

Revisiting Rapid Infant Growth: Assessing Growth in Children Under Age 2

Workshop Agenda

NCCOR (National Collaborative on Childhood Obesity Research)

September 1–2, 2026

11:00 a.m.–3:00 p.m. ET

Zoom: <https://fhi360-org.zoom.us/meeting/register/oTLouTKxTfK2tETS2hjf8A>

Meeting ID: 919 5936 3216

Background: There is strong and growing clinical and public health interest in identifying growth that is either faster or slower than expected during the first two years of life, given evidence linking early growth trajectories to later obesity and chronic disease risk.

There is currently no consensus on how best to define, measure, and longitudinally track rapid infant growth using existing growth standards, nor is there clarity about which specific period of rapid weight gain in infancy is most predictive of later risk.

Rationale: A measure of rapid infant growth may improve clinical care and research in several ways:

- This measure may serve as an **intermediate outcome** in evaluations of obesity prevention interventions. For example, a measure could allow earlier evaluation of the potential effectiveness of an intervention on long-term obesity and associated adverse health outcomes.
- The measure may serve as a **predictor** of longer-term outcomes. For example, improved understanding of genetic and environmental predictors of long-term outcomes can inform strategies for intervention.
- The measure may serve to **prioritize** interventions targeted at children at high risk for obesity or related adverse health outcomes.

Target population: This workshop is specifically focused on term infants who were born at an appropriate weight for gestational age (AGA). In other words, we are focused on children who are born in a typical range and then have rapid growth, rather than catch-up growth as the term is currently commonly used.

Workshop goals: The NCCOR webinar and workshop activities aim to a) assess what existing measures of infant growth can and cannot tell us; b) evaluate which metrics are most appropriate for identifying and tracking rapid infant growth; and c) define the critical unanswered questions needed to move toward consistent, evidence-based approaches for clinical practice, research, and population health surveillance.

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Workshop Day 1

September 1, 2026

11 a.m.–3 p.m. ET

11:00–11:25 Welcome and charge for the day

- Speakers:
 - Carrie Daymont, MD, MSCE, FAAP, *Penn State College of Medicine*
 - Charles Wood, MD, MPH, FAAP, *Duke University School of Medicine*

11:25–12:20 Panel: Researchers in Rapid Infant Growth & Early-Life Obesity Risk – Biological perspective

Objective: Discuss the biological pathways and timing of growth through which rapid infant growth may influence later health outcomes to inform interpretation of early growth patterns and their relevance for prevention. Discuss strengths and limitations of measures of proxies for adiposity. Describe the current state of the evidence and identify key gaps.

- Speakers:
 - Ken Ong, PhD, *Cambridge University*
 - Ellen Demerath, PhD, *University of Minnesota School of Public Health*
 - Julie Lumeng, MD, *University of Michigan*
- Moderator: Carrie Daymont, MD, MSCE, FAAP, *Penn State College of Medicine*
- Q&A

12:20–1:10 Group discussion and report-out related to the biological perspective

- What are the key research questions that, if answered, could inform future prevention-focused guidance on early-life growth assessment and help establish a clearer path forward for research related to rapid infant growth and long-term obesity risk?
- Which time periods are most useful for evaluation of rapid infant growth?
 - Are there particular time periods that should be most prioritized, given stronger associations with long-term outcomes (either known or suspected)?
 - Are there particular time periods that should *not* be used to infer appropriate vs. inappropriate growth? For example, are there periods of highly variable “resetting” or “recalibrating” to extrauterine influences (e.g., possibly the first 4–6 months of life)?
- Given what we know about biology, how do we know when infants are exceeding or fulfilling their growth potential? In some term AGA infants, could rapid growth represent a transition to their extrauterine growth potential?
- What adiposity measures/proxies are available? How do their strengths and weaknesses align with what is needed to evaluate infant growth?
- Facilitators:

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- Jessica G. Woo, PhD, MHSA, FAHA, Cincinnati Children's Hospital Medical Center
- Teresia O'Connor, MD, MPH, FAAP, *Baylor College of Medicine*
- Shannon Robson, PhD, MPH, RD, *University of Delaware*

1:10–1:20 **Break**

1:20–1:50 **Presentation: Research in Rapid Infant Growth & Early-Life Obesity Risk – Statistical perspective**

Objective: Describe various methods used to analyze and model infant and child growth trajectories.

