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

Thursday, May 11, 2023 10:00 a.m.—3:30 p.m. ET

The Stone House | Building 16
9000 Rockville Pike | Bethesda, MD 20892
<u>Livestream recording</u>

IN-PERSON PARTICIPANTS (n=37); VIRTUAL PARTICIPANTS* (n=26)

CDC: B. Belay,* H. Blanck,* J. Fulton, D. Galuska, A. Goodman,* D. Harris,* L. Kettel Khan, R. Mortimer,* S. Pierce,* R. Porter,* P. Zhang,* L. Zhao*	USDA: M. Abley,* D. Chester, S. Fleischhacker, J. Guthrie, P. Starke-Reed,* S. Stluka,* J. Variyam
NIH: S. Sonia Arteaga, D. Berrigan, A. Brown, M. Brown, S. Calabrese,* S. Czajkowski,* L. Donze,* L. Esposito,* S. George, K. Gibbs, M. Green Parker, K. Herrick, B. Jean-Francois,* B. Kowtha, R. Kuczmarki,* L. Nebeling,* V. Osganian,* J. Reedy, M. Shams-White, S. Vorkoper, M. Wolz,* S. Yanovski, K. Zanetti, J. Zink	RWJF: K. Hempstead* Coordinating Center (CC): B. Anderson Steeves,* L. Canady, K. Deuman,* V. Do, R. Grimsland, K. Hilyard, T. Phillips, A. Sharfman, M. Van Orman, S. Xiong
FDA: K. Casavale*	Other Virtual Attendees: Lucy K.*

Speakers (in order of appearance)

- Brook Belay, MD, MPH, CDC
- Sandy Hassink, MD, FAAP, American Academy of Pediatrics Institute for Healthy Childhood Weight
- Jack Yanovski, MD, PhD, NIH
- Amanda Staiano, PhD, MPP, MS, Pennington Biomedical Research Center
- Tiffany Powell-Wiley, MD, MPH, NIH
- Mariah Ehmke, PhD, USDA

In-Person Welcome Activity and Introductions

Karen Hilyard, PhD, NCCOR Coordinating Center

K. Hilyard welcomed in-person participants to NCCOR's first in-person meeting since February 2020 and invited them to share their answer to the question, "Why did you come to today's NCCOR meeting and what do you hope to get out of today's meeting?" Many attendees shared that they were looking forward to connecting with colleagues in person.

Welcome and Highlights of NCCOR's Recent Accomplishments

Karen Hilyard, PhD, NCCOR Coordinating Center

K. Hilyard welcomed all participants (in-person and virtual), reviewed the agenda, highlighted the primary purpose of the meeting—to understand and explore the public health impacts of prevention and treatment of childhood obesity discussed in the new Clinical Practice Guideline and to gather NCCOR members in-person for collaboration—and provided highlights of NCCOR's Accomplishments and Activities (pages 4–8 of the Member Meeting Binder):

NCCOR's accomplishments since its last in-person meeting (September 2019):

- Created seven new workgroups
- Released four tools and 20+ resources
- Published 13 journal articles
- Hosted 18 Connect and Explore <u>webinars</u> (featuring a combined total of 50+ speakers) and held three workshops (featuring a combined total of 15+ speakers)

On the horizon:

- The <u>Catalogue of Surveillance Systems</u> is being updated with sleep variables.
- A new website was created to replace the previous internal resources page and provide NCCOR members easy access to NCCOR templates, meeting notes, and other NCCOR-specific materials: https://www.nccor.org/member-hub/
- New workgroups:
 - O Identification and categorization of evidence gaps in physical activity (PA) research –To join or learn more reach out to Brama Kowtha <u>Bramaramba.kowtha@nih.gov</u> or Amanda Sharfman <u>asharfman@fhi360.org</u>
 - O State of the science on measures of individual physical activity *Reach out to David Berrigan berrigad@mail.nih.gov* or *Amanda Sharfman asharfman@fhi360.org*
- Implementation science: To participate in a brainstorm session, email Van Do wdo@fhi360.org or Janet Fulton jkf2@cdc.gov.
- The Healthy Eating Index 2020 Update and Healthy Eating Index-Toddlers 2020 Update will be released in the September issue of the *Journal of the Academy of Nutrition and Dietetics*.

