White Paper

The Price of Obesity

COSTS BEYOND PATIENT HEALTH

Nearly 40% of Americans are obese having a body mass index (BMI) over 30. Obesity is not a lack of willpower; it is a biologic, environmental, and behavioral disease.[1] As such it should be treated like a disease and without judgement.

The implications of this disease are far-reaching. Obesity is linked to three of the five leading causes of death (heart disease, cancer, and stroke)[2] and tied to 400,000 deaths each year.[3] As such, it is considered one of the top preventable causes of death. In addition to physical complications experienced by obese individuals, there are economic consequences that impact those suffering from obesity, the doctors and hospitals who treat them.

HEALTH ISSUES FOR OBESE PATIENTS

Beyond weight-related problems, obese individuals are almost certain to have comorbid conditions that require medical treatment. These might include hypertension, heart disease, high cholesterol, stroke, Type 2 diabetes, gallbladder disease, and certain types of cancers.[4,5] Correspondingly, obese patients also are more likely to be prescribed pharmaceuticals to manage medical conditions.[6]

The need for surgery brings additional complications. Procedures take longer, surgery sites are deeper which creates greater opportunity for infection, and more intraoperative blood loss occurs as does slower healing times due to reduced blood flow in adipose tissue.[7,8] Continued tension on the surgical incision further impairs healing.[9]

Additional challenges for obese patients vary depending on the type of surgery. Obese patients undergoing spinal surgery are more likely to be admitted to an intensive care unit and to need a ventilator.[10] Hip surgeries have higher risks for dislocation, greater risk of wound complications, require more post-operative pain management, and have longer hospital stays.[11,12,13] Patients having elective breast surgery such as reduction or augmentation were twenty-two times more likely to suffer a complication.[14] As noted, all of these surgeries take a longer amount of time, requiring that the patient remain under anesthesia for an extended period.

ECONOMIC BURDEN ON DOCTORS AND HOSPITALS

Not surprisingly, these complications also come with financial costs. Many of the risks facing obese patients translate to economic challenges for doctors and hospitals. Patients with post-operative infections or who are readmitted to a hospital, both of which are more likely for obese patients,[15,16] can result in financial repercussions for a health care system. The Hospital Readmission Reduction Program created by the Centers for Medicare & Medicaid Services (CMS) penalizes hospitals for “higher-than-expected” readmission rates in several categories. This is discriminatory because hospitals serving socially disadvantaged patients, including those who may not be able to afford medication or do not have the resources to follow-through on post-surgical rehabilitation, are held to the same standards as more selective hospitals.[17]

Additionally, reviews of surgical outcomes are based on standardized measures. Surgeries that are more complicated or time-consuming, such as those required by obese patients, do not fall within the identified parameters. As a result, providers may not be reimbursed fully by insurers like Medicare.[18] These outcomes were validated by a JAMA study that confirmed hospitals are penalized for doing medically complex surgeries and serving a socioeconomic mix of patients.[19]

The length of time required for surgical procedures also has financial implications for doctors and hospitals. Most hospitals follow a fee-for-service model. These are based on surgical protocols developed with the assumption of an "average" no-risk patient. Consequently, the additional time required for surgery on obese patients results in a receipt of a lower fee. Additionally, while the cost of providing services have increased, Medicare typically provides a flat reimbursement which does not cover the cost associated with "more expensive" patients. This problem was exacerbated when CMS implemented reduced reimbursements for off-campus hospital outpatient departments.[20]

Because of these risks obese patients may be discouraged from getting surgery. The National Health Service in the United Kingdom proposed the controversial measure of restricting elective surgery for up to a year for patients who are obese or smoke. During this period the patients would receive support and monitoring while waiting to become eligible for surgery. Public outcry was immediate and severe. The plan was viewed as discriminatory because obesity is an illness[21] and it was seen as "rationing on the basis of poverty."[22] This practice is not limited to the U.K., however, and obese patients in the United States have had similar experiences. Treatments including elective procedures and organ transplants, might be denied because they are less effective or too risky for the patient.[23]

Despite these practices, there is overwhelming consensus that delaying or denying surgery is not a viable option. Symptoms can worsen or lead to additional conditions if not treated. Moreover, failing to provide adequate care to obese patients is discriminatory[24] and hospitals have a responsibility to provide a quality of care to all patients[25] irrespective of the costs. Opposing viewpoints remain a topic of debate in the medical community and with obesity rates continuing to increase across the nation, it will remain a contentious issue.

MINIMIZING REVENUE LOSS

In reaction to the health care crisis, a variety of approaches have been implemented in an attempt to provide affordable, quality care for patients. Obese patients, in particular, face unique challenges that jeopardize not only their health but their financial well-being. This has a ripple effect with doctors and hospitals bearing the economic brunt. In the absence of a long-term, comprehensive solution, possible measures that consider treatment and outcomes for obese patients and the economic burden to providers are discussed below.

