Obesity Management: Children & Adults

OBJECTIVE

The objective of this Clinical Practice Guideline (CPG) is to provide evidence-based practice recommendations for obesity management in children and adults. The CPG discusses behavioral health implications as well as outlines the organizations that WellCare aligns with on this topic and relevant Measureable Health Outcomes.

OVERVIEW

Obesity is a serious health issue in the United States – over a third of the population is obese. This can lead to preventable conditions like heart disease, stroke, type 2 diabetes, and certain cancers. Annually obesity has an annual medical cost of $147 billion (2008); medical costs are also $1400 or more for people who are obese.[1]

Children and Adolescents. According to the CDC, obesity prevalence remained stable among those age 2-19 years however, nearly 13 million (17%) are impacted. Prevalence was higher among Hispanics (22%) and non-Hispanic Blacks (20%) compared to non-Hispanic Whites (15%). The lowest prevalence was found in non-Hispanic Asians (9%). Among those age 2 to 5 years, prevalence of obesity was 9% compared to 18% of those age 6 to 11 years and 21% of those age 12 to 19 years. It is noted that obesity decreased among those age 2 to 5 years from 14% in 2003-2004 to 9% in 2013-2014.[2]

Adults. Among populations, non-Hispanic Blacks account for the highest age-adjusted rates of obesity (48%) followed by Hispanics (43%), non-Hispanic Whites (35%), and non-Hispanic Asians (12%). Obesity is more prevalent among middle age adults age 40-59 years (40%) and older adults over the age of 60 (37%). Approximately one third of younger adults age 20–39 are obese. With respect to socioeconomic status, among non-Hispanic Black and Mexican-American men, those with higher incomes are more likely to have obesity than those with a low income. Among women however, higher income women are less likely to have obesity than low-income women. Studies indicate that there is no significant relationship between obesity and education among men. Among women, it is noted that those who are college-educated are less likely to have obesity compared with less educated women.[1]

For screening information related to obesity, visit the United States Preventive Services Task Force (USPSTF) website at https://www.uspreventiveservicestaskforce.org. In addition, refer to the following preventive CPGs: *Adult Preventive Health: HS-1019, Adolescent Preventive Health: HS-1051, Older Adult Preventive Health: HS-1063,* and *Pediatric Preventive Health: HS-1019.*

Hierarchy of Support

GUIDELINE HIERARCHY

CPGs are updated annually or as necessary due to updates made to guidelines or recommendations by the American Academy of Pediatrics (AAP), American Heart Association (AHA)/American College of Cardiology (ACC)/The Obesity Society (TOS), and the Institute for Clinical Systems Improvement (ICSI). When there are differing opinions noted by national organizations, WellCare will default to the member's benefit structure as deemed by state contracts and Medicaid / Medicare regulations. If there is no specific language pertaining to obesity in children and adults, WellCare

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will default (in order) to the following:

- National Committee for Quality Assurance (NCQA);
- United States Preventive Services Task Force (USPSTF), National Quality Strategy (NQS), Agency for Healthcare Research and Quality (AHRQ);
- Specialty associations, colleges, societies, etc. (e.g., American Academy of Family Physicians, American Congress of Obstetricians and Gynecologists, American Cancer Society, etc.).

Links to websites within the CPGs are provided for the convenience of Providers. Listings do not imply endorsement by WellCare of the information contained on these websites. NOTE: All links are current and accessible at the time of MPC approval.

WellCare aligns with the AAP, AHA/ACC/TOS, and ICSI on the topic of obesity. Highlights from their respective publications are noted below.