Member Announcements

NIH

- NIH Obesity Research Task Force Virtual Symposium: Advances in Childhood Obesity Research by the Environmental Influences on Child Health Outcomes (ECHO) Program is June 6, 2023.
- <u>NIH Obesity Research Task Force</u> will host a full day (hybrid) symposium on use of medication to treat obesity (adult and pediatric). Registration link to follow.
- NIH will host a workshop on multi-generational nutritional influences on health and disease on July 12–13, 2023 (hybrid). Registration link.
- NIH will host a workshop on culture-centered dietary interventions to address chronic disease titled, Advancing Health Equity Through Culture-Centered Dietary Interventions to Address Chronic Diseases on September 28–29, 2023 from 12:00 pm to 5:00 pm ET. Registration link to follow.
- Request for Information (RFI) on the NIH Office of Disease Prevention Strategic Plan for Fiscal Years 2024–2028. Closed on May 22, 2023.

USDA

- <u>Dr. Caree Cotwright</u> is the new Director of Nutrition Security and Health Equity.
- Science and Research Strategy has been released.
- NIFA will host a webinar, <u>An Overview of NIFA's Food Loss and Food Waste Relevant Funding</u> Opportunity, on June 13, 2023.
- NIFA released the EFNEP 2022 Impact Report.
- Year 3 Impact Report for GusNIP will be released in early June.

Panel I: Overview of the Clinical Practice Guideline for the Evaluation and Treatment of Children and Adolescents with Obesity

Moderated by Karen Hilyard, PhD, NCCOR Coordinating Center

Setting the Stage: The Importance of the Clinical Practice Guideline (CPG) for Prevention and Public Health – Brook Belay, MD, MPH, CDC

B. Belay provided a public health introduction to the AAP <u>Clinical Practice Guideline for the Evaluation</u> <u>and Treatment of Children and Adolescents with Obesity</u>, including recommended care for child obesity treatment, an overview of systemic gaps in care, how CDC is moving forward, and clinical practice guideline opportunities.

- The CDC-recognized <u>Family Healthy Weight Program</u> is an intensive health behavior and lifestyle treatment program. This program is positioned at the evidence-based clinical care treatment end of the care continuum for child obesity in health care (which spans from prevention to treatment).
- Systemic gaps in child obesity care include low availability of evidence-based services, lack of sustainability related to challenges with insurance coverage and reimbursement, and lack of tools to support evidence-based care. CDC is helping to address these gaps by:
 - Addressing low availability of evidence-based services with programs such as <u>Childhood</u>
 <u>Childhood</u>
 <u>Obesity Management with MEND Implementation Team</u> (COMMIT!), the <u>High Obesity</u>
 <u>Program</u> (HOP), and Child Obesity Demonstration Projects (CORD).
 - Working with the Office of Personnel Management, which oversees federal employee health and benefit plans, to update and expand their definition of comprehensive coverage for adult and childhood obesity so that it is inclusive of services from screening to various treatment strategies and update the ICD-10 codes related to youth obesity.
 - Working with NCCOR partners to clean, analyze, and launch electronic health record (EHR) longitudinal growth data for research and evaluation.
 - Published extended updated CDC growth charts for severe obesity in youth
 - NEW: NOPREN Pediatric Obesity Health Services Research WG First meeting is June 12 at 12:00pm ET, email NOPREN@ucsf.edu for more info.

Overview of the CPG and Behavioral Treatments – Sandy Hassink, MD, FAAP, *American Academy of Pediatrics Institute for Healthy Childhood Weight*

S. Hassink shared an overview of the Clinical Practice Guideline (CPG), including how it was developed and what is new from previous recommendations, and discussed the evaluation and treatment of children and adolescents with obesity as well as evidence gaps and future research needs.

