

Putting Prevention into Practice

An Evidence-Based Approach

Behavioral Weight Loss Interventions to Prevent Obesity-Related Morbidity and Mortality in Adults

Iris Mabry-Hernandez, MD, MPH, Medical Officer, U.S. Preventive Services Task Force Program, Agency for Healthcare Research and Quality

Lahila-Carina Ojeda, MD, Preventive Medicine Resident, University of Maryland Medical Center

Case Study

A.C., a 32-year-old woman, presents for her annual wellness visit. She recently had blood work completed that showed normal glucose and lipid levels. Her blood pressure is 124/76 mm Hg, weight is 221.8 lb (100.6 kg), height is 5 feet 6 inches (172 cm), and body mass index (BMI) is 34 kg per m²; examination of her heart and lungs is normal.

Case Study Questions

1. Based on the U.S. Preventive Services Task Force (USPSTF) recommendation statement, which one of the following interventions should you recommend to this patient?

- A. Offer or refer her to combined pharmacotherapy and behavioral intervention.
- B. Offer to start pharmacotherapy alone.
- C. Refer her for weight loss surgery.
- D. Offer or refer her to an intensive, multicomponent behavioral intervention.

2. Which of the following outcomes are clear benefits of intensive, multicomponent intervention?

- A. Clinically significant improvement in weight.
- B. Reduced incidence of type 2 diabetes mellitus.
- C. Reduced incidence of cardiovascular events.
- D. Less weight gain after cessation of the intervention.

3. A.C. is worried that she will not be able to adhere to the intervention. Which one of the following statements is correct regarding completion of interventions recommended by the USPSTF?

- A. Less than one-half of the study participants completed the interventions.
- B. All study participants completed more than two-thirds of the intervention.
- C. Participant adherence was low.
- D. Participation rate was steady over time.
- E. There was 100% completion rate for all interventions.

Answers appear on the following page.

See related U.S. Preventive Services Task Force Recommendation Statement at <https://www.aafp.org/afp/2019/0415/od1.html>.

This PPIIP quiz is based on the recommendations of the USPSTF. More information is available in the USPSTF Recommendation Statement and supporting documents on the USPSTF website (<https://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/obesity-in-adults-interventions1>.

This series is coordinated by Kenny Lin, MD, MPH, Deputy Editor.

A collection of Putting Prevention into Practice published in *AFP* is available at <https://www.aafp.org/afp/ppip>.

CME This clinical content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz on page 479.

Author disclosure: No relevant financial affiliations.

PUTTING PREVENTION INTO PRACTICE

Answers

1. The correct answer is D. The USPSTF recommends that clinicians offer or refer adults with a BMI of 30 kg per m² or more to intensive, multicomponent behavioral interventions. The USPSTF considered interventions that combined pharmacotherapy with behavioral interventions, which showed greater weight loss and weight loss maintenance over 12 to 18 months compared with behavioral interventions alone. However, participants in the pharmacotherapy trials were required to meet highly selective inclusion criteria and had high attrition. It is unclear how well patients tolerate these medications and whether the findings from these trials are applicable to the general U.S. primary care population.¹ Surgical weight loss interventions were considered to be outside the scope of the primary care setting.

2. The correct answers are A, B, and D. The USPSTF found that behavior-based weight loss interventions in adults with obesity can lead to clinically significant improvements in weight status and reduced incidence of type 2 diabetes among adults with obesity and elevated plasma glucose levels.² The USPSTF also found that behavior-based weight loss maintenance interventions are associated with less weight gain after the cessation of interventions, as compared with

control groups.² Intermediate outcomes (such as prevalence of high blood pressure or metabolic syndrome, use of cardiovascular disease medications, or estimated 10-year risk of cardiovascular disease) were seldom reported. Effects of interventions on these outcomes were mixed.

3. The correct answer is B. In the studies the USPSTF reviewed, the rates of participant adherence were high. More than two-thirds of study participants completed interventions, and all study participants completed more than two-thirds of the intervention.¹ It was noted, however, that participation adherence decreased over time.

The views expressed in this work are those of the authors and do not reflect the official policy or position of the University of Maryland Medical Center or the U.S. government.

References

1. LeBlanc ES, Patnode CD, Webber EM, Redmond N, Rushkin M, O'Connor EA. Behavioral and pharmacotherapy weight loss interventions to prevent obesity-related morbidity and mortality in adults: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2018;320(11):1172-1191.
2. Curry SJ, Krist AH, Owens DK; US Preventive Services Task Force. Behavioral weight loss interventions to prevent obesity-related morbidity and mortality in adults: US Preventive Services Task Force recommendation statement. *JAMA*. 2018;320(11):1163-1171. ■



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