Preventive Service: Screening for and Management of Obesity in Adults (including Preconception and Postpartum)
Grade: B

U.S. Preventive Services Task Force (USPSTF) Recommendation:
Screen all adults for obesity. Clinicians should offer or refer patients with a body mass index (BMI) of 30 kg/m^2 or higher to intensive, multicomponent behavioral interventions.[1]

Why is this important?

It is estimated that more than one-third (or 78.6 million) of U.S. adults are obese. Among non-pregnant women aged 12–44 years in the USA, the prevalence of obesity has more than doubled between 1976 and 2004, with a threefold increase in severe obesity (BMI greater than or equal to 40).[2] Obesity-related conditions include heart disease, stroke, type 2 diabetes and certain types of cancer, some of the leading causes of preventable death.[3]

In 2008, the estimated annual medical cost of obesity in the U.S. was $147 billion. The medical costs for people who are obese were $1,429 higher than those of normal weight. [4]

Being overweight prior to pregnancy puts women at higher risk for unhealthy postpartum weight retention.[5]

Excess weight gain during pregnancy, excessive postpartum weight retention and the inability to lose pregnancy-related weight 6 months to one year after pregnancy are predictors of long-term obesity for women.[6]

How frequently is this preventive service being provided?

Studies have found that the percentage of obese patients who received weight loss counseling from their primary care provider (PCP) varies from 20% to 40%.[7] Most recent estimates suggest that only 18% of obese patients receive counseling for weight reduction, 25% for dietary change, and 21% on exercise.[8] Rates of weight loss counseling among obese patients have not increased since the USPSTF guidelines were first released in 2003.[9]

What are the best screening practices identified in the literature?

The USPSTF recommendation did not focus on the recommended screening type. However, the recommendation statement itself uses Body Mass Index (BMI) as the indicator for intervention.

BMI is a number calculated from a person's weight and height and is used as a screening tool to identify possible weight problems for adults. However, BMI is not a diagnostic tool.

BMI	Weight Status
Below 18.5	Underweight
18.5 – 24.9	Normal
25.0 – 29.9	Overweight
30.0 and Above	Obese

The USPSTF note recent evidence may suggest that waist circumference measurement may be a good alternative to BMI. This finding was consistent with a meta-analysis that evaluated primary care based interventions. [10]

	The waist circumference at which there is an increased relative risk is noted below. This high waist circumference is associated with an increased risk for type 2 diabetes, dyslipidemia, hypertension, and cardiovascular disease in patients with a BMI in a range between 25 and 34.9 kg/m^2. [11] **High Risk** Men: >102 cm (>40 in.) Women: >88 cm (>35 in.) [Waist circumference cut-off points lose their incremental predictive power in patients with a BMI ≥35 kg/m^2 because patients will exceed the cut-off points noted above. [12]]
What are the best interventions identified in the literature?	A meta-analysis of effective primary care based interventions showed that behavioral interventions have a statistically significant effect on weight loss (on average 6% decrease of baseline weight (4 to 7 kg [8.8 to 15.4 lb] which is clinically significant). Elements present in behavioral interventions often include a reduced calorie diet, increased physical activity and behavioral therapy.[13] The USPSTF found that the most effective interventions were comprehensive and were of high intensity (12 to 26 sessions in the first year). The higher-intensity behavioral interventions included multiple behavioral management activities, such as group or individual sessions that focused on: • setting weight-loss goals • improving diet or nutrition • physical activity sessions • addressing barriers to change • active use of self-monitoring • strategizing how to maintain lifestyle changes [14] Interventions with more sessions showed more weight loss. In fact, after adjusting for number of sessions none of the other independent variables had a statistically significant relationship with weight loss (including: physical activity sessions, group sessions, technology-based, etc). This means that the number of sessions is critical to the success of the intervention.[15] Behavioral interventions also showed a reduction in diabetes incidence, declines in glucose levels in pre-diabetic patients, reductions in diastolic and systolic blood pressure, and decrease in waist circumference. There were no direct harms concerns with behavioral interventions. However, some secondary harms considerations are labeling stigma, higher insurance premiums, or reinforcement of self-esteem.[16] Pharmacological interventions used a combination of medication and behavioral intervention and saw slightly greater weight loss but exhibited more adverse effects such as gastrointestinal symptoms. However, there are concerns about the potential harms and there was a lack of evidence about maintaining improvement after discontinuation of medications. As a result, the USPSTF did not recommend medication use.[17] Women who breastfeed exclusively for 3 months or more tend to lose more weight than those who do not and breastfeeding for more than 4-6 months may contribute to continued weight loss.[18]