AMERICAN ACADEMY OF PEDIATRICS

The American Academy of Pediatrics (AAP) published *The Role of the Pediatrician in Primary Prevention of Obesity* to offer guidance on how to educate members and their families about the adoption of healthful lifestyles to reduce the development of chronic diseases and conditions. Obesity prevention and treatment is an important public health priority. The report discusses the rationale for pediatricians to be an integral part of the obesity-prevention effort. Pediatricians should use a longitudinal, developmentally appropriate life-course approach to help identify children early on the path to obesity and base prevention efforts on family dynamics and reduction in high-risk dietary and activity behaviors. Providers should also discuss with limiting – or eliminating entirely – sugar-sweetened beverages and foods with high caloric density as well as encouraging increased intake of fruits and vegetables. Physical activity should also be discussed to promote a lifestyle with reduced sedentary behavior and with 60 minutes of daily moderate to vigorous physical activity. Additional highlights of the report are noted below:[3]

1. Adoption and maintenance of healthful lifestyles must be emphasized as the basis for the prevention of obesity and other chronic health conditions.
2. Prevention of childhood obesity is the most prevalent chronic health condition in the pediatric population. Primary care providers play a unique role as a resource, including how to mobilize community and social sectors to address the issue.
3. Pediatricians should become familiar with the complex and interconnected factors that lead to excessive weight gain, including how they impact in a developmental fashion and create important periods for preventive intervention. Understanding the environmental determinants of obesity, including those that they cannot control, pediatricians can improve their ability to provide recommendations that are relevant.
4. Prevention messages should be tailored to the child's developmental stage and the socioeconomic, cultural, and psychological characteristics of families.
5. BMI should be assessed and plotted on percentile charts at every visit. Those at-risk children can be identified through family history and Bright Futures templates on nutrition, sedentary behavior, and physical activities.
6. Pediatricians should become familiar with other forms of interventions as they apply to obesity prevention (e.g., behavior-modification techniques, environment control approaches, promotion of improved parenting skills). They should also be familiar with community resources.
7. Remove or limit all sweetened beverages as the ideal beverage for children at all meals and during the day is water. Low-fat or fat-free, preferably unflavored, milk also is recommended for children beginning at 12 months of age. One hundred percent fruit juice should not be used before 1 year of age and should be limited thereafter. Fruits should be encouraged over fruit juice.
8. Promote a diet rich in foods with low caloric density (e.g., vegetables, fruits, whole grains, lowfat dairy products, lean meats, lean fishes, legumes) and poor in foods with high caloric density (e.g., fat-rich meats, fried foods, baked goods, sweets, cheeses, oil-based sauces).
9. Limit sedentary entertainment (e.g., television, time spent on electronic devices and games) to 2 hours per day for children 2 years and older. This should be excluded for infants.
10. Promotion of active play and lifestyle and family – or sports based moderate to vigorous physical activity for a total of 60 minutes per day for health benefits.

11. Promotion of healthy maternal weight should begin before age 2 by encouraging healthy maternal weight and smoking cessation during/before pregnancy, appropriate gestational weight gain and diet, breastfeeding and appropriate weight gain in infancy, transition to healthier foods with weaning, elimination of sedentary entertainment, active play for physical activity, and parental role modeling of healthy dietary and physical activity behaviors.

The AAP report can be accessed here.[3]

INSTITUTE FOR CLINICAL SYSTEMS IMPROVEMENT (ICSI)

The Institute for Clinical Systems Improvement (ICSI) published a guideline addressing the prevention, diagnosis and management of childhood obesity from birth through 17 years of age. A range of approaches are included such as education, behavioral and lifestyle changes, medication and surgical options. An emphasis is place on the involvement of the child's family or other social supports as well as a multidisciplinary team (primary care clinician, consultants, dietitian, school nurse, etc.) for education, counseling and follow-up. Aims of the guideline include increasing percentage of patients ages 2 through 17 years:[4]

1. Who have an annual screening for obesity using body mass index (BMI) measured and whose BMI percentile status is determined.
2. With an annual BMI screening who have received education and counseling regarding weight management strategies that include nutrition and physical activity.
3. With a BMI screening percentile greater than 85 whose percentile decreased within 12 months of screening.

