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Patient Assessment and Medical Evaluation Table of Contents

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Introduction

The VA National Center for Health Promotion and Disease Prevention (NCP), Veterans Health Administration (VHA) Office of Patient Care Services with input from the field, developed a Weight Management Program for Veterans (MOVE!®). The Program is based on the *NIH Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report* (1998)[1] and the United States Preventive Services Task Force (USPSTF) *Screening and Interventions for Obesity in Adults: Summary of the Evidence for the US Preventive Services Task Force* (2003)[2] and *Screening for Obesity in Adults* (2003).[3]

The following resources provide guidance to VHA clinicians for implementation/maintenance of weight management programs:

Handbook 1101: Managing Overweight and/or Obesity for Veterans Everywhere (MOVE!) Program [4]
Joint Veterans Affairs (VA)/Department of Defense (DoD) Clinical Practice Guideline for Screening and Management of Overweight and Obesity (CPG) (2006)[5]

The MOVE! Reference Manual addresses the full spectrum of weight management. The Manual consists of topic specific chapters, and each topic should be considered in relation to others.

General Information

This chapter introduces the process of assessing patients who have indicated they are interested in losing and controlling their weight. It describes how to use MOVE!23, a multifactorial patient assessment tool, provides an overview of medical evaluation of patients beginning weight management, and addresses evaluation of a patient's medication regimen, as well as strategies for minimizing the effects of drug-induced weight gain.

Multifactorial Patient Assessment

There is no single effective weight management strategy that will work for every patient. Thus, tailoring care to a patient's strengths and challenges is an important component of any effective weight management program. A multifactorial patient assessment involves gathering information about history, behavior, nutrition, and physical activity habits that are important for weight management. A structured clinical interview can obtain this information, but is often not feasible within a primary care setting due to time and resource constraints. The MOVE!23 Patient Questionnaire is a quick multifactorial patient assessment that can be used when patients indicate that they are interested in weight management. The questionnaire is described in more detail below; a technical manual on the MOVE!23 is available on the Intranet.

History of the MOVE!23

The MOVE!23 questionnaire was developed to give providers a way to rapidly assess patients with respect to the multiple factors important for weight management. The items included on the original patient assessment used in the MOVE! pilot studies were either adapted from other instruments or derived empirically based on experience working with weight management patients. Feedback from staff and patients at the pilot sites and a review of the data generated from pilot MOVE! enrollees allowed the national MOVE! team to shorten and refine this questionnaire to the current version, which consists of 23 items (hence the name MOVE!23).

The MOVE!23 is a clinical tool; it was not designed for research purposes. Measurement of various weight control behaviors with this tool is not perfect, nor will all Veterans necessarily understand each item that is being asked. It is suggested that reports resulting from the patient's answers on the MOVE!23 be used to foster discussion between provider and patient to more effectively manage the patient's weight. The resultant discussion is the critical piece of the encounter.

Format of the MOVE!23

The MOVE!23 is a computerized assessment. On average, it takes about 10 minutes to complete. The Veteran is asked about the following:

- Demographics (including age, sex, race)
- Medical history (with a particular emphasis on conditions which may be barriers to change)
- Importance, confidence, and readiness to change
- Weight control history

- Problem nutrition behaviors and barriers
- Problem physical activity behaviors and barriers

Completion of the questionnaire generates an individualized patient report written at a sixth-grade reading level. The report summarizes strengths and problem areas relevant to weight management and provides brief tips and suggested handouts for identified barriers to change.

An abbreviated staff report that includes the same information is also generated. The staff report highlights issues that require staff evaluation and/or treatment. This report includes the list of relevant patient handouts (with links to the handouts on the MOVE! website). Recommendations for supporting self-management are also given.

One of the best ways to get a better feel for the MOVE!23 is to try it for yourself. You can go to the MOVE! intranet website and choose "TEST SITE" for the facility. You can use your own name or make up a "test" name.

The MOVE!23 can be administered to Veterans using paper and pencil, but this option should be reserved for cases where computer access is not available. All paper and pencil administrations will require a staff member to enter item responses in order to generate the tailored reports. In the MOVE! pilot studies, most Veterans were able to complete the MOVE!23 electronically; only some required staff assistance.

Domains and Items Assessed on the MOVE!23

This section provides additional detail about specific items on the MOVE!23.

Items are grouped into the following general domains:

- Medical history and status (Items 2 and 3)
- Weight control expectations and history (Items 1, 4, 5, 6, 7, 12, 13, 14)
- Behavior change readiness and assets (Items 8, 9, 10, 11)
- Nutrition behaviors and barriers (Items 15, 16, 17, 18, 19, 20, 21)
- Physical activity behaviors and barriers (Items 22 and 23)

Each item in the section that follows is annotated with respect to the following:

- Actual question on the MOVE!23
- Response options
- Brief summary of patient messages
- Source of item (if adapted or empirically derived)

Medical/Psychiatric History and Status (Items 2 and 3)

Item 2. In general, would you say that your health is:

- ☐ a. Excellent
- ☐ b. Very Good
- ☐ c. Good
- ☐ d. Fair
- ☐ e. Poor

Patient report: None.
Staff report: Veteran reports current health to be (excellent) (very good) (good) (fair) (poor).

Item rationale and source: This is the first item on the SF-36[6], a measure commonly used to assess quality of life and health status. This single item is correlated with health care utilization and mortality.

Item 3. Please indicate (with a check mark to the left) any of the following that apply to you:

- ☐ Shortness of breath at rest
- ☐ Chest pains not previously evaluated by your doctor
- ☐ Active infection of any kind
- ☐ Hernia in the groin or belly area
- ☐ Retinal hemorrhage (bleeding in the back of the eye)
- ☐ Loss of balance because of dizziness or passing out
- ☐ Any chronic medical problem that has recently been out-of-control, unstable or flared up
- ☐ Arthritis or joint pain
- ☐ Osteoporosis or bone disease
- ☐ Amputation
- ☐ Spinal cord injury
- ☐ Lung disease (emphysema, COPD, or asthma)
- ☐ Heart disease such as heart failure, heart attack or angina, heart surgery or angioplasty, irregular heartbeat, implanted defibrillator or pacemaker, heart valve problems
- ☐ Poor blood circulation in the legs
- ☐ Stroke or TIAs (mini-strokes) or carotid artery surgery in the neck
- ☐ Diabetes – even if controlled by medication or diet
- ☐ High blood pressure - even if controlled by medication or diet
- ☐ Back pain or spinal disc disease
- ☐ Someone in your immediate family with heart problems at an age younger than 50
- ☐ High blood cholesterol - even if controlled by medication or diet
- ☐ General unhappiness
- ☐ Depression
- ☐ Anxiety problems or nervousness
- ☐ Too much stress
- ☐ Family or relationship problems
- ☐ Bipolar disorder (Manic depressive disorder)
- ☐ Schizophrenia
- ☐ Post traumatic stress disorder (PTSD)
- ☐ Obsessive/compulsive disorder
- ☐ Eating disorder/binge eating/anorexia/bulimia
- ☐ Tobacco use/smoking
- ☐ Substance abuse or dependence
- ☐ None of these

Patient report: Depending on which conditions the Veteran selects, he/she will receive one or more of the following messages:

Physical Activity Precautions

- You reported the following medical issue(s) on the questionnaire (see attached list). You should discuss these with your doctor before beginning a program of increased physical activity.
- It is probably safe for you to begin mild to moderate exercise. You have some medical issues that may limit the types of activities you can safely do. You should see your doctor before starting any heavy or vigorous activities. Please discuss the following medical issue(s) with your MOVE! health care team (see attached list of selected conditions).

Mental Health Problems

- Problems of an emotional nature often contribute to weight gain. There are better ways of dealing with negative thoughts and feelings. If you are stressed most of the time, ask your medical provider about available treatments. The MOVE! handouts *Stress, Anxiety, and Depression (B28), Emotions and Your Weight (B12)*, *Take Control of Your Thoughts, Feelings, and Behavior (B29)*, and *Psychiatric Conditions (B22)* may be helpful.
- You indicated that you may have an eating disorder. Specialized treatment may be available at your VA facility. Please tell your primary care provider about this.
- Quitting tobacco use is important for your health. The MOVE! handouts *Quitting Smoking is a Healthy Choice (M04)* and *Quit Smoking—Gain Weight? (B23)* may be helpful.
- You indicated a problem with substance abuse or dependence. This can make managing your weight a challenge. Discuss this further with your MOVE! health care team.

Staff report: If Veteran indicates conditions which are contraindications to physical activity in the absence of further evaluation (see the MOVE! Physical Activity Decision Aid), then one or more of the following messages is displayed:

Physical Activity Precautions
The Veteran is reporting the following (selected from a list in the report):

- Although the patient can work on nutrition issues, increased physical activity is not recommended without further evaluation by the primary care provider. Primary care providers can refer to the Physical Activity Readiness-Medical Exam (PARmed-X)[7] and the Pre-Exercise Cardiovascular Risk Stratification Guide[8] for guidance about exercise stress testing and conditions requiring medically supervised exercise.

The Veteran is reporting the following (selected from a list in the report):

- The Veteran should check with the primary care provider before doing strength or flexibility exercises. This includes exercises using free weights, specialized machines or resistance type exercises like sit-ups. In addition, the following may be recommended to design an individualized program: consultation to physical therapy, kinesiotherapy, or physical medicine and rehabilitation.
- The Veteran can begin moderate physical activity without a medical evaluation assuming good control of any chronic conditions. The primary care provider should perform a medical evaluation before the Veteran starts any vigorous physical activity.

Mental Health Problems
The Veteran is reporting the following (selected from a list in the report):

- Poor control of any of these issues may make changing behaviors related to weight management more difficult for the Veteran. Discuss with Veteran whether further evaluation and treatment for any of these issues is needed and/or wanted. The following MOVE! handouts may help:
  (B12) Emotions and Your Weight
  (B28) Stress, Anxiety, Depression
  (B29) Take Control of Your Thoughts, Feelings, and Behavior
  (M04) Quitting Smoking is a Healthy Choice and (B23) Quit Smoking—Gain Weight?
  (B22) Psychiatric Conditions
  (B16) Tempted and (B24) Control Yourself
- The Veteran is reporting problems with or a history of an eating disorder such as binge eating, bulimia, or anorexia. The Veteran should check with his or her primary care provider before beginning any weight management program.

Item rationale and source: Medical contraindications to various types of physical activity are based on recommendations issued by the American College of Sports Medicine, American Heart Association, American College of Cardiology, and the Canadian Society for Exercise Physiology.[9] Mental health problems assessed are those that may present competing demands for staff and patient attention or may pose barriers to changing nutrition and physical activity barriers in a safe and healthy way.

Weight Control Expectations and History (Items 1, 4, 5, 6, 7, 12, 13, 14)

Item 1. I consider myself to be (check one):

☐ Underweight for my height and age
☐ Normal weight for my height and age
☐ Overweight for my height and age

Patient report: none
Staff report: If Veteran selects the options “underweight” or “normal weight,” then the following message is displayed:

Veteran's BMI is X, but Veteran considers self as underweight or of normal weight. Educate Veteran on medical classification of overweight/obesity using BMI and address any remaining inconsistency.

Item rationale and source: This item was empirically derived to measure patient self-perception of weight and to allow staff to address any inconsistencies between perceived and actual weight and health risk.

Items 4 and 5. Past and current attempts at weight control.

