



General

Guideline Title

VA/DoD clinical practice guideline for screening and management of overweight and obesity.

Bibliographic Source(s)

Management of Overweight and Obesity Working Group. VA/DoD clinical practice guideline for screening and management of overweight and obesity. Washington (DC): Department of Veterans Affairs, Department of Defense; 2014. 178 p. [283 references]

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Management of Overweight and Obesity Working Group. VA/DoD clinical practice guideline for screening and management of overweight and obesity. Washington (DC): Department of Veterans Affairs, Department of Defense; 2006. 117 p.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Recommendations

Major Recommendations

Note from the Department of Veterans Affairs and the Department of Defense (VA/DoD) and the National Guideline Clearinghouse (NGC): The recommendations for the screening and management of overweight and obesity are presented in the form of an algorithm. The accompanying recommendations are presented below. The grades of recommendations (A-D, I, and Expert Opinion [EO]) and levels of certainty are defined at the end of the "Major Recommendations" field.

Screening and Assessment for Overweight and Obesity

Recommendations

1. Screen adult patients to establish a diagnosis of overweight or obesity by calculating body mass index (BMI), and document the presence of overweight or obesity in the medical record. [B]
2. Screen for overweight and obesity at least annually. [EO]
3. Assess for the presence of obesity-associated conditions among overweight patients or patients with increased waist circumference. [B]
4. Perform a targeted assessment on overweight and obese patients. In addition to the basic medical history and physical examination, assess for factors contributing to obesity. [EO]

Normal Weight Patients

Recommendation

5. Consider providing normal weight patients with information and behavioral counseling regarding healthy diet and physical activity behaviors, in order to maintain a healthy weight. [C]

Overweight Patients without Obesity-associated Condition(s)

Recommendation

6. Consider providing overweight patients without obesity-associated conditions with information and behavioral counseling regarding healthy diet and physical activity behaviors, in order to pursue a healthy weight. [C]

Overweight Patients with Obesity-associated Condition(s)

Recommendations

7. Offer comprehensive lifestyle intervention to achieve weight loss and to improve blood pressure and/or glucose control in overweight patients. [A]
8. Offer comprehensive lifestyle intervention to overweight patients with dyslipidemia for weight loss and to improve lipid levels. [B]
9. Current evidence is insufficient to recommend for or against offering comprehensive lifestyle intervention for weight loss to overweight patients with degenerative joint disease, non-alcoholic fatty liver disease and/or obstructive sleep apnea to reduce harms of these conditions. [I]

See Table 1 in the original guideline document for classification of overweight and obesity by BMI and associated disease risk.

Obese Patients

Recommendations

10. Offer obese patients comprehensive lifestyle intervention for weight loss to improve lipid levels, blood pressure, and/or glucose control. [A]
11. Offer obese patients comprehensive lifestyle intervention for weight loss to reduce harms of obstructive sleep apnea. [B]
12. Consider offering obese patients comprehensive lifestyle intervention for weight loss to reduce harms of degenerative joint disease. [C]
13. Current evidence is insufficient to support weight loss through comprehensive lifestyle intervention for reducing harms of non-alcoholic fatty liver disease. [I]

See Boxes 1 and 2 in the original guideline document for common obesity-associated conditions and elements of medical assessment of overweight or obesity.

Shared Decision-Making

Recommendation

14. Reach a shared understanding with overweight and obese patients about the risks of overweight and obesity and the benefits of weight management. [EO]

See Box 3 in the original guideline document for methods for reaching shared understanding.

General Treatment Principles

Recommendations

15. Perform an in-depth clinical assessment in order to assess the risks and benefits of different weight management treatments and to develop a weight management plan. [EO]
16. Use motivational interviewing techniques to evoke patient motivation to accept and participate in weight loss treatments. [EO] See Box 4 in the original guideline document for principles and core strategies of motivational interviewing.
17. Convey the importance of weight loss and maintenance as a lifelong commitment rather than a brief episode of treatment. [EO]
18. Offer patients at least 12 contacts within 12 months of a comprehensive lifestyle intervention that combines dietary, physical activity, and behavioral strategies. [B]
19. Plan a net deficit of 500 to 1,000 kcal/day addressing both diet and physical activity to achieve a weight loss of 0.5 to 2 pounds per week, resulting in a 5% to 10% reduction in body weight over 6 months. [A]
20. Assess adherence to the weight loss program one-to-two times per month by measuring the patient's weight and providing feedback and ongoing support. [EO]