Additional highlights of the ISCI guideline include:

- Childhood obesity has risen at an alarming pace over the past decade, making obesity the most prevalent health problem in the majority of the developed countries.
- Clinicians should conduct a focused review of systems and physical examination assessing for obesity-related comorbid conditions.
- Management intervention strategies are available and include nutrition, physical activity, behavior and lifestyle changes, medication and surgical considerations.
- Clinicians should use motivational interviewing techniques as a tool for encouraging behavior change.

To view the guideline in its entirety, click here.[4]

AMERICAN HEART ASSOCIATION, AMERICAN COLLEGE OF CARDIOLOGY, THE OBESITY SOCIETY

The American Heart Association (AHA), American College of Cardiology (ACC), and The Obesity Society (TOS) published guidelines and recommendations on obesity in adults which focus on the:[5]

- Need for additional training as most primary care providers (PCPs) are not trained in obesity etiology, pathogenesis, diagnosis and treatment;
- Impact of a culture that promotes supplements and dietary approaches for quicker, easier weight loss; and
- Need for authoritative, evidence-based recommendations for managing weight to improve health.

Recommendations of the AHA/ACC/TOS include:

- Measure height and weight and calculate BMI at annual visits or more frequently.
- Use the current cut points for overweight (BMI 25.0-29.9 kg/m2) and obesity (BMI ≥30 kg/m2) to identify adults who may be at elevated risk of cardiovascular disease (CVD) and the current cut points for obesity (BMI ≥30 kg/m2) to identify adults who may be at elevated risk of mortality from all causes.
- Advise overweight and obese adults that the greater the BMI, the greater the risk of CVD, type 2 diabetes, and all-cause mortality.

- Measure waist circumference at annual visits or more frequently in overweight and obese adults. Advise adults that the greater the waist circumference, the greater the risk of CVD, type 2 diabetes, and all-cause mortality.
- Counsel overweight and obese adults with cardiovascular risk factors (high blood pressure [BP], hyperlipidemia, and hyperglycemia), that lifestyle changes that produce even modest, sustained weight loss of 3%–5% produce clinically meaningful health benefits, and greater weight losses produce greater benefits.
  - Sustained weight loss of 3%–5% is likely to result in clinically meaningful reductions in triglycerides, blood glucose, hemoglobin A1c, and the risk of developing type 2 diabetes.
  - Greater amounts of weight loss will reduce BP, improve LDL-C and HDL-C, and reduce the need for medications to control BP, blood glucose and lipids as well as further reduce triglycerides and blood glucose.
- Prescribe a diet to achieve reduced calorie intake for obese or overweight individuals who would benefit from weight loss, as part of a comprehensive lifestyle intervention. The following methods can be used:
  - Prescribe 1,200–1,500 kcal/d for women and 1,500–1,800 kcal/d for men (kilocalorie levels are usually adjusted for the individual's body weight);
  - Prescribe a 500-kcal/d or 750-kcal/d energy deficit; **or**
  - Prescribe one of the evidence-based diets that restricts certain food types (such as high-carbohydrate foods, low-fiber foods, or high-fat foods) in order to create an energy deficit by reduced food intake.
- Prescribe a calorie-restricted diet for obese and overweight individuals who would benefit from weight loss, based on the patient's preferences and health status, and preferably refer to a nutrition professional for counseling. A variety of dietary approaches can produce weight loss in overweight and obese adults.
- Advise overweight and obese individuals who would benefit from weight loss to participate for ≥6 months in a comprehensive lifestyle program that assists participants in adhering to a lower-calorie diet and in increasing physical activity through the use of behavioral strategies.
- Prescribe on-site, high-intensity (i.e., ≥14 sessions in 6 months) comprehensive weight loss interventions provided in individual or group sessions by a trained interventionist.
- Electronically delivered weight loss programs (including by telephone) that include personalized feedback from a trained interventionist† can be prescribed for weight loss but may result in smaller weight loss than face-to-face interventions.
- Some commercial-based programs that provide a comprehensive lifestyle intervention can be prescribed as an option for weight loss, provided there is peer-reviewed published evidence of their safety and efficacy.
- Use a very-low-calorie diet (<800 kcal/d) in limited circumstances and when provided by trained practitioners in a medical care setting where medical monitoring and high-intensity lifestyle intervention can be provided. Medical supervision is required due to the rapid rate of weight loss and potential for health complications.
- Advise overweight and obese individuals who have lost weight to participate long term (≥1 year) in a comprehensive weight loss maintenance program.
- For weight loss maintenance, prescribe face-to-face or telephone-delivered weight loss maintenance programs that provide regular contact (monthly or more frequently) with a trained interventionist† who helps participants engage in high levels of physical activity (i.e., 200–300 min/wk), monitor body weight regularly (i.e., weekly or more frequently), and consume a reduced-calorie diet (needed to maintain lower body weight).
- Advise adults with a BMI ≥40 kg/m2or BMI ≥35 kg/m2with obesity-related comorbid conditions who are motivated to lose weight and who have not responded to behavioral treatment with or without pharmacotherapy with sufficient weight loss to achieve targeted health outcome goals that bariatric surgery may be an appropriate option to improve health and offer referral to an experienced bariatric surgeon for consultation and evaluation.

