

Provider Discussion Tool Literature Review

Methodology:

The following findings were obtained through a systematic review of relevant literature. We primarily searched databases like Scopus, PubMed, and Google Scholar and chose articles featured in peer-reviewed journals. Search terms included: obesity treatment in primary care, obesity diagnosis, barriers to obesity treatment, obesity bias in primary care, obesity discussion tools, motivational interviewing techniques, and physician training in obesity. We also went directly to public sources like the National Center for Health Statistics, the Yale Rudd Center for Food Policy and Obesity, and previously published research conducted by STOP Obesity Alliance.

Findings:

Finding 1: Most providers are not having instructive or satisfactory conversations with their patients about weight. Even when physicians have conversations about weight, patients do not necessarily come away from the experience with the information they need.

- 1. Why primary care? Primary care providers are an important source of information and guidance on health-related issues. Primary care physicians are uniquely situated to help address overweight and obesity.**
 - i. Physician offices host over one billion patient visits each year, with visits to primary care physicians (PCPs) encompassing 56 percent of doctor visits.¹
 - ii. A person will visit his or her PCP an average of 1.8 times per year, providing these physicians with an excellent opportunity to regularly interact with a wide variety of patients.²
 - iii. In 2012, 28 percent of primary care patients were overweight, and 35 percent were obese.³ Taken together, 63 percent of patients seen by a PCP have an unhealthy weight.
 - iv. Physicians feel a responsibility to treat weight. In 2009, the STOP Obesity Alliance conducted a survey of 290 primary care physicians, assessing treatment of patients with overweight and obesity.⁴ The survey found that 89 percent of physicians agreed it was their responsibility to help a person with overweight lose weight.

- 2. Physicians are not diagnosing overweight and obesity in their patients.**
 - i. The National Health and Nutrition Examination Survey (NHANES), a cross-sectional nationally representative study, found that only 45 percent of patients with a BMI greater than 25 were told by a physician that they were

overweight.⁵ For those with a BMI over 30, 66 percent received an obesity diagnosis.

- ii. According to a study of 9,827 Mayo Clinic patients, 2,543 had a BMI indicating obesity, yet only 20 percent of these patients with obesity received an obesity diagnosis.⁶ The study also found that diagnosis was the strongest predictor in formulation of a weight management plan. Approximately 40 percent of patients who received an obesity diagnosis also received a treatment plan, while only 20 percent of patients with obesity that was undiagnosed received a management plan.⁷

3. Studies have shown that when physicians have weight-related discussions with their patients, the patients are able to recall the conversation with excellent accuracy and will increase their weight-loss efforts.

- i. In a meta-analysis of 32 reports, all except one demonstrated a positive effect of PCP advice on patient engagement in weight-loss efforts.⁸
- ii. One study compared physician and patient reports of weight discussions with audio recordings of patient visits. Overall, physicians were 70 percent accurate in correctly recalling conversations they had with patients, while 67 percent of patients correctly summarized the visit.⁹ However, for discussions of weight only, these percentages increased greatly. Physicians had 97 percent accuracy and patients had 98 percent accuracy with congruence between the two groups of 95 percent.

Finding 2: Physicians who are struggling to discuss weight with their patients currently lack the necessary resources (most notably training, patient materials, and time) to treat patients with overweight and obesity.

4. PCPs have reported several common barriers to discussing and treating obesity.

- i. Physicians cite time limitations, as well as avoiding referrals to services not covered by insurance, as reasons for avoiding weight counseling.¹⁰
- ii. In 2007, a focus group of 22 physicians representing internal medicine, family medicine, ob/gyn, and pediatrics, as well as four nurse practitioners, detailed the barriers they encounter in trying to treat obesity.¹¹ Concerned by the lack of reimbursement for time spent on preventive procedures, physicians cited payment as the number one barrier to obesity treatment. Next were time constraints, followed by legal issues, inconsistency between guidelines and available resources, and concern that discussions regarding weight might be offensive or be perceived as “lecturing.” The focus group also discussed facilitators in obesity treatment, specifically mentioning patient materials like

pamphlets and handouts, as well as “tool consistency,” with listed user-friendly resources and implementation of guidelines as examples.¹²

5. Training physicians to counsel patients can produce measurable patient outcomes; however, most PCPs lack training in treatment of overweight and obesity.