PREVENTION

Prevention offers the greatest benefits to the myriad of issues associated with obesity. For most, however, it is not an easy or quick fix. Dieting and weight maintenance are likewise challenging. Many people, regardless of body type, have difficulty losing weight and physical and emotional obstacles are a further hurdle for obese individuals.[26] [27]

SURGICAL CONSIDERATIONS

For many obese patients, surgery cannot be avoided. As such, doctors must be educated on the tools and equipment necessary to treat obese patients, as well as procedural adaptations that may be needed. Recommending less invasive practices also reduces costs and minimize negative health outcomes.[28]

CREATING IN-HOUSE OPPORTUNITIES

More immediately, it makes economic sense to identify options that minimize risk and promote positive post-operative outcomes. Since weight loss provides the best chances at achieving such outcomes, recommendations for monitored weight-loss programs should be a surgical criterion – not for patients, but for doctors in charge of their care. Surgeons and anesthesiologist should become informed on the benefits of preoperative, intraoperative, and postoperative medically-supervised Very Low Calorie Diets (VLCD) or Low Calorie Diets (LCD). Increased awareness of the effectiveness of these options can increase surgery eligibility, minimize medical complications during surgery, and reduce post-surgery hospital costs and readmissions.

Physicians can create alerts in electronic health records for patients with high BMI and intercede to offer resources for weight management and counselling. These tools already exist in most hospitals and can prevent 43,000 cases of obesity over 10-years. Further, referring surgical patients to an in-house weight loss program provides monitoring and support. A supervised program helps patients lose weight and promote positive outcomes. Patients also will be better positioned to adopt a lifestyle change that will allow them to enjoy additional benefits of their surgery (e.g. low impact exercises, ease of breathing, etc.).

SUMMARY

Obesity among Americans is at epidemic levels and effective, long-term options are scarce, underfunded, or ineffective. As a result, the need for medical treatment for obesity-related diseases continues to rise, as does the economic burden for patients, doctors and hospitals. The medical community must consider new and different methods that provide the level of care patients deserve and counter the medical and financial burdens associated with serving obese patients. This requires a present and future view that addresses obesity as a medical condition while simultaneously treating the physical and mental health issues it generates.

REFERENCES

1. *Hruby, A., & Hu, F.B. (2016). The epidemiology of obesity: A big picture. Pharmacoeconomics*
2. *Centers for Disease Control and Prevention. (2018, August). Overweight & Obesity; Data & Statistics.*
3. *Lee, B.Y. (2016, September 23). How our health-care system is feeding the obesity epidemic. Time.*
4. *Bierl, etal.*
5. *Polley, S. (2006). The obesity problem in U.S. hospitals. The Hospitalist.*
6. *Trust for America's Health and Robert Wood Johnson Foundation. (2018, September). The state of obesity 2018: Better policies for healthier America.*
7. *Johns Hopkins. (2011, June 29). Surgical complications twelve times more likely in obese patients. News and Publications.*
8. *Miller, A. M. (2016, April 11). Too fat for surgery. U.S. News and World Reports.*
9. *Theetes, etal. (2015, July 31). Obesity – A risk factor for postoperative complications in general surgery?*
10. *Miller, A.M.*
11. *Miller*
12. *Russo, M.W., Macdonell, J.R., Paulus, M.C., Keller, J.M., & Zawadsky, M.W. (2015). Increased complications in obese patients undergoing direct anterior total hip arthroplasty. The Journal of Arthroplasty.*
13. *Kadry, B., Press, C.D., Alosh, H., Opper, I.M., Orisni, J., Popov, I.A., Bordsky, J. B., & Macario, A. (2014). Obesity increases operating room times in patients undergoing primary hip arthroplasty: A retrospective cohort analysis. Peer J.*
14. *Johns Hopkins*
15. *O-Riordan, M. (2017, August 11). Obese cardiac surgery patients a burden on ICU resources. TCTMD.*
16. *University of Alberta Faculty of Medicine & Dentistry. (2015, June 10). Obese patients at high risk of post-surgery complications. Science News.*
17. *Georgetown University Medical Center. (2016) Could minority-servicing hospitals be unfairly penalized by CMS for readmissions?*
18. *CDC*
19. *Joynt, K.E., &Jha, A.K. (2013, January). Characteristics of hospitals receiving penalties under the hospital readmissions reduction program. JAMA*
20. *Pearl, R. (2017, November 7). Why major hospitals are losing money by the millions. Forbes.*

21. *Rawlinson,K., & Johnston, C. (2016, September 3). Decision to deny surgery to obese patients is like 'racial discrimination'. The Guardian.*
22. *Pillutla, V., Maslen, H., & Savulescu, J. (2018). Rationing elective surgery for smokers and obese patients: Responsibility or prognosis? BMC Medical Ethics*
23. *Miller*
24. *Shaw, D. (2016). Delaying surgery for obese patients or smokers is a bad idea. BMJ, 355.*
25. *Polley*
26. *Stetka, B. (2018, August 23). A molecular reason why obese people have trouble losing weight. Scientific American.*
27. *Beaumont, A. (2015, September 11). Fat is an emotional issue. Psychology Today.*
28. *ACOG, Committee on Gynecologic Practice. (2015, January). Committee opinion: Gynecologic surgery in the obese woman. The American College of Obstetricians and Gynecologists.*
29. *Trust for America's Health and Robert Wood Johnson Foundation. (2018, September). The state of obesity 2018: Better policies for healthier America.*

ABOUT ROBARD CORPORATION

Robard Corporation, a privately-owned company headquartered in central New Jersey, provides health care professionals with a turnkey solution to operate their own medically-supervised obesity treatment program. Respected leaders in the weight loss and management industry for more than 40 years, Robard's evidence-based programs are complimented by scientifically-designed nutrition products and best-in-class business services to help physicians, surgeons and hospitals treat mildly overweight to morbidly obese patients. To learn more, call us at (800) 222-9201 or visit www.Robard.com.