Effective Screening and Counseling for Obesity in Adolescents

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Madison, WI
The views expressed during today’s session are those of the presenters. They do not necessarily reflect the views of the Office of the Assistant Secretary for Health, Office of Adolescent Health, or the U.S. Department of Health and Human Services.
• Effective Screening and Counseling for Obesity in Adolescents
  Madison, WI • November 10, 2015 • 11:00 a.m. ET

• Effective Screening and Referral Processes for Tobacco Use in Adolescents
  Chicago, IL • Date TBA

http://adolescenthealthseries.net
Led by the HHS Office of Adolescent Health (OAH), TAG is a national call to action to improve adolescent health in the U.S. TAG specifically aims to reach and engage a wide array of professionals who touch adolescents’ lives, as well as parents and adolescents themselves. It includes both protective and behavioral risk factors and emphasizes building on young people’s strengths.

It highlights **Five Essentials for Healthy Adolescents:**
1. Positive connections with supportive people,
2. Safe and secure places to live, learn, and play,
3. Access to high-quality, teen-friendly health care,
4. Opportunities for teens to engage as learners, leaders, team members, and workers,
5. Coordinated, adolescent- and family-centered services.

[http://www.hhs.gov/ash/oah/tag](http://www.hhs.gov/ash/oah/tag)
Vision and Mission of MCH

• **Vision:** Title V envisions a nation where all mothers, children and youth, including children and youth with special health care needs (CYSHCN), and their families are healthy and thriving.

• **Mission:** The mission of Title V is to improve the health and well-being of the nation’s mothers, infants, children, and youth, including children and youth with special health care needs, and their families.
2016–2020 MCH Priority Areas

Wisconsin’s Maternal and Child Health (MCH) and Children and Youth with Special Health Care Needs (CYSHCN) Programs work to improve the health and well-being of mothers, infants, children and youth, including CYSHCN, and their families across the following priority areas:

1. Healthy behaviors
2. Safety and injury prevention
3. Mental health factors and healthy relationships
4. Preventive screening and follow-up
5. Health care access and quality
6. Health equity
7. Infrastructure to assure data-informed and policy, environmental, and systems-based strategies
Adolescent Well-Visit National Performance Measure

Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year
U.S. Preventive Services Task Force Draft Recommendation Statement

Obesity in Children and Adolescents: Screening

**This topic is currently in the process of being updated.

HHS OASH Region V will establish a regional network of adolescent health and social service providers that will continue to information-share about:

- screening
- intervention
- referral
- policy
- programming

Contact Lesley.Craig@hhs.gov if you’d like to learn more.
Effective Screening and Counseling for Obesity in Adolescents

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Disclosures (B. Nemeth)

• I have no relationships with commercial interests to disclose.

• I do not intend to reference unlabeled or unapproved uses of drugs or products in my presentation.
Objectives

• Demonstrate the recent trends in pediatric and adolescent obesity
• Discuss the USPSTF stance on screening and treatment of pediatric obesity that is supported by the Affordable Care Act
• Identify background principles important in the prevention and treatment of adolescent obesity
Figure 1: Trends in obesity among children and adolescents aged 2–19 years, by sex: United States, 1971–1974 through 2009–2010

NOTE: Obesity is body mass index greater than or equal to the 95th percentile of the sex- and age-specific 2000 CDC growth charts.

Fryer CD, Carroll MD, Ogden CL. 2012. (accessed 11/01/2015)
www.cdc.gov/nchs/data/hestat/obesity_child_09_10/obesity_child_09_10.htm
Percentage of high school students who were obese* — selected U.S. states, Youth Risk Behavior Survey, 2005

A text version of this map is available.