For these items, the Veteran is asked about his or her prior history and current attempts with weight control. Methods listed include:

- Some form of dieting, i.e., eating differently from the way you usually eat for the sake of losing weight
- Avoiding particular foods or food groups
- Physical exercise, such as walking, swimming or calisthenics
- Prepackaged meals
- Meal replacements in bar, powder, liquid, tablet/pill or water form
- Fasting for 24 hours or longer
- Skipping meals
- Hypnosis
- Comprehensive weight loss program with dietary, physical activity, and behavioral counseling
- Any other kind of weight loss program that does NOT provide comprehensive treatment
- Keeping a log or journal for eating or exercise
- Causing yourself to vomit after you eat
- Cosmetic procedure such as liposuction or other
- Weight loss medical procedure such as gastric bypass, gastric banding, wiring of your jaw or other

Patient report: none

Staff report: A list of past and present weight loss methods used by patient is provided.

You may want to discuss with Veteran what did or didn't work for him or her in the past and the pros and cons of various methods he or she has tried or is currently using.

Item rationale and source: Experiences with weight management patients helped to develop this question. Any methods used by patients past and/or present should be recognized and addressed. Note that prior weight loss history may influence the patient's readiness, confidence, and beliefs about weight loss.

Item 6. Select the answer that best describes your rate of weight gain over the years.

☐ I have been overweight since childhood (before age 18).
☐ I have gained weight gradually over the years.
☐ I have gained most of my excess weight in a short period of time.
☐ I have gained and lost weight many times over the years ("yo-yo").

Patient report: Veteran receives one of the following responses:

- You indicated that you have been overweight since you were a child. It is possible that you may have inherited a tendency to gain weight easily, or perhaps you were encouraged to overeat, and/or be physically inactive. Either way, don't be discouraged. There is a great deal you can do to reach and maintain a healthy weight with the MOVE! Program.
- Most people gain weight as they age, because they are less physically active and eat more. Gradual changes in physical activity and eating habits can change this pattern. Refer to *Basics of Weight Control (S01)* and other MOVE! handouts for guidance. You indicated that you have gained much of your excess weight in the last few years. This could happen for a number of reasons. A stressful event (quitting smoking, job change, retirement, injury, loss of someone close to you, etc.) sometimes causes people to eat unhealthy or be less active. Finding better ways to deal with these stressful situations would be helpful. Talk to your MOVE! health care team.
- You indicated that you have gained and lost weight over and over again. In the MOVE! Program, we encourage you to make changes in your eating and physical activity that you can maintain. The MOVE! handout *Skip the Fad Diet (M01)* can help.

Staff report: Veteran reports weight gain pattern as:

- Since childhood
- Gradual over the years; Veteran should read the handout *Basics of Weight Control (S01)*
- In a short period of time; staff are instructed to help Veteran identify cause(s)
- Multiple loss and gain cycles ("yo-yo" dieting); Veteran should read the handout *Skip the Fad Diet (M01)*

Item rationale and source: This item was empirically derived to help staff and patient put his or her weight gain pattern in a larger perspective.

Item 7. Select the answer that best describes your family:

☐ a. As a group, my family is not overweight or obese.
☐ b. As a group, some members of my family are overweight or obese.
☐ c. As a group, most members of my family are overweight or obese.

Patient report: If Veteran selects (b) or (c), he/she receives the following message:

- Genetics and family habits may have played a role with your weight. The MOVE! Program gives you tools and resources to reach and maintain a healthy weight. You can do it!

Staff report: If Veteran selects (c), the following is displayed:

- Most members of Veteran's family are overweight.

Item rationale and source: This item was empirically derived to provide staff with a sense of how much of the Veteran's overweight or obesity might be attributable to genetic factors, although the extent to which familial obesity is a product of genes versus a product of a common environment cannot be discerned from this item alone. This question also provides staff with an idea of what sorts of social barriers the patient might face as he or she begins a program of weight management.

Item 12. How much weight do you think you realistically could lose in one year?

☐ 10 lbs or less
☐ 11 – 25 lbs
☐ 26 – 50 lbs
☐ 51 - 100 lbs
☐ more than 100 lbs

Patient report: The Veteran receives one of the following responses:

- You indicated that you think you can lose 10 pounds or less in one year. Your expectations for losing weight are very realistic. In general, people can safely lose ½ pound to 2 pounds a week, on average, if they work at it. Go for it!
- You indicated that you think you can lose 11–25 pounds in one year. Your expectations for losing weight are realistic. In general, people can safely lose ½ pound to 2 pounds a week, on average, if they work at it. Go for it!
- You indicated that you think you can lose 26-50 pounds in one year. Your expectations for losing weight appear to be realistic. In general, people can safely lose ½ pound to 2 pounds a week, on average, if they work at it. Go for it!
- You indicated that you think you can lose 51–100 pounds in one year. Although a loss of ½ pound to 2 pounds a week is feasible and can be safely accomplished, this rate of weight loss is hard to maintain over a long period of time. Smaller weight loss goals over a shorter time period may be more easily achieved. Refer to the MOVE! handout *Set Your Weight Loss Goals (S02)*.
- You indicated that you think you can lose more than 100 pounds in one year. You may be expecting to lose more weight in one year than is probably realistic. This may lead to disappointment and is a sure-fire way to lose your motivation. We don't want that! Realistically, a loss of ½ pound to 2 pounds a week, on

average, can be safely accomplished. Smaller weight loss goals over a shorter time period may be more easily achieved. See the MOVE! handout *Set Your Weight Loss Goals (S02)*.

Staff report: If the Veteran selects (d) or (e), then the following message is displayed:

- Weight loss expectations may be unrealistic. Remind Veteran of the health benefits of even small amounts of weight loss. In general, people can safely lose ½ pound to 2 pounds a week, on average, if they work at it. See the MOVE! handout *Set Your Weight Loss Goals (S02*).

Item rationale and source: NIH Guidelines recommend a weight loss rate of ½ pound to 2 pounds per week.[1] This rate is safe, achievable, and maintainable for the long term. Rates at the higher end of this range are more typical with initial weight loss efforts but may be hard to maintain over the course of many months. Thus, over the course of a year a realistic amount of weight loss is in the range of 26–52 lbs or less.

Item 13. How satisfied are you with the appearance of your body?

- ☐ Very satisfied
- ☐ Moderately satisfied
- ☐ Neither satisfied or dissatisfied
- ☐ Moderately dissatisfied
- ☐ Very dissatisfied

Patient report:

- You indicated that you are moderately dissatisfied or very dissatisfied with the appearance of your body. Many people focus more on their flaws than on their good features. Focus on the positive! The MOVE! handout *Body Image (B08)* may help.

Staff report:

If the Veteran selects (a) or (b), the following is displayed:

- Veteran is very satisfied or moderately satisfied with the appearance of his or her body. Although it is good that the patient is satisfied with his or her physical presentation at this time, from a health perspective, the excess weight places the Veteran at greater risk. While a negative body image is not desired, you should be aware of the mismatch between the Veteran's self-perception of appearance and his or her apparent lack of discomfort with excess weight.

If the Veterans selects (d) or (e), the following is displayed:

- Veteran is moderately dissatisfied or very dissatisfied with the appearance of his or her body. Help the Veteran to focus on positive features rather than dwell on the negatives. See the MOVE! handout *Body Image (B08)* for more information.

For some patients, dissatisfaction with body appearance can be used to increase motivation and strengthen commitment.

Item rationale and source: This item was empirically derived as a measure of body image satisfaction. The mismatch between being satisfied with current body image and health risks might be leveraged to create some patient discomfort. Patient dissatisfaction with current body image can be leveraged to increase motivation.

Item 14. Do any of the following have anything to do with your being overweight? Check all that apply to you.

- ☐ a. Eating because of emotions or stress
- ☐ b. Family or relationship problems
- ☐ c. Boredom
- ☐ d. Loneliness or Loss of loved one
- ☐ e. Eating too much
- ☐ f. Poor food choices or habits
- ☐ g. Not getting enough physical activity
- ☐ h. Difficulty with self control
- ☐ i. Hungry all the time
- ☐ j. Feeling bad about myself
- ☐ k. Love to eat
- ☐ l. Quitting tobacco use
- ☐ m. Pregnancy/Childbirth
- ☐ n. Illness or injury
- ☐ o. Medications led to weight gain
- ☐ p. Other
- ☐ q. None of the above

Patient report: Veterans who select anything other than (q) receive a tailored response recognizing the barrier(s) to weight loss and offering suggestions for addressing the barrier(s), including appropriate MOVE! handouts. A Veteran who selects (p) will be advised to speak further with his or her MOVE! health care team.

Staff report: Reasons given by Veteran for his/her overweight/obesity (selected responses are listed).

Item rationale and source: This list of causes is a combination of medical, behavioral, nutrition, and physical activity factors that are associated with being obese or overweight. This item does not measure “actual” causes for the patient’s overweight or obesity, just the factors that the Veteran perceives to be related to his/her own obesity.

Behavior Change Readiness and Assets (Items 8, 9, 10, 11)

Item 8. How much can you rely on family or friends for support and encouragement?

☐ A lot
☐ Somewhat
☐ Not at all

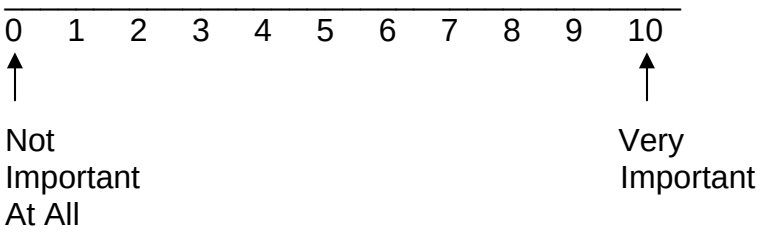
Patient report: Depending on the answer selected, the Veteran receives one of the following messages:

- You indicated that you can rely a lot on family or friends for support and encouragement. Great! Use them for support.
- You indicated that you can rely somewhat on family or friends for support. It may be helpful for you to find others who will also give you support and encouragement as you work on weight control. MOVE! can also offer you support. The MOVE! handout *Involving Others in Your Weight Control Program (B27)* offers tips on getting the support you need.
- You indicated you can't rely on family and friends for support and encouragement. It may be helpful for you to find others who will give you support and encouragement as you work on weight control. MOVE! can also offer you support. The handout *Involving Others in Your Weight Control Program (B27)* offers tips on getting the support you need.

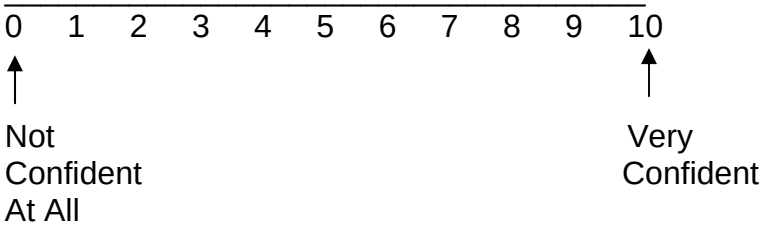
Staff report: Veteran has indicated that he or she can rely on friends and family for support: (a lot) (somewhat) (not at all)

Item rationale and source: This item gauges self-perceived social support, which is a factor that can influence maintenance of health behavior changes. [10]

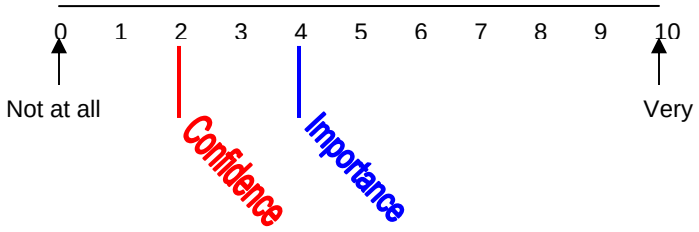
Item 9. How important is controlling your weight to you personally? Please circle the number that applies. Please do not place a circle in the space between numbers.



How confident are you that you can successfully change your eating and physical activity to control your weight? Please circle the number that applies. Please do not place a circle in the space between numbers.

