This Issue Brief is the third in a series addressing issues around bariatric surgery specifically from the perspective of risk bearing and non-risk preferred provider organizations (PPOs). In each Issue Brief we discuss evidence and best practices on an aspect of bariatric surgery, and highlight key issues for PPOs. This information will support PPO executives in engaging with health plan, employer and third party administrator customers about bariatric benefit design and in adopting best practices in contracting for services.

In Issue Brief 1 we discussed the rising rates of obesity and the growing evidence on medical necessity of bariatric surgery for individuals with severe obesity. Evidence based guidelines now recommend bariatric surgery for individuals with a Body Mass Index (BMI) greater than 40 or a BMI greater than 35 and one or more serious co-morbid conditions such as diabetes, hypertension or sleep apnea. Bariatric surgery has been shown to reverse diabetes and hypertension in many patients, and it is the most effective treatment that results in major weight loss. In Issue Brief 2, we discussed the importance of contracting with an appropriate panel of bariatric professionals. An effective multidisciplinary approach to surgery involves surgeons, mental health professionals, nutrition and exercise professionals in a comprehensive and ongoing treatment plan. With each Issue Brief, AAPPO includes case studies profiling best practice organizations.

In this Issue Brief, we discuss the need to engage patients long-term to manage weight and examine best practices for engaging patients in self management. While bariatric surgical procedures create a physiologic environment conducive to major weight loss, patient self management has an essential role in achieving success. Experience of bariatric surgery programs, backed up by results of research studies, show that successful weight loss requires a long term commitment by the patient to lifestyle change that includes better eating and increased exercise. This type of engagement can be brought about through a variety of outreach and follow up strategies targeted to the patient’s needs and delivered through face to face, web-based, telephonic and other modalities.

About the AAPPO Best Practice Initiative

This Issue Brief is part of a series developed by the American Association of Preferred Provider Organizations (AAPPO) examining bariatric surgery policy for PPOs. The Issue Briefs and the AAPPO web site on bariatric surgery (www.aappo.org) were created to provide risk and non-risk PPOs, along with their employer clients, information on best practice considerations for bariatric surgery.

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.
PPO Roles In Leveraging Bariatric Surgery Benefits And Quality

PPOs, as the dominant delivery approach to health care in the U.S., must take notice of obesity and the rapidly increasing rate of bariatric surgery as an important cost driver to their customers. Obesity is a driver of lost productivity and increased health care costs. For example, the National Business Group on Health reports that obese adults incur annual medical expenses almost 40% higher than non-obese adults. Plus, adults with extreme obesity have 118% more lost time from work, and also have twice as many work limitations.¹

To thrive in this competitive environment, PPOs need to understand how to create value products for their customers that address the pressing problem of obesity and related medical costs. With the increase in bariatric surgery, PPOs must position themselves to guide customers towards the networks and benefit offerings most likely to drive better outcomes. Better outcomes in turn drive lower costs by avoiding complications and by achieving remissions in obesity’s co-morbid conditions such as diabetes and hypertension. Creating the right network for customers and meeting the need of patients is a business imperative for all PPOs. Non-risk PPOs can offer a qualified network and clinical expertise to purchasers and risk-bearing entities. Risk-bearing PPOs offer a network and can also use benefit design innovations and incentives to engage physicians and patients in addressing weight management and obesity.

PPOs should consider what strategies are most effective at engaging surgical patients long term and should ensure that contracted bariatric programs are using all of the outreach and engagement strategies necessary to achieve the best outcomes.

WHY PATIENT ENGAGEMENT?

Patients, providers and payers want bariatric surgery to succeed. Success is measured in excess weight loss (EWL) e.g. the expected loss based on starting BMI. When bariatric surgery is successful:

• Patients have better quality of life and longer life expectancy;
• Co-morbidities such as diabetes, hypertension and sleep apnea may resolve or improve;
• Employers benefit when patients are more productive;
• Employers/payers see a return on investment for the cost of surgery.

In order to realize these effects, patients must be successful at weight loss. Patient engagement, as measured by adherence to scheduled visits and compliance with recommended diet and exercise rules, is the most important predictor of success for patients following weight loss surgery.² ³ Exercise in particular correlates to initial weight loss and long term weight management.⁴ If eating habits go unchanged then patients are two times more likely not to lose at least half of their excess weight; and patients who do not increase physical activity are 2.3 times more likely not to lose at least half of their excess weight.⁵

As discussed in Issue Brief 1, bariatric surgery has been shown to have a positive return on investment.⁶ Although medical necessity and treatment effectiveness are the primary concerns in coverage of any medical treatment, payers often also want to know the value of their health care investments and ways to maximize value. Ensuring patient engagement is one important piece of assuring the investment on bariatric surgery will generate the expected health and cost returns. PPOs should promote programs that achieve the best results with patient engagement as an essential value-added strategy to maximize both return on investment and patient health outcomes.

