MEETING SUMMARY
National Collaborative on Childhood Obesity Research (NCCOR)
Member Meeting

Wednesday, January 18, 2023
12:30–3:00 p.m. ET

PARTICIPANTS (n=47)

CDC: H. Blanck, D. Harris, G. Langley, K. Reddy, J. Seymour, S. Sliwa, E. Stowe	**USDA:** M. Ehmke, P. Jean, L. Kaume, E. Rahavi
NIH: A. Bremer, A. Brown, M. Brown, H. D'Angelo, L. Donze, L. Esposito, S. George, K. Gibbs, M. Green Parker, B. Kowtha, L. Nebeling, C. Pratt, M. Shams-White, S. Vorkoper, S. Yanovski	**RWJF:** K. Hempstead, A. Rooker
	Coordinating Center (CC): E. Callahan, L. Canady, K. Deuman, V. Do, R. Grimsland, K. Hilyard, Todd Phillips, A. Sharfman, M. Van Orman, S. Xiong
	Others: Two joined by phone (names not captured)

Speakers (in order of appearance)

- Janet Fulton, PhD, CDC
- Holly Wethington, PhD, CDC
- Robin McKinnon, PhD, Center for Food Safety and Applied Nutrition, FDA
- Jennifer Turnham, MS, Office of Policy Development and Research, HUD
- Jennie Hefelfinger, MS, Center for Advancing Healthy Communities for the National Association of Chronic Disease Directors
- Pär Andersson White, MD, Linköpings Universitet, Sweden
- Tomas Faresjö, PhD, Linköpings Universitet, Sweden

Welcome and Introductions – Karen Hilyard*, NCCOR Coordinating Center*

K. Hilyard welcomed participants, reviewed the agenda, highlighted the primary purpose of the meeting—to explore how NCCOR can support the White House's National Strategy on Hunger, Nutrition, and Health with a focus on social determinants of health (SDOH)—and provided Steering Committee updates:

- Thank you to Heather Hamner for serving on the Steering Committee
- Welcome Janet Fulton to the Steering Committee

Panel - Evidence to Action – Karen Hilyard*, NCCOR Coordinating Center*

Update on Implementation Science Workshop – Janet Fulton, PhD, *CDC*

- J. Fulton provided updates from NCCOR's November 30 workshop, *Implementation Science and Childhood Obesity: Sparking Conversation and Action to Advance Equity*. The goals of the workshop were as follows: 1) start building capacity for implementation science, 2) engage participants through examples and stories, and 3) include an equity lens throughout. The workshop highlighted examples of implementation science in action by illustrating approaches

to advance equity across three areas: pre-implementation; implementation; and sustainability for childhood obesity, nutrition, and physical activity interventions. The workshop had 159 participants, with most considering themselves novices or intermediate level experts on implementation science. Recording and resources are available.

- Key takeaways:
    - Implementation can be broken down into three components (see illustration on slide 9):
        1. The thing (intervention)
        2. The strategy (how to implement), and
        3. The context (in which the intervention is implemented)
    - You don't have to be an implementation scientist. Researchers, practitioners, and policy advocates should understand where implementation might fit.
    - It is important to know how SDOH impact communities.
    - Existing measures can be adapted when needed.
    - Think about pre-implementation and opportunities for adaptation and the ability to scale up.
    - Implementers need to identify what local adaptations are needed for implementation to be culturally relevant.
    - Sustainability of the project should be considered at the beginning.
    - Implementation science needs to be intentional. Consider the context and include community partners from the beginning.

How Do We Build Evidence for the Community Guide? – Holly Wethington, PhD, *CDC*

- H. Wethington shared and discussed *The Community Guide,* specifically reviewing the Childhood Obesity Systematic Reviews. The Community Guide is a collection of recommendations and findings of the Community Preventive Services Task Force (CPSTF) based on systematic reviews of public health interventions. The Community Guide informs decision-making about practice, policy-making, research, and funding for research and programs.
- The following are needed for a CPSTF recommendation: a clear understanding of intervention (program, service, policy), existing evidence to assess effectiveness of the intervention, and meaningful effect and consistency of the evidence.
- Three categories of CPSTF recommendations and findings:
    - Recommended based on strong or sufficient evidence; for example, multicomponent interventions to increase the availability of healthy foods.
    - Recommend against based on strong or sufficient evidence
    - Insufficient evidence due to not enough studies with consistent findings, for example increasing water access in schools.
- All Community Guide reviews identify evidence gaps that could be filled with additional research and evaluation (see examples of evidence gaps on slide 25)

NCCOR External Scientific Panel (NESP) Ideas and Suggestions – Todd Phillips, *NCCOR Coordinating Center*

- T. Phillips presented the NESP's ideas and suggestions for how NCCOR can support the White House Conference goals. NESP members shared thoughts on current issues with NCCOR to assist with future planning: Initial reflections related to the White House Strategy include the following:
    - Identify what is and isn't working among current interventions.
    - We need to examine the role of the food industry, food systems, and food marketing.
    - Much of the discourse on childhood obesity has shifted towards food security.