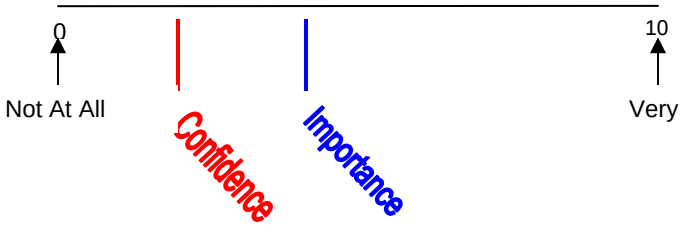


Patient report: The chart below indicates how you rated the importance of weight management to you personally and your level of confidence in your ability to change behaviors related to weight management.



If you rated "importance" or "confidence" in the middle or low range, don't feel bad. Many people who are starting with weight management often feel the same way. The more important weight management becomes to you and the more confidence you gain, the more likely you will be successful. Talk with your MOVE! health care team about what help you might need.

Staff report: The Veteran rated the importance of and confidence for changing weight management behaviors as follows:



Item rationale and source: The assessment of importance and confidence for health behavior change comes from literature that suggests that these are two important determinants of "readiness for change," as described by the Transtheoretical Stages of Change Model.[11] Exploring and raising importance and/or confidence can help

advance patients on the continuum of precontemplation, contemplation, preparation, action, and maintenance. Exploring and raising importance and confidence using the scale from 0 to10 is a contemporary method of motivational counseling that is being promoted for "brief behavioral interventions" in primary care and other medical care settings. Its origins lie within the Motivational Interviewing methods originally described by Rollnick and Miller[10].

Item 11. Check the statement that most closely applies to you:

☐ I am not considering trying to control my weight at this time.

☐ I am considering trying to control my weight sometime within the next six months.

☐ I am ready to make some changes to control my weight.

☐ I am actively working on controlling my weight at this time.

☐ I have been continuously and successfully doing things to control my weight for more than the last six months.

Patient report: Depending on how the Veteran answers, he/she receives one of the following messages:

- You answered that you are not considering trying to control your weight at this time. That's OK. You need to feel ready before making such a major effort. The MOVE! handout *So, You're Not Ready Yet? (B02)* should be helpful.
- You answered that you are considering working on weight control sometime within the next six months. Great! The MOVE! Program will help when you are ready. You may be interested in the MOVE! handout *So….You're Thinking About It! (B03)*.
- It appears that you are ready to begin working on controlling your weight. Super!! Ask for the MOVE! handout *Getting Ready to Lose Some Weight? (B04)*.
- You answered that you are already working on controlling your weight at this time. Excellent!! Keep it up! Using the MOVE! Program will help you continue to do that. Ask for the MOVE! handout *Yes..Now You're Doing It! (B05)*.
- You have been successfully working on controlling your weight for some time now. Excellent!! Keep it up! Ask for the MOVE! handout *Yes…You Can Keep That Weight Off! (B06)*. The MOVE! Program can provide support if you need it.

Staff report: Depending on the Veteran's response, staff receive one of the following messages:

- The Veteran indicated that he/she is not considering trying to control his/her weight at this time. Using the patient's ratings of importance and confidence above, ask what it would take for the patient to rate these items 1-2 points higher. Also, ask what kept him/her from rating these items 1-2 points lower than he/she did. Gently advise the patient of the risks of overweight/obesity and give him/her the MOVE! handout *So, You are not Ready Yet (B02)*.
- The Veteran indicated that he/she is considering trying to control his/her weight at this time. Using the patient's ratings of importance and confidence above, ask

what it would take for the patient to rate these items 1-2 points higher. Also ask what kept him/her from rating these items 1-2 points lower than he/she did. Gently advise the patient of the risks of overweight/obesity and provide the MOVE! handout *So, You are Thinking About It (B03)*. Reassess his/her readiness to begin the MOVE! Weight Management Program at the end of your visit or during the next primary care visit.

- The Veteran indicated that he/she is ready to make some changes to control weight. Congratulate the Veteran and support self-efficacy. If importance or confidence is rated in the mid or low range, ask the Veteran what it might take to increase the rating by 1-2 points. Provide the MOVE! handout *Getting Ready to Lose Some Weight? (B04)*.
- The Veteran indicated that he/she is actively working on weight management at this time. Congratulate the Veteran and support self-efficacy. If importance or confidence is rated in the mid or low range, ask the Veteran what it might take to increase the rating by 1-2 points. Provide the MOVE! handout *Yes..Now You're Doing it! (B05)*.
- The Veteran indicated that he/she has been continuously and successfully managing weight for the last six months. Congratulate the Veteran and support self-efficacy. If importance or confidence is rated in the mid or low range, ask the Veteran what it might take to increase the rating by 1-2 points. Provide the MOVE! handout *Yes ..You Can Keep that Weight Off! (B06*).

Item rationale and source: This single item asks patients to assign themselves to one of the stages of readiness to change as described by the Transtheoretical Stages of Change Model.[11] Assessing the patient's stage of change is essential, as it allows for targeted counseling messages appropriate to the patient's stage.

Nutrition Behaviors and Barriers (Items 15, 16, 17, 18, 19, 20, 21)

Item 15. What do you think may get in the way of changing your eating habits? Check all that apply to you.

- ☐ a. Eating food from restaurants, fast food places, convenience stores, vending machines
- ☐ b. Person who prepares my food is uncooperative or unsupportive
- ☐ c. Too much high calorie food available at home or work
- ☐ d. Too little time to prepare and eat healthy food
- ☐ e. Too little money to buy healthy food
- ☐ f. Feeling hungry much of the time
- ☐ g. Used to eating a certain way
- ☐ h. Difficulties such as stress or depression
- ☐ i. Being with others who overeat
- ☐ j. Don't know how
- ☐ k. Other
- ☐ l. Nothing should get in the way

Patient report: Veterans who select anything other than (l) receive a tailored response recognizing the barrier(s) and offering suggestions for addressing the barrier(s), including appropriate MOVE! handouts. A Veteran who selects (k) is advised to talk further with his or her MOVE! health care team.

Staff report: Reported barriers to changing eating habits: list of selected answers. MOVE! handouts are available for some of these issues.

Item rationale and source: Responses to this item were chosen because they are recognized as common barriers to changing eating habits to support weight management.

Item 16. How many times a day do you typically eat, including snacks?

- ☐ 1 time a day
- ☐ 2 times a day
- ☐ 3 times a day
- ☐ 4 times a day
- ☐ 5 or more times each day

Patient report: Patients who respond that they eat three times a day or less are offered this message:

- It would be better for you to eat more frequently. A healthy eating pattern for weight loss is to eat five to six small healthy meals or snacks each day, avoiding high calorie foods. See the MOVE! handout *Nutrition Tips (N22) for more information*.

Patients who respond that they eat four times a day or more are offered this message:

- You eat (relatively frequently) or (frequently), and that is good, as long as you eat small, healthy meals or snacks. Be careful to limit high calorie foods.

Staff report: For Veterans who indicate that they eat three times a day or less, this message appears on the staff report. Veteran may be eating too infrequently. Veteran should aim for five to six small, healthy meals or snacks each day. See the MOVE! handout *Be A Frequent Feeder (N22*).

Item rationale and source: With less frequent meals or skipping of meals, hunger can grow such that one becomes ravenous and is prompted to overeat. With such intense hunger, it can be tempting to go for the first available item, which may be high in calories and fat. With a healthy eating pattern of 5 to 6 small meals or snacks a day, one can sustain energy, keep blood sugar levels in check, and reduce temptations for less nutritious choices.

Item 17. How many times per week do you eat at restaurants or buy 'take out' food?

Please indicate on the line below the number of times between 0 and 21. Consider breakfast, lunch, and supper 7 days a week for a total of 21 meals for which restaurant or take out food could be eaten. If the Veteran answers "1" or "2," then a follow-up question asks: When you eat out, do you find that you overeat or eat higher calorie foods?

Patient report: If the Veteran indicates that he or she eats out three or more times per week or one to two times per week with high calorie food, then he or she is provided the following message:

- Eating restaurant or take-out food can make controlling weight hard due to the large portions of high-calorie food. People will often eat the entire amount they buy. Healthy eating is possible with careful attention to food choices and smaller portions. Ask for the MOVE! handouts *Restaurant Tips (N25)* and *Fast Food Alternatives (N07)*.

Staff report: Veteran may be eating out or buying food to go frequently. This often can lead to overeating or eating higher calorie foods. Provide the MOVE! handouts *Restaurant Tips (N25)* and *Fast Food Alternatives (N07).*

Item rationale and source: This item is empirically derived based on the fact that eating restaurant or take-out food can make controlling weight hard due to the large portions of high calorie food that are typically provided. This item encourages the

respondent to consider the possibility of healthy restaurant eating with careful attention to food choices and smaller portions.

Item 18. How much sugar-sweetened soda, tea, juice, juice-drinks, or other beverages do you drink most days?

☐ a. I don't drink drinks sweetened with sugar or juice. I don't drink drinks sweetened with sugar or juice.

☐ b. 1 – 2 cups, cans, small bottles or drink boxes per day.

☐ c. 3 or more cups, cans, small bottles or drink boxes per day.

Item 19. Do you drink alcoholic beverages (such as beer, malt liquor, wine, wine coolers, hard/distilled liquor)?

☐ Yes

☐ No

Patient report: Veterans selecting 18 (b) or (c) or 19 (a) are provided the following message:

- You may be taking in (a huge number of) unnecessary calories by drinking sugar-sweetened soda, tea, juice, or other sugary beverages. Try switching to water or other sugar-free drinks. Sugar-free drinks may taste slightly different at first, but you will get used to the new taste quickly. Ask for the MOVE! handouts *Liquid Calories (N17)* and *Water—Drink Up (N31)*.
- Alcoholic beverages add "empty" calories that can make controlling your weight difficult. The MOVE! handout *Liquid Calories (N17)* has more information. The MOVE! handout *Water—Drink Up (N31)* may also be helpful.

Staff report: Veteran may be consuming unnecessary liquid calories from sweetened soda or juice or alcohol. See the MOVE! handouts *Liquid Calories (N17)* and *Water—Drink Up (N31).*

Item rationale and source: Consumption of sugar-sweetened beverages is often a problem behavior for those who are overweight. Often, individuals are unaware of the significance of their intake in the form of liquid calories. This item roughly measures such intake. Veterans are advised that they may be consuming unnecessary liquid calories and that they should consider water, artificially sweetened, and/or calorie-free alternatives. Question 19 is designed to assess "liquid calories" from alcohol rather than problem alcohol use; thus, the dichotomous response option of yes/no. Currently, screening for problem alcohol use is conducted within primary care settings using the AUDIT-C tool.

Item 20. How fast do you usually eat?

- ☐ I eat slowly
- ☐ I eat at a moderate pace
- ☐ I eat fast

Patient report: Patients receive one of the following messages:

- You eat slowly. This is good and is an important skill for weight control. Keep it up!
- Eating too quickly may result in eating too much. Everyone can benefit from eating slowly and truly tasting and enjoying what they eat. If you eat too quickly, the MOVE! handout *Slow Down… You Eat Too Fast… (B26)* may help.
- Eating too quickly may result in eating too much. Everyone can benefit from eating slowly and truly tasting and enjoying what they eat. If you eat too quickly, the MOVE! handout *Slow Down… You Eat Too Fast… (B26)* may help.

Staff report: If the Veteran selects (b) or (c), he or she may be eating too quickly. See the MOVE! handout *Slow Down… You Eat Too Fast… (B26)*.