[Map image]

www.cdc.gov/healthyschools/obesity/obesity-youth.htm
(accessed 11/1/2015)
Percentage of high school students who were obese* — selected U.S. states, Youth Risk Behavior Survey, 2009

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Affordable Care Act

• Coverage of preventive services graded as B or higher by the US Preventive Services Task Force

• Obesity screening and treatment covered as a preventive service

Obesity Screening

- Assess Body Mass Index (BMI)
  - Weight (kg)
  - Height (m)^2
- Obese = BMI ≥ 95%-for-age-and-sex
USPSTF Recommendations for Treatment

• Offer or refer to **moderate-intensive multi-modal program**

• Grade B – high certainty that benefit is moderate or moderate certainty that benefit is moderate to substantial
Caveats to USPSTF

• Insufficient data for < 6-years old and BMI < 95%ile
• Effectiveness of programs was based on 6-12 month outcomes
• **Moderate-intensive** = >25 hours over 6 months
  – Retention and/or enrollment issues in studied programs
• Many other programs effective, just less dramatically or consistently
Keys for Successful Moderate-Intensive Obesity Treatment

• Motivation
• Retention

• Where to find these programs
  – Tertiary care centers
  – Health care plans
  – Schools/community organizations
Providers Outside of Moderate-Intensive Programs Play an Integral Role in Setting the Stage for Success

- Does not work to refer a patient because they are “obese”
- Create a supportive environment
- Help identify important reasons to change (in a healthy manner)
- Remain involved throughout and AFTERWARDS
Stages of Readiness for Change

PRECONTEMPLATION
No intent to take action, unaware of need to change

CONTEMPLATION
Aware of problem, thinking but not committed to change

PREPARATION
Initiation of planning, baby steps

ACTION
Modified behavior & environment, short-term change with plans for long-term

MAINTENANCE
Ongoing establishment of changes, working to prevent relapse

How I (Simplistically) Think of Assessing Readiness for Change

Are you concerned?

Why do you want to change?
What you want to change?

How are you going to change?
What is getting in the way?

PRECONTEMPLATION
- Educate on risks/benefits

CONTEMPLATION
- Address concerns
- Identify misconceptions
- Educate on guidelines

PREPARATION
- Assist in planning
- Identify barriers
- Experiment with small changes

ACTION
- Set goals
- Anticipate barriers
AAP Recommendations

• Early identification, prevention and treatment
• Promotes chronic care model
• Assess BMI at every well-child check
• Prevention for everybody
• Patient and family-centric messaging
  – e.g. 5-2-1-0 (www.letsgo.org)
  – Motivational interviewing
    • 15-minute obesity prevention protocol

Importance of Obesity Screening

- Detection of obesity-related disorders
  - Additional history/ROS
  - Additional exam
  - Possibly labs
- Initiation of “treatment”
Stages of Intervention

1. Prevention Plus
   - More frequent visits
   - Goal = improve BMI

2. Structured Weight Management
   - More support (dietitian, counselor, monthly visits)
   - Monitoring/logging

3. Comprehensive Multidisciplinary

4. Tertiary Care
Key Components

• Increased contact
  – Physical Activity programs may help with this

• Involvement of parents

• Behavior management
  – We can’t force people to change
    • Need to be ready and able
  – Help them (and yourself) identify why, as well as barriers, to change
  – Then move on to TREATMENT
Food Insecurity Screening
AAP 2015

• Within the past 12 months, we worried whether our food would run out before we got money to buy more
• Within the past 12 months, the food we bought just didn’t last and we didn’t have money to get more

Obesity Prevention: AAP 2015

• Re-emphasizes prevention
  – Results of treatment modest
  – Education provided in context of individual child

• Emphasizes role of prevention in prenatal and <2yo

• Family-based interventions so everyone changing together

• Parents as role-models and active participants

Algorithm for the Assessment and Management of Childhood Obesity in Patients 2 Years and Older

This algorithm is based on the 2007 Expert Committee Recommendations, new evidence and promising practices.

Assess Behaviors
Assess healthy eating and active living behaviors

Provide Prevention Counseling
5 (fruits & vegetables) 2 (hours or less of screen time) 1 (hour or more of physical activity) 0 (sugary drinks) every day!

Determine Weight Classification
Accurately determine weight and height, calculate and plot Body Mass Index (BMI) and determine BMI percentile.