- The CPG summarizes what is known about child obesity treatment and comorbidity
 management; provides practical, effective recommendations in the context of whole child care
 and non-stigmatizing communication; and addresses key social drivers of health. It has been 15
 years since the prior comprehensive guidance on this topic was issued.
- Key Action Statement (KAS) topics: Assessment and evaluation
 - BMI measurement: Pediatricians and other primary health care providers (PHCPs) should measure height and weight, calculate BMI, and assess BMI percentile using ageand sex-specific CDC growth charts (including growth charts for children with severe obesity) at least annually for all children 2 to 18 years of age to screen for overweight, obesity, and severe obesity.
 - Evaluate for obesity-related comorbid conditions: Pediatricians and other PCHPs should evaluate children 2 to 18 years of age with overweight and obesity for obesity-related comorbidities using a comprehensive patient history, mental and behavioral health screening, SDOH evaluation, physical examination, and diagnostic studies.
 - Lab evaluation: In children 10 years and older, pediatricians and other PHCPs should evaluate for lipid abnormalities, abnormal glucose metabolism, and abnormal liver function in children and adolescents with obesity and for lipid abnormalities in children and adolescents with overweight (additional evaluations for different conditions are described in the CPG).
- KAS topics: Treatment recommendations
 - Comprehensive obesity treatment: Pediatricians and other PHCPs should treat overweight and obesity in children and adolescents, following the principles of the medical home and the chronic care model, using a family-centered and non-stigmatizing approach that acknowledges obesity's biologic, social, and structural drivers.
 - Motivational interviewing: Pediatricians and other PHCPs should use motivational interviewing to engage patients and families in treating overweight and obesity.
 - Intensive health behavior and lifestyle treatment (IHBLT): Pediatricians and other PHCPs should provide or refer children 6 years and older (and may provide or refer children 2–5 years of age) with overweight and obesity to intensive health behavior and lifestyle treatment. The more contact hours, the more effective treatment will be; the most effective treatment includes 26 or more hours of face-to-face, family-based, multicomponent treatment over a 3- to 12-month period).
- AAP has developed supports to help pediatricians implement the CPG, such as CME modules, clinical decision support tools, multimedia assets, family resources, and more.

Pharmacotherapy and Surgery for Pediatric Obesity – Jack Yanovski, MD, PhD, NIH

- J. Yanovski presented an overview of pharmacotherapy and surgery for pediatric obesity. The overview included a description of the mechanisms of action, efficacy, and side effects for each type of FDA-approved drug, as well as for bariatric surgical options.
 - Intensive treatments have been considered for adolescents with obesity because evidence indicates limited results (i.e., minimal impact on BMI) for behavioral weight management strategies alone.
 - According to the AAP CPG, pediatricians and other PHCPs:
 - Should offer weight loss pharmacotherapy, according to medication indications, risks, and benefits, as an adjunct to health behavior and lifestyle treatment to adolescents 12 years and older with obesity;

- May offer the above to 8–11-year-olds as an adjunct to health behavior and lifestyle treatment; and
- Should refer adolescents ≥13 years with severe obesity for evaluation for metabolic and bariatric surgery done in comprehensive, multidisciplinary pediatric metabolic and bariatric surgery centers.
- Drugs approved by FDA for treating obesity for ages 12–16 years include or listat, liraglutide, setmelanotide, phentermine-topiromate, and semaglutide. Setmelanotide is the only drug that is also approved for children <12 years of age.
 - Anorexiants (topiramate and phentermine): The mixed-action combination of these two
 drugs targets energy intake by influencing monoaminergic circuits that govern feeding
 and satiety; adverse effects of the drug may limit acceptability.
 - Setmelanotide: Treats the deficiency of leptin (a hormone made by adipose cells) as well as defects in the leptin signaling pathway so that the leptin functions as intended to reduce energy intake under certain conditions; several adverse reactions to the drug are common.
 - Orlistat: Prevents fat digestion and absorption by binding to gastrointestinal lipases but is minimally effective for weight reduction in adolescents with obesity and is associated with gastrointestinal adverse events that may impact adherence to medication, therefore it is not routinely recommended for treatment of adolescents with obesity.
 - O GLP-1 receptor agonists (liraglutide/semaglutide): Liraglutide 3 mg plus lifestyle modification is moderately effective for weight reduction in adolescents with obesity over 52 weeks. Semaglutide 2.4 mg plus lifestyle modification is very effective for weight reduction in adolescents with obesity over 68 weeks and is FDA-approved for ages 12−16 with body weight ≥60 kg and BMI for age corresponding to ≥30. GLP-1 receptor agonists are generally well tolerated.
- Current bariatric surgical operations include vertical sleeve gastrectomy (VSG) and Roux-en-Y gastric bypass (RYGB), the indications for which include Class II obesity and Class III obesity. Long-term outcomes (5-year effects) include reduced BMI and remission of diabetes; some contraindications to use exist (e.g., inability to adhere to post-op dietary and medication regimes), and adverse events have been observed (e.g., certain nutritional deficiencies).
- Key takeaways
 - Multiple FDA-approved pharmacotherapies exist for adolescent obesity including two with good efficacy and one that is approved for children as young as age 6.
 - Bariatric surgery has good efficacy but is not the solution for everyone with high body weight.
 - Additional development of highly effective approaches is still needed, especially for those <12 years of age and for refractory obesity.
 - o Effective preventive strategies are urgently needed.