Item rationale and source: Faster eating leads to a reduced ability to regulate the amount eaten. Slower eating allows for visual cues to help regulate consumption and register satiety. It takes approximately 20 minutes for the signal from the stomach to reach the brain and register as satiety/fullness. Veterans who select (b) or (c) should be cautioned to resist the temptation to eat rapidly, which can lead to overconsumption, and advised to slow down and enjoy their food.

Item 21. On average, how often have you eaten extremely large amounts of food at one time and felt that your eating was out of control at that time?

- ☐ Never
- ☐ Less than 1 time per week
- ☐ 1 time per week
- ☐ 2 to 4 times a week
- ☐ 5 or more times a week

Patient report: If the Veteran reports binge eating once or more per week, he or she is given the following message:

- You may have problems with binge eating, which is eating extremely large amounts of food at one time and feeling like you can't control yourself. Your MOVE! health care team can help you concentrate on how to control your impulses to eat. The MOVE! handouts *Control Yourself!! (B24)* and *Tempted (B16)* may also help.

Staff report: If Veteran reports binge-eating 1 or more times per week, this finding is highlighted on the "red flags" section of the Staff Report.

Item rationale and source: This item is a single item assessment for binge-eating behavior. This item alone is not sufficient to screen for or diagnose binge-eating disorder, a condition classified with specific criteria in the Diagnostic and Statistic Manual of Psychiatric Disorders (DSM; American Psychiatric Association).[12] Veterans who indicate a frequency of binge-eating of 1 or more times per week should be further evaluated for the presence of binge-eating or other eating disorders. The Questionnaire on Weight and Eating Patterns (QWEP-R©)[13-15], available on the MOVE! website, is an instrument that can be administered for the diagnosis of binge-eating disorder by DSM criteria, when followed up with a targeted clinical interview by a qualified professional.

Physical Activity Behaviors and Barriers (Items 22 and 23)

Item 22. What do you think may get in the way of changing your physical activity habits? Check all that apply to you.

- ☐ a. Too little time
- ☐ b. Too little money
- ☐ c. Safety concerns
- ☐ d. No place to walk or be active
- ☐ e. No transportation
- ☐ f. Lack of support or encouragement from others
- ☐ g. Difficulties such as stress, depression, etc.
- ☐ h. Do not like to exercise
- ☐ i. Daily habits or routines that do not include exercise
- ☐ j. Pain
- ☐ k. Amputation
- ☐ l. Back problems
- ☐ m. Arthritis
- ☐ n. Muscular problems
- ☐ o. Heart or lung disease
- ☐ p. Joint problems
- ☐ q. Spinal cord injury
- ☐ r. Too tired
- ☐ s. Job or work schedule
- ☐ t. Other
- ☐ u. Nothing should get in the way

Patient report: Veterans who select anything other than (u) receive a tailored response recognizing the barrier(s) they have identified and offering suggestions for addressing the barrier(s), including appropriate MOVE! handouts. A Veteran who answers (t) will be advised to talk further with his or her MOVE! health care team.

Staff report: The report will list the barriers identified by the Veteran; MOVE! handouts addressing some of these barriers are available.

Item rationale and source: The response options were chosen because they are recognized as common barriers to changing physical activity habits in support of weight management.

Item 23. This next question asks about your physical activity habits. There are two types of activity to consider:

- Moderate physical activities cause light sweating and a slight to moderate increase in breathing or heart rate. Examples include brisk walking, bicycling, vacuuming, gardening, and golfing without a cart.
- Vigorous activities cause heavy sweating and large increases in breathing or heart rate. Examples include running, aerobic classes, heavy yard work, and briskly swimming laps.

a. How many days per week do you do moderate activities for at least 10 minutes at a time? Please circle the appropriate number. Please do not place a circle in the space between numbers.

0 1 2 3 4 5 6 7

b. On days when you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

☐ a. 10-19 minutes
☐ b. 20-29 minutes
☐ c. 30-59 minutes
☐ d. >=60 minutes

c. How many days per week do you do vigorous activities for at least 10 minutes at a time? Please circle the appropriate number. Please do not place a circle in the space between numbers.

0 1 2 3 4 5 6 7

On days when you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

☐ a. 10-19 minutes
☐ b. 20-29 minutes
☐ c. 30-59 minutes
☐ d. >=60 minutes

Patient report: Patients who are meeting the Surgeon General's Recommendations for Physical Activity for Health Benefits (moderate activity for at least 30 minutes on 5 or more days per week) are offered this message:

- You are already meeting the Surgeon General's recommendation for physical activity for health benefits. This is great! Talk with your MOVE! health care team about increasing the duration, intensity, or frequency of activity in order to use physical activity to manage your weight.

All others are offered this message:

- For health benefits, the Surgeon General recommends at least 30 minutes of moderate physical activity on 5 or more days per week. With the help of your MOVE! health care team, you can build up to this level slowly and safely.

Staff report: The patient reports:

XX minutes of moderate activity on XX days per week
XX minutes of vigorous activity on XX days per week

Item rationale and source: This item is taken from the CDC's Behavioral Risk Factor Surveillance System telephone survey[16] and adapted slightly to allow for written or electronic administration. Veterans can be classified as sedentary, irregularly active (at moderate or vigorous intensity, or regularly active (at moderate or vigorous intensity).

Medical Evaluation of Patients Beginning a Weight Management Program

Medical Evaluation

The purpose of the medical evaluation is to:

1. Identify reversible causes for the patient's obesity.
2. Further stratify patients with respect to risk for obesity-associated complications.
3. Assess the clinical safety of planned health behavior changes based on the patient's clinical condition.
4. Identify and treat medical conditions that may be barriers to the patient's success.

The medical evaluation consists of a review of the patient's history, a physical exam, and when indicated, laboratory testing and/or diagnostic imaging. You can use information from the MOVE!23 Staff Report as a starting place for reviewing the patient's weight-related history.

History

Assessment of the Veteran's medical history should focus on medical conditions that may cause obesity or that might result from obesity, as well as conditions which require further testing or monitoring before health behavior changes are initiated. This includes review of:

- Concurrent disease and review of systems for absolute and relative contraindications to physical activity and/or dietary changes
- Current medications that may be responsible for some weight gain or which may affect the ability to engage in physical activity and/or make dietary changes
- Brief assessment of self-reported functional capacity and exercise-induced symptoms, if any exist
- Assessment of cardiovascular risk factors

The assessment should also check for conditions that may be barriers to success in a weight management program, including those that may interfere with increasing physical activity or which may be aggravated by changes in diet. Depending on severity, almost any medical disorder could potentially be a barrier, so it is important to ask each patient about how existing medical conditions may affect his or her health behavior change plan. Common barriers include disorders of the gastrointestinal, cardiovascular, and pulmonary systems; chronic pain; psychiatric disorders; and musculoskeletal conditions. In addition, it is important to identify conditions for which treatment may need to be modified consequent to weight loss (e.g., diabetes, hypertension).

Family history includes genetic factors. These may influence the capacity or susceptibility for weight gain, but rarely do they account entirely for a person becoming overweight or obese. In families, it is often difficult to differentiate shared genetic predispositions from shared environmental or behavioral influences.

Social history includes profession, cultural background, lifestyle, living environment, eating patterns, smoking, alcohol use, and physical activity. Social history can help form a clinical impression regarding degree of overweight attributable to an underlying medical condition and health behavior change barriers.

Physical Examination

For the purposes of identifying underlying causes for obesity, examination of the skin, thyroid, and general body habitus will probably be most useful. For physical activity readiness, an examination of at least the cardiovascular, pulmonary, peripheral vascular, and musculoskeletal systems is warranted. The need to examine other organ systems will depend on the history and review of these systems.

Obesity, BMI, Waist Circumference and Metabolic Risks

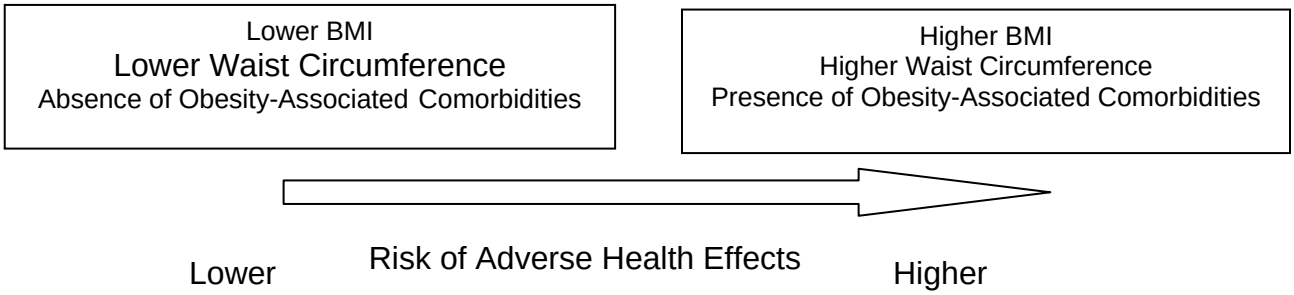
Additional Risk Stratification

The primary care provider plays a significant role in the assessment and management of overweight and obese patients. MOVE! emphasizes that some patients may need further medical assessment before significantly increasing physical activity. Items on the MOVE!23, chart review, or the MOVE! Physical Activity Decision Aid may assist in identifying patients who need further medical evaluation.

Although BMI classification is useful as a preliminary screen to determine if patients have weight-related health risks, obesity risk is probably more accurately represented on a continuum (Figure 3-1 Obesity Risk Continuum). Further stratification along the risk continuum can provide a better sense of an individual patient's risk. However, although higher BMIs are associated with higher risks, not all patients with a BMI >25 not have equal risks for obesity-related complications. In addition, patients with the following comorbidities are at the very highest absolute risk due to obesity:

- Established coronary heart disease
- Other vascular disease (peripheral or cerebrovascular)
- Type 2 diabetes mellitus
- Obstructive sleep apnea
- Other obesity-associated comorbidities that are less lethal but still require appropriate clinical therapy.

Figure 4-1 Obesity Risk Continuum



The last component of additional risk stratification is assessing the degree of abdominal or centrally deposited fat. This type of body fat distribution carries a higher metabolic and cardiovascular risk than peripherally deposited fat. BMI does not take into account body fat distribution. Waist circumference is a measurement that can assess abdominal fat and provides an independent prediction of cardiovascular risk over and above that given by BMI alone. However, measurement of waist circumference is most useful in

patients who are normal weight or overweight. It adds very little to risk assessment for patients with BMI >35.

In patients with a BMI of 25-35, waist circumference can be used to identify those at higher risk. These patients may benefit from more intensive weight management efforts, clinical management of comorbid conditions, or closer monitoring of weight management progress. Decreases in waist circumference, even in the absence of weight loss, is beneficial. Epidemiologic studies suggest that the predictive power of waist circumference varies by race (particularly in men); waist circumference is less predictive in African-American populations. [2]

Gender-specific waist-circumference thresholds identify high-risk individuals. These thresholds are as follows: for men, >40 inches (102 cm), and for women, >35 inches (88 cm).

Figure 4-2 describes how to measure waist circumference accurately.