- For individuals with a BMI <35 kg/m2, there is insufficient evidence to recommend for or against undergoing bariatric surgical procedures.
- Advise patients that choice of a specific bariatric surgical procedure may be affected by patient factors, including age, severity of obesity/BMI, obesity-related comorbid conditions, other operative risk factors, risk of short-and long-term complications, behavioral and psychosocial factors, and patient tolerance for risk, as well as provider factors (surgeon and facility).

The AHA/ACC/TOS guideline can be found in its entirety here.[5]

Evidence Based Practice

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY (AHRQ)

The Agency for Healthcare Research and Quality (AHRQ) has not published recent reports on this topic. For screening information related to obesity, visit the United States Preventive Services Task Force (USPSTF) website at https://www.uspreventiveservicestaskforce.org

MEASUREMENT OF COMPLIANCE

WellCare is committed to adhering to the measures and standards published by the Centers for Medicare and Medicaid Services (CMS) and the National Committee for Quality Assurance (NCQA). Please reference WellCare's Clinical Policy Guiding Document titled *Quality Improvement.*

NOTE: To access Clinical Policy Guiding Documents visit www.wellcare.com – select the Provider tab, then "Tools" and "Clinical Guidelines".

Care Management

The goals for Care Management are to support the member's ability to self-manage their weight, minimize risk factors, and remove barriers preventing the member from achieving those goals.
Integrated care management of Obesity involves:

- Coaching related to making lifestyle changes
- Ensuring member's understanding of dietary and activity recommendations
- Supporting the member's weight loss efforts as appropriate
- Regular screening for comorbities (e.g., hypertension, diabetes, cardiovascular disease)
- Assess for risk of depression and share with appropriate provider(s) if risks identified

Initial Assessment for Risk Factors – Children and Adolescents[6,7]

Weight categories are defined as having a body mass index (BMI) of:

- **Severely Obese:** ≥ 99th percentile
- **Obesity:** 95-98th percentile
- **Overweight:** 85-94th percentile
- **Healthy Weight:** 5-84th percentile
- **Underweight:** < 5th percentile

Assessment of obesity should take place among all children aged 2-18 and include the following:

- **Calculate BMI*** - make category diagnosis and plot on growth chart (Note: BMI = [weight (lb) / height (in)] x 703)
- **Physical Examination,** including measurement of **blood pressure**
- **Review of Systems**
- **Family history** (including obesity, Type 2 diabetes, cardiovascular disease (hypertension, cholesterol), early death due to heart disease or stroke)
- **Assess Behavior and Attitudes** (diet behaviors, physical activity, readiness to change / possible success barriers)
- **Laboratory Tests** may include fasting lipid profile, ALT and AST, fasting glucose HgBA1c / TSH
  - *BMI 85-95%ile without Risk Factors* – fasting lipid profile
  - *BMI 85-95%ile with Risk Factors, Age 10+* – fasting lipid profile, ALT and AST, fasting glucose
  - *BMI ≥95%ile, Age 10+* – fasting lipid profile, ALT and AST, fasting glucose, other tests as indicated by health risks (e.g., HgBA1c, TSH)