Q&A with Panelists

Is there a plan to update or adapt the CDC growth charts for racial subgroups?

• B. Belay: An effective research base is needed before any such updates can be made, as we lack necessary data from various pediatric racial/ethnic groups to better understand the different cut-points.

It seems like intensive treatment is recommended immediately for all children classified with overweight or obesity. Given that children often gain weight before they grow taller, is there a risk that children will

be identified with a problem that they might naturally grow out of without treatment? Or was this not seen in the literature reviewed?

 S. Hassink: For children with obesity, BMI is used as a screening tool and the intervention is based on the overall contextual situation for the child. General guidelines can be applied and individualized for each child. The risk of continuing weight gain once a child has reached overweight or obesity is very high.

Are there enough practitioners to deliver the 26 hours of intensive health behavior and lifestyle treatment to all for whom it's recommended?

• S. Hassink: The short answer is no. Our job is to recommend what we know is effective, not to wait until capacity is available. Both capacity- and advocacy-building are imperative in order to fully implement the recommendations.

We currently lack a mechanism for providers to get paid for providing obesity treatment services, and we know this has led to access issues for families. What efforts are underway to change that?

- S. Hassink: Advocacy efforts are happening all the time. Two key barriers to more widespread insurance coverage for obesity drugs include 1) cost (because a large number of people will potentially be eligible and could be using the drugs for a long period of time) and 2) societal attitudes about the causes of obesity (i.e., perception that it is primarily a problem of personal responsibility).
- J. Yanovski: We lack data to indicate that early treatment in pediatrics will impact mortality. Once available, we will likely be able to show a benefit in terms of quality-adjusted life year (QALY) as well.

What do you envision for the role of the registered dietitian nutritionist (RDN)? How can we leverage that workforce to deliver recommended treatment?

- S. Hassink: The Academy of Nutrition and Dietetics has been vocal about promoting the role of RDNs in obesity treatment. We need RDNs, we need community health workers, we need diabetes educators and other team members to support full implementation of the CPG.
- A. Goodman shared in chat: CDC/DNPAO has a publication slated for July 3 in JAMA Peds with updated costs of child obesity (annual medical expenditures). We are also working with AAP and APA on a proposed new CPT code to facilitate reimbursement for intensive lifestyle behavioral programs.

Is anything being done to help pediatricians adopt and utilize these new clinical guidelines?

- S. Hassink: We have started developing some implementation materials including publications, quality improvement offerings, CME offerings, etc.
- H. Blanck shared in chat: DNPAO has helped fund implementation resources to assist AAP, and we are actively working with EHR vendors who ask for our assistance.

What do data show about retention of weight loss? Is one drug better than another?

• J. Yanovski: When one stops a medicine, it no longer works. These drugs do not act as a weight loss jumpstart as we originally thought in the 1960s. We need to continue to address the underlying physiological systems to enable continued weight loss. Whereas adult data show that a substantial portion of weight loss is being retained at the 2- to 3-year mark, such data are not yet available for adolescents as the drugs are still relatively new for this population. We hope to fill this knowledge gap in the future.

Stigma is associated with using the term "obesity." Are there any communication strategies from a public health perspective to address this?

- S. Hassink: We don't recommend using the term "obesity" in communication with families.
 Instead, use other terms/phrases like "healthy weight," "weight going up faster than height," and "overall health." Use obesity only as a technical term for billing.
- B. Belay: It is important to focus on discussing the health of the child, health and wellbeing of the family, and healthy growth.

How do we ensure these clinical interventions don't take the focus off public health interventions? Are there past examples that we could look to?