Figure 4–2 Waist Circumference Measurement

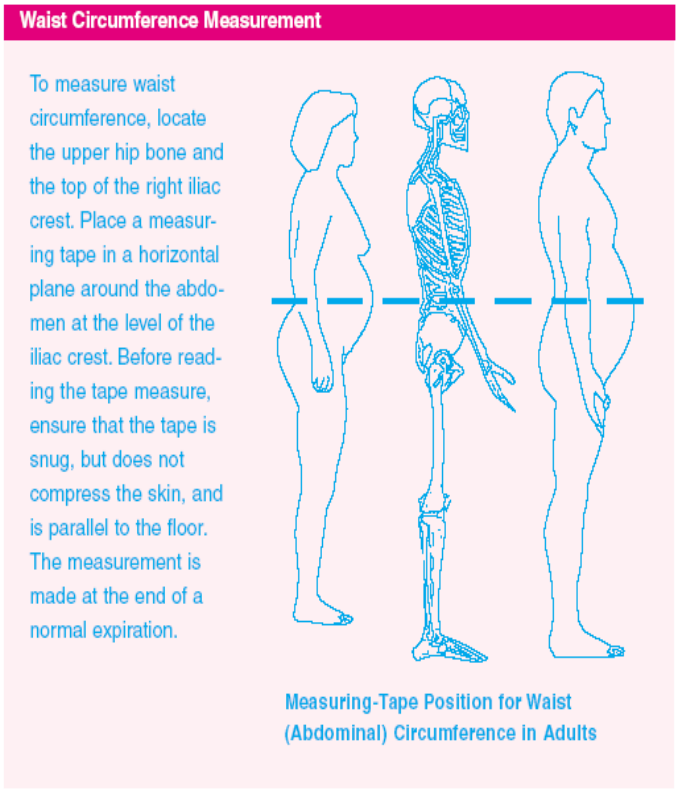


Figure 4-2 reproduced from the NIH Practical Guide (2000)[1]

To summarize, patients at the highest risk of complications of overweight/obesity include those with BMI >30, excess abdominal fat, vascular disease, type 2 diabetes, or obstructive sleep apnea. For these patients, more intensive efforts to manage these

conditions along with other cardiac risk factors, such as blood pressure and lipids, are warranted.

Other Diagnostic Testing

Beyond tests to establish the presence of overweight/obesity-related conditions, no "standard" battery of tests is indicated. Additional tests should be ordered based on clinical need to evaluate newly identified symptoms, signs, or conditions, or as part of the ongoing management of chronic conditions already identified.

For a small subset of patients, the risk of physical activity will exceed the benefits. As the most serious risk of physical activity is a cardiovascular event, cardiac risk stratification of certain patients using a graded exercise test (such as an exercise stress test or treadmill test) may be warranted. In some cases, consultation with a cardiologist and/or exercise physiologist may be helpful in the decision-making process. The American College of Cardiology, the American Heart Association, and the American College of Sports Medicine have issued guidance on this topic (see Appendix 4-1 for a summary). Note that conducting an exercise stress test prior to vigorous activity is recommended for men 45 or older and women 55 or older, as well as persons of any age with diabetes or two or more cardiac risk factors. However, a person who habitually engages in moderate-intensity activity can gradually increase to vigorous intensity without needing to consult a health-care provider.

Reversible Causes of Obesity

Reversible causes of obesity, such as endocrine disorders and certain medications, should be treated and monitored as clinically warranted. Endocrine disorders are rarely the sole cause of overweight and obesity. Nonetheless, hypothyroidism, Cushing's Syndrome, insulinomas, hypothalamic tumors, and damage to the hypothalamus as a consequence of radiation, infection, or trauma have all been associated with weight gain.

Certain medications are known to induce weight gain. Drug-induced effects should be suspected when the weight gain coincides with the initiation or dosage increase of a particular medication. If a medication is identified as the underlying cause or contributor to overweight or obesity, a medication substitution or change in dosage should be considered whenever possible.

Assessing for Medical Clearance

Primary care providers who have had patients referred to them for "medical clearance" prior to beginning a program of physical activity or who are referring to their local MOVE! program can refer to the Physical Activity Readiness Medical Examination (PARmed-X), which is adapted from the Canadian Society for Exercise Physiology. The PARmed-X is a checklist of medical conditions which warrant caution. Conditions are grouped by systems, and there are three categories of precautions, as shown below.

Comments under “Advice” are general, since details and alternatives require individualized clinical judgment.

Absolute contraindications for physical activity include:

Aortic aneurysm (dissecting)	Thrombophlebitis
Aortic stenosis (severe)	Ventricular tachycardia and other dangerous dysrhythmias (e.g., multi-focal ventricular activity)
Crescendo angina	Pulmonary or systemic embolism (acute)
Decompensated congestive heart failure	Acute systemic infections accompanied by fever, body ache, or enlarged lymph nodes
Myocardial infarction (acute)	Myocarditis (active or recent)

Relative contraindications to physical activity include:

Aortic stenosis (moderate)	Severe systemic or pulmonary hypertension, untreated or uncontrolled
Subaortic stenosis (severe)	Hypertrophic cardiomyopathy
Marked cardiac enlargement	Compensated congestive heart failure
Supraventricular dysrhythmias (uncontrolled or high rate)	Subcutaneous/chronic/recurrent infectious diseases (malaria, mononucleosis, hepatitis, AIDS)
Ventricular ectopic activity (repetitive or frequent)	Uncontrolled metabolic disorders (diabetes mellitus, thyrotoxicosis, myxedema)
Ventricular aneurysm	

Conditions can be highly variable. In some cases, the value of exercise testing and/or beginning a physical activity program may exceed risk. In other cases, physical activity may need to be limited. It is always desirable to maximize control of a condition before a patient begins new physical activity. In yet other cases, supervision by a trained exercise professional may be desirable. Further guidance can be found in the Facilitating Physical Activity chapter.

Appendix 4-2 provides a sample template for a weight management medical evaluation to establish medical clearance. Whether or not this template is used, documentation of the medical evaluation should be completed in CPRS as an office visit progress note with explicit physical activity instructions (e.g., no physical activity until further testing is completed, limited physical activity, avoidance of certain activities, and so forth).

Issuing an exercise prescription
If you have determined that a patient is safe to begin increasing physical activity (either with or without certain limitations), the next step is to convey this message to both the patient and other staff members. An exercise prescription is an effective way to document medical clearance and recommend activities that will lead to health benefits, as well as limits on activity due to medical conditions. Remember, it is the rare patient who will NOT benefit from exercise; thus, the exercise prescription should focus on building exercise capacity by gradual increases. It should be continually revised as the patient progresses.

The 2008 Physical Activity Guidelines for Americans recommend at least 150 minutes of moderate-intensity aerobic activity or 75 minutes of vigorous-intensity activity weekly, completed sessions in that are at least 10 minutes long. Muscle-strengthening activities that involve all major muscle groups should be performed on two or more days a week to provide additional benefit[17].

Veterans referred for MOVE! may initially be very sedentary. In such cases, recommend 150 minutes per week as a long-term goal, but encourage patients to start off at a lower level of intensity and frequency and to slowly progress over several weeks or months. As endurance builds, frequency, duration, and intensity can be increased. Adding 10-minute sessions of moderate-intensity activity into one's lifestyle (e.g., stepping in place while watching the news on television) may be more effective than planned physical activity (e.g., going to a gym).[17] Remember that any increase in physical activity is likely to be beneficial, and it is important for staff to acknowledge even small changes. Veterans already meeting the physical activity recommendation for health benefits can be given a prescription for increased duration and/or intensity that incorporates all three types of activity (aerobic, strength, flexibility) and is consistent with their personal weight loss needs. Please refer to the Physical Activity chapter for more information.

Facilitating Further Care

The medical evaluation may identify conditions that can be barriers to health behavior change. Discuss these with the Veteran to find out how these barriers impact his or her weight management plans. In partnership with the Veteran, decide on further evaluation and/or treatment, if needed. Patients with special needs may benefit from referral to physical activity specialists [physical therapy (PT), occupational therapy (OT), kinesiotherapy (KT), recreation therapy (RT)], registered dietitians, or behavioral health professionals for further evaluation and/or monitoring during participation in a weight management program. (See Appendix 4-1 for Pre-Exercise Cardiovascular Risk Stratification).

Clinical Monitoring

The following are potential medical complications of weight loss:

Diuresis
The most rapid weight loss typically occurs in the first 2 weeks and is primarily attributable to water weight loss or diuresis. If diuresis of 10 pounds or more occurs within the first week, the primary care provider should be informed. After the period of diuresis, the rate of weight loss should be restricted to no more than 1% of initial weight, or 1-2 lbs per week. If weight loss is more rapid, caloric intake should be increased by 200 kcal increments to stabilize to the preferred rate of loss.

Dehydration
Dehydration is defined as water loss occurring through sweating, urination, or respiration. With significant diuresis, dehydration is a concern. Thus, adequate water/fluid intake should be emphasized.

People who engage in physical activity often begin consuming special drinks and/or foods that are promoted as being for athletic performance. However, such products are typically a significant source of calories and in most cases are unneeded. Overweight and obese Veterans who are just beginning to introduce or increase activity should be given information on hydration and appropriate use of low-calorie electrolyte beverages. Generally speaking, these products are not required unless engaging in more than 60-90 minutes of vigorous-intensity activity.

Aggravation of Heart Disease
During the initial weight loss phase, significant diuresis and/or too rapid of a drop in weight can occur, sometimes resulting in arrhythmias or congestive heart failure. Replacement of adequate sodium, potassium, and magnesium may be necessary. Weight reduction can also induce a catabolic state for the heart, which may require modification or termination of the lower-calorie eating plan.

Lowering of Blood Pressure
An eating pattern that is hypocaloric or of a specific nutrient composition (such as the DASH diet*, which physicians often recommend to people with hypertension or pre-hypertension) can result in reduction of both weight and blood pressure. For hypertensive patients, medications are usually a part of the equation. When combined with antihypertensive medications, rapid weight loss may result in hypotension. Drug/nutrient interactions should also be considered. Cooperation and communication among the health care team and patient is essential.

*Research sponsored by the National Institutes of Health indicates that the DASH diet (Dietary Approaches to Stop Hypertension) has been proven to lower blood pressure. The DASH diet is based on an eating plan rich in fruits and vegetables and low-fat or non-fat dairy. The DASH diet is recommended by the US Department of Health and Human Services National Heart, Lung, and Blood Institute, the American Heart Association, the 2005 Dietary Guidelines for Americans, and the US guidelines for Treatment of High Blood Pressure. The DASH diet formed the basis for the 2005 USDA MyPyramid.

Hypokalemia
Hypokalemia refers to the condition in which the concentration of potassium in the blood is too low. Electrolytes (i.e., potassium, sodium, chloride, and bicarbonate) should be monitored during the first few weeks of rapid weight loss and diuresis. A very restrictive diet, significant diuresis, or certain medications can result in hypokalemia in an individual with initial borderline potassium levels. Inclusion of additional potassium sources in the meal plan and/or supplementation may be warranted. As sedentary patients become more physically active, they may experience electrolyte imbalances.

Hyperuricemia
Hyperuricemia is a high level of uric acid in the blood. Obesity and upper body adiposity is associated with higher serum levels of uric acid. Very low calorie diets, a very low carbohydrate eating pattern, red wine, and purines can aggravate uric acid levels. Slowing the rate of weight loss and increasing dietary carbohydrate are often effective strategies for controlling elevated uric acid levels.

Dyslipidemia
Dyslipidemia involves elevation of plasma cholesterol, triglycerides, or both, or a decreased high density lipoprotein level that can contribute to the development of atherosclerosis. Weight loss usually improves lipid levels; however, the mobilization of fat stores that occurs with weight loss may at times decrease high-density lipoprotein cholesterol levels and increase serum cholesterol levels.

Gallbladder Disease
Approximately 20 mg of additional cholesterol is produced for each kilogram of extra body fat; however, no collateral increase in bile acids or phospholipids is seen with weight loss. Thus, with mobilization of fat stores, bile becomes supersaturated with cholesterol. Furthermore, with lower calorie and often lower fat dietary intake, the need for bile is decreased and contraction of the gallbladder is reduced, setting the stage for development of cholesterol-type gallstones. Keeping the rate of weight loss to no more than 1% per week may prevent this problem. If using a formula or a very low fat eating plan, add 11 grams of fat at one meal per day in order to stimulate the gallbladder.

