Health Resources and Services Administration
Advisory Committee on Heritable Disorders
in Newborns and Children

Brief Summary of Committee Meeting
August 8-9, 2024

Introduction

The Advisory Committee on Heritable Disorders in Newborns and Children (ACHDNC) met on August 8-9, 2024, to discuss various topics related to newborn screening and genetic disorders. The meeting was open to the public, and public comments were allowed.

ACHDNC Nomination and Evidence Review Process

Ned Calonge, MD, MPH, Committee Chair

Dr. Calonge provided an overview of the revised nomination and evidence review process for adding conditions to the Recommended Uniform Screening Panel (RUSP). The updated process includes a Preliminary Nomination Form that addresses four key questions. The Nomination and Prioritization (N&P) Workgroup will review the preliminary nomination and determine whether the nominators should complete the full nomination package.

Committee Discussion

The discussion focused on the effectiveness and potential impacts of the newly introduced two-step nomination process. There was discussion of having a tentative plan to pilot the process with two or three condition nominations and then re-evaluate it for further improvements.

ACHDNC Decision Matrix Tool: Public Health System Assessment

Ned Calonge, MD, MPH, Committee Chair

Dr. Calonge discussed proposed revisions to the Decision Matrix tool used by the ACHDNC for evaluating the addition of new conditions to the RUSP. He emphasized that the matrix is designed to support decision-making by providing a structured framework for analyzing evidence. Dr. Calonge outlined the proposed methodology for conducting public health impact assessments.

Committee Discussion

The discussion highlighted the need to consider FDA-approved assays when adding new conditions to the RUSP, noting the challenges of new FDA regulations and associated costs. There was also a recommendation to rename the public health impact assessment to better reflect its focus on laboratory and programmatic evaluations rather than broader public health outcomes.

Standardized Reporting of Newborn Screening Outcomes (STAR-NBS)

Alex R. Kemper, MD, MPH, MS, Lead, Evidence-Based Review Group

Dr. Kemper discussed an ongoing project called STAR-NBS, which aims to standardize the reporting of data in newborn screening evaluations. He highlighted the challenges caused by the variability in how data were reported across publications, such as inconsistencies in clinical case definitions, screening targets, test characteristics, and outcomes. Dr. Kemper recommended a standardized reporting

guideline for journals, which would improve the clarity, synthesis, and utility of data in newborn screening research, ultimately aiding in better decision-making.

Committee Discussion

The discussion highlighted that other research fields have established standards for various types of studies, such as qualitative studies or randomized control trials, and noted that journals typically require adherence to these standards. A similar framework for newborn screening research would make it easier for studies to be utilized in the evidence review process.

ACHDNC Review of Research Focusing on Lived Experience Perspectives

Ned Calonge, MD, MPH, Committee Chair

Dr. Calonge summarized previous presentations to the ACHDNC on research focusing on lived experience and family perspectives. Dr. Calonge emphasized the importance of translating lived experiences into peer-reviewed research that can be systematically included in evidence-based decision-making and suggested exploring funding resources to support this critical area of research.

Committee Discussion

During the discussion, concerns were raised on the difficulty in gathering comprehensive lived experience data, particularly from individuals who might not readily share their experiences or from those who were harmed by screening. As well as concerns with the tendency to prioritize quantitative data over qualitative aspects, potentially marginalizing meaningful lived experiences. It was stressed to engage directly with patient groups, noting that valuable insights often exist outside traditional academic channels, such as online discussion boards. There was advocacy for using both formal and informal methods to gather these lived-experience perspectives.

Approaches to Population-Based Screening in Newborns and Children

Critical Clinical Processes for Newborns

Stephen Patrick, MD, MPH, MS, Professor and Chair, Rollins School of Public Health, Emory University

Dr. Patrick discussed critical aspects of neonatal care, particularly for extremely low birth weight (ELBW) infants. He emphasized the importance of the "golden hour" after birth, during which crucial interventions are necessary to prevent complications such as respiratory failure, hypothermia, and hypoglycemia. His talk underscored the importance of systematic quality improvement in neonatal care to enhance outcomes for vulnerable newborns.

Approaches to Screening in Childhood

Alex R. Kemper, MD, MPH, MS, Lead, Evidence-Based Review Group

Dr. Kemper discussed the importance of preventive care strategies in pediatrics after discharge from the newborn nursery. He also detailed various sources of recommendations for pediatric preventive services, such as Bright Futures and the U.S. Preventive Services Task Force. Dr. Kemper concluded by stressing the necessity of clear recommendations, process measures, and a population-focused approach to ensure effective delivery of preventive care services, especially for underserved communities.