21. Re-evaluate the treatment plan for patients who have lost an average of less than 0.5 pound per week. [EO]
22. Offer patients who have met their weight loss goals a comprehensive maintenance program consisting of behavioral components and ongoing support. [B]

Behavioral and Lifestyle Approaches

Recommendations

23. Offer comprehensive lifestyle interventions for weight loss, in either individual or group setting. [B]
24. Offer telephone-based comprehensive lifestyle intervention for weight loss, either as an alternative or an adjunct to face-to-face intervention. [B]
25. There is insufficient evidence for or against offering internet-based comprehensive lifestyle intervention for weight loss, as an alternate or adjunct to face-to-face intervention. [I]

Dietary Approaches

Recommendations

26. Offer any of several diets that produce a caloric deficit and have evidence for weight loss efficacy and safety (e.g., low-carbohydrate, Dietary Approaches to Stop Hypertension [DASH], or low-fat). [A]
27. Offer very-low-calorie diets for weight loss, but only for short durations (12-16 weeks) and under close medical supervision. [B]
28. Offer meal replacements to achieve low-calorie or very low-calorie diets. [A]

Physical Activity Approaches

Recommendations

29. Offer physical activity elements (e.g., home fitness, lifestyle, or structured/supervised physical activities) that can be combined to produce a caloric deficit leading to weight loss. [A]
30. Offer physical activity options that include short intermittent bursts (at least 10 minutes) as well as longer continuous exercise. [A]
31. Offer, as part of a comprehensive lifestyle intervention, moderate-intensity physical activity performed for at least 150 minutes/week to result in weight loss. [A]
32. Offer, as part of comprehensive lifestyle intervention, moderate-intensity physical activity performed for 200-300 minutes per week to prevent weight regain after initial weight loss. [EO]

Pharmacotherapy

Recommendations

33. Offer pharmacotherapy with the combination phentermine/topiramate extended-release to patients with a BMI ≥ 30 kg/m² and to those with a BMI ≥ 27 kg/m² who also have obesity-associated conditions, as an adjunct to comprehensive lifestyle intervention, when lifestyle interventions alone do not produce the desired weight loss. [A]
34. Offer pharmacotherapy with orlistat or lorcaserin to patients with a BMI ≥ 30 kg/m² and to those with a BMI ≥ 27 kg/m² who also have obesity-associated conditions, as an adjunct to comprehensive lifestyle intervention, when lifestyle interventions alone do not produce the desired weight loss. [B]
35. Offer pharmacotherapy (i.e., orlistat, lorcaserin, combination phentermine/topiramate extended-release), as an adjunct to comprehensive lifestyle intervention, to patients with obesity-associated conditions, for its beneficial effects on type 2 diabetes, hypertension, and/or dyslipidemia. [B]
36. Offer patients who achieve their weight loss goal, a program that includes continued medication use for weight maintenance. [B]

Bariatric Surgery

Recommendations

37. Offer bariatric surgery, as an adjunct to comprehensive lifestyle intervention, for weight loss in adult patients with a BMI > 40 kg/m² or those with BMI 35.0-39.9 kg/m² with one or more obesity-associated conditions. [A]
38. Offer bariatric surgery, as an adjunct to comprehensive lifestyle intervention, to improve some obesity-associated conditions in adult patients with BMI ≥ 35.0 kg/m². [A]

39. Current evidence is insufficient to assess the balance of benefits and harms of offering bariatric surgery as an adjunct to comprehensive lifestyle intervention, for weight loss or to improve some obesity-associated conditions, to patients over age 65 or with a BMI <math>< 35 \text{ kg/m}^2</math>. [I]
40. Engage all patients who are candidates for bariatric surgery in a general discussion of the benefits and potential risks. If more detailed information is requested by the patient to assist in the decision-making process, a consultation with a bariatric surgical team should occur. [EO]
41. Provide lifelong follow-up after bariatric surgery to monitor adverse effects and complications, dietary restrictions, adherence to weight management behaviors, and psychological health. [EO]

Definitions:

The recommendations in this Clinical Practice guideline are rated according to the U.S. Preventive Services Task Force (USPSTF) rating scheme and are based on two main dimensions: 1) net benefit of an intervention and 2) certainty of evidence association with that net benefit.

What the USPSTF Grades Mean and Suggestions for Practice

Grade	Grade Definitions	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer or provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

Grade of EO was added for "Expert Opinion".