    - The burden still falls on individuals/families vs. examining the food system.
    - In addition to SDOH, we should look at commercial determinants of health (food company activities that impact public health).
    - The physical activity recommendations could be more specific.
    - A national strategy for healthy children should be developed, which could be re-framed as a social problem.
- Other topics discussed included BMI/weight/measurement; SDOH; childhood obesity treatment; food is medicine; intersection of climate change, food security, and nutrition; and implementation science.
    - NCCOR could play an important role reviewing definitions, validation, and use of BMI. BMI research has primarily been done on non-Hispanic white people, but research needs done to validate it as a measure for other demographic groups such as Black, Latino, and/or Tribal youth.
        - Many cohorts are already other there, so we do not necessarily need to collect new data.
    - The hardest thing is to better understand SDOH and equity. We know there is a connection, but what is the pathway that leads to obesity? How do SDOH affect how people eat or behave? Is it mostly through the stress pathway?
    - Currently, the majority of SDOH measures are still at the individual level, even PhenX.
        - We need to identify data sources or existing databases with measures at the environmental level.
        - NCCOR may want to consider engaging commercial firms who are aggregating and combining data related to the social determinants.

Q&A with Panelists

What are the NESP plans moving forward? Could new working groups address issues raised?

- T. Phillips: NESP input is intended as suggestions for NCCOR to consider, for example, when planning member meetings and drafting questions for breakout sessions. The recent NESP feedback helped inform today's meeting topics, and NCCOR plans to convene a working group on SDOH based on their recommendations. The NCCOR Steering Committee also considers NESP feedback and how it can inform future NCCOR activities.

Are any systematic reviews for childhood obesity forthcoming?

- H. Wethington: At the moment, there are no immediate plans for childhood obesity-related reviews, but an SDOH team is considering a systematic review of interventions for fruit and vegetable incentive programs.

Panel – How are Other Agencies and Organizations Implementing the National Strategy on Hunger, Nutrition, and Health, as it Relates to Children/Childhood Obesity? – Karen Hilyard, *NCCOR Coordinating Center*

Representatives from FDA, HUD, and NACDD shared their organizational plans for implementing the National Strategy on Hunger, Nutrition, and Health as it relates to children/childhood obesity.

Robin McKinnon, PhD, *Center for Food Safety and Applied Nutrition, Food and Drug Administration (FDA)*

- R. McKinnon explained the goal of the FDA's Nutrition Initiatives: to reduce the burden of diet-related chronic diseases and advance health equity by focusing on empowering consumers, creating a healthier food supply for all and establishing a healthy start.
- Most FDA initiatives fall into the National Strategy's pillar 3, "empower all consumers to make and have access to healthy choices." FDA initiatives broadly fit into two categories: empowering consumers (e.g., developing a symbol for "healthy," proposing to develop a front of pack labeling system) and creating a healthier food supply (e.g., facilitate lowering sodium content in processed, packaged, and prepared foods; proposing to update regulations related to use of salt substitutes in standardized foods)
- Research gap for NCCOR members to consider: FDA lacks data on immediate changes in the food supply; current surveillance infrastructure may not be able to accurately assess real-time changes in sodium and sugar content.

Jennifer Turnham, MS, Office of Policy Development and Research, Department of Housing and Urban Development (HUD)

J. Turnham shared HUD's 10 commitments to the White House Conference; seven are programmatic changes within HUD and three are research-oriented:

- USDA Food Atlas and HUD administrative data: Map USDA's Food Access Research Atlas with HUD administrative data to pinpoint areas with limited access to affordable and nutritious foods and prioritize education of HUD grantees in those areas. An area of high interest is comparing food access in project-based vs. tenant-based programs.
- Data linkage in collaboration with USDA and Census Bureau: Better understand and address persistent food insecurity among HUD-assisted individuals already connected with nutrition assistance programs.
- Nutrition and food insecurity in HUD's Learning Agenda: Enhance nutrition and food security research into the next HUD Learning Agenda for research publications, which identifies the Department's priority learning and evidence needs for the next five years and proposes research, evaluation, and data linkage projects to address those needs.

