REVIEW

THE AMERICAN JOURNAL of MEDICINE®

An Evidence-based Guide for Obesity Treatment in Primary Care

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ABSTRACT

On behalf of the Society of Behavioral Medicine, we present a model of obesity management in primary care based on the 5As counseling framework (Assess, Advise, Agree, Assist, and Arrange). Primary care physicians can use the 5As framework to build and coordinate a multidisciplinary team that: 1) addresses patients' psychosocial issues and medical and psychiatric comorbidities associated with obesity treatment failure; 2) delivers intensive counseling that consists of goal setting, self-monitoring, and problem solving; and 3) connects patients with community resources to assist them in making healthy lifestyle changes. This paper outlines reimbursement guidelines and weight-management counseling strategies, and provides a framework for building a multidisciplinary team to maximize the patient's success at weight management.
 • *The American Journal of Medicine (2015)* ■, ■-■

KEYWORDS: 5As Counseling framework; Comorbidities; Obesity; Primary care

Over two-thirds of US adults meet criteria for overweight or obesity.[1] Obesity has been linked to cardiovascular disease,[2] type 2 diabetes,[3] and several cancers.[4] Intensive behavioral therapy for obesity has produced mean weight losses of 8%-10% of initial weight across clinical trials[5] and significant reductions in the risk for developing diabetes and cardiovascular disease.[6,7] Further, weight loss of this magnitude has been associated with improved diabetes control, lipids, and blood pressure across clinical trials.[6,7] In 2011, the Center for Medicare & Medicaid Services (CMS) passed a decision to reimburse primary care physicians for delivering intensive behavioral therapy to treat patients with obesity.[8] The US Preventive Services Task Force,[9] and a joint statement by the American Heart Association, American College of Cardiology, and the Obesity Society[2] also recommended that physicians screen for overweight and obesity in their practices and provide intensive behavioral counseling to patients with risk factors for cardiovascular disease. However, the rates of screening and counseling for obesity in the primary care setting are only 30%.[10-12]

The Society of Behavioral Medicine is a multidisciplinary organization devoted to the science of health behavior change, and among its membership are experts who design and deliver evidence-based intensive behavior interventions for obesity. The purpose of this paper is to provide physicians with practical guidance on how to maximize obesity treatment for their patients with obesity.

CURRENT REIMBURSEMENT GUIDELINES

The CMS now reimburses intensive behavioral therapy for obesity delivered by primary care physicians in a primary care setting.[8] This reimbursement policy is limited to coverage for Medicare beneficiaries and reimburses only primary care practitioners. Alternative billing options exist for obesity treatment but vary widely across private payer groups. In

Funding: None.

Conflict of Interest: None.

Authorship: All authors contributed to the writing and reviewing of this manuscript.

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0002-9343/$ -see front matter
http://dx.doi.org/10.1016/j.amjmed.2015.07.015

brief, the CMS reimbursement model consists of 10-15-minute visits (maximum of 22 visits) on the following schedule:

- Month 1, one face-to-face visit every week
- Months 2-6, one face-to-face visit bi-weekly
- Months 7-12, one face-to-face visit monthly, contingent on the patient meeting the 3-kg (6.6-pound) weight loss requirement during the first 6 months of treatment.

One challenge is that reimbursement after 6 months is dependent upon the patient achieving a 3-kg weight loss during their initial 6 months of therapy. Several studies have identified that patients with low socioeconomic status,[13] racial/ethnic minority backgrounds,[14] and presence of medical comorbidities including sleep apnea, insomnia,[15] chronic pain,[16] and diabetes,[17] or psychiatric comorbidities such as depression,[18] attention deficit hyperactivity disorder,[19] and binge eating disorder have more difficulty meeting this criterion.[18] To avoid further exacerbating health disparities in these populations, early identification of at-risk patients and provision of additional support targeting these populations is critical.

CLINICAL SIGNIFICANCE

- Current primary care management of obesity is insufficient.
- Psychosocial issues, and psychiatric and medical comorbidities associated with treatment failure must be addressed to maximize outcomes.
- A multidisciplinary team is needed to help patients lose weight and maintain their weight loss.
- 5As is a counseling framework to help physicians maximize their impact on obesity care.