USPSTF Levels of Certainty Regarding Net Benefit

Definition: The USPSTF defines certainty as "likelihood that the USPSTF assessment of the net benefit of a preventive service is correct." The net benefit is defined as benefit minus harm of the preventive service as implemented in a general, primary care population. The USPSTF assigns a certainty level based on the nature of the overall evidence available to assess the net benefit of a preventive service.

Level of Certainty	Description
High	The available evidence usually includes consistent results from well-designed, well-conducted studies in representative primary care populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.
Moderate	The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the estimate is constrained by factors such as: <ul style="list-style-type: none"> • The number, size, or quality of individual studies • Inconsistency of findings across individual studies • Limited generalizability of findings to routine primary care practice; and • Lack of coherence in the chain of evidence <p>As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion.</p>
Low	The available evidence is insufficient to assess effects on health outcomes. Evidence is insufficient because of: <ul style="list-style-type: none"> • The limited number or size of studies • Important flaws in study design or methods

Level of Certainty	Description
	<ul style="list-style-type: none"> • Inconsistency of findings across individual studies • Gaps in the chain of evidence • Findings not generalizable to routine primary care practice; and • A lack of information on important health outcomes <p>More information may allow an estimation of effects on health outcomes.</p>

Clinical Algorithm(s)

An algorithm for management of overweight and obesity is provided in the original guideline document.

Scope

Disease/Condition(s)

Overweight and obesity

Guideline Category

Counseling

Diagnosis

Evaluation

Management

Prevention

Screening

Treatment

Clinical Specialty

Cardiology

Endocrinology

Family Practice

Internal Medicine

Nursing

Nutrition

Physical Medicine and Rehabilitation

Preventive Medicine

Psychiatry

Psychology

Surgery

Intended Users

Advanced Practice Nurses

Dietitians

Health Care Providers

Nurses

Pharmacists

Physical Therapists

Physician Assistants

Physicians

Psychologists/Non-physician Behavioral Health Clinicians

Guideline Objective(s)

To provide primary care clinicians with a framework by which to evaluate the individual needs and preferences of overweight and obese patients, leading to improved clinical outcomes

Target Population

Adults (men and women who are >18 years old) who are eligible for care in the Veterans Affairs (VA) or Department of Defense (DoD) health care delivery system

Note: This guideline does not provide recommendations for the treatment of children, adolescents, or pregnant/lactating women.

Interventions and Practices Considered

Screening/Evaluation

1. Obtaining height and weight and calculating body mass index (BMI)
2. Documenting the presence of overweight or obesity in the medical record
3. Screening for overweight and obesity at least annually
4. Assessment for the presence of obesity-associated conditions
5. Targeted assessment in overweight and obese patients (assessing for factors contributing to obesity)
6. In-depth clinical assessment to assess the risks and benefits of different weight management treatments and to develop a weight management plan

Treatment/Management

1. Providing patients with information and behavioral counseling regarding healthy diet and physical activity behaviors to maintain or pursue a healthy weight
2. Offering patients comprehensive lifestyle interventions for weight loss to control or to reduce harms of obesity-related conditions
3. Reaching a shared understanding with overweight and obese patients about the risks of overweight and obesity and the benefits of weight management
4. Use of motivational interviewing techniques to evoke patient motivation to accept and participate in weight loss treatments
5. Assessment of adherence to weight loss program
6. Comprehensive maintenance program
7. Behavioral and lifestyle approaches (individual or group settings, telephone-based interventions)
8. Dietary approaches (e.g., low-carbohydrate, Dietary Approaches to Stop Hypertension [DASH], low-fat, very-low-calorie, meal replacement)

9. Physical activity approaches (moderate-intensity physical activity; other physical activity options)
10. Pharmacotherapy (orlistat, lorcaserin, combination phentermine/topiramate extended-release)
11. Bariatric surgery with lifelong follow-up

Major Outcomes Considered

- Incidence and severity of obesity and obesity-associated conditions
- Obesity-related morbidity and mortality
- Effectiveness of obesity treatment on weight loss and weight maintenance
- Change in secondary health outcomes and obesity-associated conditions with weight loss, including:
 - Major cardiovascular events (e.g., acute myocardial infarction, ischemic stroke, and death)
 - Cardiovascular risk factors (e.g., hypertension, type 2 diabetes, dyslipidemia)
 - Degenerative joint disease
 - Obstructive sleep apnea
 - Overall health and function
 - Quality of life
 - Non-alcoholic fatty liver disease
- Adverse effects of treatment

