Executive Summary

Pediatric obesity affects more than 21 percent of children and adolescents in the United States and contributes to substantial physical, psychological, social, and economic burdens across the lifespan.[1] Recent advances in obesity treatment include the approval and growing use of glucagon-like peptide-1 (GLP-1) and other obesity medications (OMs), expanding therapeutic options for youth who may not achieve or sustain improved health outcomes with lifestyle interventions alone. However, the rapid evolution of the treatment landscape has outpaced the evidence needed to guide day-to-day decision-making in real-world health care settings.

To address this gap, NCCOR (the National Collaborative on Childhood Obesity Research) convened the "Clinical Research Gaps in Pediatric Obesity Pharmacotherapy" workshop, bringing together experts in pediatric medicine, nutrition, physical activity, mental health, public health, and lived experience. Building on past efforts, their task was to develop actionable, clinically relevant research priorities and tools that could support practitioners over the next two to three years in the initiation, maintenance, and discontinuation of OMs for youth.

Using a structured Nominal Group Technique process that included virtual and in-person convenings, participant reflections, case studies, expert review, and prioritization exercises, the workshop generated an initial list of prospective research questions. These questions spanned five priority domains: 1) GLP-1 treatment initiation, selection, duration, and discontinuation; 2) GLP-1 treatment effects and outcomes; 3) mental and behavioral health; 4) nutrition and physical activity assessment, monitoring, and counseling; and 5) health behavior and lifestyle treatment.

Over the course of a year, 27 national experts in pediatric weight management refined the ideas into a carefully curated set of 35 high-priority research questions along with suggested research protocols, outcome measures, and clinical tools needed to address the most pressing and actionable evidence gaps. This white paper describes the deliberation process and proposes gaps that can guide near-term research, support evidence generation, and accelerate improvements in the quality, consistency, and effectiveness of pediatric OM utilization.

Rather than an exhaustive list of research questions, NCCOR's central emphasis is timeliness and applicability. Clinicians—particularly those on the front lines of pediatric care—need evidence that can directly inform decision-making in the near term, especially in the context of emerging pharmacotherapies such as GLP-1–based treatments. If addressed, these 35 high-priority research questions have the strong potential to generate evidence that can equip practitioners with the knowledge necessary to deliver standardized, high-quality, evidence-based care to the children and families they serve.

Academic journals, professional societies, and research funders are encouraged to consider not only the prioritized research questions, but also the collected research protocols, outcome measures, and tools presented in this white paper. When studies publish sufficient details to replicate successful interventions, it helps ensure translation and dissemination of research findings to real-world practice. Together, NCCOR's collection of research questions, protocols, and outcomes to address gaps in pediatric obesity pharmacotherapy is a resource to guide future research and accelerate improvements in the quality and consistency of care for youth with obesity.

NCCOR

[1] Emmerich SD, Fryar CD, Stierman B, Gu Q, Afful J, Ogden CL. Trends in obesity-related measures among US children, adolescents, and adults. JAMA. 2025;333(12):1082–1084. doi:10.1001/jama.2024.27676.