THE 5AS MODEL FOR WEIGHT MANAGEMENT COUNSELING IN PRIMARY CARE

The recently updated 2013 obesity treatment guidelines[2] include a treatment algorithm based on the 5As framework (Assess, Advise, Agree, Assist, and Arrange). This is an effective behavior-change counseling model.[20] Studies have shown that each additional 5A step delivered by physicians has been associated with higher odds of patients increasing their motivation to lose weight, change their diet, and exercise regularly.[21] In a recent study, physicians who used the 5As showed a twofold increase in obesity management (ie, diagnosis and coordinating follow-up) in primary care settings.[22]

Behavioral medicine research has identified several psychosocial factors and psychiatric and medical comorbidities associated with poor obesity treatment outcomes[23] and supports the importance of a team-based approach to obesity care. Below, we describe a modified 5As model in which the physician: 1) provides brief counseling; 2) identifies and arranges care for psychosocial issues and medical and psychiatric comorbidities associated with poor weight loss outcomes; and 3) builds and oversees a comprehensive treatment team that addresses the patient's biopsychosocial needs (see **Figure**).

ASSESS

The "Assess" step involves screening for obesity, comorbidities that are likely to interfere with weight loss, and the patient's willingness to make health behavior changes. This can be conducted by a medical assistant or nurse. The use of appropriate language without denotation of stigma and shame is particularly important in the Assess step.[24] The terms "obese" or "obesity" have been associated with patient stigmatization.[25] Patients prefer providers to refer to their actual weight or body mass index (BMI). For example, providers might say "Let's discuss your weight today" or "Your current BMI puts you at risk for cardiovascular disease."

Both patients and primary care physicians have been found to attribute obesity to personal choice or insufficient willpower.[26] The "personal responsibility" notion fails to consider the individual differences in sensitivity to food's rewarding properties and the ability to delay gratification, which have known neurobiological and genetic bases,[27-29] that can strongly influence eating behavior.[30] We recommend STOP Obesity Alliance's "Why Weight? A Guide to Discussing Obesity & Health with Your Patients" for practical discussion tools to start the conversation about weight management (http://www.stopobesityalliance.org/research-and-policy/alliance-initiatives/health-care-providers/).[31]

Assess BMI and Waist Circumference

Screening involves evaluating and informing patients of their weight status and risk factors for cardiovascular disease.[2] Both BMI (weight in kg/height in m^2) and waist circumference, a stronger predictor of cardiometabolic risk,[2] should be assessed.

Assess Patient Characteristics and Comorbidities Associated with Poor Weight Loss Outcomes

The Assess phase should include briefly assessing psychosocial characteristics and psychiatric and medical comorbidities associated with poor success rates in obesity treatment. These comorbidities include binge eating, sleep disorders, depression, and chronic pain (see **Table 1**[32-35] for full list of relevant comorbidities, screening tools, and recommended referrals). A weight loss attempt without attention to these comorbid conditions is at higher risk for failure, an experience that may increase the severity of the comorbid conditions and obesity. Weight loss outcomes also differ by race/ethnicity, particularly among African Americans and Hispanic/Latinos. Research suggests that weight gain prevention may need to be the