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Formulating Evidence Questions

The Clinical Practice Guideline (CPG) Champions were tasked with identifying key evidence questions to guide the systematic review of the literature on overweight and obesity. These questions, which were developed in consultation with the Lewin Group's evidence review team, addressed clinical topics of the highest priority for the Veterans Affairs (VA) and Department of Defense (DoD) populations, including the benefits and harms of various pharmacologic and non-pharmacologic therapies on weight loss and other comorbidities. The key questions follow the population, intervention, comparison, outcome, timing and setting (PICOTS) framework for evidence questions, as established by the Agency for Healthcare Research and Quality (AHRQ). Table A-1 in Appendix A in the original guideline document provides a brief overview of the PICOTS typology.

The Champions and evidence review team carried out several iterations of this process, each time narrowing the scope of the CPG and the literature review by prioritizing the topics of interest. Table A-2 contains the final set of key questions used to guide the systematic review for this CPG. Table A-3 provides a detailed chart which outlines some of the decisions that the Champions made in prioritizing the key questions (see Appendix A in the original guideline document).

Conducting the Systematic Review

A number of the key questions were also addressed by the AHRQ systematic evidence review entitled *Screening for and Management of Obesity and Overweight in Adults* which reviewed literature published through September 9, 2010. For key questions that overlapped with the AHRQ review, the evidence review team focused on new relevant literature published after this date. For those that were not addressed by the AHRQ report, the literature was reviewed dating back to March 2005, prior to which evidence was reviewed by the 2006 CPG Work Group. The date parameters used for each key question are shown in Table A-2 in the original guideline document. The systematic review conducted for this CPG examined literature that was published up to February 1, 2013.

Additional inclusion and exclusion criteria were imposed on this systematic review and are described in Table A-4 in the original guideline document.

Detailed search strategies were developed for each key question and used to conduct searches in multiple biomedical bibliographic and other databases, including PubMed/Medline, EMBASE, PsycINFO, Database of Abstracts of Reviews of Effectiveness (DARE), Cochrane Central Register of Controlled Trials (CCTR), and the Cochrane Database of Systematic Reviews (COCH). The search strategy was based on a combination of Medical Subject Headings (MeSH) terminology and text key words, and can be found in Table A-5 in the original guideline document.

The literature search identified over 4,800 titles and abstracts, which were screened and assessed by members of the evidence review team for relevance to the key questions. Over 4,400 abstracts were excluded during this first step, and the remaining 441 full text articles were reviewed. Of these, 369 studies were excluded for one of the five reasons described below and a final set of 72 studies were included in this systematic review. Additionally, since the completion of the evidence synthesis, the Champions reviewed several papers published in peer-reviewed journals. This included reviews, CPGs, editorials, and primary research articles. These were intended to be additive to the information already reviewed and were used to augment rather than create recommendations.

Reasons for Exclusion

- Study is not relevant.
- Search date parameters do not apply.
- Study is not a controlled trial, a systematic review, or a meta-analysis.
- Intervention(s) studies are not of interest.
- Study length is six months or less (if applicable).

Number of Source Documents

Seventy-two studies were included in this systematic review.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

The evidence review team assessed the quality of the individual studies for each key question, using the United States Preventive Services Task Force (USPSTF) methodology for grading the evidence (<http://www.uspreventiveservicestaskforce.org/Page/Name/methods-and-processes>).

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

The evidence review team assessed the quality of the individual studies for each key question, using the United States Preventive Services Task Force (USPSTF) methodology for grading the evidence. The USPSTF has developed a rigorous standard for assessing the quality of the evidence, which is utilized by other guideline development groups, such as Agency for Healthcare Research and Quality (AHRQ). Lewin adhered to this methodology in order to help determine the validity, reliability, and generalizability of the evidence. These elements were factored into the development of clinical recommendations for this clinical practice guideline (CPG).

It is important to note that the USPSTF updated its definition of grade C recommendations, effective July 2012. As such, the evidence grades presented in the 2006 evidence review may be different from the evidence grades presented in the 2013 review, based on the revised definitions. The CPG Work Group for the 2014 CPG critically assessed and graded each recommendation using the updated, 2013 USPSTF approach.

