anecdotal reports of people seeking employment specifically with employers offering generous bariatric surgery coverage for the purpose of accessing that benefit.

When it occurs, “adverse selection” causes a disproportionate expenditure on the service by a self insured employer or health plan, and can put that entity at a competitive disadvantage. Even when there is a return on investment for bariatric surgery, e.g. the patient’s medical expenses are less after the surgery, the purchaser experiences a high initial outlay and may or may not retain the beneficiary for the 3 years it takes to recoup the cost. Concerns about adverse selection may be an underlying reason that many plans or employers do not offer more generous or easily accessible bariatric benefits.

A number of purchasers have developed benefit design approaches to modulate use of bariatric surgery. Some of the approaches are consistent with best practice evidence while others are less so. Employers must use caution in developing benefit limitations to ensure that there are no violations of the Americans with Disabilities Act. Strategies include:

- **Medical Necessity and Appropriateness Assessment:** Virtually all benefit policies require a beneficiary to document medical necessity and undergo clinical and psychological screening. There are variations in how plans cover this preoperative work up, the timeframe required and requirements for which clinicians supervise the activities.
- **Step Therapy:** some plans require the patient to participate in step therapy over a period of time. This can require the patient to complete a medically supervised weight loss program, patient education and nutritional counseling sessions and behavior...
There are variations in the duration required for these activities, whether gaps in participation are allowed, and how much progress must be demonstrated.

- **Employment Period**: Some employers offering a bariatric benefit require an employment waiting period that specifies how long the individual must be covered/employed prior to accessing the benefit.
- **Pre-Operative Education**: Many plans and purchasers require a patient to complete a pre-operative educational program, often one that presents risks and benefits of both medical and surgical treatments of severe obesity. Organizations profiled in AAPPO case studies offer such programs.
- **Cost sharing**: Purchasers may offer bariatric surgery as a benefit rider subject to separate co-pays or deductibles – generally higher. This is generally viewed as a rate limiting approach to offering a bariatric surgery benefit. Conversely some organizations have concluded that bariatric surgery is a good investment in employee health and productivity. The State of Maine provides an example of an organization that reduces copayments for patients meeting criteria and using a Center of Excellence.
- **Cost caps**: Some plans place a total benefit limitation on the cost of bariatric surgery. This can have the intended impact of steering patients toward providers and facilities that offer more efficient procedures and having lower rates of complications. Anecdotally it is reported that COEs offer better pricing than lower volume unaffiliated practices. Cost caps can have an adverse impact on the patient if she/he experiences complications.

### Payment Strategies

The cost of bariatric surgery has fallen over the past decade as more practitioners are trained in the procedures and techniques have improved. Costly complications have also been reduced. PPO contracts are negotiated to ensure the best available pricing for specific surgical procedures. Experts in bariatric surgery also recommend examining innovative payment strategies that incorporate appropriate follow up care. Alternatives to discounted fee for service payment strategies might include:

- **Bundled payment**: PPOs contract with providers for comprehensive pre and post-operative care.
- **Discounted Aftercare**: Although cosmetic surgery is not generally a covered benefits, PPOs might negotiate discounted services for cosmetic procedures following massive weight loss. This could be used as a patient incentive to ensure ongoing patient engagement with a weight loss program.
- **Prometheus**: PPOs may want to consider new episode related payments under development for bariatric surgery. The Prometheus payment system has developed Episode Case Rates that use local data and make adjustments for potentially avoidable complications (PACs).

As benefit packages are crafted, it is also important for payers to consider how they will address coverage of complications due to bariatric surgery in a covered beneficiary, when the surgery was not a covered benefit. Payers may also encounter late complications from surgeries performed when the patient was covered by another source of insurance.

### CONCLUSION: CONSIDERATIONS FOR PPOS

As research evidence accumulates on the effectiveness of bariatric surgery in promoting massive weight loss and its ability to reverse diabetes, there are fewer unresolved questions about medical necessity of the procedures. Questions now focus on developing appropriate medical policy and clinical processes to maximize good outcomes. Purchasers also look to medical policy to help mitigate adverse selection, although as benefit coverage becomes increasingly common, the problem of adverse selection could be reduced.

In this environment, PPOs are asked to supply efficient and effective provider networks to deliver the bariatric surgery benefit. PPO leadership may also be asked to create or weigh in on benefit policy related to bariatric surgery. PPOs should work with their customers to assess factors that may drive use of bariatric surgery and the potential for return on investment by the employer. These factors may include overall health of the employee population, geographic environment, competition from other employers, average employee tenure, wages or
other considerations. In addition to helping clients develop benefits prospectively, PPOs are also positioned to help employers and plans rigorously evaluate the health outcomes and costs of surgery. This service is essential to helping payers assess the impact of a bariatric surgery benefit.

Clinical leadership of PPOs should be prepared to work with clients to ensure that benefits are affordable and consistent with evidence. Such benefits:

• Assure that surgical candidates are clinically ready and motivated for surgery
• Promote a multidisciplinary assessment and treatment approach
• Include evidence based medical policy for pre-surgical evaluation
• Direct patients to high quality and appropriate surgical interventions
• Ensure access to surgery for patients who meet medical necessity criteria and have a bariatric surgery benefit
• Are delivered by contracted high quality providers at competitive rates
• Reward providers and facilities for delivering both on high quality and efficient care
• Meet patient needs for follow up care for short or long term complications
• Support client needs for cost management
• Are evaluated periodically to ensure they meet patient health needs and client objectives

PPOs, their employer and plan customers, and patients all share a common desire to promote successful outcomes for medical interventions. The rise of obesity in the American population has thrust the issue of bariatric surgery to the forefront and raised important issues of how to best design and deliver an obesity surgery benefit. PPO leadership should contribute to benefit design and reimbursement discussions by advocating for evidence based practices and by assuring a high quality network to deliver that benefit.

For examples of benefit design and supporting medical policy, please review the associated Case Study on the State of Maine or visit the Bariatric Surgery Best Practices section on the AAPPO web site for links to several health plan medical policies. http://www.aappo.org/AAPPO_BEST_PRACTICES/ABP_08.cfm
For a listing of numerous health plan bariatric surgery benefit policies, visit: http://www.obeseinfo.com/insurance_gastric_bypass_surgery.htm From this site users can search by policy number to review specific policies. The material in the table has not been reviewed by AAPPO for accuracy. Examples of health plan policies are also linked to AAPPO’s web site, http://www.aappo.org/AAPPO_BEST_PRACTICES/ABP_01.cfm