Committee Discussion

There was discussion on successful hospital-based interventions for newborns and children and concerns about the challenges of ensuring high-quality care outside of hospitals. There was emphasis on the importance of primary care-based interventions, effective coordination with subspecialists, and the need for an integrated approach to maternal and child health care.

Public Comments

Seven written comments and eleven oral comments were provided to the committee. Oral commenters included representatives from Parent Project Muscular Dystrophy, Muscular Dystrophy Association, Association of Public Health Laboratories, MLD Foundation, as well as parents with children with a genetic condition, medical practitioners, and professors from Baylor College of Medicine and Northwestern University Feinberg School of Medicine. Topics covered included advocacy for adding Duchenne muscular dystrophy to the RUSP, the importance of early diagnosis and treatment for biliary atresia, laboratory-developed tests (LDTs) in newborn screening, and the need for comprehensive screening and support for metachromatic leukodystrophy (MLD) based on personal and professional experiences.

Metachromatic Leukodystrophy (MLD) Nomination Process

Michele Caggana, ScD, Committee Member
Chanika Phornphutkul, MD, FACMG, Committee Member
Drs. Caggana and Phornphutkul presented the findings of the Nomination and Prioritization (N&P) work group review of the full nomination package of MLD for inclusion in newborn screening. The N&P workgroup concluded that MLD is a medically serious condition and that the onset and phenotypic range are well-defined for effective population-based screening. Drs. Caggana and Phornphutkul concluded that the N&P workgroup recommended moving MLD for full evidence review.

Committee Discussion
Committee discussion included updates on CDC's development of sulfatide and enzyme assay methods in preparation for potential newborn screening of MLD and a NIH pilot study aimed at generating data from prospective screenings within the U.S. Additionally, there was discussion on using non-FDA-cleared markers within FDA-cleared testing frameworks, noting that doing so would classify the entire test as a lab developed test (LDT), potentially affecting the use of cleared assays for other conditions. This issue was recognized as a broader challenge for incorporating new tests into existing newborn screening panels.

Naming/Counting Condition ACHDNC Ad Hoc Topic Groups (ATG): Updates and Next Steps

Susan Tanksley, PhD, Chair, Association of Public Health Laboratories Naming/Counting Condition ATG, (Laboratorian)
Susan A. Berry, MD, Member, Association of Public Health Laboratories Naming/Counting Condition ATG, (Clinician)
Drs. Berry and Tanksley discussed the longstanding issues surrounding the counting and naming of conditions in newborn screening panels and inconsistencies in how conditions are listed and counted across different states, causing confusion. They described the collaborative effort to refine the process of defining and counting conditions in newborn screening, particularly focusing on the importance of

considering the phenotypic spectrum when determining how to count conditions. They proposed that a condition should be listed and counted only once, even when it includes a spectrum of severity or multiple subtypes. They concluded that there should not be a distinction between core and secondary conditions and to consider mechanisms for updating the RUSP.

Committee Discussion

During the discussion, concerns were raised about the inconsistencies states might face in optimizing screening processes for various conditions, when different biochemical profiles are involved. Questions arose on how conditions should be categorized and reported if states optimize their assays differently. There was a suggestion that states should indicate the number of recommended conditions they screen for to enhance transparency and uniformity in reporting. It was emphasized that any changes to the naming and counting of conditions related to updating the RUSP should be communicated early with all stakeholders to ensure that the proposed changes are effectively understood and implemented. It underscored that this collaborative approach is essential for successfully adapting and uniformly applying the new screening guidelines across states.

New Business

- The evidence review for Duchenne Muscular Dystrophy (DMD) remains paused at the request of the nominators.
- A reminder was provided that the next advisory committee meeting will be November 14 and 15 and will be virtual.

Awards and Acknowledgments

New committee members Dr. Robyn Sagatov, representing the Agency for Healthcare Research and Quality (AHRQ), and Dr. Jeff Brosco, from the Health Resources and Services Administration (HRSA), were welcomed. The committee also welcomed new organizational representative Amy Gaviglio, replacing Cate Walsh Vockley, who is retiring.

The Committee acknowledged and thanked Dr. Kamila Mistry (AHRQ) and Dr. Michael Warren (HRSA) for their service as they would no longer be serving as committee members.

Committee Votes

Motion #1: (Phornphutkul / Lal) Motion to adopt the Decision Matrix as a tool to evaluate evidence presented to it and in making recommendations regarding addition of the condition to the RUSP.

12 in favor / 0 opposed. Motion carries.

Motion #2: (Kwon / Cody) Motion to approve the meeting summary from the meeting on January 29-30, 2024.

12 in favor / 0 opposed. Motion carries.

Motion #3: (Caggana / Phornphutkul) Motion to move forward to full evidence review of Metachromatic Leukodystrophy (MLD).

11 in favor / 1 recusal / 0 opposed. Motion carries.