Additionally, the Lewin evidence review team modified the USPSTF grading framework so as to provide for a grade of EO for "Expert Opinion." This change is a direct reflection of the need to develop a CPG that can be used in real practice for Veterans and Service members where evidence for or against a particular intervention is lacking. The analogous USPSTF grade of an I for "Insufficient evidence" may not provide enough guidance for supporting clinical decisions in real-world practice settings, especially for clinical questions that arise frequently in practice.

Evidence Tables

The Champions and a smaller subset of the Work Group, known as the editorial team, developed a comprehensive evidence table for this CPG, shown in Appendix C of the original guideline document, which provides detailed information on each recommendation, the grade of each recommendation, and the literature supporting each recommendation, including the certainty of evidence and magnitude of net benefit. If a recommendation was also included in the 2006 version of this CPG, the assigned grades from both 2006 and 2014 are specified. If a recommendation is new and was not addressed in the 2006 version, a N/A is marked in the 2006 grade column.

In some cases, a recommendation was assigned a grade of "I" for insufficient evidence. In such cases, the quality of the evidence base or the certainty of the evidence is deemed low, either due to a lack of evidence to address the question or because there is conflicting evidence as to the balance of benefits and harms.

In other cases, a recommendation was assigned a grade of "EO" for expert opinion. A recommendation may have an "EO" when the certainty of the evidence is low or insufficient, but, based on expert opinion, the potential magnitude of the net benefit (benefits minus harms) might be substantial enough for providers to consider offering the recommendation. In these cases, the panel used position statements or consensus building comments from major organizations, where available, to craft and support the recommendation.

An evidence synthesis was not performed for the direct effects of diet and physical activity on weight loss. This is because the authors/editors felt that the principle of creating an energy deficit applies to all forms of dietary and physical activity interventions and therefore new research in this area would not likely substantially change recommendations regarding their effects on weight loss.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

The methodology used in developing the 2014 clinical practice guideline (CPG) follows the "Guideline for Guidelines," an internal document of the Veterans Affairs (VA) and Department of Defense (DoD) Evidence-Based Practice Working Group (EBPWG). This document provides information regarding the process of developing guidelines, including the identification and assembly of the Guideline Champions (Champions) and other subject matter experts from within the VA and DoD, known as the Work Group, and ultimately, the submission of an updated obesity CPG.

The Champions and Work Group for this CPG were charged with developing evidence-based clinical practice recommendations and publishing a guideline document to be used by providers within the VA/DoD healthcare system. Specifically, the Champions for this guideline were responsible for identifying the key questions of greatest clinical relevance, importance, and interest for the management and treatment of overweight and obesity. In addition, the Champions assisted in:

1. Conducting the evidence review, including providing direction on inclusion and exclusion criteria
2. Assessing the level and quality of the evidence
3. Identifying appropriate disciplines to be included as part of the Work Group
4. Directing and coordinating the Work Group
5. Participating throughout the guideline development and review processes.

The VA Office of Quality, Safety and Value, in collaboration with the Medical Command of the DoD, identified two clinical leaders as Champions for the 2014 CPG.

The Lewin Group (Lewin), contracted by VA and DoD to support the development of this CPG and conduct the evidence review, held the first conference call in November 2012, with participation from the contracting officer's representatives (COR), leaders from the VA and DoD evidence-based guideline development program, and the Champions. During this call, the project team discussed the scope of the guideline initiative, the roles and responsibilities of the Champions, the project timeline, and the approach for developing specific research questions on which to base a systematic review about the management and treatment of overweight and obesity. The team also identified a list, from which the

Work Group members were recruited, of clinical specialties and areas of expertise that are important and relevant to the treatment and management of overweight and obesity. The specialties and areas included were Clinical Dietetics, Family Medicine, Healthcare Systems Management and Policy, Internal Medicine, Nursing, Pharmacy Benefit Management, Physical Therapy, Psychiatry, Psychology and Surgery.

The evidence review and synthesis portion of the guideline development process for the 2014 CPG consisted of the following steps:

- Formulating evidence questions (key questions)
- Conducting the systematic review
- Convening a two and a half day face-to-face meeting with the CPG Champions and Work Group members
- Drafting and submitting a final CPG on the screening and management of overweight and obesity to the VA/DoD EBPWG

Appendix A in the original guideline document provides a detailed description of each of these tasks.