Healthy Weight (BMI 5-84%)
- Family History
- Review of Systems
- Physical Exam

Overweight (BMI 85-94%)
- Augmented (obesity-specific)¹
  - Family History
  - Review of Systems
  - Physical Exam

Determines Health Risk Factors

Risk Factors Absent

Obesity (BMI ≥ 95%)
- Augmented (obesity-specific)²
  - Family History
  - Review of Systems
  - Physical Exam

Risk Factors Present

Institute for Healthy Childhood Weight. ihcw.aap.org
Routine Care
- Provide ongoing positive reinforcement for healthy behaviors.
- For patients in the **healthy weight** category, screen for genetic dyslipidemia by obtaining a non-fasting lipid profile for all children between the ages of 9-11 and again between 18-21.
- For patients in the **overweight** category, obtain a lipid profile.
- Maintain weight velocity:
  - Crossing 2 percentile lines is a risk for obesity
  - Reassess annually
  - Follow up at every well-child visit.

Lab Screening
- The 2007 Expert Committee Recommendations\(^1\) state that a fasting glucose and fasting lipid profile along with ALT and AST should be obtained.
- Additionally, guidelines from the ADA and Endocrine Society recommend using A1C, fasting glucose or oral glucose tolerance test for diabetes or pre-diabetes. The ADA notes that there are presently limited data supporting A1C for diagnosing diabetes in children and adolescents; however, they are continuing to recommend A1C at this time.\(^3\)
- For patient convenience, some providers are obtaining non-fasting labs.
- Clinical judgment, local preferences and availability of testing should be used to help determine the timing of follow up of abnormal labs.
- Of note, some subspecialty clinics are screening for Vitamin D deficiency and insulin resistance by obtaining labs for Vitamin D and fasting insulin. The clinical utility and cost effectiveness of such testing is yet to be determined.
- Currently, there are no guidelines on when to start laboratory testing for patients with obesity. Based upon the patient’s health risk, some experts may start screening patients at 2 years of age.

Obesity-related conditions: The following conditions are associated with obesity and should be considered for further work-up. Additional lab tests may be warranted if indicted by the patient’s clinical condition.\(^5\) In 2014, consensus statements from The Children’s Hospital Association described the management of a number of these conditions.\(^6,7\)

**Dermatologic:**
- Acanthosis nigricans
- Hirsutism
- Intertrigo

**Endocrine:**
- Polycystic ovarian syndrome (PCOS)
- Precocious puberty
- Prediabetes: Impaired fasting glucose and/or impaired glucose tolerance as demonstrated during a GTT
- Premature adrenarche
- Type 2 Diabetes

**Gastrointestinal:**
- Cholelithiasis
- Constipation
- GERD
- Nonalcoholic fatty liver disease or steatohepatitis

**Orthopedic:**
- Blount’s Disease
- Slipped capital femoral epiphysis (SCFE)

**Psychological/Behavioral Health:**
- Anxiety
- Binge eating disorder
- Depression
- Teasing/bullying

*Based on behaviors, family history, review of systems, and physical exam, in addition to weight classification.*
Management and Treatment Stages for Patients with Overweight or Obesity

- Patients should start at the least intensive stage and advance through the stages based upon the response to treatment, age, BMI, health risks and motivation.
- An empathetic and empowering counseling style, such as motivational interviewing, should be employed to support patient and family behavior change.\(^5\)
- Children age 2 – 5 who have obesity should not lose more than 1 pound/month; older children and adolescents with obesity should not lose more than an average of 2 pounds/week.

### Stage 1 Prevention Plus

**Where/By Whom:** Primary Care Office/Primary Care Provider

**What:** Planned follow-up themed visits (15-20 min) focusing on behaviors that resonate with the patient, family and provider. Consider partnering with dietician, social worker, athletic trainer or physical therapist for added support and counseling.

**Goals:** Positive behavior change regardless of change in BMI. Weight maintenance or a decrease in BMI velocity.\(^4\)

**Follow-up:** Tailor to the patient and family motivation. Many experts recommend at least monthly follow-up visits. After 3 – 6 months, if the BMI/weight status has not improved consider advancing to Stage 2.

