THE UNDERULITIZATION OF BARIATRIC SURGERY: HEALTH INSURANCE DESIGN, WEIGHT STIGMA, AND PATIENT-PROVIDER COMMUNICATION

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Extreme Obesity in the United States

- 11.5% of women and 6.9% of men have a BMI > 40 kg/m^2.[1]
- 13.8% of non-Hispanic Blacks have a BMI > 40 kg/m^2.[1]
- As of 2016, over 32 million Americans adults had either Class III or Class II obesity (BMI 35–39.9 kg/m^2) and who would be potential candidates for bariatric surgery.[2]

1-Hales et al. NCHS Data Brief 2020:1–8 .
2-Campos et al. Ann Surg 2020;271:201–9.

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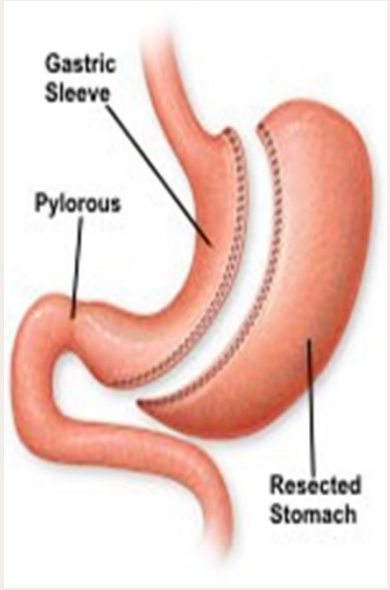
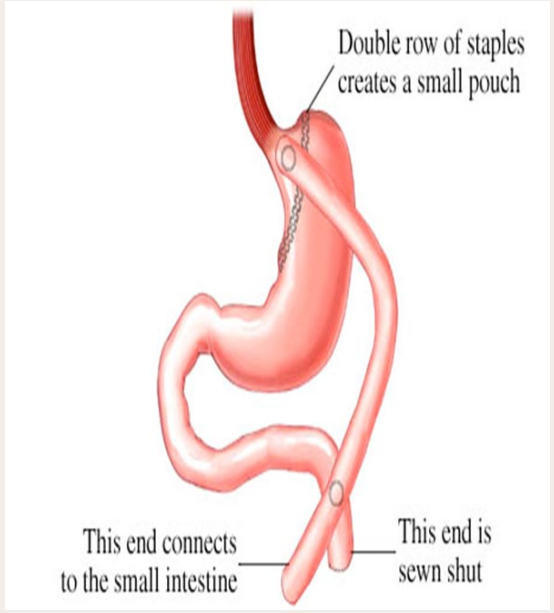
Bariatric Surgery in the United States

- Approximately 256,000 bariatric procedures are performed annually.[2]
- Only 1 in 100 Americans who meet the BMI criteria for bariatric surgery have it done.[2]
- While extreme obesity differentially affects African-Americans and Hispanic-Americans, they represent only 25% of individuals who have surgery.[2]





2-American Society for Metabolic and Bariatric Surgery 2019.

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The Underutilization of Bariatric Surgery in the United States

The reasons for underutilization are likely multifactorial:

- Health Insurance Coverage and Benefits Design
- Weight bias and Stigma
- Patient-Provider Communication

Sarwer et al., Role of weight bias and patient–physician communication in the underutilization of bariatric surgery. Surgery for Obesity and Related Diseases, in press.

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Insurance Coverage for Bariatric Surgery

- Insurance coverage for the procedures has expanded over the past decade
- As of 2018, bariatric surgery coverage provided by
  - *Medicare*
  - *49 state Medicaid programs*
  - *43 state employee programs*
  - *individual and small-group insurance markets in 23 states*
  - *most commercial insurers (~93%)*

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Insurance Coverage for Bariatric Surgery

- Insurance coverage does not necessarily mean <u>easy access</u> to bariatric surgery
  - *Precertification criteria such as 3-6 months of preoperative medical weight management (MWM)*
  - *Disproportionate patient cost-sharing*
  - *Extreme workup and documentation*

Gasoyan et al., 2019; Tewksbury et al. 2018, 2020.