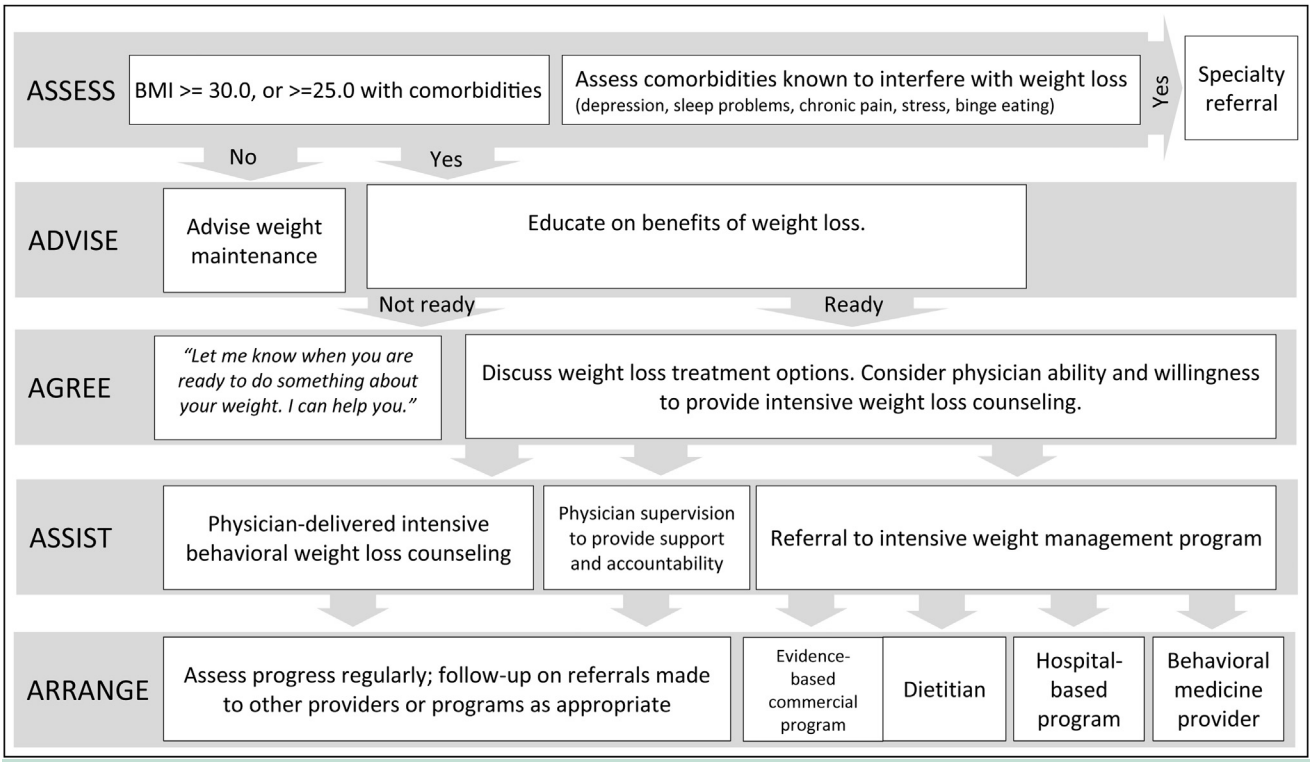

Figure Flow chart for 5As model of obesity management in primary care. The flow chart allows for the categorization of patients according to their readiness to lose weight within the 5As model. Of note, the physician is able to consider comorbid conditions that may interfere with weight loss and provide appropriate referrals for other professionals as needed within this model. BMI = body mass index.

short-term goal of intensive behavioral therapy for racial/ethnic minority patients,[36] and long-term behavioral therapy may be needed to achieve clinically significant weight loss among these high-risk populations.[37]

Assess Readiness to Change

To assess readiness to change, ask patients, "Are you ready to take some steps to lose weight?" or "How does your weight impact your health?" Some patients may not be motivated to pursue weight loss due to having more pressing health or mental health issues, lacking confidence in their ability to control their weight, or experiencing serious financial problems or other challenging life circumstances. In this case, simple steps include:

- Make a plan to address interfering issues
- Invite the patient to let you know when he or she is ready

Table 1 Comorbidities Associated with Poor Obesity Treatment Response, Brief Screeners, and Recommended Referrals

Comorbidity/Condition	Brief Screening Tool	Referrals
Sleep apnea	STOP Questionnaire (http://sleepmed.com.au/STOP_questionaire.pdf)	Sleep specialist Behavioral medicine
Chronic insomnia	Pittsburgh Sleep Quality Index[32]	Behavioral medicine
Chronic pain	—	Orthopedics Physical therapy Behavioral medicine
Inflammatory bowel disease	—	Gastroenterology Behavioral medicine Nutrition
Depression	PHQ-2[33]	Psychiatry/Psychology
Eating disorder	Binge Eating Scale[34]	Behavioral medicine Psychiatry/Psychology
Attention deficit hyperactivity disorder	Adult ADHD Symptom Rating Scale[35]	Psychiatry/Psychology
Severe mental illness (bipolar disorder, psychotic disorder, severe PTSD)	—	Psychiatry behavioral medicine

ADHD = attention deficit hyperactivity disorder; PHQ = Patient Health Questionnaire; PTSD = posttraumatic stress disorder.