Nonalcoholic Fatty Liver Disease
Nonalcoholic fatty liver disease refers to a wide spectrum of liver disease stages from simple fatty liver (steatosis), to nonalcoholic steatohepatitis, to cirrhosis (irreversible, advanced scarring of the liver). All of the stages of nonalcoholic fatty liver disease involve accumulation of fat (fatty infiltration) in the liver cells (hepatocytes). Obesity is associated with a significantly greater flow of fatty acids through the portal vein into the liver. As a result, more lipid is stored in the hepatocytes, resulting in fatty liver. A fatty liver usually reduces with weight loss. However, with mobilization of fat stores via weight loss, flux of lipid through the liver is significant and can result in elevation of liver enzymes. Weight loss that is too rapid can result in hepatic inflammation (hepatitis).

Hypoglycemia
For diabetics, weight loss will generally result in lower blood sugars. Giving more food to alleviate hypoglycemia is counterproductive to weight loss. Rather, current dosages of diabetic medication can be evaluated for adjustment. Reduction of medication provides opportunity to reduce caloric intake even further. Patients should be encouraged to consistently monitor blood sugars, if not already doing so. Teamwork among the Veteran, primary care provider, and dietitian can help maintain blood sugars within a safe range.

Coordinating timing of exercise with usual planned meals or snacks will help provide energy for activity without adding extra, unnecessary calories that are counterproductive. For persons with diabetes this is particularly important for avoiding episodes of hypoglycemia.

Weight Loss Medication - Orlistat
When dietary intervention occurs concurrent with the use of weight loss medication, care must be taken to differentiate the source of any side effects.

Because the mechanism of action for the weight loss medication orlistat is in the gut rather than in the bloodstream, it has few side effects outside the gastrointestinal (GI) system. GI side effects include oily spotting, flatulence, flatulence with discharge, fatty/oily stool, oily evacuation, increased defecation, fecal incontinence, fecal urgency, abdominal pain/discomfort, bloating, dyspepsia, and diarrhea. These GI side effects are generally a result of fat that goes undigested through the GI tract; thus, meals high in fat tend to cause more symptoms than meals lower in fat. The absorption of fat soluble vitamins can be affected due to the interference with fat absorption. Thus, a multivitamin/mineral supplement including vitamins A, D, E, and K should be taken by the Veteran and timed to be taken at least 2 hours before or after meals/orlistat consumption. See Weight Loss Medications Chapter for more information on orlistat.

Constipation or Diarrhea
Changes in eating patterns, introduction of new foods, increases in fiber intake, and other dietary modifications can cause GI issues such as flatulence, constipation, or diarrhea. An appropriate intake of fluids, the importance of gradually increasing fiber consumption, and tips on reducing gas should be discussed with the patient. If symptoms persist, the Veteran should be referred to the primary care provider.

Depression
Depression is common among obese patients and sometimes improves with weight loss. However, depression can be triggered by the weight control regimen. Reduction of calories in the diet can lead to feelings of deprivation, and changes in body size can cause emotional turmoil. With low carbohydrate diets, serotonin levels can become decreased, which can affect mood. If this appears to be an issue, dietary carbohydrate levels can be increased, perhaps with strategic timing to help alleviate depression. Encourage the Veteran to retain some favorite, treat, or comfort foods in the meal plan, but in moderation. Make a conscious effort to show the Veteran how all foods can fit into

a balanced diet. Ongoing communication with the Veteran is key as her or she embarks upon and continues with weight control, tackling issues as they arise.

Evaluation of a Patient's Medication Regime

Medication Adjustment to Facilitate Weight Management

Certain drugs and entire classes of medications have been associated with small to modest amounts of weight gain in research studies. Outside of research studies, experienced practitioners will often hear complaints from patients about Drug X or Y causing weight gain. Avoiding or substituting for medications that cause weight gain, in conjunction with changes in dietary and physical activity behaviors, can often lead to clinically significant degrees of weight loss which were not possible before the medication changes were made.

In research studies, drug-induced weight gain is generally in the range of 1-5 kg. Weight gain more than this amount can rarely be attributed to medication alone. Research studies cannot substitute for a Veteran's individual past experience with weight changes when starting or stopping a drug, and this should be considered whenever medication adjustments are made.

Risks and Benefits of Medication Adjustments
Risks and benefits of alternative treatments should be discussed with the Veteran and relevant specialists (if needed) before any changes in medication are made. Risks of medication adjustment include:

- Destabilization of currently controlled comorbid conditions
- Development of new and/or increased side effects from the alternative medications
- Increased additional out-of-pocket expenses for the Veteran

Benefits of Medication Adjustment Include:

- Prevention of future weight gain
- Facilitation of weight loss efforts
- Decreased health risks due to overweight/obesity

Strategies for Medication Adjustment

- Avoid using medications that cause weight gain by prescribing non-pharmacologic options that are safe, efficacious, and feasible.
- Use alternative medications that either do not induce weight gain or minimize the degree of weight gain compared to other drugs in the same class.
- With medications that can contribute to weight gain, use the lowest dosage needed to achieve therapeutic efficacy.
- Discuss medication options with the patient and document this discussion, options, and resulting plan in the patient's medical electronic record.

Cautions When Adjusting Medications
Consider past medical history and experience treating the patient when adjusting medications. Avoid making adjustments in acutely ill patients. Likewise, avoid medication adjustments in patients with brittle conditions or who have a history of intolerance to medication changes. Close follow-up is warranted after medication change.

The following classes of drugs are commonly associated with weight gain:

- Antipsychotics (especially newer, atypical ones)
- Antidepressants
- Anticonvulsants
- Certain classes of diabetes medications
- Older antihistamines
- Certain alpha or beta-blockers
- Oral steroid hormones

The next section discusses each medication class in detail.

Antipsychotic Medications
Drug-associated weight gain and metabolic side effects with this class of drugs is well-documented. For this class of drugs, weight gain is the norm, rather than the exception. In general, medication-related weight gain is greater for patients with lower BMIs than patients with higher BMIs. Among the atypical antipsychotic medications, clozapine (Clozaril®) and olanzapine (Zyprexa®) cause the most weight gain. Aripiprazole (Abilify®) and ziprasidone (Geodon®) cause the least weight gain relative to other atypicals. (See table 4-1 below).

Table 4-1 Metabolic Effects of Antipsychotic Medications based on National Institute of Mental Health Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) Study[18]

	Olanzapine	Quetiapine	Risperidone	Perphenazine	Ziprasidone
Weight gain	++++	++	++	0	0
Glucose	+++	+	+	+	+
Cholesterol	+++	++	0	0	0
Triglycerides	++++	++	0	0	0

Note: Impact is graded from no effect (0) to large adverse effect (++++)

Clozapine was studied in another phase of CATIE and demonstrated similar effects to olanzapine. Aripiprazole (Abilify®) and paliperidone (Invega®) were not studied in CATIE. Aripiprazole appears to have effects similar to ziprasidone and paliperidone appears to have similar effects to risperidone. CATIE also found that patients who gained substantial weight or developed hyperlipidemia during the first phase of the trial

demonstrated improvements when they were changed to ziprasidone or risperidone in the second phase.

In selecting an antipsychotic medication for patients with diabetes, prediabetes, hypertension, dyslipidemia, or obesity, clinicians should choose an agent that is unlikely to worsen these conditions. If the treating clinician chooses an antipsychotic agent associated with weight gain, an increased risk of diabetes, or an increased risk of lipid elevation, there should be documentation as to the reason for the selection. For example, a patient may have known intolerance to alternative medications.

Patients who are already receiving an atypical antipsychotic medication associated with metabolic side effects and who are obese, hypertensive, diabetic, or prediabetic or have elevated lipids should be changed to an antipsychotic medication with a lower risk for these side effects. If a decision is made to continue the current antipsychotic medication, there should be medical record documentation to support this decision.

Risperidone and quetiapine are first-line atypical agents per VA Pharmacy Benefits Management (PBM). This designation is based on cost, not difference in efficacy. Please refer to documents from PBM pertaining to the use of atypical antipsychotic medications.

Conventional antipsychotic medications can also induce weight gain. In this class of medications, haloperidol, fluphenazine, loxapine, molindone, and pimozide are least likely to cause weight gain.

Antidepressants
Most antidepressants are associated with weight gain when used on a long-term basis. Whether this gain is due directly to drug effects or improvements in depression is not entirely clear. Antidepressant medications that cause weight gain include:

- Tricyclic antidepressants: amitryptyline, clomipramine, desipramine, doxepin, imipramine, nortriptyline, protryptiline (non-formulary)
- Selective serotonin reuptake inhibitors: paroxetine
- Monamine oxidase inhibitors: phenelzine, tranylcypromine
- Others: mirtazapine, trazodone

Consider bupropion, when not medically contraindicated, for first-line treatment of depression in overweight/obese individuals. Other good alternatives include citalopram, fluoxetine, nefazodone (non-formulary), sertraline, venlafaxine, escitalopram (non-formulary), and fluvoxamine (non-formulary). In general, use the lowest effective dose of antidepressants and consider adjunctive psychotherapy. Finally, consider “off-label” use of topiramate or bupropion in conjunction with other antidepressants to minimize weight gain. Refer to guidelines developed by PBM for further guidance on the selection and use of antidepressants.

Anticonvulsant/Mood-Stabilizing Medications
The following medications are associated with weight gain: divalproex, gabapentin, lithium, and valproate. From a weight perspective, the best alternatives are topiramate or lamotrigine; other good alternatives are carbamazepine, phenytoin, primidone, and tiagabine (non-formulary). PBM has developed criteria for use of gabapentin.

Diabetes Medications
The interplay of weight and diabetes is quite complex. Weight loss and exercise should always be emphasized as true "first-line therapy" for patients with impaired fasting glucose and early diabetes. As the disease progresses, some patients may need pharmacotherapy. Module G of the Clinical Practice Guideline "Management of Diabetes Mellitus in Primary Care" is an excellent resource for an overview of the pharmacologic treatment of Diabetes:
http://www.healthquality.va.gov/Diabetes_Mellitus.asp

For overweight/obese patients without contraindications and who do not need insulin, metformin (Glucophage®, Riomet®, Fortamet®) is the preferred first-line oral agent. As opposed to other first-line agents, metformin has been associated with weight loss. A newer class of drugs, known as glucagon-like peptide analogs (GLP-1 analogs), is also associated with significant weight loss. These agents (Victoza, Byetta) may be available by special request at certain facilities.

Many other drugs we commonly use to manage diabetes cause weight gain, for example sulphonylureas (glipizide, glyburide), insulin, and thiazolidinediones (Actos). This weight gain may in turn worsen insulin resistance, leading to a cycle of higher doses of medication and ever-increasing weight. Conversely, as a patient begins to lose weight, he or she may develop frequent hypoglycemic episodes, particularly if using sulphonylureas or insulin. This is often a good opportunity to decrease doses of these medications, thereby reducing the frequency of hypoglycemia and consequent intake of high glycemic index or "simple" carbohydrates. Theoretically, as doses of these drugs are decreased, loss of weight from lifestyle changes is further enhanced in a synergistic cycle. In such cases, providers should emphasize to patients that weight loss and lifestyle changes are supplanting medications as "treatment" of the patient's diabetes. Measurements like improvement in A1C can then be used to give positive feedback and encourage the patient to sustain these changes.

Antihistamines
Weight gain associated with antihistamine medications is most notable with first generation medications, particularly diphenhydramine (Benadryl®), cyproheptadine, and azatadine (Optimine®, non-formulary).