- **Give Consistent Evidence-Based Messages** to all children, regardless of weight:
  - Limit sugar-sweetened beverages
  - Eat at least 5 servings of fruits and vegetables
  - Moderate to vigorous physical activity for at least 60 minutes a day
  - Limit screen time to no more than 2 hours/day; remove television from children's bedrooms
  - Eat breakfast every day
  - Limit eating out, especially at fast food
  - Have regular family meals and limit portion sizes

Initial Assessment for Risk Factors – Adults [8,9]

An individual's body mass index (BMI) is *body weight in kilograms / height in meters*^{2}. Individuals with a BMI of 25.0 to 29.9 kg/m^2 are considered **overweight**; a BMI of $\geq$ 30 kg/m^2 indicates **obesity.** Initial assessment should include:

- Assess degree of obesity based on BMI
- Assess presence of abdominal obesity based on waist circumference (see treatment indication)
- Assess presence of underlying diseases and conditions:
  - Coronary heart disease
  - Type 2 diabetes mellitus
  - Sleep apnea
  - Gynecologic abnormalities
  - Osteoarthritis
  - Stress incontinence
  - Gallstones and their complications
  - Other atherosclerotic diseases (peripheral arterial disease, abdominal aortic aneurysm and symptomatic carotid artery disease)
- Assess presence of cardiovascular disease risk factors:
  - Cigarette smoking
  - Impaired fasting glucose
  - Hypertension
  - Men $\geq$ 45 years
  - High low-density lipoprotein cholesterol (LDL-C)
  - Low high-density lipoprotein cholesterol (HDL-C)
  - Family history of premature coronary heart disease
  - Women $\geq$ 55 years or postmenopausal
- Physical examination
- Assess other risk factors such as physical activity level and diet.
- Laboratory tests
  - Fasting blood sugar
  - Triglycerides
  - Urinalysis
  - Total cholesterol (including LDL-C, HDL-C, HDL-C/TC)
  - Liver function test

MEASURABLE HEALTH OUTCOMES

Targeted Health Outcomes (Extended Program Goals) result from successful member self-management (see Case Management Objectives).

1. Maintaining a healthy diet. Compare member's knowledge and dietary habits pre and post engagement at 6-12 months. In absence of documentation, Provider and/Member narrative/HRA data may be used.
2. A moderate physical activity regimen to include a minimum of 30 minutes on most days of the week (60 minutes for children).Compare physical activity level documented in provider records, assessments and care plans, and monitoring data pre and post engagement 6-12 months. In the absence of these data sources, CM may use Provider and/or Member narrative and/or HRA data may be used.
3. Follow-up evaluation of BMI as evidenced by provider claims pre and post engagement at 6-12 months. In absence of documentation, Provider and/Member narrative/HRA data may be used.

Weight Loss Target by Age Group and BMI [10]

- *BMI 85-94th Percentile, No Risks*
  2-5 Years: Maintain Weight Velocity
  6-11 Years: Maintain Weight Velocity
  12-18 Years: Maintain Weight Velocity. After linear growth is complete, maintain weight

- *BMI 85-94th Percentile, With Risks*
  2-5 Years: Decrease weight velocity or weight maintenance
  6-11 Years: Decrease weight velocity or weight maintenance
  12-18 Years: Decrease weight velocity or weight maintenance

- *BMI 95-98th Percentile*
  2-5 Years: Weight maintenance
  6-11 Years: Weight Maintenance or gradual loss (1 pound per month)
  12-18 Years: Weight loss (average is 2 pounds per week)

- *BMI ≥ 99th Percentile*
  2-5 Years: Gradual weight loss of up to one pound a month if BMI is very high (>21 or 22 kg/m^2)
  6-11 Years: Weight loss (average is 2 pounds per week)
  12-18 Years: Weight loss (average is 2 pounds per week)

Dietary management (caloric intake) is the primary and essential action to improve a member's BMI status – this should be more coupled with a balanced diet, low in trans-fats, and nutritionally sound and culturally appropriate. Encourage nutritional counseling and education by a licensed dietitian. Activity prescription that is fun and recreational is advised; it may include lifestyle activities tailored to the strengths of the member and family.