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Investigations of Insurance Plan Design and Utilization of Bariatric Surgery

- Data Source
  - *PHC4 databases in Southeastern PA during 2014-2018*
- Study Populations
  - ***Study 1**: bariatric surgery patients during 2014-2018 (N = 14,348) and a 1:1 matched sample of surgery patients and those who were eligible for surgery but did not undergo surgery.*
  - ***Study 2**: privately insured patients who underwent bariatric surgery in 2016 and a 1:1 matched comparison group (N = 1,054).*
  - ***Study 3**: cohort of patients who underwent bariatric surgery in 2016 and for whom the insurance-mandated precertification requirements were known (N = 2,717).*

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Summary of the Three Studies

- In Southeastern Pennsylvania:
  - Rates of bariatric surgery have increased among African-American and Hispanic-Americans.
  - Patients with PPO and Fee-for-Service option of Private Insurance or Medicare are receiving surgery at higher rates.
  - Preoperative Medical Weight Management appears to be a barrier to care.
  - Preoperative Medical Weight Management, as well as Cardiology and Pulmonary clearances, are not related to a reduction in complications in the first postoperative year.

Gasoyan et al. Medical Care 2020; 58(11): 952-957
Gasoyan et al. Surgery for Obesity and Related Diseases 2021; 17(5): 860-868
Gasoyan et al. Surgery for Obesity and Related Diseases, in press.

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Implications for Providers and Patients

- It is time to reconsider insurance-mandated precertification requirements
  - *Insurance-mandated 3-6 months MWM is a barrier to bariatric surgery*
  - *The MWM requirement, as well as the cardiology and pulmonology evaluations, were not associated with a reduction in inpatient healthcare utilization in the first postoperative year*
- It is time to reorganize care around the patient
  - *Many bariatric programs pivoted to increased utilization of telemedicine appointments for preoperative assessments and postoperative follow-up visits*
  - *Continued use of telemedicine could address barriers to completion of preoperative assessments and engagement in postoperative care.*

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Implications for Payers

- It is time for the application of value-based insurance design for bariatric surgery
  - *Payers would achieve higher return on investment if the utilization of bariatric surgery increases among patients with BMI≥ 40 kg/m^2 and T2D*
  - *Patient out-of-pocket costs should be based on the clinical value of a specific bariatric procedure*
  - *Some employers have already incorporated bariatric surgery into their self-administered benefit plans via utilizing VBID*

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The Washington Post

Democracy Dies in Darkness

Gasoyan argues changing insurance coverage is feasible and provides medical benefits over the long run, and cites the case of MGM Resorts International. The hospitality company, which runs its own benefits program, found good clinical outcomes after offering an incentive for its employees who underwent weight-loss surgery: $5,000 in reimbursed co-pays after two years and another $5,000 to cover procedures such as excess skin removal after four years.

January 6, 2021

Weight Stigma: Another Barrier to Bariatric Surgery

- Ubiquitous in the general population
- Common among persons with obesity
- Well-established barrier to all forms of obesity treatment

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The Impact of Weight Stigma

- Associated with psychosocial distress with 50% of patients meeting criteria for a psychiatric diagnosis. [1]
- Associated with weight gain as well as increased waist circumference, elevated levels of C-reactive protein, and poor glycemic control. [2]
- Internalized weight bias also has been associated with increased odds of having metabolic syndrome.

1-Hatzenbuehler ML, Keyes KM, Hasin DS. Associations Between Perceived Weight Discrimination and the Prevalence of Psychiatric Disorders in the General Population. Obesity 2009;17:2033–9. https://doi.org/10.1038/oby.2009.131.

2- Pearl RL, Wadden TA, Hopkins CM, Shaw JA, Hayes MR, Bakizada ZM, et al. Association between weight bias internalization and metabolic syndrome among treatment-seeking individuals with obesity. Obesity 2017;25:317–22. https://doi.org/10.1002/oby.21716.

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Strategies to Reduce Weight-Biased Attitudes

- Educating the public (and, specifically, health care providers) about multifactorial nature of the disease of obesity may reduce weight-biased attitudes by challenging the notion that weight is exclusively within an individual's behavioral control. [1]
- Medical students trainings that allow students to interact with standardized patients with obesity appear to hold some promise for increasing empathy and confidence in delivering treatment. [2]
- Together, these observations suggest that future research should target the relationship between race, weight stigma, and patient-provider communication about obesity treatment and bariatric surgery in particular.

1--Pearl RL, Lebowitz MS. Beyond personal responsibility: Effects of causal attributions for overweight and obesity on weight-related beliefs, stigma, and policy support. Psychol Health 2014;29:1176–91. https://doi.org/10.1080/08870446.2014.916807.

