



## Guideline for Disease Management in Correctional Settings

### ADOLESCENT OBESITY

#### **Recommended Resources to Support Evidence-Based Practice and Quality Improvement**

NCCHC issues guidelines to assist correctional health care clinicians in evidence-based decision making. For specific clinical practice guidelines and recommendations, please see the resources listed on page 2.

#### **Introduction**

Although clinical guidelines are important decision support for evidence-based practice, to leverage the potential of guidelines to improve patient outcomes and resource use, NCCHC recommends that health care delivery systems also have components including primary care teams, other decision support at the point of care (such as reminders), disease registries, and patient self-management support. These components have been shown to improve outcomes for patients with chronic conditions. In addition, we recommend establishment of a strategic quality management program that supports ongoing evaluation and improvement activities focused on a set of measures that emphasize outcomes as well as process and practice. For information on the chronic care model, model for improvement, and outcomes measures, see the resources listed on page 2.

#### **Adolescent Obesity in Corrections**

Obesity is caused by a complex interaction of emotional, social, and physical factors that are individual to each patient. Treatment will therefore need to involve the entire biopsychosocial network within the facility. Components of long-term successful treatment include the following:

- Motivation of the patient
- Cooperation of the family
- Psychological and social evaluations and treatment of any causative factors
- Nutrition education
- Administrative support to provide proper diet, exercise, and physical accommodations

The diagnosis of obesity is based on the body mass index (BMI). This is determined for children and adolescents by plotting the BMI for Age graph developed by the Centers for Disease Control and Prevention. Childhood obesity is defined as a BMI greater than the 95th percentile. A child at risk for overweight has a BMI between the 85th and 95th percentile.

Weight loss is not a goal in itself. Adolescent obesity and relapse prevention are based on learning and adapting to a healthy lifestyle and on maintaining weight loss in a less restrictive setting. Adolescents who achieve and maintain a weight in an appropriate range (BMI < 85th percentile) are less likely to experience complications of obesity such as diabetes, hypertension, sleep apnea, and skeletal breakdown. The treatment plan should be individualized and provide motivation and goals that can be achieved in small increments. Adolescents may be particularly affected by body image; it takes professional competence and sensitivity to assist the adolescent in dealing with weight problems.

An adolescent's motivation to lose weight may be affected by social and emotional factors. For example, many obese adolescents have suffered past trauma and abuse. Some adolescents choose to remain obese as a defense against sexual predators or physical aggressors. Depression can be both a cause and effect of obesity. Weight loss maintenance may require that the past history be addressed in a clinical

setting. Motivational interviewing techniques may be helpful in addressing psychosocial causes of obesity.

Diet can be problematic in an adolescent correctional setting where one standardized meal plan is used for children of very different sizes and growth. Obese children should be taught how to make appropriate food choices. This may be extremely difficult for a child who uses food as a coping mechanism, especially when placed in a stressful situation. It may be necessary to place a child on a calorie-controlled diet under the direction of a physician and dietitian to help achieve weight loss success for a time, but gradually the adolescent should be encouraged to take responsibility for his/her own choices. Any commissary should include healthy food choices within the diet restrictions.

Exercise is an important component of a healthy lifestyle and movement of large muscle groups should be part of every child's daily activity. Group exercise should be a component of the treatment plan. If this occasionally becomes impossible, the adolescent should be taught an exercise program than he/she can carry out alone. Organized sports and dance activities have been used in correctional settings to improve fitness, competence, morale, and cooperation. Community volunteers can be a resource for these activities.

Obesity is a chronic illness and treatment requires a long-term commitment. Although a goal of weight loss may be unrealistic in a short-term care facility, obese adolescents should be given opportunities to avoid weight gain through the use of emotional support, exercise programs, appropriate diets, and diet education.

### **Quality Improvement Measures**

The following quality improvement measures are suggested, but they are not intended to be a complete list necessary to ensure a successful weight reduction program in a juvenile correctional setting. We recommend that the improvement measures for a patient population be reported at a facility level and at a provider or team level.

- Percentage of adolescents whose BMI is measured if obesity is suspected
- Percentage of patients with weight, height, and BMI measured
- Percentage of patients whose BMI is tracked for changes and use of data as a program measure
- Percentage of dietitian consultations in cases of increasing BMI
- Percentage of charts with fasting lipid results
- Percentage of charts with exercise as an element of the treatment plan
- Percentage of charts with follow-up comment on exercise during subsequent visits
- Evidence of counseling adolescents with BMI of 85% and higher
- Presence of a management clinic specifically for obesity (using chronic disease format)
- Availability of an organized dietary program
- Availability of an exercise program

### **Recommended Resources to Support Evidence-Based Practice and Quality Improvement**

RESOURCE Prevention and Treatment of Childhood Overweight and Obesity  
SOURCE American Academy of Pediatrics  
URL <http://www.aap.org/obesity>

RESOURCE BMI Percentile Calculator for Child and Teen, English Version  
SOURCE Centers for Disease Control and Prevention  
URL <http://apps.nccd.cdc.gov/dnpabmi/calculator.aspx>

- RESOURCE Pediatric Weight Management Evidence-Based Nutrition Practice Guideline  
SOURCE American Dietetic Association  
URL <http://www.adaevidencelibrary.com/topic.cfm?cat=2721&auth=1>
- RESOURCE Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Summary Report (December 2007)  
SOURCE *Pediatrics* (Official Journal of the American Academy of Pediatrics), Vol. 120, Supplement 4  
URL [http://pediatrics.aappublications.org/content/120/Supplement\\_4/S164.full.html](http://pediatrics.aappublications.org/content/120/Supplement_4/S164.full.html)
- RESOURCE Chronic Care Model: Meet the Needs of Specific Populations  
SOURCE Based on the model developed by Ed Wagner MD, MPH, MacColl Institute for Healthcare Innovation, Group Health Cooperative of Puget Sound, and the Improving Chronic Illness Care program. Available from the Institute for Healthcare Improvement  
URL <http://www.ihl.org/knowledge/Pages/Changes/MeettheNeedsofSpecificPopulations.aspx>
- RESOURCE How to Improve / Model for Improvement  
SOURCE Associates in Process Improvement. Available from the Institute for Healthcare Improvement  
URL <http://www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/HowToImprove>
- RESOURCE Measures  
SOURCE Institute for Healthcare Improvement  
URL <http://www.ihl.org/knowledge/Pages/Measures/default.aspx>
- RESOURCE HEDIS & Quality Measurement  
SOURCE National Committee for Quality Assurance  
URL <http://www.ncqa.org/tabid/59/Default.aspx>

Last reviewed: October 2011  
Next scheduled review: October 2012  
For the latest version, go to  
<http://www.ncchc.org/resources/clinicalguides.html>