CASE MANAGEMENT GOALS

Case Goals should target specific care gaps and/or adherence issues, and measure the member's progress towards self-management and adherence which will lead to the targeted health outcomes above. Examples:

1. The member will increase their level of physical activity by 2-5 minutes each week. Member self-reports exercise regime over the last 30 days that demonstrates improved adherence to physical recommendation.
2. The member will be able to identify healthy eating patterns. Member self-reports grocery shopping and diet regime over the last 30 days that demonstrate improved adherence to guideline and or provider recommendation.
3. Specific for Members requiring hospitalization: The Member participates in provider follow-up visit within 7 days of hospital discharge.

Treatment Goals and Monitoring[6,7]

Short-term goal: 10% loss of initial body weight in 6 months

- Be physically active for at least 1 hour per day
- Decrease screen time to 2 hours per day or less
- Proper, balanced meals and diet, including daily breakfast; no sugar-sweetened beverages

Long-term goal: Altered and sustained life style behaviors to provide further weight loss, maintain declined weight, and avoid additional weight gain and BMI < 85th percentile (BMI between 85-94th percentile may be healthy in some children). If interventions are not successful in achieving goals, medications and weight loss surgery are not recommended for children. Referral to a specialist for further assessment in the case of severe obesity where medical risks are present.

Treatment Indication, Goals & Monitoring [8,9]

Treatment for obesity is indicated for individuals with a BMI ≥ 25 kg/m^2 and < 30 kg/m^2, waist circumference > 40 in (men) or > 35 in (women) associated with two or more risk factors; **OR** a BMI ≥ 30. **Initial visit and assessment** at periodic follow-up visits should include:

- Establishment of healthcare team to include:
  - Attending physician (PCP or specialist)
  - Dietary professional
  - Behavioral health specialist

- Reduced calorie diet developed in conjunction with dietary professional
- Regular exercise program (30 minutes per day, increasing to 60 minutes) developed in conjunction with exercise professional
- Lifestyle interventions and depression screening in conjunction with behavioral health professional
- Attending physician to monitor ongoing program compliance and weight loss at periodic office visits 6+ months.

Monitoring of treatment goals should take place **every six months** with the following considerations:

- *Short-term goal:* 10% loss of initial body weight in 6 months
- *Long-term goal:* Altered and sustained life style behaviors to provide further weight loss, maintain declined weight, and avoid additional weight gain.

Additional Interventions if Initial Goals Are Not Met [8,9]

- **Medications.** The following are approved for the treatment of obesity:
  - *Orlistat:* Indicated long-term; blocks the effect of lipase in the GI tract, leading to decreased absorption of fats
  - *Sibutramine:* Indicated long term, acts on CNS
  - *Benzphetamine:* Indicated for short-term use only, acts on CNS (norepinephrine-like)
  - *Diethylpropion:* Indicated for short-term use only, acts on CNS (norepinephrine-like)
  - *Phendimetrazine:* Indicated for short-term use only, acts on CNS (norepinephrine-like)
  - *Pheentermine:* Indicated for short-term use only, acts on CNS (norepinephrine-like)
- **Weight loss surgery.** Option for selected patients with clinically severe obesity (BMI > 40 kg/m^2 or BMI > 35 kg/m^2 with comorbid conditions) and failure to achieve short-term goals after a physician supervised weight loss program as described above.