- Build the patient's confidence to make an effort toward weight loss

For the patient who expresses readiness to change, simple steps include:

- Praise patients who have had recent or past weight loss even if their BMI is still in the overweight or obese range
- Ask the patient about past and current weight loss strategies and what is working and not working for them
- Ask the patient how you may help in their weight loss efforts
- Acknowledge their values in linking weight to health issues

ADVISE

The Advise step involves counseling the patient about the health risks associated with their current weight status and the health benefits of modest weight loss (ie, 5%-10%).[8] Patients are often interested in learning how their weight affects specific medical conditions, or their risk for medical conditions.[24,38] Understanding the risks associated with obesity may influence the patient's motivation to make health behavior changes. Physicians should inform patients that while individual studies have found benefit from low-fat, low-carbohydrate, vegetarian, and Mediterranean diets, the collective literature conclusively indicates that no single diet is best for weight loss.[39] As such, patients should be advised to select diets or to make gradual dietary modifications based on their specific needs and personal preferences to maximize confidence and long-term adherence. Of paramount importance is that the physician does not impose his or her personally preferred diet onto the patient, as it may be contraindicated to the patient's preferences, which can lead to treatment failure. The physician can provide informational handouts about evidence-based dietary guidelines (eg, American Heart Association dietary guidelines, see http://www.choosemyplate.gov/downloads/GettingStartedWithMyPlate.pdf) and encourage patients to develop a diet-modification plan that they can adhere to long term. Referral to a dietitian may be beneficial in developing a personalized plan.

Regardless of the dietary approach chosen by the patient, patients should be encouraged to reduce their energy intake by 500-1000 calories per day via diet and exercise,[2] although patients will vary in the calorie reduction required to lose a pound.[40] Physical activity is a central component of lifestyle interventions and, even in the absence of weight loss, can result in significant improvements in cardiometabolic health.[2] The American Heart Association guideline (http://www.heart.org/HEARTORG/GettingHealthy/PhysicalActivity/FitnessBasics/American-Heart-Association-Recommendations-for-Physical-Activity-in-Adults_UCM_307976_Article.jsp) for physical activity states that adults should engage in at least 150 minutes per week of moderate-intensity (or 300 minutes for weight loss), or 75 minutes per week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Aerobic activity should be performed in episodes of at least 10 minutes, and preferably, it should be spread throughout the week. Unfortunately, <50% of Americans meet these guidelines.[41] For these individuals, gradually increasing exercise via smaller, incremental goals (eg, 10% increase from current activity level in minutes per week) will be more effective than starting with an ambitious static goal (eg, engage in 60 minutes of daily physical activity).[42] This infographic from the American Heart Association (http://www.heart.org/idc/groups/heart-public/@wcm/@fc/documents/downloadable/ucm_469557.pdf) can be displayed in the examination room or given to patients as a reminder of the guideline.

AGREE

Agree on Goals

Goal-setting is a key health behavior change strategy.[5] Appropriate behavioral goals are Specific, Measurable, Attainable, Relevant, and Time-based (SMART). An example of a SMART goal is, "I will walk for 30 minutes three times per week," whereas "I will exercise more" is not a SMART goal. Patients often have unrealistic weight loss goals, which can increase the risk for feelings of failure and disappointment.[43] The Agree step involves a collaborative approach to setting realistic goals. An initial weight loss goal of 5%-10% of weight is recommended for overweight and obese adults; for most patients this implies a weight loss rate of 1-2 pounds per week. Self-monitoring of weight, nutrition, and physical activity is also essential for behavior change and has been associated with improved dietary choices and practices,[44] increased physical activity,[45] weight loss, and weight maintenance.[44,46] A multitude of commercial mobile applications are available to assist in dietary and physical activity self-monitoring.[47] Boudreaux and colleagues[48] outline steps for selecting health apps for patients. Patient data gathered from self-monitoring tools can be reviewed by the primary care physician at each patient session and used to facilitate the patient-provider discussion about progress, barriers to change, problem solving, and goal setting.