Jennie Hefelfinger, MS, *Center for Advancing Healthy Communities for the National Association of Chronic Disease Directors* (NACDD)

- J. Hefelfinger shared an overview of the NACDD's Center for Advancing Healthy Communities, which aims to foster healthy communities for all by advancing health equity and eliminating social barriers to health, and its alignment of priorities with the White House National Strategy across all five pillars. Examples of alignment include:
    - Pillar 1: Incorporated an SDOH screening in health care settings to improve outreach and enrollment in SNAP, WIC, and school meals
    - Pillar 2: Partnered with two food banks and three Federally Qualified Health Centers to build on-site clinic food pantries that connect food insecure patients to food and other SDOH resources
    - Pillar 3: Developed trauma-informed food service guidelines
    - Pillar 4: Promoted and enhanced parks and trails through wayfinding signage
    - Pillar 5: drafted culturally appropriate, equitable nutrition standards for food banks
- NACDD developed a timeline of its planned activities to elevate awareness and action related to the National Strategy within NACDD and its membership, culminating in fall 2023 with

preparation of an impact report describing NACDD and member activities supporting the National Strategy.

Q&A with Panelists

How is FDA collecting input for the "healthy" symbol?

- R. McKinnon: There is a very prescribed process for such rulemaking. Two notices have requested comments on the burden of doing experimental research and then potentially the next stage may be some sort of rulemaking. There is always an opportunity for public comment and input. In addition, the agency is meeting with many different stakeholders, industry, and public health consumer groups.

Are there opportunities for external researchers to use HUD's administrative data and is it publicly available?

- J. Turnham: Yes, some data are publicly available. For example, "Pictures of Subsidized Households" provides statistics at the Housing Authority level and by different programs, and some datasets on HUDuser.org are publicly available. Researchers can submit a request to HUD for person-level de-identified data and then enter into a data license agreement. (Note: HUD data's linkage to NHANES and NHIS is mentioned in the NCCOR Catalogue of Surveillance Systems.)

Can you elaborate on learnings from the thought leader roundtables convened in 2022 to discuss racial wealth gaps, obesity prevention, and family healthy weight strategies?

- J. Hefelfinger: The discussions covered topics including community design and the spread and scale of family healthy weight and nutrition strategies; social justice, housing, and racial wealth gaps; potential explanations for higher burdens of COVID and chronic diseases in more marginalized communities; strategies for supporting states and communities; and research suggestions for state health departments and partners. Proceedings will be available in March or April and will be shared with NCCOR; the primary audience is chronic disease directors.

Spotlight: How does Household Income and Maternal Education in Early Childhood Effect Overweight and Obesity in Late Childhood?
Pär Andersson White, MD, and Tomas Faresjö, PhD, *Linköpings Universitet, Sweden*

P. Andersson White and T. Faresjö shared the implications of findings from the Elucidating Pathways of Child Health Inequities (EPOCH) Study on Childhood Obesity for the USA.

- The overall goal of the study was to investigate and compare socioeconomic health inequalities in high income countries (Sweden, United Kingdom, Netherlands, Canada, Australia, USA).
- Key findings:
    - A social gradient in childhood overweight and obesity by maternal education and income was found in all participating countries, but the slope of the gradient varied between countries.
    - Sweden had the lowest absolute inequality in obesity, and the United States had the highest.
    - Policy differences between countries influence the inequality in overweight and obesity risk:

        - Universal school meals (Sweden adopted in 1946)
        - Universal preschools (Sweden introduced in 1975; Quebec in 1997)
        - Ban on advertising aimed at children (Sweden and Quebec)
        - Differences in parental leave regulations
- Implications for the United States and NCCOR to consider:
    - Policies need to be tailored to reduce childhood obesity prevalence as well as address socioeconomic inequality.
    - Examples of policies that reduce both prevalence and inequality can be found in other high-income countries, such as Sweden.
    - The National School Lunch Program could be improved by making it universal and by introducing it during preschool years.
    - NCCOR could strengthen the evidence for these policies by conducting research in the US on the effects of universal preschools with free meals.

Q&A with Spotlight Speakers

Did the study look into healthcare access as a contributor to overweight and obesity risk?

- P. Andersson White: No, we did not have sufficient cohort data to examine the role of healthcare access in this study. It is also a bit difficult to compare the health systems of these participating countries as they vary in many ways.

Which of the four policy differences that you listed—universal school meals, universal preschool, the bans on ads to children, and parental leave regulations—do you think had the biggest influence on overweight and obesity risk?

- P. Andersson White: Our study could not determine which one is most important. I believe that the preschool policy combined with free meals in preschool is probably most likely to have the biggest effect on early childhood obesity, because in Sweden we see that children often start to gain weight upon leaving preschool and stay healthy until around age 7.

Any thoughts about why rapid weight gain may happen at that time?

- P. Andersson White: One possibility is that when children are in preschool, the teacher helps them choose foods and controls portion sizes, but when they are of school age, they choose their own foods and determine their own portion sizes.