Many alternatives for long-term antihistamine therapy exist. Indications for therapy and co-existing comorbidities will help determine the best alternative. Options include:

- Loratidine (Claritin®, Alavert®)
- Fexofenadine (Allegra®, non-formulary)

- Cetirizine (Zyrtec®, non-formulary)
- Nasal steroid inhalers
- Cromolyn nasal inhaler
- Oral decongestants
- Allergen immunotherapy

Cardiovascular Drugs
Beta-blockers may have adverse effects on insulin and lipid profiles, but their definitive role in causing weight gain is less clear. Beta-blockers may cause weight gain directly or by decreasing the patient's tolerance for exercise. It is also not entirely clear whether selective beta-blockers have any advantage over non-selective beta blockers with regards to adverse metabolic effects and/or weight gain.

In patients with hypertension, the risk of weight gain due to beta-blockers should be weighed against their well-known long-term morbidity and mortality benefits relative to other antihypertensive classes. In patients with chronic heart failure, the risk of weight gain due to beta-blockers should be weighed against the benefits of treatment. PBM has made recommendations for use of beta blockers in the treatment of chronic heart failure.

The alpha-blocker terazosin (Hytrin®) has also been shown to cause weight gain in limited numbers of studies. Consider alternative medications.

Oral Steroid Hormone Medications
For contraception, injectable progesterone (Depo-Provera®) and the progestin-only pill (mini-pill) have the strongest association with weight gain. Weight changes associated with the combined estrogen/progesterone pill vary by pill type and by individual. Patients who experience weight gain on one type of pill can be offered a trial on a pill with a different progestin component. Non-hormonal methods can also be considered (e.g., intrauterine device, barrier methods: diaphragm or condoms, or permanent surgical sterilization).

Chronic oral steroid use is often required to maintain control of rheumatologic and pulmonary conditions. Providers have typically already titrated to the lowest possible steroid dose. For rheumatologic conditions, non-steroidal anti-inflammatory drugs (NSAID) and/or other analgesics (acetaminophen, codeine, tramadol) can be considered. Consider the higher risk of adverse GI effects from concomitant steroid and NSAID use. For pulmonary conditions, inhaled steroids, long-acting beta agonists, and oral theophylline can be considered for steroid dose sparing effect.

This chapter was reviewed and edited by the following VA clinical staff:

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4
Appendix

Appendix 4–1

Pre-Exercise Cardiovascular Risk Stratification

1. Unstable Disease? → YES → Class D

- Ischemia
- Uncompensated heart failure
- Uncontrolled arrhythmias
- Severe or symptomatic aortic stenosis
- Other conditions aggravated by exercise.

✓ No activity recommended for conditioning purposes

✓ Treat subject and restore to class C or higher

NO ↓

2. Moderate to High Risk Individual? → YES → Class C

- Cardiomyopathy or low LV ejection fraction (< 30%)
- Moderate valvular heart disease
- Non-ischemic EST* abnormalities
- Ventricular fibrillation or cardiac arrest that did not occur during acute ischemic event
- Complex ventricular arrhythmias that are uncontrolled at mild to moderate work intensities with medication
- Three vessel or left main disease
- CAD with the following characteristics:
  - 2 or more MIs
  - NYHA Class 3 or higher
  - Exercise capacity < 6 METs
  - Horizontal or downsloping ST depression of 4mm or more
  - Angina or fall in SBP during exercise
  - Previous episode of primary cardiac arrest
  - Ventricular tachycardia at a workload of < 6 METs
  - Other associated problems that may be life-threatening
- Lower risk individuals who are unable to self-regulate activity or to understand recommended activity level

✓ EST* required† for safety and prescriptive purposes.

✓ Activity should be individualized with exercise prescription by qualified personnel.

✓ Continuous ECG and BP monitoring during exercise session until safety is established (usually in 6-12 sessions).

✓ Medical supervision during all exercise session until safety is established.
(i.e. formal rehabilitation program)

NO ↓

3. Lower Risk Individual? → YES → Class B

- Stable CAD with the following characteristics:
  - NYHA Class 1 or 2
  - Exercise capacity > 6 METs
  - No evidence of heart failure
  - Ischemia free at rest and with exercise ≤ 6 METs
  - Appropriate SBP rise with exercise
  - No sequential ectopic ventricular contractions
  - Ability to self-monitor intensity of activity
- Stable cardiomyopathy, congenital heart and valvular disease
- EST* abnormalities that don't meet Class C

✓ EST* required† for safety and prescriptive purposes.

✓ Activity should be individualized with exercise prescription by qualified personnel.

✓ Continuous ECG and BP monitoring during exercise may be used during the early prescription phase.

✓ Medical supervision during the prescription phase, non-medical supervision for other exercise sessions until the individual understands how to monitor his or her activity. (i.e formal cardiac rehabilitation program at least initially)

NO ↓

4. Individual without known CAD? → YES → Class A2 A3

- Male ≥ 45 y or Female ≥55 y
- Any age with Diabetes or ≥ 2 cardiac risk factors

✓ EST* recommended prior to vigorous‡ activity

✓ No monitoring or supervision during exercise is required

NO ↓

5. Apparently Healthy Younger Individual with no more than 1 cardiac risk factor. → Class A1

✓ No EST required prior to moderate or vigorous‡ activity

✓ No monitoring or supervision is required

* EST = exercise stress test
† Within the past year
‡ Vigorous defined as activities ≥ 6 METS or exercise intense enough to represent a substantial cardiorespiratory challenge. Moderate activities defined as the equivalent of brisk walking (~3-4 MPH)

From:

ACSM's Guidelines for Exercise Testing and Prescription 6th Ed. American College of Sports Medicine. Lippincott,Williams & Wilkins. Philadelphia, PA. 2000. and Balady GJ et al. Recommendations for Cardiovascular Screening, Staffing, and Emergency Policies at Health/Fitness Facilities. AHA/ACSM Scientific Statement. Circulation. 1998;97: 2283-2293.

ACC/AHA 2002 guideline update for exercise testing: summary article: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee to Update the 1997 Exercise Testing Guidelines). Circulation. 2002 Oct 1; 106(14):1883-92..

Appendix 4–2

Suggested template for documenting "medical clearance" for weight management programs in CPRS

Section 1: History		
Diagnosed Conditions:	Cardiac Risk Factors:	Relevant Review of Systems
☐ Cardiovascular Disease	☐ Smoking	☐ Chest pain/pressure induced by activity or at rest
☐ Pulmonary Disease	☐ Hypertension	☐ Unaccustomed shortness of breath at rest or brought on by mild exertion
☐ Musculoskeletal Disease	☐ High Cholesterol	☐ Dizziness with activity, loss of balance
☐ Peripheral Vascular Disease	☐ Diabetes	☐ Syncope
☐ Metabolic Disease	☐ Family History of Early CAD (Age < 50)	☐ Fast, irregular, or extra heart beats
☐ GI disease		☐ Metabolic symptoms suggesting thyroid or diabetes
☐ Others		☐ Unusual fatigue
☐ Medication Review		☐ Undiagnosed pain, edema, or functional deficits in extremities or joints
Section 2: Physical Exam		
☐ Vital Signs	☐ Pulmonary	☐ Musculoskeletal
☐ HEENT	☐ Cardiovascular	☐ GI and GU
Section 3: Other Relevant Findings		
☐ Laboratory ☐ Radiology ☐ GXT (Stress Test) ☐ Other Diagnostic Testing		

Section 4: Assessment and Plan	
☐ No physical activity permitted ☐ Medically supervised program until further medical clearance ☐ Unrestricted physical activity ☐ Basic Exercise Rx Issue or ☐ Advanced Exercise Rx Issue ☐ Progressive unsupervised activity okay with restrictions as noted below: ☐ Basic Exercise Rx Issued with Restrictions ☐ Advanced Exercise Rx Issued with Restrictions _____ _____ _____	☐ Further Evaluation Required prior to Activity ☐ GXT (Stress Test) ☐ Cardiology Consultation ☐ Physical Therapy Consultation ☐ Other Consultation ☐ No dietary restrictions/precautions ☐ Dietary restrictions precautions noted below _____ _____ _____ ☐ Referral to a registered dietitian for supervision of dietary changes
☐ Other	

Appendix 4-3
MOVE!23 Patient Questionnaire
Paper and Pencil Version

Please print

VA FACILITY: _____

NAME: _____

DATE: _____

Height:_____(feet)_____ (inches)

Weight:_____(lbs)

(Please enter measured height and today's weight – Your Body Mass Index or BMI will be calculated from this measurement. Height should be measured without shoes.)

Date of Birth: Month____ /Day____ /Year____

Male or Female (Circle one.)

Ethnicity

Do you consider yourself to be Hispanic or Latino? Select one.

□ Hispanic or Latino
A person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race

□ Not Hispanic or Latino

□ I do not wish to provide this information.

Race

What race do you consider yourself to be? Select one or more of the following.

□ American Indian or Alaskan Native
A person having origins in any of the original peoples of North, Central or South America, and who maintains tribal affiliation or community attachment

□ Asian
A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam

□ Black or African American
A person having origins in any of the black racial groups of Africa

□ Native Hawaiian or Other Pacific Islander
A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands

□ White
A person having origins in any of the original peoples of Europe, the Middle East, or North Africa

□ I do not wish to provide this information.

Check the appropriate option(s) below.

Are you completing this questionnaire (*MOVE!23*)…

□ as a veteran?
□ for yourself as an employee?

Please complete the following questionnaire.
(All information is confidential and subject to applicable laws regarding privacy of patient records.)

1. I consider myself to be (check one):
    a. _____ Underweight for my height and age
    b. _____ Normal weight for my height and age
    c. _____ Overweight for my height and age

2. In general, would you say that your health is (check one):
    a. _____ Excellent
    b. _____ Very Good
    c. _____ Good
    d. _____ Fair
    e. _____ Poor

3. Please indicate (with a check mark to the left) any of the following that apply to you:
    _____ Shortness of breath at rest
    _____ Chest pains not previously evaluated by your physician
    _____ Active infection of any kind
    _____ Hernia in the groin or belly area
    _____ Retinal hemorrhage (bleeding in the back of the eye)
    _____ Loss of balance because of dizziness or passing out
    _____ Any chronic medical problem that has recently been out-of-control, unstable or flared up
    _____ Arthritis or joint pain
    _____ Back pain or spinal disc disease
    _____ Osteoporosis or bone disease
    _____ Amputation
    _____ Spinal cord injury
    _____ Lung disease such as emphysema, COPD, or asthma
    _____ Heart disease such as heart failure, heart attack or angina, heart surgery or angioplasty, irregular heartbeat, implanted defibrillator or pacemaker, heart valve problems
    _____ Poor blood circulation in the legs
    _____ Stroke or TIAs (mini-strokes) or carotid artery surgery in the neck
    _____ Diabetes – even if controlled by medication or diet
    _____ High blood pressure - even if controlled by medication or diet
    _____ High blood cholesterol - even if controlled by medication or diet
    _____ Someone in your immediate family with heart problems at an age younger than 50
    _____ None of the above

Please indicate any of the following that apply to you:

_____ Too much stress
_____ General unhappiness
_____ Depression
_____ Anxiety problems or nervousness
_____ Family or relationship problems
_____ Bipolar disorder (Manic depressive disorder)
_____ Schizophrenia
_____ Post traumatic stress disorder (PTSD)
_____ Obsessive/compulsive disorder
_____ Eating disorder/binge eating/anorexia/bulimia
_____ Tobacco Use/Smoking
_____ Substance Abuse or Dependence
_____ None of these

4. Have you tried to lose weight in the past? (Circle one.) Yes No

If so, what of the following options have you tried in order to lose weight? Check all that apply.