- i. Half of the 23 residents in the New York University School of Medicine Primary Care Residency Program received a five hour obesity training curriculum based on the 5As model (assess, advise, agree, assist, and arrange). More than 15 percent of patients whose resident had specific training in obesity saw statistically significant weight loss. While this is not a particularly high percentage, only 5 percent of patients whose resident did not undergo obesity training saw the same weight loss results.¹³
- ii. A 2003 survey of 87 internal medicine residents found that 60 percent did not know the minimum BMI for diagnosing obesity, 69 percent did not recognize waist circumference as a reasonable measure of overweight/obesity, 39 percent incorrectly reported their own BMI, and only 44 percent felt qualified to treat patients with obesity.¹⁴
- iii. Similar results were seen with physicians in 2008. In a study observing competency in obesity treatment among internal medicine, pediatric, and psychiatric physicians, 48 percent could not adequately answer patient questions about obesity treatments and 39 percent could not adequately provide counseling.¹⁵
- iv. A STOP survey of 290 physicians representing general, family, and internal medicine found that 72 percent of those polled said no one in their practice had been trained to deal with obesity diagnosis and management.¹⁶ The sample of responses was weighted to be representative of the PCP population in the U.S. by using gender, number of years in practice, and regional demographics from the American Medical Association Masterfile.
- v. There is confusion among physicians regarding their ability to treat obesity. In 2012, a group of 500 PCPs polled were split nearly down the middle, with 48 percent responding that dietitians and nutritionists were more qualified to help patients with obesity, while 41 percent believed physicians were the most qualified to help.¹⁷ Smaller percentages left the responsibility to endocrinologists, psychologists, and nurses. Interestingly, when asked about their abilities to treat obesity, 90 percent reported feeling confident in their weight counseling abilities, but only 44 percent reported success in helping their patients with obesity lose weight.¹⁸

Finding 3: Behavioral and medical treatment can be effective in certain patient populations, but improvised discussions run the risk of potentially stigmatizing or shaming patients, which can be detrimental to obesity treatment and patient outcomes.

6. **Several studies have demonstrated a lack of respect that some physicians have for patients with obesity.**
 - i. In a study of 40 physicians, higher BMI had a significant and negative correlation with respect; physicians reported “low respect” for 39 percent of their patients with overweight and obesity.¹⁹
 - ii. In another study, 126 individuals with overweight and obesity admitted to feeling judged because of their weight.²⁰ Of these, only 14 percent achieved significant weight loss, compared to 20 percent of individuals with overweight and obesity who reportedly did not feel judged because of their weight. Patients who felt judged by their PCP were more likely to attempt weight loss, but were not more likely to achieve clinically significant results. Unintentionally stigmatizing patients could negate otherwise effective treatment.
 - iii. Lack of respect for patients with obesity can be seen as early as the post-graduate level. A group of 107 post-graduate students across several health disciplines, including physician assistants and medical residents, were asked questions about their attitudes toward patients with obesity.²¹ Weight bias was evident, with 65 percent of students reporting their patients with obesity were a target of negative attitudes by health providers.
 - iv. Three key themes emerged in qualitative interviews among individuals living with obesity, health professionals, and policy makers²².
 1. Blame as a devastating relation of power
 - Participants with obesity shared feelings of self-blame, shame and embarrassment, discussing their frustrations with failed attempts to lose weight and the absence of support. Health care providers viewed a lack of weight loss as an unwillingness to commit, voicing their disappointment in patients who are unable to lose weight. They also blamed themselves, describing feelings of powerlessness and inability to support or provide follow up.
 2. Tensions in management
 - Both patients and health care providers described a lack of support from the health care system, and health providers in particular detailed the struggle to approach obesity management. Policy makers discussed the trend of shifting the focus from obesity to underlying issues like nutrition and physical activity, which means treatment is often overlooked in favor of prevention policies. If the physicians do not feel equipped to treat obesity and the system perpetuates a lack

of interest in treatment, individuals are left alone to struggle with weight.

3. Prevailing conflicts in medical management discourse

- Physicians are less likely to treat obesity alone; rather they work with patients living with both obesity as well as another diagnosed chronic health condition, indicating reluctance to accept obesity as a disease. Policy makers were hesitant to conceptualize obesity within a medical model, questioning whether medical treatment was necessary. Several policy makers suggesting community health promotion was a better avenue to address obesity, referring to it as a “risk factor” rather than a “disease.”
- v. Clear understanding of public preference and perception of weight terminology is crucial to creating an encouraging and informative weight counseling program. Physician wording can impact treatment, by either motivating or harming patient-physician relations.

1. A study of 1,064 participants, 62 percent of whom had overweight or obesity, asked which weight-related words participants found motivating and which they found stigmatizing.²³ Desirable weight-related words were: weight, unhealthy weight, and overweight. Undesirable words were: morbidly obese, obese, and fat. These “blaming” words were so undesirable that 19 percent of patients said they would avoid future medical visits if this language was used consistently, and 21 percent said they would seek new doctors if they felt stigmatized.