	• Inadequate training • Low self-efficacy in handling patients of excess weight [19] • Personal bias based on the physician's own body mass index status or cultural perspectives on weight [20,21]
What are some ideas to address these barriers?	Recent policy changes including the Affordable Care Act (ACA) Marketplace coverage of obesity screening and management and Medicare coverage obesity counseling visits may reduce concern about lack of reimbursement and time. Additionally, the rise of new models of care delivery and reimbursement, such as patient-centered medical homes or accountable care organizations, may also facilitate referrals to ancillary providers like registered dietitians or multicomponent weight loss programs.[22] Other ideas include: • increasing the number of dietitians and nutritionists in hospitals • subsidizing weight-loss medication • providing professional and organizational support and training • offering financial incentives[23] • promoting diet and exercise for mother and family in all postnatal and well-child pediatric appointments
What does the Affordable Care Act cover?	All Marketplace plans and many other plans must cover obesity screening and counseling for all adults without charging a copayment or coinsurance. This is true even if the patient has not met their yearly deductible. This applies only when these services are delivered by a network provider. ACA also covers diet counseling for adults at higher risk for chronic disease. [24] Additionally, the ACA covers well-woman visits, which include a full checkup, separate from any other visit for sickness or injury. These visits focus on preventive care for women and have three goals: 1. Documenting your health habits and history (includes covering topic of eating habits and physical activity); 2. Getting a physical exam (includes calculating BMI); 3. Setting health goals (like losing weight).[25] The Centers for Medicare and Medicaid Services (CMS) also provides information about the Coverage of Preventive Services. HealthCare.gov provides lists of preventive care benefits for all adults and those specific to women.
What does Medicaid cover?	Each state has its own plan for Medicaid coverage. To find out more about Medicaid and CHIP eligibility and coverage in your state, please visit Medicaid.gov.

References

[1] U.S. Preventive Services Task Force. (2012). Screening for and Management of Obesity in Adults: Current Recommendation.

[2] Huda, S., Brodie, L., Sattar N. (2010). Obesity in pregnancy: prevalence and metabolic consequences. *Semin Fetal Neonatal Med*; 15:70–6.

[3] Centers for Disease Control and Prevention. (2014). Overweight and Obesity: Adult Obesity Facts.

[4] Centers for Disease Control and Prevention. (2014). Overweight and Obesity: Adult Obesity Facts.

[5] Gore, S.A., Brown, D.M., and West, D.S. (2003). The Role of Postpartum Weight Retention in Obesity Among Women: A Review of the Evidence. *Ann Behav Med*; 26(2): 149-159

[6] Rooney, B. & Schauberger, C. (2002). Excess Pregnancy Weight Gain and Long-Term Obesity: One Decade Later. *The American College of Obstetrics and Gynecologists*; 100 (2): 242-252.

[7] Lewis, K., & Gudzune, K. (2014). Overcoming Challenges to Obesity Counseling: Suggestions for the Primary Care Provider. *JCOM*; 21(3): 123-133.

[8] Lewis, K., & Gudzune, K. (2014). Overcoming Challenges to Obesity Counseling: Suggestions for the Primary Care Provider. *JCOM*; 21(3): 123-133.

[9] Lewis, K., & Gudzune, K. (2014). Overcoming Challenges to Obesity Counseling: Suggestions for the Primary Care Provider. *JCOM*; 21(3): 123-133.

[10] U.S. Preventive Services Task Force. (2012). Screening for and Management of Obesity in Adults: U.S. Preventive Services Task Force Recommendation Statement.

[11] National Heart, Lung, and Blood Institute. (1998). Guidelines on Overweight and Obesity: Electronic Textbook

[12] National Heart, Lung, and Blood Institute. (1998). Guidelines on Overweight and Obesity: Electronic Textbook

[13] U.S. Preventive Services Task Force. (2012). Screening for and Management of Obesity in Adults: Current Recommendation.