- S. Hassink: ADHD medications are available, but the child also needs other behavioral and environmental components in place to support them for the drug to be most effective.
- H. Blanck: Tobacco continuum: prevention, screening, counseling-quit lines, patches, gum, medications.
- S. Czajkowski: Antidepressant medications: best outcomes are when used in combination with psychotherapy.

Panel II: Beyond the Clinic: Public Health Implications for Prevention of Childhood Obesity

Moderated by Karen Hilyard, PhD, NCCOR Coordinating Center

What are the Evidence Gaps and Future Research Directions for the Prevention and Treatment of Childhood Obesity? – Amanda Staiano, PhD, MPP, MS, Pennington Biomedical Research Center

A. Staiano described the evidence gaps for providers and researchers and future research directions for the clinical treatment of childhood obesity, as well as barriers to implementation of the clinical practices guidelines.

- Evidence gaps and future research needs
 - Areas of uncertainty for providers include 1) implementation in clinical practice settings,
 2) size and durability of treatment effects on weight and comorbidities, and 3)
 heterogeneity of effects (modifiers include social determinants of health, adverse childhood experiences, poverty, obesity severity).
 - Areas of uncertainty for researchers include 1) lack of consistent and complete methods and results, 2) limited data on children from rural and minority populations, and children with special health needs, 3) disconnect from pragmatism, feasibility, and 4) synergies across treatment modalities (lifestyle, pharmaceutical, surgical).
 - Additional gaps in research include:
 - Epidemiology (predictors of severe obesity/comorbidities, costs)
 - Measurement (alternatives to BMI in primary care, relation of BMI change with comorbid conditions)
 - Risk factors (biologic, such as maternal obesity; environmental, such as food insecurity)
 - Treatment programs (cultural adaptations, use of EHR and e-health tools, linkages between community and clinic)
 - Process of care (how to reduce attrition; cost and sustainability; adapting programs to delivery settings)

- Barriers to implementation of CPG for providers include 1) personal factors (physician knowledge and attitudes), 2) guideline-related factors (complexity, plausibility, lack of evidence or clarity), and 3) external factors (organizational constraints, lack of collaboration).
- Other implementation barriers include:
 - Health care infrastructure and capacity limitations
 - Payment/coverage
 - o Burden on family to participate
 - Skill set of providers who use medications
 - Comfort level of providers to talk about obesity, offer treatment options, provide medical monitoring
- Implementation and advocacy recommendations for health care
 - Coverage of comprehensive obesity prevention, evaluation, and treatment
 - Multisector partnership to expand access to evidence-based pediatric obesity treatment programs
 - Clinical decision support systems to aid in managing children and adolescents with obesity
 - Improved education and training opportunities for practicing providers and in preprofessional schools and residency/fellowship programs

How Can We Ensure Equity, Social Determinants of Health, and Racism are Considered in Future Research on Prevention and Treatment? – Tiffany Powell-Wiley, MD, MPH, NIH

- T. Powell-Wiley described the effects of weight stigma and bias in childhood obesity and offered equity-based approaches to obesity treatment. She also highlighted the importance and benefits of centering patient voices and engaging communities in research.
 - Structural and contextual factors that impede and influence health and treatment include access to care, weight bias and stigma, obesogenic environments (including neighborhood environments), adverse childhood experiences, racism, and health inequities.
 - Racism exists in multiple forms (internalized, interpersonal, institutional, structural) and plays a role in childhood obesity prevalence: as an SDOH, as a factor affecting access to resources across the life course (e.g., housing, education, income, safe neighborhoods, health care), and as a contributor to chronic stress that leads to inflammation and promotes obesity.
 - Effects of weight stigma and bias in childhood obesity include negative beliefs and experiences
 projected upon an individual (i.e., teasing and discrimination based on weight), weight-related
 harassment, and weight bias in health care systems that limit adequate care.
 - Advancing health equity efforts in obesity treatment (based on the paper, <u>Advancing Health Equity Efforts to Reduce Obesity: Changing the Course</u>) require giving health equity issues a higher priority, adopting a health equity lens, strengthening the approaches by using health equity frameworks, broadening the types of policies considered to be relevant to obesity, and emphasizing implementation science concepts and tools.
 - One framework suggests a combination of policy and systems change interventions along with ensuring individual and community resources and capacity.
 - In Canada, a study is addressing social needs in obesity prevention and treatment by incorporating screening into the EHR and linking to resource navigators.