Reconciling 2006 Recommendations

The 2006 CPG recommendations and topics that were not subject to the 2013 evidence review were directly carried over into the 2014 CPG, without revisions to the statements or their associated grade (strength of recommendation). These "carryover" recommendations are identified in the evidence table by an arrow pointed from the 2006 grade column to the 2014 grade column. Recommendations from the 2006 CPG were only carried over into the 2014 CPG if the core intent of the original recommendation remained the same and without any substantial revisions to the wording of the recommendation. The authors of this CPG also note that in some cases, there exists additional evidence since 2006 supporting those recommendations and grades that were carried over, which simply strengthens the evidence base. This information is noted in the evidence tables under "Additional Supporting Literature." Any topic not addressed by the 2013 evidence review, which the authors felt warranted a change or addition to the 2006 recommendation addressing that topic, was noted as part of the discussion section and included the relevant new information (although not systematically reviewed).

Convening the Face-to-Face Meeting

In consultation with the Contracting Officer Representative, the Champions, and the Work Group, the Lewin Team convened a two and a half day face-to-face meeting of the CPG Champions and Work Group members on April 15-17, 2013. These experts were gathered to develop and draft the clinical recommendations for an update to the 2006 CPG. Lewin presented findings from the evidence review of the key questions in order to facilitate and inform the process.

Under the direction of the Champions, the Work Group members were charged with interpreting the results of the evidence review, and asked to retain, revise, or reject each recommendation from the 2006 CPG. The members also developed new clinical practice recommendations, not presented in the 2006 CPG, based on the 2013 evidence review. The subject matter experts were divided into four smaller subgroups at this meeting.

Following the drafting of clinical practice recommendations, the Work Group assigned a grade for each recommendation based on a modified USPSTF methodology. Each recommendation was graded by assessing the quality of the overall evidence, or the certainty of the evidence to support the recommendation, and the magnitude of the net benefit of the intervention(s). Each recommendation received a grade of A (offer the service), B (offer the service), C (consider this service for some patients), D (discourage this service), I (if offered, understand that there is a level of uncertainty of evidence) or EO (consider offering this service based purely on expert opinion) (see the "Rating Scheme for the Strength of the Recommendations" field).

The grade of the recommendation is based on a framework that combines the two dimensions, as shown in the table below. As described above, the grade depends on both net benefit and certainty. For example, in the USPSTF grading scheme, a grade of A is assigned to a recommendation that is based on a high certainty of a substantial net benefit. Three combinations of certainty and net benefit can yield a grade of B. Note that, in the USPSTF framework, any recommendation associated with low certainty of net benefit results in a recommendation of I, regardless of the magnitude of net benefit.

Certainty of Net Benefit	Magnitude of Net Benefit			
	Substantial	Moderate	Small	Zero/Negative
High	A	B	C	D
Moderate	B	B	C	D
Low	Insufficient			

Grade of EO for Expert Opinion: During the face-to-face meeting, the Champions and Work Group members used a variation of the USPSTF grading framework to provide for a grade of EO for "Expert Opinion." Given that evidence-based clinical practice guidelines have to be used in real practice for Veterans and Service members, a grade of I for insufficient evidence may not provide enough guidance for supporting clinical decisions in practice. In particular, the Work Group members considered certain instances in which evidence suggests a substantial or moderate net benefit, but the certainty/strength of that evidence is low. In those instances, rather than concluding that the evidence is insufficient to support a clinical decision, the Work Group may rely on considered EO to set forth a recommendation. A grade EO does not imply that the evidence is strong (it is still low). It does suggest that the magnitude of net benefit (substantial or moderate) is of sufficient clinical importance to make a recommendation, even if it is based on low certainty (weak evidence). See Figure B-1 in the original guideline document for a framework that incorporates Expert Opinion.

Drafting and Submitting the Final CPG

Following the face-to-face meeting, the Champions and Work Group members were given writing assignments for the update of specific sections of the 2006 CPG that would form the narrative text for the 2014 CPG. During this time, the Champions also revised the 2006 algorithms and identified the content for the guideline summary and pocket card, as part of the provider toolkits that will be developed by the Evidence-Based Practice Working Group (EBPWG) following the publication of the 2014 CPG. The algorithms will be included as part of this CPG so as to provide a clear description of the flow of patient care. A final two-and-a-half day face-to-face meeting of the editorial team was held from November 20-22, 2013. The final 2014 CPG was submitted to the EBPWG on March 31, 2014.

Rating Scheme for the Strength of the Recommendations

The recommendations in this Clinical Practice guideline are rated according to the U.S. Preventive Services Task Force (USPSTF) rating scheme and are based on two main dimensions: 1) net benefit of an intervention and 2) certainty of evidence association with that net benefit.