The Need for Long Term Behavior Change

The majority of bariatric surgery patients achieve massive and clinically important weight loss. However, many patients fall short of their own expectations and do not lose all excess weight, and a very small percent lose no weight or actually gain weight. Up to 30% of bariatric patients with good initial loss regain at least some weight.⁷ Obesity is a chronic condition and even with surgery, weight management is an ongoing, long term treatment goal.
Many non-obese individuals are personally familiar with the challenge of losing weight and regaining it over time. Long term behavior change is challenging in any context. Patients who go through bariatric surgery are the same – initial high motivation and compliance wanes over time and relapses can occur. Even after initial weight loss, patients are subject to relapses in old behaviors of poor dietary compliance and lack of exercise. Treatment includes both behavioral reinforcement, and in some cases, addition of weight loss medications. Patients also need long term relationships with bariatric professionals to support them in sustaining both behavioral and medical weight control approaches.

To better understand how to support bariatric patients, it is helpful to understand behavioral characteristics common to patients with severe obesity. Patients who seek bariatric surgery by definition have severe obesity and virtually all of them have tried a variety of weight loss strategies. In fact, one study showed that bariatric patients averaged approximately five times each of having lost over ten pounds through dieting, but all had regained the weight. Thus virtually all bariatric surgery patients begin the process having already unsuccessfully attempted long term behavior change. Surgery will help these patients, but they also need intensive help making necessary changes in spite of past behavior change failures.

It is helpful to know the reasons patients give for lack of weight loss. A recent study of bariatric surgery candidates found gender differences in behavioral explanations, with most falling in these categories:

- Nonspecific explanations related to diet (25.3%)
- Physical activity (21.0%)
- Motivation (19.7%)
- Diet-related motivation (12.7%)
- Medical conditions or medications affecting physical activity (12.7%)
- Time, financial cost, social support, physical environment and knowledge (less than 4%)

These reasons show why successful bariatric programs focus heavily on diet and exercise in addition to surgical preparation, and why a long term relationship that can continually reinforce flagging motivation can help to drive the best weight loss outcomes. Best practice organizations have a variety of strategies to reach patients, understand which ones are high risk and tailor programs and treatments to their individual needs.

Predicting High Needs Patients

Decades of experience with bariatric surgery have also revealed that some patient characteristics predict a greater likelihood of success or lack thereof. Some factors cannot be changed: people of higher socioeconomic status, women, lower BMI before surgery and Caucasians are statistically more likely to have a greater EWL. People who do not have these characteristics typically (but not always), do less well at achieving weight loss.

Some factors associated with lesser weight loss can be changed through medical treatment, proactive outreach or higher intensity care. Factors most amenable to change associated with failure to achieve EWL include: missed appointments, non-compliance with diet and exercise, depression and binge eating disorders. Most of these factors reflect patient engagement in treatment. This information can help bariatric programs design approaches that address specific needs of higher risk patients, and perhaps target them for additional preoperative education and support to improve expected outcomes.

For clinical reasons it is not an option to withhold treatment to high risk individuals in need of bariatric surgery. Rather, bariatric programs should demonstrate to PPOs that they will use patient risk factors to intensify engagement strategies to assure good outcomes.
Bariatric professionals from all disciplines recognize the need for a long-term relationship with patients. In most Centers of Excellence (COE) and best practice programs, patients are encouraged to stay engaged with a bariatric program indefinitely to support their initial and ongoing weight loss. Once surgery has been completed, the bariatric programs have an ongoing therapeutic relationship with the patients to address complications and regaining of weight. Patients may need periodic behavioral reinforcement or nutritional or medical therapy. Behavioral health professionals may be needed to treat depression or eating disorders. As noted in Issue Brief 2, a multidisciplinary team is better prepared to address eating disorders, psychosocial adjustment issues and potentially, the need for pharmacologic therapy.