ASSIST

The Assist step consists of identifying the barriers the patient is experiencing in achieving each of their behavioral goals and developing a plan with clear strategies to overcome these barriers (eg, problem solving). An acronym representing the steps of problem solving is ADAPT, which stands for Attitude, Define the problem, generate Alternative solutions, Predict consequences, and Try out and evaluate the solution (see **Table 2**).[49] Use of problem-solving skills is associated with significant weight loss in treatment programs.[50,51]

In helping patients identify and overcome barriers to weight management, primary care physicians may find that some patients require more intensive behavioral counseling than can be provided during a primary care encounter. Physicians may consider referral to a behavioral psychologist or dietitian with expertise in weight management, or both, or a commercial program with established efficacy (eg, Weight Watchers) to optimize weight loss success.

Table 2 Problem Solving Using ADAPT

Step	Meaning	What to Say
A - Attitude	Normalizing patient's attitude	"A lot of people struggle with weight loss; it's a natural part of the process. Let's see if we can come up with ways to get you unstuck."
D - Define (identify) problem	Define or identify the problem	"What is the main thing that is preventing you from losing more weight right now?"
A - Alternative solutions	Generate alternative solutions and set a goal around the selected solution	"What are possible solutions to this problem?" "Which solution will be most effective? Which are you willing to try in the next week?"
P - Predicting consequences	Predicting consequences of each proposed solution and deciding which solution is most appropriate	"What could get in the way of you following through with the solution this week?"
T - Trying out solution	Try out solution and evaluate effectiveness	"Name a day and time you will attempt that solution in the next week."

ARRANGE

Increasing accountability through regular (eg, monthly) follow-up is critical to maximizing success. In follow-up visits, physicians should assess the patient's progress with SMART goals, review self-monitoring records, help the patient problem-solve any barriers encountered since the last visit, and review progress on referrals made. The pace of weight loss varies across patients, with some losing 1-2 pounds weekly and others experiencing slower or negligible weight loss with frequent plateaus and occasional regains. Patients with slow or negligible weight loss in the first month should be referred for more intensive counseling with behavioral health or nutrition providers.

Building a Multidisciplinary Care Team

Two systematic reviews[52,53] indicated that obesity interventions that involve intensive behavioral treatment with auxiliary health care professionals (eg, nurse, medical assistant) or allied health care professionals (eg, dietitian, psychologist, or health educator) combined with physician oversight through quarterly visits are more likely to produce clinically significant weight loss (ie, 5% or more loss of initial weight) than physician counseling alone. In terms of CMS reimbursement, auxiliary staff (eg, nurses, health educators) within the primary care clinic may provide intensive behavioral counseling by billing "incident to" the primary care physician. An example of intensive behavioral treatment for obesity is the Diabetes Prevention Program Lifestyle Intervention (http://www.diabetesprevention.pitt.edu/), which is now available in 144 YMCAs around the country (http://www.ymca.net/diabetes-prevention/participating-ys.html). Physicians in the vicinity of a participating YMCA can refer patients to the program and provide oversight and follow-up.

Compiling and distributing a list of inexpensive community resources for physical activity can be helpful. Connecting with leadership at local recreational facilities may create mutually beneficial partnerships, and some may be willing to negotiate discounts for patients referred from clinics. Given the increasing presence of community and commercial weight loss programs, we recommend that primary care physicians use the 2013 obesity treatment guidelines[2] to evaluate whether practices offered in local programs are evidence based.

Although patients may require referral for more intensive or specialized treatment, the primary care physician should maintain the central role in guiding patients through healthy weight management. The physician should request regular treatment updates from providers of intensive behavior therapy. Ultimately, the physician, along with the patient, can determine whether intensive behavioral therapy for obesity has been effective over the long term and whether alternative approaches are needed.

CONCLUSION

Intensive behavioral therapy has strong efficacy data for weight loss, diabetes prevention, and cardiovascular disease risk reduction from several large trials,[54,55] but implementation has been slow.[56] As gatekeepers of health care in the US, primary care physicians have enormous opportunities to address obesity at the level of the individual and broader population. However, physicians have many health issues to address during time-constrained visits, some more immediately pressing than weight. Efforts from physicians to address obesity need to be brief, targeted, and effective. We encourage physicians to use the US Preventive Services Task Force-recommended 5As model to build a multidisciplinary team to: 1) assist with intensive counseling; 2) address psychosocial issues and medical or psychiatric comorbidities associated with obesity treatment failure; and 3) connect patients with available community resources.

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