USPSTF Recommendations

Grade	Grade Definitions	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer or provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be measured.	If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

Grade of EO was added for "Expert Opinion".

USPSTF Levels of Certainty Regarding Net Benefit

Definition: The USPSTF defines certainty as "likelihood that the USPSTF assessment of the net benefit of a preventive service is correct." The net benefit is defined as benefit minus harm of the preventive service as implemented in a general, primary care population. The USPSTF assigns a certainty level based on the nature of the overall evidence available to assess the net benefit of a preventive service.

Level of Certainty	Description
High	The available evidence usually includes consistent results from well-designed, well-conducted studies in representative primary care populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.
Moderate	The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the

Level of Certainty	Description
	<p>estimate is constrained by factors such as:</p> <ul style="list-style-type: none"> • The number, size, or quality of individual studies • Inconsistency of findings across individual studies • Limited generalizability of findings to routine primary care practice; and • Lack of coherence in the chain of evidence <p>As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion.</p>
Low	<p>The available evidence is insufficient to assess effects on health outcomes. Evidence is insufficient because of:</p> <ul style="list-style-type: none"> • The limited number or size of studies • Important flaws in study design or methods • Inconsistency of findings across individual studies • Gaps in the chain of evidence • Findings not generalizable to routine primary care practice; and • A lack of information on important health outcomes <p>More information may allow an estimation of effects on health outcomes.</p>

See Appendix B in the original guideline document for additional information about grading the recommendations.

Cost Analysis

Published cost analyses were reviewed.

Method of Guideline Validation

Peer Review

Description of Method of Guideline Validation

Not stated

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

This Clinical Practice Guideline is based on a systematic review of both clinical and epidemiological evidence.

The type of supporting evidence is identified for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

There is strong evidence that weight loss resulting from comprehensive lifestyle interventions significantly impacts hypertension, type 2 diabetes, and pre-diabetes in the overweight population. There is also moderate evidence that weight loss has beneficial effects for dyslipidemia. It is hoped that weight loss induced improvements in cardiovascular risk factors (i.e., hypertension, type 2 diabetes, and dyslipidemia) will ultimately result in improved cardiovascular morbidity and mortality.

Potential Harms

- Any form of very-low-calorie diet requires close follow-up and should only be used when high levels of monitoring by trained medical personnel are available.
- Adverse effects, precautions, and drug interactions of anti-obesity agents are described in Appendix J of the original guideline document.
- Bariatric surgery may be associated with stricture of gastrojejunostomy, gastrointestinal bleeding, marginal ulcer, bowel obstruction, deep venous thrombosis and anastomotic leak, obstructions about the distal intestinal anastomosis (with Roux-en-Y gastric bypass), and complications of the LapBand. There is also risk of mortality. See Appendix K in the original guideline document for details.

Contraindications

Contraindications

- The use of weight loss drugs (orlistat, phentermine and topiramate extended-release, lorcaserin) during pregnancy is contraindicated.
- Phentermine is contraindicated during or within 14 days following administration of a monoamine oxidase inhibitor (MAOI) (see Appendix J in the original guideline document for more information on specific drug contraindications).
- Bupropion has a black box warning for suicidality and is contraindicated in patients with a seizure disorder, bulimia, or anorexia.
- While evidence to support absolute contraindications for bariatric surgery is lacking, expert consensus states that women who are pregnant or who are considering pregnancy in the next 18-24 months should not be considered candidates for bariatric surgery. Other relative contraindications to bariatric surgery that are supported only by expert consensus include conditions that compromise anesthesia or wound healing, lack of patient's ability to follow pre- and postoperative instructions, general high risk surgical conditions, and reduced life expectancy for reasons unrelated to obesity.