Engagement Tools

A number of tools are available to support patients in meeting weight loss goals. Some of the approaches can be offered by a bariatric surgery program or COE, others are available through health plans and still others are available in communities either in person or via the internet. For example:

- **Face to face meetings and support**: Bariatric support groups are consistently associated with improved weight loss for patients who attend.\(^{14,15}\) Most bariatric programs offer support group meetings, and many, like the HealthPartners example offered in the case study, require participation both pre- and post-operatively as a condition of surgery. Many programs report fall off in support group participation over time. To keep patients engaged, some COEs and bariatric programs periodically and personally contact members to invite them to participate.

- **Phone based coaching programs**: Phone based coaching programs are used extensively in wellness programs supporting a variety of healthy behaviors such as weight loss, exercise, and smoking cessation. There is not yet a strong evidence base showing which specific elements of coaching or modalities are most effective, so often programs use many approaches simultaneously to communicate with and engage patients.\(^{16}\) Coaching is widely used in wellness and disease management programs. The Healthyroads program case study shows one “wrap around” program that coaches patients to meet the required pre-operative weight loss threshold and supports patients in maintaining healthier diets after surgery.

- **Self monitoring**: Self monitoring by patients – through food journaling, exercise logs and regular self-weighing is beneficial to sustaining motivation and making course corrections in a timely manner.\(^{17}\) Effective programs should encourage continuous self monitoring during the immediate post-operative period and at least intermittent self monitoring in the long term. A bariatric program should build in a review of self monitoring results and provide behavioral reinforcement to patients who are not engaged in self monitoring.

- **Reminders**: Mail, phone, email, and text message reminders are used to communicate with patients about food and exercise maintenance and encourage follow-up visit compliance. Patients are generally positive about this kind of interaction, particularly if patient preferences for the type of communication – email, phone, mail, etc. are considered. Prompts may not result in behavior change when used as stand-alone interventions,\(^{18,19}\) but they are a component of an effective long-term engagement strategy.

Specific approaches

- **Internet Support groups**: There is some evidence that interactive web based and other electronic approaches can engage patients and support weight loss efforts\(^{20,21}\) and social support networks are common on the internet. Many patients are regular internet users and participate in social networks. Many bariatric programs have established support groups or refer patients to internet groups as an adjunct tool for
ongoing engagement. The effectiveness of the internet varies across different groups and may drop off over time, suggesting that this should be one component of a multi-faceted support program.

- Food journaling (diary or internet based): Many programs suggest that patients keep an ongoing record of their food intake. The record has a dual function of helping to make patients aware of their intake and allowing dietary professionals to identify areas where the patient could fine tune intake to improve weight loss. A study conducted by the Kaiser Health Plan found that keeping a food diary doubled weight loss in a medical weight loss program. Journals can be maintained on the internet, via a personal device such as an iPhone or in a paper record. Since self-monitoring decreases over time, patients should be encouraged to experiment with tools and approaches that are convenient and engaging.

As might be expected, higher “touch” and higher intensity programs are generally more costly than web based programs. Though lower cost, lower intensity programs such as internet only often achieve less sustained results. Effective bariatric programs offer a variety of on site and remote follow up options, have the ability to effectively target diverse populations with diverse learning needs and proactively reach out to patients who do not continue to participate.

**Incentives**

As a general strategy for improved patient engagement, a number of employers and health plans are experimenting with use of incentives to activate patients. Incentives can be in the form of a cash or gift reward for certain behaviors or can be a discount or rebate applied to medical costs. Incentives have been used most widely in the health care sector to encourage health plan members to take a health risk assessment and sometimes, to encourage ongoing use of medications or chronic disease management. This strategy has also been adopted to incentivize medical weight loss and may be a future possibility as an adjunct to promoting surgical weight loss.

The theory behind incentives in general is to offer something that people want in order to make palatable a less desirable activity. Some experts in bariatric care have suggested that incentives be designed around documented behaviors rather than on the actual weight loss itself. Some desirable behaviors may include:

- Preoperative selection of bariatric centers of excellence for the surgical procedure
- Maintaining a journal with consistent documentation of exercise and food intake
- Sustained bariatric program involvement as evidenced by regular participation in support groups

Some of the financial and non-financial compliance rewards suggested for bariatric patients include:

- Reduced patient self pay requirements if the patient selects a bariatric COE and completes the program;
- For continuous program involvement rewards might include:
  - Reduced co-payments or free nutritional supplements and vitamins
  - Discounts or free memberships to gyms or exercise programs
  - Opportunity to earn credits towards cash payments made towards surgery
  - Reduced price for cosmetic procedures to remove excess skin resulting from weight
  - Reduced price for follow up gastric band fills
  - Waiving copays for bariatric related follow up visits or medications

For example, the State of Maine has rolled out an incentive in its benefit design approach, offering 100% coverage to beneficiaries if they opt for medically required bariatric surgery at one of the State’s two centers of excellence. This, and other benefit design approaches will be discussed further in the fourth AAPPO Issue Brief.