CASE MANAGEMENT OBJECTIVES

Case Management Objectives should focus on improving the Member's self-management skills up including:

1. Lifestyle change skills
2. Increasing physical activity to at least 150 minutes/week (300 minutes/week for children) or as otherwise prescribed by physician
3. Adhering to Provider visit(s) as scheduled
4. Provide education regarding cardiovascular risk factors (high blood pressure [BP], hyperlipidemia, and hyperglycemia), that lifestyle changes that produce even modest, sustained weight loss of 3%–5% produce clinically meaningful health benefits, and greater weight losses produce greater benefits.
   - Sustained weight loss of 3%–5% is likely to result in clinically meaningful reductions in triglycerides, blood glucose, hemoglobin A1c, and the risk of developing type 2 diabetes.
   - Greater amounts of weight loss will reduce BP, improve LDL-C and HDL-C, and reduce the need for medications to control BP, blood glucose and lipids as well as further reduce triglycerides and blood glucose.
5. Provide resources (via www.choosemyplate.gov.[11]

The Office of Disease Prevention and Health Promotion published the *2015–2020 Dietary Guidelines for Americans*; the following are highlights of dietary guidelines for children and adults:[12]

Children

- Limit sugar-sweetened beverages
- Eat at least 5 servings of fruits and vegetables
- Moderate to vigorous physical activity for at least 60 minutes a day
- Limit screen time to no more than 2 hours/day; remove television from children's bedrooms
- Eat breakfast every day
- Limit eating out, especially at fast food
- Have regular family meals and limit portion sizes

Adults

- A variety of vegetables from all of the subgroups – dark green, red and orange, legumes (beans and peas), starchy, and other fruits (especially whole fruits)
- Grains, at least half of which are whole grains
- Fat-free or low-fat dairy, including milk, yogurt, cheese, and/or fortified soy beverages
- A variety of protein foods (e.g., seafood, lean meats and poultry, eggs, legumes [beans, peas], nuts, seeds, and soy based products
- Limit saturated and trans fats as well as added sugars and sodium

The care team should also conduct screening for and treatment of anxiety and/or depression, as appropriate.

MEDICAL BEHAVIORAL INTEGRATION

People with obesity have higher rates of depression than the general population, and in fact, one study has shown that of chronic health conditions, co-occurring depression was found highest in very obese patients. People with depression have a higher risk of becoming obese, and conversely, people with obesity have a higher risk of depression. Women with obesity are at an even higher risk of being diagnosed with major depressive disorder, and there are studies that show that many severely obese women have a history of sexual trauma in childhood and use their weight as a defense against others.[13] Body image and low self-esteem also contribute both to depression and weight gain, as well as failure at weight loss. In order to increase physical activity and eat healthier, people need to have a high motivation to change behavioral patterns. Depression and other mental health issues reduce motivation and increase negative thinking patterns which make weight loss difficult. Stress and depression can change eating and activity habits, leading to weight gain, and binge eating can also be a manifestation of depression. "Comfort eating" due to depression, as well as anxiety, is also a problem, as people self-soothe with foods that remind them of feeling happy or being well cared for.[14] In addition, people with serious mental illness also have higher rates of metabolic disturbances, such as diabetes and obesity. Childhood obesity also puts children at higher risk of having psychological problems such as depression, inappropriate behavior, relationship issues and learning difficulties.[15]

MEMBER EDUCATIONAL RESOURCES

Currently there are no Krames/StayWell Member educational materials utilized by WellCare Case Managers.

Related WellCare Guidelines

In addition to the information contained in this document, please reference the following CPGs: *Cardiovascular Disease: HS-1002, Cholesterol Management: HS-1005,* and *Congestive Heart Failure: HS-1003.* Information related to prevention can be found in the following age-specific Preventive Health CPGs: *Adolescent (HS-1051), Adult (HS-1018), Older Adult (HS: 1063)*, and *Pediatric (HS-1019).*

NOTE: Clinical Policies can be accessed by going to www.wellcare.com – select the Provider tab, then "Tools" and "Clinical Guidelines".

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Disclaimer

Medical Policy Committee Approval History

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6/7/2018	• Approved by MPC. No changes.
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