### Stage 2 Structured Weight Management

**Where/By Whom:** Primary Care Office/Primary Care Provider with appropriate training

**What:** Same intervention as Stage 1 while including more intense support and structure to achieve healthy behavior change.

**Goals:** Positive behavior change. Weight maintenance or a decrease in BMI velocity.

**Follow-up:** Every 2 - 4 weeks as determined by the patient, family and physician. After 3 – 6 months, if the BMI/weight status has not improved consider advancing to Stage 3.

### Stage 3 Comprehensive Multi-disciplinary Intervention

**Where/By Whom:** Pediatric Weight Management Clinic/Multi-disciplinary Team

**What:** Increased intensity of behavior changes, frequency of visits, and specialists involved. Structured behavioral modification program, including food and activity monitoring, and development of short-term diet and physical activity goals.

**Goals:** Positive behavior change. Weight maintenance or a decrease in BMI velocity.

**Follow-up:** Weekly or at least every 2 – 4 weeks as determined by the patient, family, and physician. After 3 – 6 months, if the BMI/weight status has not improved consider advancing to Stage 4.

### Stage 4 Tertiary Care Intervention

**Where/By Whom:** Pediatric Weight Management Center/Providers with expertise in treating childhood obesity

**What:** Recommended for children with BMI \(> 95\)% and significant comorbidities if unsuccessful with Stages 1 - 3. Also recommended for children > 99% who have shown no improvement under Stage 3. Intensive diet and activity counseling with consideration of the use of medications and surgery.

**Goals:** Positive behavior change. Decrease in BMI.

**Follow-up:** Determine based upon patient’s motivation and medical status.
When Ready to Change, Start with SMART Goal-Setting

- **S**pecific
  - e.g. a vegetable will be on the dinner plate
- **M**easurable
  - How much, how often
- **A**ttainable
  - A small increase from current behavior
- **R**eal/Relevant
  - Tie to patient/family interest
- **T**imely
  - Hold accountable with follow-up (2-4 weeks)
My Recommendations for Screening

• Identify changes and issues early
  – Rate of weight gain
    • Crossing percentiles
  – Look for reasons for gain
    • Identify factors that can be changed
    • De-emphasize those that can’t

• Identify diseases related to, or affected by, obesity and/or life-style choices

• Intervene with behavioral modification
Anticipate the Need for Intervention: Deliver the Message Early and Often

• Review healthy behaviors
  – At well-child checks as related to:
    • Growth
    • Interests
  – At acute care visits
    • As related to current complaint/illness
  – Should occur not just in primary care, but also in specialty care

• HOW the message is delivered is critical, especially for adolescents
Recommended Resources

• AAP Guidelines
  – Obesity Prevention, Assessment and Treatment (2007)
  – Food Insecurity (2015)

• Institute for Healthy Childhood Weight
  – ChangeTalk

• Let’s Go
  – http://www.letsgo.org/programs/healthcare/toolkits/
Effective Screening and Counseling for Obesity in Adolescents

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Disclosures (P. Cody)

• I have no relationships with commercial interests to disclose.

• I do not intend to reference unlabeled or unapproved uses of drugs or products in my presentation.
Objectives

• Recognize the prevalence of dangerous weight-control behaviors
• Identify shared risk factors of eating disorders and obesity
• Formulate a plan for effective obesity screening and counseling (focusing on health habits)
My concern:

• Overemphasis of weight/BMI as indicator of health
• Nutritional advice that may encourage food fears and strict diet rules
• Inappropriate messages that may increase body dissatisfaction, dieting, and use of unhealthy weight control practices
Figure 1: Trends in obesity among children and adolescents aged 2–19 years, by sex: United States, 1971–1974 through 2009–2010

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www.cdc.gov/nchs/data/hestat/obesity_child_09_10/obesity_child_09_10.htm
Trends in obesity

2013: 48.7% of teens are trying to lose weight

Prevalence, percent

Year

CDC. YRBS 2013

2013: 13% of students had not eaten for 24 or more hours

CDC. YRBS 2013

2013: 5% of students had taken diet pills, powders, or liquids without a doctor’s advice

CDC. YRBS 2013

2013: 4.4% of students had vomited or taken laxatives

Prevalence, percent

Year

Obesity (6-11 yo)
Obesity (12-19 yo)
Trying to lose weight

CDC. YRBS 2013

Eating disorders are the 3rd most common chronic illness in adolescence, after obesity and asthma.