Overall the evidence on the impact of financial and gift incentives on long term engagement is mixed. However, many plans and payers continue to experiment and as such PPOs may have a role in designing or implementing incentives related to bariatric surgery. As more evidence accrues on the health and economic benefits of weight loss – both for payers and patients – it is likely that more employer/purchasers will adopt incentive strategies.
PPO APPROACHES TO INCREASING PATIENT ENGAGEMENT

PPOs have the option of contracting with a “full service” bariatric surgery provider or working with clients to coordinate multiple vendors who can support patient engagement best practices for bariatric surgery. Contracting options available to PPOs include:

- Disease management – many disease management vendors offer obesity management services among their chronic disease management offerings.

- Wellness programs – these programs can be used to both identify high risk patients through health risk assessments, and to support behavior changes on an ongoing basis. Many wellness programs offer coaching and behavior change support using the engagement tools identified above.

- Bariatric Centers of Excellence – COEs have the dedicated expertise and experience meeting the long term needs of bariatric patients.

PPOs should work with payer and employer customers to ensure that the network and benefit offerings will serve the customers’ benefit needs and deliver the most value for benefit dollars spent on bariatric surgery. This means contracting with providers qualified to deliver high quality clinical care and to engage patients long term in the exercise and dietary management behaviors needed to lose weight and keep it off.

PPO clinical experts should work with payers and purchasers to ensure that they understand the need to keep patients motivated and reinforce behaviors for the payer to gain the best return on investment. They can highlight the importance of directing patients to providers offering long term follow up or offering supplemental wellness programs to patients. Depending on the services offered, key PPO roles in assuring high quality bariatric care can include:

- Contract with Centers of Excellence or bariatric program that makes a specific contractual commitment to long term follow up with the patients;

- Review patient engagement strategies with bariatric providers to ensure that they offer reminders, prompts and other outreach tools, and that they deliver the follow up messages on diet and exercise using a variety of communications approaches, including internet, phone based, face to face support group meetings and other ways that meet the needs of the bariatric surgery populations;

- Review population specific engagement strategies with providers: providers should be capable of providing personalized or higher intensity education and self management assistance to higher risk patients, including males, those with higher BMI and persons with low socioeconomic status;

- Consult with payers/purchasers to ensure that where bariatric surgery is a covered benefit, benefits cover long term follow up from the COE or another wellness provider;

- Review benefit coverage language for payers and purchasers to ensure follow up nutrition and exercise counseling benefits are aligned with best practices in long term bariatric surgery management;

- Consider working with payers/purchasers on pilot tests for incentive programs that reward patients for ongoing participation in a follow up bariatric program and for effective behaviors that results in weight loss;

- Facilitate patient education and coordination, including offering web based education, personal health records for patients, interactive electronic food journals or other innovative tools.

Case studies associated with issue brief feature examine the Healthyroads Bariatric Surgery program, and the HealthPartners integrated program, “HealthPartners’ A Call to Change… Healthy Lifestyles, Healthy Weight – Weight Loss Surgery Edition.” HealthPartners requires a commitment to patient participation in the
weight loss process and offers intensive support to support that participation. The HealthPartners course is provided to plan members in addition to services provided by contracted COEs to ensure that all covered patients have access to the same information and support. Healthyroads is offered by a wellness organization that contracts directly with large self insured employers to support pre- and post-surgery protocols through coaching and internet based engagement tools. Many organizations and plans offer similar wrap around or support services to engage patients. We encourage PPOs to look for best practice features as they develop bariatric surgery contracting strategy.

Future Directions

PPOs should prepare to support their clients in addressing the rising rate of obesity and bariatric surgery. With bariatric surgery the most effective tool for massive weight loss, more patients and payers will turn to this approach to reduce weight and serious co-morbidities that accompany obesity. PPOs must help their clients maximize the impact of surgery by ensuring bariatric programs are capable of engaging patients in preliminary weight loss and are committed to supporting patients in the long term. PPOs must position themselves as expert consultants to payers. Further, they should require contacted surgery providers to demonstrate – through data – capability to fully engage and sustain engagement with bariatric surgery patients.

On behalf of AAPPO we hope this Issue Brief provides information, resources and case studies to assist PPOs in gaining that expertise.
REFERENCES