Were there any findings among the different countries examined that you found surprising?

- P. Andersson: I thought it was rather interesting that the Netherlands had very low prevalence of obesity but such high absolute risk of inequality. We suspected that this finding was associated with different ethnic groups, but multiple analyses with different ethnic group measures didn't explain the high inequality. Furthermore, the Netherlands has rather low income inequality, for example, but lacks the universal policies that exist in the Nordic countries. Another surprising finding was the low relative risk of inequality in the United States, but the connection with prevalence probably explains a lot of that.

K Hempstead: Were the patterns identified similar to or different from patterns of tobacco use?

- P. Andersson White: We have not collected data on tobacco use that would enable a cross-cohort comparison. We have looked at outcomes such as ADHD, asthma, disabilities, and the patterns are similar in that the inequalities are often lowest in Sweden and higher in other countries, but not always highest in the United States.

How did Sweden's ban on advertising to children apply to the internet?

- P. Andersson White: Currently there are no laws that apply to advertising to children on the internet or social media, so they are now reached by advertising which was not allowed in the 80s and 90s. The question of how children are affected by advertisements is important to examine, but it is difficult to address because regulations on advertising require international collaboration. Sweden was early to adopt the policy of banning all advertisements to children, not just those for food. That likely contributed to the reason why predominantly child-focused TV channels didn't appear in Sweden until 2000, because there was no incentive for them.

Do you have data to indicate that children are watching less TV/consuming less media (because there is less programming for children)?

- P. Anderson White: We do not have recent data, but I believe that today's children have more consistent access to more forms of media and tend to consume much more media than they did prior to the year 2000.

Can you explain Sweden's policy on paid maternity and paternity leave?

- P. Andersson White: In Sweden, paid maternity leave is almost 59 weeks per child and paid paternity leave is almost 6 weeks per child. On average, a mother is home with a child about one year. In terms of maternal employment, preschool availability and preschool cost (as percentage of a family's income) are associated factors.

A longitudinal study called "Growing up in New Zealand" that began in 2007 includes one of the largest cohorts of Pacific Islanders and Maori people in the world. In that cohort, a relatively high prevalence of obesity was observed but not necessarily a corresponding level of chronic disease prevalence and mortality; there could be many reasons to explain that. This cohort was not included in EPOCH. There's also the famous Dunedin study on the South Island, but it's mostly Anglo-White and wouldn't add as much diversity.

- P. Andersson White: Several cohorts that were invited to EPOCH did not participate in this specific analysis.

Discussion: How can NCCOR help build the evidence base related to SDOH policies and childhood obesity? – Karen Hilyard*, NCCOR Coordinating Center*

K. Hilyard led a discussion on how NCCOR can help build the evidence base related to SDOH policies and childhood obesity

What was presented today that stood out to you as an opportunity for further explanation?

- M. Ehmke: The NESP suggestion to investigate linkages between food industry practices and obesity. This falls within the USDA ERS wheelhouse; I'm a food economist at ERS and am particularly interested in processed food advertising (including digital forms) and the effect on childhood obesity outcomes.

Of the topics that were discussed on the NESP call (BMI; SDOH; obesity treatment; food is medicine; intersection of climate change, food security, and nutrition; implementation science), which were particularly interesting to you? Why?

- T. Phillips: To add more context about the NESP discussion on obesity treatment, the American Academy of Pediatrics recently released clinical practice guidelines for childhood obesity. Much discussion is occurring about the increased role that medication will play in light of new medications that are now available, some of which have preliminary approval for use in children ages 12 and older. There is not a specific action item for NCCOR at this time, but this development changes the conversation and perhaps the balance around focus and investment in prevention interventions, which may be perceived as less important if medication can address obesity. We are considering a focus in the next member meeting on the clinical practice guidelines and fostering discussion around this new landscape for treatment approaches, which have evolved considerably beyond family-centered approaches during the past 10 years. NCCOR will have to grapple with this evolution—for example, should we promote the AAP's clinical practice guidelines or include them on our website? It is an important conversation because NCCOR has traditionally focused on prevention.

Wrap-Up – Karen Hilyard*, NCCOR Coordinating Center*

NCCOR updates:

- New workgroups
    - State of the science on measures of individual physical activity: This project will summarize the measures landscape as represented in the Measures Registry and highlight how the Registry illuminates strengths and gaps in the development of valid measures of physical activity. If interested, contact David Berrigan berrigad@nih.gov or Amanda Sharfman asharfman@fhi360.org.
    - Social determinants of health: contact Amanda Sharfman to participate in a follow-up meeting.
- Upcoming member calls (all 2:00 pm ET): February 15 | March 15 | April 19
- In-person spring member meeting: May 11, 2023; Washington, DC (changed from Atlanta)