a. _____ Some form of dieting, that is eating differently from the way you usually eat for the sake of losing weight
b. _____ Avoiding particular foods or food groups
c. _____ Physical exercise, such as walking, swimming or calisthenics
d. _____ Prepackaged meals
e. _____ Meal replacements in bar, powder, liquid, tablet/pill or water form
f. _____ Fasting for 24 hours or longer
g. _____ Skipping meals
h. _____ Hypnosis
i. _____ Comprehensive weight loss program with dietary changes, physical activity, and behavioral counseling
j. _____ Any other kind of weight loss program that does **NOT** provide comprehensive treatment (dietary changes, physical activity, and behavioral counseling)
k. _____ Keeping a log or journal for eating or exercise
l. _____ Causing yourself to vomit after you eat
m. _____ Cosmetic procedure such as liposuction or other
n. _____ Weight loss medical procedure such as gastric bypass, gastric banding, wiring of your jaw or other
o. _____ Taking a prescription medication to lose weight
p. _____ Taking an over the counter (OTC) medication; vitamin, mineral, or nutrient supplement; herbal supplement; naturopathic or alternative medicine preparation or supplement to lose weight
q. _____ Smoking to control weight
r. _____ Other

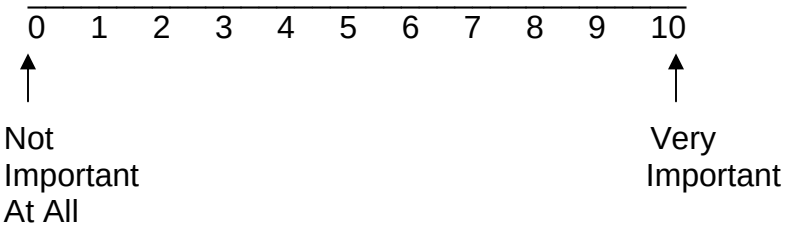
5. Are you trying to lose weight now? (Circle one.) Yes No
   If so, what does your current weight loss plan include? Check all that apply.
   a. _____ Some form of dieting, that is eating differently from the way you usually eat for the sake of losing weight
   b. _____ Avoiding particular foods or food groups
   c. _____ Physical exercise, such as walking, swimming or calisthenics
   d. _____ Prepackaged meals
   e. _____ Meal replacements in bar, powder, liquid, tablet/pill or water form
   f. _____ Fasting for 24 hours or longer
   g. _____ Skipping meals
   h. _____ Hypnosis
   i. _____ Comprehensive weight loss program with dietary changes, physical activity, and behavioral counseling
   j. _____ Any other kind of weight loss program that does **NOT** provide comprehensive treatment (dietary changes, physical activity, and behavioral counseling)
   k. _____ Keeping a log or journal for eating or exercise
   l. _____ Causing yourself to vomit after you eat
   m. _____ Cosmetic procedure such as liposuction or other
   n. _____ Weight loss medical procedure such as gastric bypass, gastric banding, wiring of your jaw or other
   o. _____ Taking a prescription medication to lose weight
   p. _____ Taking an over the counter (OTC) medication; vitamin, mineral, or nutrient supplement; herbal supplement; naturopathic or alternative medicine preparation or supplement to lose weight
   q. _____ Smoking to control weight
   r. _____ Other

6. Select the answer that best describes your rate of weight gain over the years.
   a. _____ I have been overweight since childhood (before age 18).
   b. _____ I have gained weight gradually over the years.
   c. _____ I have gained most of my excess weight in a short period of time.
   d. _____ I have gained and lost weight many times over the years (“yo-yo”).

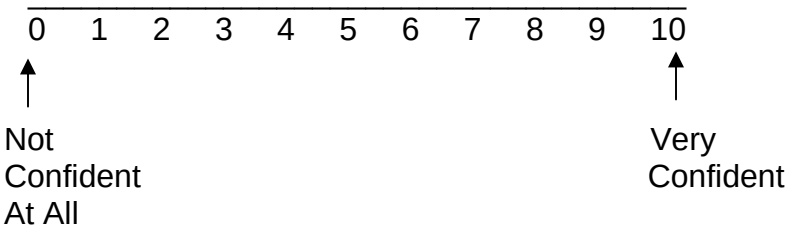
7. Select the answer that best describes your family:
   a. _____ As a group, my family is not overweight or obese.
   b. _____ As a group, some members of my family are overweight or obese.
   c. _____ As a group, most members of my family are overweight or obese.

8. How much can you rely on family or friends for support and encouragement? (Check one.)
   a. _____ A lot
   b. _____ Somewhat
   c. _____ Not at all

9. How important is controlling your weight to you personally? Please circle the number that applies. Please do not place a circle in the space between numbers.



10. How confident are you that you can successfully change your eating and physical activity to control your weight? Please circle the number that applies. Please do not place a circle in the space between numbers.



11. Check the statement that **most closely** applies to you:
    a. _____ I am not considering trying to control my weight at this time.
    b. _____ I am considering trying to control my weight sometime within the next six months**.**
    c. _____ I am ready to make some changes to control my weight*.*
    d. _____ I am actively working on controlling my weight at this time.
    e. _____ I have been continuously and successfully doing things to control my weight for more than the last six months.

12. How much weight do you think you realistically **could lose** in one year? (Check one.)
    a. _____ 10 lbs or less
    b. _____ 11 – 25 lbs
    c. _____ 26 – 50 lbs
    d. _____ 51 - 100 lbs
    e. _____ more than 100 lbs

13. How satisfied are you with the appearance of your body? (Check one.)
    a. _____ Very satisfied
    b. _____ Moderately satisfied
    c. _____ Neither satisfied or dissatisfied
    d. _____ Moderately dissatisfied
    e. _____ Very dissatisfied

14. Do any of the following have anything to do with your being overweight? Check all that apply to you.
    a. _____ Eating because of emotions or stress
    b. _____ Family or relationship problems
    c. _____ Boredom
    d. _____ Loneliness or Loss of loved one
    e. _____ Eating too much
    f. _____ Poor food choices or habits
    g. _____ Not getting enough physical activity
    h. _____ Difficulty with self control
    i. _____ Hungry all the time
    j. _____ Feeling bad about myself
    k. _____ Love to eat
    l. _____ Quitting tobacco use
    m. _____ Pregnancy/Childbirth
    n. _____ Illness or injury
    o. _____ Medications led to weight gain
    p. _____ Other
    q. _____ None of the above

15. What do you think may get in the way of **changing** your **eating** habits? Check all that apply to you.
    a. _____ Eating food from restaurants, fast food places, convenience stores, vending machines
    b. _____ Person who prepares my food is uncooperative or unsupportive
    c. _____ Too much high calorie food available at home or work
    d. _____ Too little time to prepare and eat healthy food
    e. _____ Too little money to buy healthy food
    f. _____ Feeling hungry much of the time
    g. _____ Used to eating a certain way
    h. _____ Difficulties such as stress or depression
    i. _____ Being with others who overeat
    j. _____ Don't know how
    k. _____ Other
    l. Nothing should get in the way

16. How many times a **day** do you typically eat, including snacks? (Check one.)
    a. _____ 1 time a day
    b. _____ 2 times a day
    c. _____ 3 times a day
    d. _____ 4 times a day
    e. _____ 5 or more times each day

17. How many times per week do you eat at restaurants or buy 'take out' food? Please indicate on the line below the number of times between 0 and 21. Consider breakfast, lunch and supper 7 days a week for a total of 21 meals for which restaurant or take out food could be eaten.

    _____

    When you eat out, do you find that you overeat or eat higher calorie foods?
    a. _____ Yes
    b. _____ No

18. How much juice (including juice-drinks) or sugar-sweetened soda, tea or other beverages do you drink **most days**? (Check one option below.)
    a. _____ I don't drink juice; juice-drinks; or sugar-sweetened soda, tea or other beverages.
    b. _____ 1 – 2 cups, cans, small bottles or drink boxes per day
    c. _____ 3 or more cups, cans, small bottles or drink boxes per day

19. Do you drink alcoholic beverages (such as beer, malt liquor, wine, wine coolers, hard/distilled liquor)? (Check one.)
    a. _____ Yes
    b. _____ No

20. How **fast** do you usually eat? (Check one.)
    a. _____ I eat slowly.
    b. _____ I eat at a moderate pace
    c. _____ I eat fast.

21. On average, how often have you eaten extremely large amounts of food at one time and felt that your eating was out of control at that time? (Check one.)
    a. _____ Never
    b. _____ Less than 1 time per week
    c. _____ 1 time per week
    d. _____ 2 to 4 times a week
    e. _____ 5 or more times a week

22. What do you think may get in the way of **changing** your **physical activity** habits? Check all that apply to you.
    a. _____ Too little time
    b. _____ Too little money
    c. _____ Safety concerns
    d. _____ No place to walk or be active
    e. _____ No transportation
    f. _____ Lack of support or encouragement from others
    g. _____ Difficulties such as stress, depression, etc.
    h. _____ Do not like to exercise
    i. _____ Daily habits or routines that do not include exercise
    j. _____ Pain
    k. _____ Amputation
    l. _____ Back problems
    m. _____ Arthritis
    n. _____ Muscular problems
    o. _____ Heart or lung disease
    p. _____ Joint problems
    q. _____ Spinal cord injury
    r. _____ Too tired
    s. _____ Job or work schedule
    t. _____ Other
    u. _____ Nothing should get in the way

23. This next question asks about your physical activity habits. There are two types of activity to consider:

- Moderate physical activities cause light sweating and a slight to moderate increase in breathing or heart rate. Examples include brisk walking, bicycling, vacuuming, gardening, and golfing without a cart.
- Vigorous activities cause heavy sweating and large increases in breathing or heart rate. Examples include running, aerobic classes, heavy yard work, and briskly swimming laps.

a. How many days per week do you do moderate activities for at least 10 minutes at a time? Please circle the appropriate number. Please do not place a circle in the space between numbers.

0 1 2 3 4 5 6 7

b. On days when you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities? (Select one choice below.)

i._____10-19 minutes
ii._____ 20-29 minutes
iii._____ 30-59 minutes
iv._____ >=60 minutes

c. How many days per week do you do vigorous activities for at least 10 minutes at a time? Please circle the appropriate number. Please do not place a circle in the space between numbers

0 1 2 3 4 5 6 7

d. On days when you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities? (Select one choice below.)

i._____10-19 minutes
ii._____ 20-29 minutes
iii._____ 30-59 minutes
iv._____ >=60 minutes

4
Links

For your convenience, the links from this chapter are listed below:

VA National Center for Health Promotion and Disease Prevention
http://www.prevention.va.gov/

Veterans Health Administration Office of Patient Care Services
http://www.patientcare.va.gov/index.asp

Weight Management Program for Veterans (MOVE!®)
http://www.move.va.gov/

NIH Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report (1998)
http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.htm

Screening and Interventions for Obesity in Adults: Summary of the Evidence for the US Preventive Services Task Force (2003)
http://www.annals.org/content/139/11/933.full.pdf+html

Screening for Obesity in Adults (2003)
http://www.annals.org/content/139/11/930.full

Physical Activity Readiness-Medical Exam (PARmed-X)
http://www.move.va.gov/download/Resources/AdaptedParMedX.pdf

Pre-Exercise Cardiovascular Risk Stratification Guide
http://www.move.va.gov/download/Resources/PreExerciseCardiovascularRiskStratification.pdf

PARmed-X
http://www.move.va.gov/download/Resources/AdaptedParMedX.pdf

Exercise Prescription
http://www.move.va.gov/download/Resources/BasicExercisePrescription.pdf

Module G of the Clinical Practice Guideline “Management of Diabetes Mellitus in Primary Care” - an Overview of the Pharmacologic Treatment of Diabetes
http://www.healthquality.va.gov/Diabetes_Mellitus.asp

4
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