



## **November 2011 WIC Staff In-service: Implementation of WHO Growth Charts and Related Risks**

### **Session Focus**

**Target Audience:** WIC certifiers

**Session Goal:** Prepare for the implementation of new WHO growth charts in TWIST

#### **Key Content Points:**

- Point 1: Introduction of WHO growth charts
- Point 2: Description of risk changes associated with the new charts
- Point 3: Plan for TWIST implementation

#### **Session Objectives:**

- Objective 1: By the end of the in-service, the certifier will be able to explain differences between the new WHO charts and the current CDC charts in TWIST
- Objective 2: By the end of the in-service, the certifier will be able to describe changes to existing risks and identify new risks
- Objective 3: After TWIST implementation in December, the certifier will successfully use the new WHO growth charts in TWIST

### **Session Planning**

#### **Materials Needed:**

- Power point presentation: Implementation of WHO growth charts and Related Risks for Infants and Children
- Handout: Summary of WIC Risks Changes for 2011
- See Oregon WIC website for electronic versions of these materials



**Preparation Needed:** Please review the in-service information prior to sharing with staff. Contact Vernita Reyna or your state nutrition consultant with questions.

**Time Needed:** One to 1 ½ hours prior to December 2011 TWIST release.

## Session Outline

### Facilitator notes:

TWIST practice data base can be used to view the new WHO growth charts after December 1, 2011

Updated risk information sheets and job aides for the Nutrition Risk module will be on the Oregon WIC website in November 2011

Updated Policy 675, Risk Criteria: Codes and Descriptions will be distributed in December 2011

### Additional resources:

- World Health Organization website: <http://www.who.int/childgrowth/en/>
- Centers for Disease Control and Prevention website: [http://www.cdc.gov/growthcharts/who\\_charts.htm](http://www.cdc.gov/growthcharts/who_charts.htm)
- MMWR article September 10, 2010:  
[http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5909a1.htm?s\\_cid=rr5909a1\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5909a1.htm?s_cid=rr5909a1_w)
  - Use of WHO and CDC Growth charts for Children aged 0 -59 months
- Pediatrics article; originally published online September 26, 2011:  
<http://pediatrics.aappublications.org/content/128/4/e786.full.pdf+html>
  - Parental Perceptions of Weight Terminology That Providers Use With Youth

Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
2 min	<b>Opening the session:</b> Introduce topic, length of session, invite questions as they arise	



Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
2 min	<b>Warm-up activity:</b> <ul style="list-style-type: none"> <li>• <b>What have you heard about the new World Health Organization (WHO) growth charts ?</b> (PPT slide 1)</li> </ul>	
10 min	<b>Activity 1:</b> Current use of growth charts (PPT slides 2-3) <ul style="list-style-type: none"> <li>• <b>Background: Growth charts are a key tool used to interpret growth measurements.</b> (PPT slide 2) Available in electronic or paper versions.</li> <li>• <b>Discuss together: How do you use growth charts ?</b> (PPT slide 3) Monitor child’s growth and weight gain, screen for growth problems, identify weight issues, assign risk. Ask what parents think about their child’s placement on the graph. Identify times when growth pattern shifts. Provide assurance that child’s growth is on track.</li> <li>• <b>When do you show growth charts to parents or guardians?</b> When percentiles on the medical data screen appear normal or abnormal? At the beginning or end of a certification? When it is requested by parents? To reinforce the counseling provided? Sharing growth charts is not a required element of a certification, there isn’t an expectation from the State office that this would happen at every appointment.</li> <li>• <b>How do you describe the graphs to parents?</b> Graph lines represent a child’s rate of growth or weight gain over time. The plot points illustrate measurements at a point in time and can be used as comparisons to the standard for each age. A series of points are helpful for noting trends. Use neutral terms when describing a child’s placement on the graph such as “typical range for age”, “usual pattern of growth” “growth curves above/ below average”.</li> </ul>	1
10 min	<b>Activity 2:</b> History and characteristics of WHO and CDC growth charts (PPT slides 4-10) <ul style="list-style-type: none"> <li>• <b>Which of these chart options (on PPT slide 4) are we currently using in TWIST? CDC.</b></li> </ul>	1



Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
	<ul style="list-style-type: none"> <li>• Review definitions of reference vs. standard (PPT slide 5)</li> <li>• Note differences between the data used for the CDC charts (PPT slide 6: cross sectional study of US children) and the data collected for the WHO charts (PPT slide 7-8): longitudinal study over a two year period with children who met specific criteria).</li> <li>• <b>What do you think about the growth patterns for children from different countries who were raised in optimal conditions ?</b> (PPT slides 9-10): The WHO hypothesis held true; children will grow the same when living in optimal circumstances regardless of where they live. This is how the international growth standard was developed; it was based on how children normally grow when all factors support their best possible health.</li> </ul>	
10 min	<p><b>Activity 3:</b> Implementation of the new WHO charts (PPT slides 11-12)</p> <ul style="list-style-type: none"> <li>• <b>What occurred as a result of the WHO research?</b> (PPT slide 11) An expert panel met to determine the best use of these charts in the US. Their recommendation was to use the WHO charts from birth to 2years and continue the use of CDC charts from 2 to 20 Years. This meant that care providers would have the best possible standards for young children and would only switch charts once at age two when they started measuring children standing up.</li> <li>• USDA accepts this recommendation for WIC in 2010, provides guidance for implementation by 2012.</li> <li>• Oregon implementation will occur in December 2011. (PPT slide 12) WHO graphs will be added to the charts already available in TWIST. TWIST will continue to select and plot the appropriate graphs for age.</li> <li>• <b>Which charts will TWIST use?</b> <ul style="list-style-type: none"> <li>○ WHO for children from birth to 2 years of age</li> <li>○ CDC BMI charts for children from 2 to 5 years</li> <li>○ CDC weight for length charts for children from 2 to 3 years if they cannot be measured standing up</li> </ul> </li> </ul>	1,3



Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
15 min	<p><b>Activity 4:</b> Differences between CDC charts and WHO charts (PPT slides 13-19)</p> <ul style="list-style-type: none"> <li>• <b>What changes will we see? New cutoffs.</b> (PPT slide 13) WHO growth standards measured healthy children under optimal conditions so only children whose measurements are above, below or just on the perimeters of the charts should be considered at risk. <ul style="list-style-type: none"> <li>○ WHO recommends cutoffs at the 2<sup>nd</sup> and 98<sup>th</sup> percentiles</li> <li>○ 5<sup>th</sup> and 95<sup>th</sup> percentiles will continue to be used with CDC growth charts for older children</li> </ul> </li> <li>• Other differences (PPT slide 14) : <ul style="list-style-type: none"> <li>○ Fewer infants would be below 5<sup>th</sup> percentile on WHO <u>weight-for-age</u> charts</li> <li>○ Fewer children will be identified as underweight or Failure to Thrive (FTT) especially from 6 to 23 months</li> <li>○ More infants would be above 95<sup>th</sup> percentile on WHO <u>weight-for-length</u></li> <li>○ Formula-fed infants tend to gain weight more rapidly after 3 months and could be identified as overweight.</li> <li>○ More infants would be below 5<sup>th</sup> percentile on WHO <u>length-for-age</u> charts</li> </ul> </li> <li>• Differences between the growth and weight gain curves of the CDC and WHO charts are evident (PPT slide 15) but the majority of children will continue to fall within the “normal” range of both charts.</li> <li>• <b>Case Study: What are the differences between the CDC and WHO charts for this child ?</b> (PPT slide 16-18) On the CDC chart, she is falling off of the graph and would be considered underweight. On the WHO chart, Sally is gaining weight at a normal rate.</li> </ul>	1,3
15 min	<p><b>Activity 5:</b> Risk changes (PPT slides 19-26)</p> <ul style="list-style-type: none"> <li>• <b>Review Handout: Summary of WIC Risk Revisions for 2011</b></li> </ul>	2



Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
	<ul style="list-style-type: none"> <li>• Twist will continue to automatically assign risk based on information entered on the medical data screen. (PPT slide 19)</li> <li>• <b>Risk 103: Underweight</b> (PPT slide 20) Note the new cutoffs and new high risk designation. (PPT slide 21) <b>How will RD referrals for underweight children be handled in our clinic?</b></li> <li>• <b>Risk 113: Overweight and Risk 114: At Risk of Overweight</b> (PPT slides 22-23) 113 has been renamed from “Monitor weight”. Both risks are based on BMI so are only available for children who have been measured standing up. Children from two to three years of age who may occasionally need to be measured recumbently can be plotted on CDC graphs in TWIST but would not be assigned these risks.</li> <li>• <b>Risk 115: High Weight for Length</b> (PPT slide 24) This is a new risk for infants and young children who are heavier than usual for their age. Assignment of this risk would not change the recommended counseling strategies where weight loss and food restriction is never encouraged.</li> <li>• <b>Risk 121: Short Stature</b> (PPT slide 25) Percentile cut offs have been adjusted for children who are graphed on the WHO chart.</li> <li>• <b>Risk 344: Thyroid Disorders</b> (PPT slide 26) New risk not related to the WHO charts but included in this year’s risk revision. Currently, thyroid disorders are included with Risk 360: Other Medical Conditions and generate a high risk level. This new risk has expanded the range of diagnoses and will be a medium risk level as these conditions are generally well managed with medications following diagnosis.</li> </ul>	
10	<p><b>Activity 6:</b> Talking about weight (PPT slides 27-28)  Many of the risk changes we just discussed involve weight issues, especially over weight. These can be challenging conversations to have with parents...</p> <ul style="list-style-type: none"> <li>• <b>How do we talk about weight issues with parents?</b> (PPT slide 27) Recent research shows that parents prefer terms such as “unhealthy weight” to terms that could be</li> </ul>	3



Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
	<p>viewed as offensive labels like “obese” or “fat”.</p> <ul style="list-style-type: none"> <li>• <b>What questions would you ask to find out more about the child’s family?</b> Every child is influenced by their environment and family dynamics so consider family centered counseling strategies where topics such as family mealtimes and physical activity are discussed. “What is mealtime like in your family?” “What type of active things does your family do together?” “How do you reward your children?” etc.</li> <li>• <b>What language do you use for describing concerns about weight?</b> (PPT 28) The words we use make a difference in how a parent hears what we say. Avoid describing children’s weight with slang terms such as roly-poly, pudgy, fleshy, tubby, dumpy etc. Consider neutral phrases such as monitor weight, watch weight gain, weight higher than average or weight above most children at that age etc. Open the conversation in a neutral way such as “let’s explore what might be causing a change in his rate of weight gain” or “let’s look at the weight gain and see if we can tell what is normal her”.</li> </ul> <p>In the future, we will have more discussion and training on counseling strategies related to healthy weight issues.</p>	
2 min	<p><b>Closing the session:</b> (PPT slides 29-30) Summary and questions.</p> <p>Understanding the new growth graphs and risk changes will help us successfully work with our families to promote positive health outcomes. Additional resources and materials are available. What additional questions do you have? Clarifications needed? Thank you...your participation was appreciated!</p>	

**Facilitator review:**

- Will additional review of this information before December be helpful to any staff?



