Examining Declines in Childhood Obesity in Four Communities: Highlights from Six Papers Published in *Childhood Obesity*

Connect & Explore Webinar Q & A

On April 30, NCCOR hosted a Connect & Explore webinar "Examining Declines in Childhood Obesity in Four Communities: Highlights from Six Papers Published in *Childhood Obesity*." The webinar examined the multi-level approaches, including policies, across all jurisdictions to improve the nutrition and physical activity environments through a socio-ecological lens. Speakers included **Tina Kauh, PhD,** Program Officer, Robert Wood Johnson Foundation; **Nicola Dawkins-Lyn, PhD,** Vice President for Public Health, ICF; **Laura Kettel Khan, PhD,** Senior Scientist and Advisor, Division of Nutrition, Physical Activity, and Obesity, Centers for Disease Control and Prevention; **Deborah Young-Hyman, PhD,** Health Scientist Administrator, Office of Behavioral and Social Sciences Research, National Institutes of Health.

The presentations generated many thoughtful questions, some of which the presenters were unable to answer due to time constraints. As a follow-up to this webinar, the presenters have answered all remaining questions posed by the audience during the webinar. Those answers follow.

Q1: How much staff time do you need to conduct this kind of retrospective Systematic Screening and Assessment Method? What roles do you need on the team?

A1: The site visits themselves were 2–3 days long, but the preparation for identifying potential sites, analyzing data to help select sites, capturing relevant policy data, conducting the site visits, summarizing the site visit findings, verifying our understanding with the sites, and conducting a cross-site comparison took approximately 18 months. The team benefited from having individuals with strong quantitative and qualitative data collection and analytic skills.

Q2: There was a difference in the obesity decline among the four sites. Did the site with the highest rate of decline have any unique characteristics?

A2: The levels of declines were similar, not equal. Reported rates had risen sharply in the site that later saw the largest decline. As shared in the presentation, the communities had very similar patterns of strategies. No strategy in a specific community appeared unique.

Q3: You mentioned that a large number of initiatives took place in different communities. What criteria were used to select strategies to highlight in the presentation?

A3: The strategies highlighted in the presentation and the publications were those that most directly targeted the populations of young children where the declines were observed (primarily in the early childhood education and school settings) with large potential reach (generally across the municipality).

Q4: In the schools that have daily physical education (PE), was it taught by a "real" PE teacher?

A4: We did not ask that question about PE in schools.

Q5: How do the Childhood Obesity Declines project (COBD) findings compare with the findings of the Healthy Communities Study (HCS)?

A5: COBD differs in several ways from HCS in its methodology. Specifically:

- In the HCS, a community and unit of analysis was defined as a single high school catchment area. Community in COBD was much more broadly defined: cities or counties where statewide policies and site-specific initiatives such as school wellness policies were enacted. The outcomes statistic for COBD was a population statistic based on this definition of the community.

- HCS methodology limited potential influential factors to targeted strategies expected to impact the behavior of recipients. In COBD, all levels of potential influence were considered, including strategies and policies that were not specifically directed at the population that achieved declines, such as health policies for local organizations and a weight loss challenge for adults in Granville County. The rationale for including this broad array of influences is the recognition that a community's culture or social norms might facilitate a population's reception of any particular strategy.

- HCS based its primary analysis on a constructed intensity score. The intensity score was a weighted aggregate of identified targeted efforts occurring during the specified period. This score was used in a traditional predictive logistic modeling approach to predict change in weight, which imposed expected relationships and values on those factors. COBD had the benefit of already knowing there was success (decline in BMI) and retrospectively asked what happened, with limited preconceived expectations of potential influential factors. There were no expectations about potential drivers of change or attribution of causality. HCS and COBD both focused on strategies intended to influence healthy eating and active living, but COBD asked the stakeholders what they thought were the most important strategies and processes that influenced outcomes. Furthermore, the intensity score of the HCS did not predict differences between weight outcomes both within and between sites. However, specific characteristics of the interventions were found to be associated with differences in outcomes, such as adoption of physical activity and changes in dietary content. No such attributions could be made in COBD. Rather, the researchers identified potential drivers of changes in body mass index that could be tested in community settings. In COBD, interviews provided insight that multiple initiatives and public health messaging acted synergistically.