Qualifying Statements

Qualifying Statements

- The Department of Veterans Affairs (VA) and the Department of Defense (DoD) guidelines are based upon the best information available at the time of publication. They are designed to provide information and assist decision-making. They are not intended to define a standard of care, and should not be construed as one. Neither should they be interpreted as prescribing an exclusive course of management.
- This Clinical Practice Guideline (CPG) is based on a systematic review of both clinical and epidemiological evidence. Developed by a panel of multidisciplinary experts, it provides a clear explanation of the logical relationships between various care options and health outcomes while rating both the quality of the evidence and the strength of the recommendations.
- Variations in practice will inevitably and appropriately occur when clinicians take into account the needs of individual patients, available resources, and limitations unique to an institution or type of practice. Every healthcare professional making use of these guidelines is responsible for evaluating the appropriateness of applying them in the setting of any particular clinical situation.
- These guidelines are not intended to represent TRICARE policy. Further, inclusion of recommendations for specific testing and/or therapeutic interventions within these guidelines does not guarantee coverage of civilian sector care. Additional information on current TRICARE benefits may be found at www.tricare.mil or by contacting your regional TRICARE Managed Care Support Contractor.
- Limitations. It is important to note that due to resource limitations, the Work Group could not formally update all aspects of the 2006 CPG. The key questions chosen for this CPG are those of highest priority that would be supported by a comprehensive evidence review. For instance, though vitally important, an evidence synthesis was not performed for the direct effects of diet and physical activity on weight loss. This is because the authors/editors felt that the principle of creating an energy deficit applies to all forms of dietary and physical activity interventions and therefore new research in this area would not likely substantially change recommendations regarding their effects on weight loss.

Additionally, the systematic review conducted for this CPG examined literature that was published up to February 1, 2013. The Work Group recognizes that several new studies have been published since that time. Consequently, the group reviewed and incorporated new evidence in developing and refining the recommendations, as long as the studies met all *a priori* inclusion criteria for the systematic review.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Clinical Algorithm

Patient Resources

Pocket Guide/Reference Cards

Quick Reference Guides/Physician Guides

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

Management of Overweight and Obesity Working Group. VA/DoD clinical practice guideline for screening and management of overweight and obesity. Washington (DC): Department of Veterans Affairs, Department of Defense; 2014. 178 p. [283 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2006 Dec (revised 2014)

Guideline Developer(s)

Department of Defense - Federal Government Agency [U.S.]

Department of Veterans Affairs - Federal Government Agency [U.S.]

Veterans Health Administration - Federal Government Agency [U.S.]

Source(s) of Funding

United States Government

Guideline Committee

The Management of Overweight and Obesity Working Group

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Additional contributor contact information is available in Appendix L in the original guideline document.

Financial Disclosures/Conflicts of Interest

Not stated

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Management of Overweight and Obesity Working Group. VA/DoD clinical practice guideline for screening and management of overweight and obesity. Washington (DC): Department of Veterans Affairs, Department of Defense; 2006. 117 p.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Guideline Availability

Electronic copies: Available from the [Department of Veterans Affairs Web site](#) .

Print copies: Available from the Department of Veterans Affairs, Veterans Health Administration, Office of Quality and Performance (10Q) 810

Vermont Ave. NW, Washington, DC 20420.

Availability of Companion Documents

The following are available:

- VA/DoD evidence-based clinical practice guideline for screening and management of overweight and obesity. Guideline summary. Washington (DC): Department of Veterans Affairs, Department of Defense; 2014 Apr 18. 12 p. Electronic copies: Available from the [Department of Veterans Affairs \(VA\) Web site](#) .
- VA/DoD evidence-based clinical practice guideline for screening and management of overweight and obesity. Pocket card. Washington (DC): Department of Veterans Affairs, Department of Defense; 2014. 8 p. Electronic copies: Available from the [VA Web site](#) .
- The guidelines for guidelines. Washington (DC): Department of Veterans Affairs; 2014 May 12. Electronic copies: Available from the [VA Web site](#) .
- Putting clinical practice guidelines to work. Washington (DC): Department of Veterans Affairs. 64 p. Electronic copies: Available from the [VA Web site](#) .

Print copies: Department of Veterans Affairs, Veterans Health Administration, Office of Quality and Performance (10Q) 810 Vermont Ave. NW, Washington, DC 20420.

Patient Resources

The following is available:

- VA/DoD evidence-based clinical practice guideline for screening and management of overweight and obesity. Patient summary. Washington (DC): Department of Veterans Affairs, Department of Defense; 2014. 5 p. Electronic copies: Available from the [Department of Veterans Affairs Web site](#) .

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

This NGC summary was completed by ECRI Institute on June 7, 2007. This summary was updated by ECRI Institute on January 28, 2010 following the U.S. Food and Drug Administration advisory on Meridia. This summary was updated by ECRI Institute on July 20, 2010 following the U.S. Food and Drug Administration advisory on Orlistat. This summary was updated by ECRI Institute on November 24, 2014.

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