2-- Kushner RF, Zeiss DM, Feinglass JM, Yelen M. An obesity educational intervention for medical students addressing weight bias and communication skills using standardized patients. BMC Med Educ 2014;14:53. https://doi.org/10.1186/1472-6920-14-53.

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Shared Decision Making

- Shared decision making (SDM) involves the process where both parties--patient and provider--share information and work collectively to come to a treatment decision. [1]
- Patients must understand risks and benefits of different treatment options, what options they have, and any uncertainties involved with each in order to make a “good” decision.
- The Institute of Medicine has stressed the importance of patients having the education and support they require to make decisions and participate in their own care. Patients must be involved in seeking knowledge they don’t have as well as expressing values and preferences for treatment. [2]

1-- McCaffery KJ, Smith SK, Wolf M. The Challenge of Shared Decision Making Among Patients With Lower Literacy: A Framework for Research and Development. Med Decis Mak 2010;30:35–44. https://doi.org/10.1177/0272989X09342279.

2--Hawley ST, Morris AM. Cultural challenges to engaging patients in shared decision making. Patient Educ Couns 2017;100:18–24. https://doi.org/10.1016/j.pec.2016.07.008.

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Shared Decision Making with Patients with Clinically Severe Obesity

- SDM likely needs to first occur between the patient with clinically severe obesity and the provider overseeing or coordinating medical care. This would require a thorough review of the patient's weight history and history of weight loss efforts.
- Conversations should be frank, but also respectful to ensure that the patient does not feel blamed for the lack of sustained success with previous treatments. Treatments that have not been used, such as pharmacotherapy and bariatric surgery, should be discussed with respect to the relative benefits and drawbacks of each.
- SDM also should be used in conversations between the patient and bariatric surgeon, and, ideally all members of the multidisciplinary team. SDM could be used to discuss the benefits and limitations of different surgical interventions and with the patient's degree of obesity and comorbidities in mind.
- SDM also can be used to discuss the delivery of postoperative care by the integrated health team. Ideally, these discussions would center around the different types of postoperative care available.

(Sarwer et al., Role of weight bias and patient–physician communication in the underutilization of bariatric surgery. Surgery for Obesity and Related Diseases, in press.)

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Shared Decision Making with Persons from Underserved Groups

- The idealized vision of SDM does not explicitly recognize the personal, interpersonal, and community characteristics that affect capacity to engage in SDM.
- This is especially true for racial, ethnic and cultural minorities who are more likely than their counterparts to limitations with language, communication skills, and medical literacy [1].
- This can result in the default to the traditional, hierarchical provider-as-expert approach to communication which can strain the relationship and, in turn, can lead to deferred or atypical care [2]. Importantly, these underserved patients – the majority of whom have obesity - are also more likely to report provider bias as a barrier to SDM.
- Biases about which patients are most likely to take an active role may impact how engaging the provider is in SDM. Patients' reluctance to engage in SDM may not stem from a lack of desire to participate, but rather a fear of being seen as a difficult patient or other negative reactions from providers [3].

1--Hawley ST, Morris AM. Cultural challenges to engaging patients in shared decision making. Patient Educ Couns 2017;100:18–24. https://doi.org/10.1016/j.pec.2016.07.008.

2-- Smith SK, Dixon A, Trevena L, Nutbeam D, McCaffery KJ. Exploring patient involvement in healthcare decision making across different education and functional health literacy groups. Soc Sci Med 2009;69:1805–12. https://doi.org/10.1016/j.socscimed.2009.09.056.

3--Williams SW, Hanson LC, Boyd C, Green M, Goldmon M, Wright G, et al. Communication, Decision Making, and Cancer: What African Americans Want Physicians to Know. J Palliat Med 2008;11:1221–6. https://doi.org/10.1089/jpm.2008.0057.