7. While starting the discussion is important, utilizing specific communication techniques can provide a more effective approach to weight-related conversations.

- i. A 2010 study analyzed 137 patient surveys following a PCP visit.²⁴ The surveys assessed the physicians’ use of the 5As model (assess, advise, agree, assist, and arrange). Patients with higher levels of motivation reported receiving more 5As counseling than those with less motivation. Each additional counseling session was associated with higher odds of the patient being motivated to lose weight. On average, most of the 5As were employed less than once per visit, with a particular focus on assess over assist or arrange. Patient-centered approaches—responsiveness to individual needs, goals, and preferences—were also positively associated with intentions to eat better and exercise.
- ii. In an observational study of 461 patients with overweight or obesity, physicians’ use of interviewing techniques were coded from audio recordings of patient interactions and then compared to subsequent patient weight loss.²⁵ In general, motivational interviewing (MI) techniques are:
 - a. Designed to motivate the ambivalent

- b. Collaborative in nature
- c. Understanding of the patient perspective
- d. Accepting of patient motivation or lack of motivation
- e. Meant to assist patients in finding their own solutions to their problems, thereby discovering their own motivation
- f. Affirming of a patient's freedom to change
- g. Praising
- h. Encouraging of "change statements"
- i. Not: judging, confronting, or providing advice without permission

Although weight discussions did not necessarily lead to weight loss, the use of MI did successfully predict weight loss. Simply having the conversation is not enough to encourage patients to lose weight. How these conversations are conducted seems to be a much more powerful indicator of subsequent weight loss. Unfortunately, fewer than half of the observed physicians reported receiving training in behavioral counseling.²⁶

- iii. A separate study compared weight-loss efforts of 55 participants with obesity, half of whom engaged in a behavioral weight-loss program and half of whom engaged in the same behavioral program as well as MI sessions.²⁷ Both groups attended weekly, small-group sessions for 20 weeks. The program encouraged gradual weight loss, progressively increasing physical activity, and decreased fat intake. Those in the MI group also attended a weekly session with a clinical psychologist who was trained in motivational interviewing techniques. Those in the MI group lost significantly more weight than the behavioral weight loss group alone and also engaged in significantly more planned physical activity (+68 minutes/week).
- iv. Finally, a study observing women with overweight and obesity saw that those receiving MI in addition to a regular behavioral program attended significantly more sessions and turned in more food diaries than the standard group.²⁸ While no significant weight loss differences were seen between the two groups, the results suggest MI enhances adherence to treatment and recommendations.

Finding 4: Some researchers have developed tools designed to provide assistance to PCPs treating obesity. Though few, these real world applications have been shown to effectively educate patients through informed conversations with their physicians, while simultaneously removing or lessening other barriers to obesity treatment.

- 8. The best way to ensure physicians are employing positive communication methods is to provide them with the necessary resources to discuss overweight and obesity.**

- i. A simple electronic reminder can have a profound impact on rates of weight counseling in pregnant women. In one study, the rate of counseling seen in ob/gyn and family medicine practices increased from 3 percent to 51 percent after an intervention that utilized a pre-set alert was added to the Electronic Medical Record (EMR) system.²⁹ When a patient's BMI indicated obesity, a pop-up window appeared on the computer screen with a counseling reminder and a detailed, interdisciplinary script. Before the alert was added to the electronic system, only 4 percent of patients had determined a numerical weight goal with her physician, compared to the 57 percent who discussed a concrete goal after the intervention.
- ii. The Vermont Department of Health, along with The University of Vermont College of Medicine, created a primary care weight management tool kit.³⁰ This tool kit was tested in Wisconsin primary care clinics. The tool kit is essentially a clinic algorithm to guide visits. It also includes education on MI techniques for PCPs. Providers found the tool kit helpful, straightforward, and easy to use, while 98 percent of patients with a BMI over 25 found the conversations generated by the tool kit to be useful. In fact, 90 percent agreed they had received information they felt would help them meet their weight loss goals. Nearly 70 percent of physicians reported that the nursing staff should be trained in the tool kit as well. Unfortunately, a majority of the physicians found the tool kit to be excessively time consuming.