Lucas AR, Beard CM, O’Fallon WM, et al. 50-year trends in the incidence of anorexia nervosa in Rochester, Minn.:a
Eating disorders that may contribute to obesity

- Binge Eating Disorder
- Bulimia Nervosa
- Night Eating Syndrome (part of Other Specified Feeding and Eating Disorders)
Eating disorders can be a result of inappropriate obesity counseling.
A tale of 2 patients...

<table>
<thead>
<tr>
<th>Patient A</th>
<th>Patient B</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Initial BMI 30.2</td>
<td>• Initial BMI 33.3</td>
</tr>
<tr>
<td>• Frequently bullied at school</td>
<td>• Diagnosed as obese by primary care provider</td>
</tr>
<tr>
<td>• Called “fat pig” by peers in gym locker room</td>
<td>• Advised to cut intake of sweets and junk food</td>
</tr>
<tr>
<td>• Started restricting kcal and running 5 miles daily</td>
<td>• Cut out all fat and carbs</td>
</tr>
<tr>
<td>• Lost 60 lbs in 6 months</td>
<td>• Purged if had “bad food”</td>
</tr>
<tr>
<td>• Current BMI 18</td>
<td>• Lost 50 lbs in 9 months</td>
</tr>
<tr>
<td></td>
<td>• Current BMI 25</td>
</tr>
</tbody>
</table>
Common Risk Factors for Obesity and Eating Disorders

- Genetic factors
- Psychological factors: low self-esteem, poor coping mechanisms
- Sociocultural factors: body dissatisfaction, mixed media messages

I’m not against BMI calculations!

• BMI is one data point!

• BMI says nothing about the individual situation of the person
  – Is this BMI a change? What’s the trend?
  – Are they on a medication that increases appetite?
  – Are both parents working to pay the rent and it’s easier to have prepackaged meals for the kids to make themselves?

• BMI only gives a small piece of the picture in regards to health
In the wrong hands, BMI discussions can cause harm.

- Weight discussions can be very emotional and personal
- Obesity is a medical diagnosis
- Weight/BMI should not be something that we use to create guilt or blame
Effective screening for obesity

• Focuses on trends
• Includes medical history, family history, social history, and physical exam.
• Includes questions on health habits, body satisfaction and weight control behaviors
Effective counseling is patient (and family) centered

- Ask permission
- Motivational interviewing
  - Concern vs ambivalence
  - Readiness for change
- Be empathetic, nonjudgmental, and supportive
- Involve the family!
Effective counseling takes time (but not too much) and follow up

- Brief interventions shown to be effective
- Not “one and done”
Effective counseling does NOT focus on weight or looks

• Obesity is not a behavior

• However, asking about personal body satisfaction is important
Effective counseling focuses on habits

- Fruit and vegetable consumption
- Physical activity
- Sedentary behavior
- Sugary beverage consumption
- Eating as a family
- Skipping meals
- Other weight-control methods?
Take away points

• Look at the TREND of BMI
• Screen for health habits
• Always ask about body image/satisfaction and weight-control behaviors
We all have the same goal – a healthy, disease-free population who eat well, are physically active, and are satisfied with their bodies.
Effective Screening and Counseling for Obesity: ACTION PLANNING

- What, personally, can you do differently right away in how you approach/manage adolescent care or services in your clinic/organization, such as obesity?

- What, systemically, can your organization do differently relatively soon in how you approach/manage adolescent services in your clinic/organization? Consider the steps to take and the timeline in which to do it.

- What is a personal long-term goal you have around increasing and/or enhancing the way you provide care for adolescents in your clinic/organization?

- What is a long-term systemic goal your organization can work to achieve? Consider the steps to take and the timeline in which to do it.
Effective Screening and Counseling for Obesity in Adolescents

THANK YOU