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Shared Decision Making with Persons from Underserved Groups

- SDM behaviors perceived by patients to be affected by race include being less likely to provide information to patients, less likely to listen, being domineering or talking down to patients, and being less likely to consider patient communication preferences. [1]
- The perceived warmth and confidence that providers display with their patients also affects the content of the communication, whereas judgmental and stereotypical communication can negatively affect the patient-provider relationship. Noncompliance to medical treatment under these conditions has been seen as a means for some patients to exert control over their decision making. Among low literacy Black patients, for example, many feel they do not have access to resources and lack information about treatment options, so they "just trust their doctor." But because of inherent institutional trust issues, provider trust is a double-edged sword as it can actually detract from true SDM. [2,3]

1--]. Dovidio JF, Fiske ST. Under the Radar: How Unexamined Biases in Decision-Making Processes in Clinical Interactions Can Contribute to Health Care Disparities. Am J Public Health 2012;102:945–52. https://doi.org/10.2105/AJPH.2011.300601.

2-- Bass SB, Gordon TF, Ruzek SB, Wolak C, Ward S, Paranjape A, et al. Perceptions of Colorectal Cancer Screening in Urban African American Clinic Patients: Differences by Gender and Screening Status. J Cancer Educ 2011;26:121–8. https://doi.org/10.1007/s13187-010-0123-9.

3-- Williams SW, Hanson LC, Boyd C, Green M, Goldmon M, Wright G, et al. Communication, Decision Making, and Cancer: What African Americans Want Physicians to Know. J Palliat Med 2008;11:1221–6. https://doi.org/10.1089/jpm.2008.0057.

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Use of Decision Support Tools in SDM

- Decision Support Tools can be targeted to specific populations and have tailoring elements that allow for a patient to pick and choose issues of interest to provide strategies for talking to a provider who may be in a position to recommend bariatric surgery.
- Decision support tools can take a variety of forms, from peer-to-peer navigation to use of technology in the form of web-enabled or mobile health applications. Technology based tools can be especially important to address potential literacy issues because they have interactive multimedia features (e.g., video, voice over, graphics) that require little reading. They can also have interactive features built in that provide visual cues, feedback to users, and ease of targeting to patient populations.
- A decision support tool for patients considering bariatric surgery would have to address the potential cultural and stigmatizing biases about weight by allowing patients to explore how they feel about surgery. Such a tool could increase "informed decision making" as an adjunct to SDM and may be an important strategy to ensure that communication is not one-sided, allowing the patient to bring their concerns to the discussion.

(Sarwer et al., Role of weight bias and patient–physician communication in the underutilization of bariatric surgery. Surgery for Obesity and Related Diseases, in press.)

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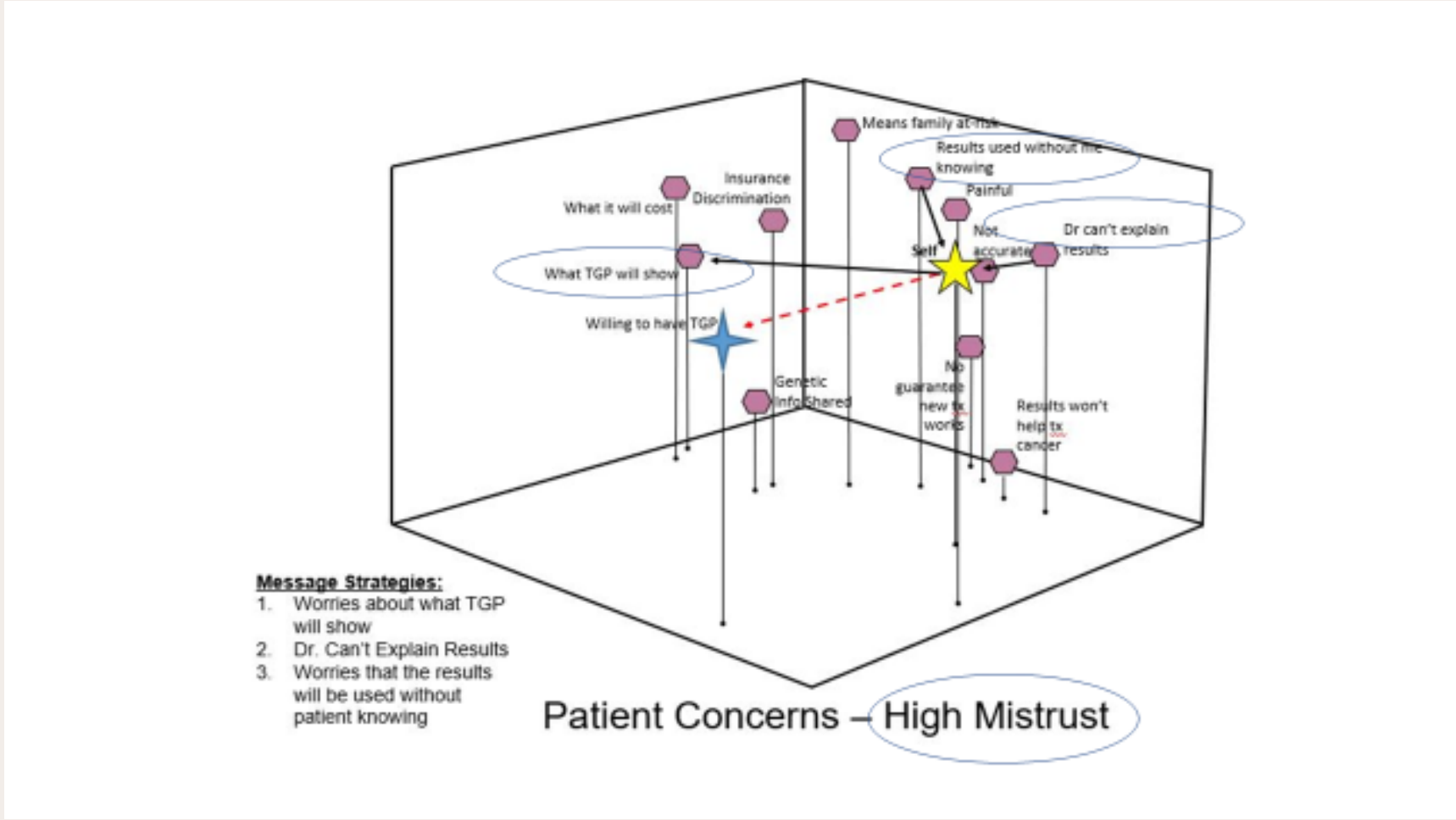
Themes from an Interview with a Patient Concerned about the use of Genetic Testing for Cancer