[14] Gore, S.A., Brown, D.M., and West, D.S. (2003). The Role of Postpartum Weight Retention in Obesity Among Women: A Review of the Evidence. *Ann Behav Med*; 26(2): 149-159

[15] LeBlanc, E., et al. (2011). Effectiveness of primary care–relevant treatments for obesity in adults: a systematic evidence review for the US Preventive Services Task Force. *Annals of Internal Medicine*; 155(7): 434-447.

[16] Rooney, B. & Schauberger, C. (2002). Excess Pregnancy Weight Gain and Long-Term Obesity: One Decade Later. *The American College of Obstetrics and Gynecologists*; 100 (2): 242-252.

[17] Rooney, B. & Schauberger, C. (2002). Excess Pregnancy Weight Gain and Long-Term Obesity: One Decade Later. *The American College of Obstetrics and Gynecologists*; 100 (2): 242-252.

[18] United States Department of Agriculture. (2013). Health and Nutrition Information for Pregnant and Breastfeeding Women.

[19] Chan, R. & Woo, J. (2010). Prevention of overweight and obesity: how effective is the current public health approach. *Int J Environ Res Public Health*; 7(3):765-83.

[20] The American Congress of Obstetricians and Gynecologists (ACOG). (2014). Committee Opinion: Ethical Issues in the Care of the Obese Woman.

[21] Lewis, K., & Gudzune, K. (2014). Overcoming Challenges to Obesity Counseling: Suggestions for the Primary Care Provider. *JCOM*; 21(3): 123-133.

[22] Lewis, K., & Gudzune, K. (2014). Overcoming Challenges to Obesity Counseling: Suggestions for the Primary Care Provider. *JCOM*; 21(3): 123-133.

[23] Chan, R. & Woo, J. (2010). Prevention of overweight and obesity: how effective is the current public health approach. *Int J Environ Res Public Health*; 7(3):765-83.

[24] HealthCare.gov. Preventive care benefits: Preventive health services for adults.

[25] U.S. Department of health and Human Services. (2014). Get Your Well-Woman Visit Every Year.

For more information

PROVIDER IMPLEMENTATION TOOLS

The **Centers for Disease Control and Prevention (CDC)** **Assessing Your Weight website** includes general information about Waist Circumference and Body Mass Index (BMI) including a calculator tool to easily determine BMI.

National Heart, Lung and Blood Institute (NHLBI) **Guidelines on Overweight and Obesity: Electronic Textbook Waist Circumference Information** provides details on waist circumference; how to measure and which patient populations it is most useful for.

[PDF] provides specific step-by-step information to accurately measure waist circumference (see page 45-46 PDF; 3-15 and 3-16).

Association of Reproductive Health Professionals **Postpartum Counseling for Diet, Nutrition, and Exercise** is a quick reference guide for clinicians.

Association of Reproductive Health Professionals **Counseling Postpartum Patients About Diet and Exercise** is a clinicians fact sheet.

Institute of Medicine (IOM) **Weight Gain During Pregnancy: Reexamining the Guidelines** (2009) examines weight gain during pregnancy from the perspective that factors that affect pregnancy begin before conception and continue through the first year after delivery. The guidelines are based Body Mass Index (BMI) categories and include a recommendation for obese women.

United Kingdom Department of Health **National Institute for Health and Clinical Excellence (NICE) Guidelines** (2010) provides public health guidance on dietary and physical activity interventions for weight management before, during and after pregnancy; recommendation 2 is specific to pregnant women and recommendation 3 for perinatal patients.

OTHER RESOURCES

President's Council on Physical Fitness and Sports **Research Digest Physical Activity During Pregnancy and Postpartum: What Have We Learned?** [PDF] (2009) includes information on the role of physical activity during pregnancy and the postpartum period as well as the potential risks and benefits to women and their offspring.

The American Congress of Obstetricians and Gynecologists (ACOG) **Exercise During Pregnancy and the Postpartum Period Committee Opinion Report** (2009) reflects emerging clinical and scientific advances and is subject to change; information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

IOM Healthy Weight Gain During Pregnancy is a comprehensive guide including interactive tools and resources for providers and consumers.

USDA Health & Nutrition Information for Pregnant & Breastfeeding Women interactive and informational website for consumers.

The **CDC Overweight and Obesity website** provides a variety of information including strategies to combat obesity for individuals, families, and communities, data and statistics, state and community programs, and other healthy living topics.