(Information) Economics of Childhood Obesity in a Changing Policy Landscape – Mariah Ehmke, PhD, USDA

M. Ehmke discussed examples of economic implications for preventing and treating childhood obesity—specifically, that information asymmetries, misinformation, and poor substitute goods threaten the effectiveness of the new CPG. Information economics is the exchange of information in a market between buyers and sellers about the product they are exchanging. Ideally, both parties have the same, clear information about the product, but one party typically has more information about the good than the other (i.e., asymmetry). She explained that "asymmetric information" can manifest as a moral hazard, as adverse selection, and as misinformation.

- Moral hazard product or plan reduces the incentive to "take care"
 - AAP risk: A moral hazard may be developed in two directions. On one hand, parents could be less vigilant of their child's nutrition, physical activity, and health. On the other hand, some parents may be scared and not have as much trust in the health care system.
 - Another example can be seen in health care among those who are insured vs not insured. Those who are insured may take less care of themselves because they know insurance will pay for it.
- Adverse selection when low quality goods crowd out high-quality goods (incentives drive low
 cost inputs when consumers can't differentiate from higher quality inputs at purchase).
 - AAP risk: As the percentage of children who are obese increases, without a parallel increase in medical facilities and resources to care for those children, the focus and resources will remain on those with the most severe cases. This may result in lower quality care being provided to those who are less severe and can't access the quality care they need.
 - Another example in the food space is when products like fruit juice and fruit snacks crowd out healthier options like fresh fruit, or when infant formula crowds out breastfeeding.
- Misinformation information that is "incorrect based on the best available evidence" such as unsubstantiated and untested information.
 - AAP risk: medical community and consumers may have different interpretations of "best available evidence" and "experts" which leads to parental distrust of the medical community and understanding of their child's needs.
 - An example is when the food industry markets unhealthy food to children without disclosing the low nutritional content or harmful long-term impacts of consuming the product.
- Remedies for information asymmetry
 - Research on various types of regulation like food advertising.
 - Look at the big picture to combat misinformation
 - Lifelong "cradle to grave" education and awareness empower patients and provide information about research (knowns and unknowns), new information, and how it is evolving.

Q&A with Panelists

How do we communicate the entire continuum from prevention to treatment when we often communicate health information in silos (i.e., separate prevention and treatment statements and auidelines)?

- M. Ehmke: One idea is offering information in a way that allows communication back and forth and time for asking questions, especially for some of the more marginalized communities. There is a great "barber shop" example that has been used where barbers have been educated to talk about cardiovascular disease in their shop with their clients.
- T. Powell-Wiley: We must emphasize the life course piece in clinical practice to help people
 understand that these health issues start in-utero and during childhood. These diseases develop
 over the lifetime, and treatment occurs over the lifetime.
- A. Staiano: In the same breath that we say treatment, we must say prevention.

How can we effectively communicate health messages when the same information may be perceived differently by different people?

• T. Powell-Wiley: This comes down to engaging the community and learning about what they want to hear or learn.

There are a lot of competing messages about the real cost of eating healthfully. What have you found, with the rising cost of everything, is the burden of eating healthfully and how do the new clinical practice quidelines address those costs?

• M. Ehmke: Based on data, the high cost of food may not be as impactful as the environment, location, and other influences. Americans of all socioeconomic levels consume poor diets.

What are some specific opportunities to work on community-engaged research toward obesity prevention?

- T. Powell-Wiley: One opportunity to explore is how housing plays a role in the development of obesity. Data suggest that improvements in housing, such as providing housing vouchers, can reduce the risk of developing obesity.
- A. Staiano: In our evaluations, we should broaden our outcomes. Parents often say they want
 their child to have a good quality of life, to be able to run with their friends, to play sports. Many
 studies exclusively look at weight as the primary outcome, but don't examine comorbidities,
 psychological outcomes, mental health, quality of life, or other things that parents care about
 and think are important for their children.

Do you know of research and/or health systems that are incorporating measures of social determinants of health, structural racism, and social needs into EHRs? How do you think this can occur more broadly in health systems?