MAPS	Medical Mistrust Cluster	
	High Mistrust	**Low Mistrust**
Concerns about TGP	1. Worries about what TGP will show 2. Dr. Can't Explain Results 3. Worries that the results will be used without patient knowing	1.Worries about what TGP will show 2. Results are not Accurate 3. Worries that the results will be used without patient knowing
Benefits of TGP	1. New Treatment Options 2. Improve QoL 3. Help Treat Cancer	1. Could Benefit Society 2. Improve QoL 3. Benefits outweigh barriers
Worries about TGP	1. Genetic testing done to get more money from me. 2. Genetic info won't be kept private 3. Minorities likely to be discriminated against	1. Minorities more likely to be discriminated against 2. Genetic info used against me because of my race 3. Genetic info won't be kept private.
Beliefs about TGP Results	Nothing clear	Nothing Clear
Family Issues Related to TGP	1. Concerned family will judge testing 2. Results would help family 3. Would ask family advice about testing	1. Would ask advice about testing 2. Results would help family
Beliefs about Oncologist	1. Trust oncologist to make treatment decisions 2. Comfort talking to oncologist	1. Trust oncologist to make treatment decisions 2. Comfort talking to oncologist

Example of a Concept Map for Creating a Decision Support Tool



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Summary

- Bariatric surgery is the most effective treatment for obesity, producing weight losses far greater and more durable than those seen with lifestyle modification and pharmacotherapy. Unfortunately, bariatric surgery remains underutilized for a number of reasons. Its demonstrated efficacy in promoting weight loss and improving physical and psychosocial health for the large majority of patients who undergo surgery demands the development of strategies to increase utilization.
- The barriers to greater usage of surgery are numerous. Some fall at the intersection of health care policy and health care delivery. Others are at the individual level, and include misinformation and fear, as well as weight stigma and bias. Without question, misinformation and fear about bariatric surgery prevent large numbers of people from considering it as a viable option.
- Interventions to minimize internalized weight bias have shown some early promise. There also is optimism that increasing efforts to educating medical students and other health professionals about the disease of obesity, as well as the importance of nutrition and physical activity in physical health and mental well-being, may decrease weight bias among health care providers.
- Until these and other related issues are addressed, perhaps health care providers can have their greatest impact on the delivery of evidence-based obesity treatment through the use of SDM in their consultations with patients with obesity.
- If we are to witness even small success arresting the growth of obesity at the population level, we need to identify novel strategies to ensure that patients with clinically severe obesity and related morbidities are informed of the most appropriate treatments available to them.

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