- Speaker: Ahmed Elhakeem, MPH, PhD, *University of Bristol*
- Moderator: Charles Wood, MD, MPH, FAAP, *Duke University School of Medicine*
- Q&A

1:50–2:40 **Group discussion and report-out related to statistical perspective**

- What are the key research questions that, if answered, could inform future prevention-focused guidance on early-life growth assessment and help establish a clearer path forward for research related to rapid infant growth and long-term obesity risk?
- While we wait for additional research, what are the benefits and risks of using an increase in WFAz or WFLz >0.67 for research or clinical purposes?
 - Are there relatively simple measures that would be feasible and meaningful in research or clinical settings?
 - Do different types of studies need different approaches?
- What data are needed to further evaluate existing statistical methods applied to infancy growth or to develop new methods?
- How can we balance competing considerations when designing and selecting measures of rapid infant growth for different research studies and clinical settings? Some considerations include:
 - Predictive ability: How strong is the association with important outcomes?
 - Robustness: How is the measure affected by missing or imprecise measurements?
 - Feasibility: Can we obtain data at the ages needed? Is it possible to include a measurement beyond weight and length?
 - Interpretability: Can clinicians understand the indicator and explain it to parents?
- Facilitators:
 - Jessica G. Woo, PhD, MHSA, FAHA, Cincinnati Children's Hospital Medical Center
 - Teresia O'Connor, MD, MPH, FAAP, *Baylor College of Medicine*
 - Shannon Robson, PhD, MPH, RD, *University of Delaware*

2:40–3:00 **Closing Day 1**

- Speaker: Charles Wood, MD, MPH, FAAP, *Duke University School of Medicine*

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Workshop Day 2

September 2, 2026

11 a.m.–2:30 p.m. ET

11:00–11:10 Welcome back; recap of day 1

- Speaker: Carrie Daymont, MD, MSCE, FAAP, *Penn State College of Medicine*

11:10–12:05 Panel: Clinicians & Applied Researchers: Use of Rapid Infant Growth Measures in Practice

Objective: For both public health and clinical research, discuss use cases for measures of rapid infant growth in public health and desired characteristics of measures.

- Speakers:
 - Ian Paul, MD, MSc, *Penn State College of Medicine*
 - Cynthia Ogden, PhD, MRP, *Centers for Disease Control and Prevention*
 - Sandy Hassink, MD, *American Academy of Pediatrics*
- Moderator: Kirsten Herrick, PhD, MSc, *National Institutes of Health*
- Q&A

12:05–12:55 Group discussion and report-out related to measures in practice

- What are the key research questions that, if answered, could inform future prevention-focused guidance on early-life growth assessment and help establish a clearer path forward for research related to rapid infant growth and long-term obesity risk?
- What features of a measure or measures are needed to support the following uses? Features could include the timing and type of data used to calculate the measure; robustness to specific types of bias, such as bias caused by variable availability of data; or test characteristics (prioritizing positive predictive value or a different characteristic).
 - Clinical research
 - Population surveillance
 - Clinical care
- At what age(s) should we evaluate longer-term outcomes for which rapid infant growth may be a predictor? How do we balance the practical need for evaluation at younger ages and the potential lack of durability of effects from weight- or obesity-related interventions?
- Facilitators:
 - Jessica G. Woo, PhD, MHSA, FAHA, *Cincinnati Children's Hospital Medical Center*
 - Teresia O'Connor, MD, MPH, FAAP, *Baylor College of Medicine*
 - Shannon Robson, PhD, MPH, RD, *University of Delaware*

12:55–1:05 Break

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- 1:05–2:00 Small group breakouts by perspective (clinical research, research, and methods)**
- What are the key “answerable” research questions needed to support further development of one or more measures of rapid infant growth?
 - What are features of 1–3 feasible studies that would address these questions?
 - Facilitators:
 - Jessica G. Woo, PhD, MHSA, FAHA, Cincinnati Children's Hospital Medical Center
 - Teresia O'Connor, MD, MPH, FAAP, *Baylor College of Medicine*
 - Shannon Robson, PhD, MPH, RD, *University of Delaware*
- 2:00–2:30 Report-out from breakout discussions**
- 2:30–2:45 Closing Day 2**
- Speakers:
 - Charles Wood, MD, MPH, FAAP, *Duke University School of Medicine*
 - Capt. Alyson B. Goodman, MD, MPH, *Centers for Disease Control and Prevention*