T. Powell-Wiley: A lot of work is underway to incorporate measures of social needs into EHRs. A group in Oregon, OCHIN, is leading a study called "health leads" that has looked at not only incorporating those measures but also implementing treatment based on those measures. The study has shown that by addressing social needs, you can reduce blood pressure and LDL in adults. There is a tool called "the PRAPARE tool" that has been used across the United States for screening of social needs. The tools exist, but how do we harmonize measures across tools so that we are measuring similar things across health care systems? Then how do we implement treatments or provide access to resources based on these social needs? What are the long-term outcomes that result from providing resources?

Discussion: Childhood Obesity Prevention

Moderated by Karen Hilyard, NCCOR Coordinating Center

K. Hilyard led a discussion on what should be included in a childhood obesity prevention research agenda and what sectors that should be involved.

What should be on a childhood obesity prevention research agenda?

- There seems to be a need to create tools to help researchers embrace a community perspective in their research. An idea is to highlight stories about how effective community engagement can be and how useful it has been to researchers.
- Focus on the community asset piece. A great example is Shape Up Somerville and the success that initiative experienced from authentic community engagement. Are there other examples that tie to specific community assets that can be leveraged and learned from? These stories matter and can help inspire the research agenda for NCCOR.
- It is important to focus on both the "what" of the message and the "who" of the messenger. There is also a need for implementation science. We need to learn how to bridge the gap between science/knowledge and engagement and to develop interventions with communities from the start. If policy makers are not trying to move the needle, then what good is the effort? Behavioral interventions are only a band-aid, and many people can't afford the pharmaceutical interventions. This should be considered in the research agenda going forward.
- Some programs within USDA have used the peer counselor approach (e.g., WIC breastfeeding peer counselors and EFNEP peer counselors).
- We should encourage early career researchers to focus on community engagement in their research, to include requiring community engagement components to be included in grant applications.
- We can't forget about mid-level investigators because they are perfectly positioned to make transitions. They should be encouraged to form interdisciplinary teams with researchers who are experienced in community-engaged research. We also need to include an intentional look at de-implementation (i.e., stop doing things that are not effective), so that we can be more efficient with limited resources.
- Consider the family and the family dynamic. Children do not have control over the environments in which they exist. We can look to the <u>Healthy Communities study</u> that is working within schools and churches. If an intervention or behavior change is not something that is embraced at home, longevity or sustainability for long-term health impact is unlikely.

What sectors can be brought together to take on issues related to the prevention of childhood obesity?

- Procurement of food is a factor that contributes to obesity.
- Pediatric mental health and impact on appetite and medications.
- Medical sociologists to bring in the perspectives around historical context.
- We need to do more work with policy makers. There are plenty of examples of natural
 experiments that we can evaluate like the Healthy Hunger-Free Kids Act and BMI data we have
 in ECHO. We also can't forget about participant engagement, e.g., sharing research data and
 findings back with research participants.
- Schools, counties, social service agencies

- We need to engage insurers and insurance companies. A big gap in our work is around leveraging social media to share health messaging. We are competing with social media and need to be intentional in how we use it to communicate.
- In Louisiana, home health workers can reach every mile in the state. Many are trained as certified diabetes educators. There are also cooperative extension agents living in local, often rural, areas that can be tapped to deliver or complement family weight management programs. We need to consider who people interact with regularly and who they trust.

Comments from Around the Room – Karen Hilyard, PhD, NCCOR Coordinating Center

What is something you heard today that excites you, or what is something you heard today that you want to work on?

- Focusing on community assessment and building community capacity. We need to know what is already working. We are considering holding a series of three workshops about lessons learned from international, national, and local public health policy efforts to promote healthy weight trajectories. We need to start thinking about a whole-of-government approach and innovative obesity policy efforts to transform the environment.
- I am excited that there has been a lot of excitement around the release of the CPG. Since release, the guidelines have received 14,000+ media mentions.
- I appreciate the inclusion and discussion of sleep and relation to obesity.
- We need to make sure policy and implementation science are working together.

Wrap-Up and Closing – Karen Hilyard, PhD, NCCOR Coordinating Center

NCCOR updates:

- Upcoming member calls: June 21, July 19, August 16, October 18, November 15, December 20
- Next member meeting: September 20 (virtual); February 28 (virtual)