Sources Cited

- ¹ National Center for Health Statistics. National ambulatory medical care survey: 2010 summary tables. 2010.
- ² National center for health statistics. Summary health statistics for U.S. adults: National health interview survey, 2012. *Vital and Health Statistics*. 2012;10(260).
- ³ National center for health statistics, 2012.
- ⁴ STOP Obesity Alliance. Weight in america survey. *Harris Interactive*. 2010.
- ⁵ Post RE. The influence of physician acknowledgment of patients' weight status on patient perceptions of overweight and obesity in the united states. *Archives of internal medicine*. 2011;171(4):316; 316-321; 321.
- ⁶ Bardia A, Holtan SG, Slezak JM, Thompson WG. Diagnosis of obesity by primary care physicians and impact on obesity management. *Mayo Clin Proc*. 2007;82(8):927-932.
<http://search.ebscohost.com/login.aspx?direct=true&db=mdc&AN=17673060&site=eds-live&scope=site&authtype=ip,uid&custid=s8987071>.
- ⁷ Bardia, 2007.
- ⁸ Rose SA. Physician weight loss advice and patient weight loss behavior change: A literature review and meta-analysis of survey data. *International journal of obesity (2005)*. 2013;37(1):118; 118-128; 128.
- ⁹ Bodner ME, Dolor RJ, Ostbye T, et al. Accuracy and congruence of patient and physician weight-related discussions: From project CHAT (communicating health: Analyzing talk). *J Am Board Fam Med*. 2014;27(1):70-77. doi: 10.3122/jabfm.2014.01.130110; 10.3122/jabfm.2014.01.130110.
- ¹⁰ Kolasa KM. Barriers to providing nutrition counseling cited by physicians: A survey of primary care practitioners. *Nutrition in clinical practice*. 2010;25(5):502; 502-509; 509.
- ¹¹ Ayres CG. Perceived barriers to and facilitators of the implementation of priority clinical preventive services guidelines. *Am J Manag Care*. 2007;13(3):151; 151-155; 155.
- ¹² Ayres, 2007.
- ¹³ Jay MR. The impact of primary care resident physician training on patient weight loss at 12 months. *Obesity (Silver Spring, Md.)*. 2013;21(1):45; 45-50; 50.
- ¹⁴ Block JP. Are physicians equipped to address the obesity epidemic? knowledge and attitudes of internal medicine residents. *Prev Med*. 2003;36(6):669; 669-675; 675.
- ¹⁵ Jay M, Gillespie C, Richter R, et al. Do internists, pediatricians, and psychiatrists feel competent in obesity care?: Using a needs assessment to drive curriculum design. *J Gen Intern Med*. 2008;7:1066-1070.
- ¹⁶ STOP Obesity Alliance, 2010.
- ¹⁷ Bleich SN. National survey of US primary care physicians' perspectives about causes of obesity and solutions to improve care. *BMJ open*. 2012;2(6).
- ¹⁸ Bleich, 2012.
- ¹⁹ Huizinga MM. Physician respect for patients with obesity. *Journal of general internal medicine : JGIM*. 2009;24(11):1236; 1236-1239; 1239.
- ²⁰ Gudzone KA. Perceived judgment about weight can negatively influence weight loss: A cross-sectional study of overweight and obese patients. *Prev Med*. 2014;62:103; 103-107; 107.
- ²¹ Puhl RM. Obesity bias in training: Attitudes, beliefs, and observations among advanced trainees in professional health disciplines. *Obesity (Silver Spring, Md.)*. 2013.
- ²² Kirk SF, Price SL, Penney TL, Rehman L, Lyons RF, Piccinini-Vallis H, Vallis TM, Curran J, Aston M. Blame, shame, and lack of support: A multilevel study on obesity management. *Qual Health Res*. 2014.
- ²³ Puhl R. Motivating or stigmatizing? public perceptions of weight-related language used by health providers. *International journal of obesity (2005)*. 2013;37(4):612; 612-619; 619.
- ²⁴ Jay M. Physicians' use of the 5As in counseling obese patients: Is the quality of counseling associated with patients' motivation and intention to lose weight? *BMC health services research*. 2010;10(1):159; 159.
- ²⁵ Pollak KI. Physician communication techniques and weight loss in adults. *Am J Prev Med*. 2010;39(4):321; 321-328; 328.
- ²⁶ Pollak, 2010.

²⁷ Carels RA. Using motivational interviewing as a supplement to obesity treatment: A stepped-care approach. *Health psychology*. 2007;26(3):369; 369-374; 374.

²⁸ Smith DE. Motivational interviewing to improve adherence to a behavioral weight- control program for older obese women with NIDDM: A pilot study. *Diabetes Care*. 1997;20(1):52; 52-54; 54.

²⁹ Lindberg SM. Improving gestational weight gain counseling through meaningful use of an electronic medical record. *Matern Child Health J*. 2014;1; 1-7; 7.

³⁰ Stiff L. Evaluating the implementation of a primary care weight management toolkit. *Wisconsin medical journal (Madison, Wis.)*. 2014;113(1):28; 28-31; 31.