

National Cancer Institute (NCI)
National Cancer Advisory Board (NCAB)
ad hoc Subcommittee on Population Science, Epidemiology, and Disparities

Gaithersburg Marriott Washingtonian Center
Gaithersburg, MD
11 June 2024
6:45 p.m.–7:45 p.m. EDT

SUMMARY

Subcommittee Members

Dr. Karen M. Winkfield, Chair
Dr. Nilofer S. Azad (absent)
Dr. Philip E. Castle, Executive Secretary
Dr. Luis Diaz (absent)
Ms. Ysabel Duron

Dr. Christopher R. Friese
Dr. Nikan Khatibi (absent)
Dr. Ana Navas-Acien
Dr. Fred K. Tabung
Dr. Susan Thomas Vadaparampil (absent)

Other Participants

Dr. H. Nelson Aguila, NCI
Dr. Chandrakanth Are, Board of Scientific
Advisors (BSA)
Dr. Karen M. Basen-Engquist, BSA
Dr. John D. Carpten, Chair, NCAB
Dr. Andrew T. Chan, BSA
Dr. Gloria D. Coronado, BSA
Dr. Behrouz Davani, NCI
Mr. Brian Davis, NCI
Dr. Mark P. Doescher, BSA
Dr. Shelton Earp, Chair, BSA
Dr. Gary Ellison, NCI
Dr. Katrina A.B. Goddard, NCI
Dr. Dorothy K. Hatsukami, BSA
Ms. M.K. Holohan, NCI

Dr. Ana Maria Lopez, BSA
Dr. Douglas R. Lowy, NCI
Ms. Anne Lubenow, NCI
Dr. Karen Mustian, BSA
Dr. Lisa Newman, BSA
Dr. Diane Palmieri, NCI
Dr. W. Kimryn Rathmell, Director, NCI
Dr. Sanya Springfield, NCI
Dr. Cornelia M. Ulrich, NCAB
Ms. Stacey Vandor, NCI
Dr. Tiffany Wallace, NCI
Mr. Mike Bykowski, The Scientific
Consulting Group, Inc., Rapporteur

Welcome and Opening Remarks

Dr. Karen M. Winkfield, Executive Director, Meharry-Vanderbilt Alliance, Ingram Professor of Cancer Research, Professor of Radiation Oncology, Vanderbilt University School of Medicine

Dr. Karen M. Winkfield, Subcommittee Chair, welcomed the participants to the NCAB *ad hoc* Subcommittee on Population Science, Epidemiology, and Disparities (Subcommittee) meeting. She reminded the Subcommittee that its purpose is to help inform and advise NCAB and the NCI Director on strategic approaches and opportunities to enhance NCI's contributions to population science, epidemiology, and diversity. The Subcommittee is responsible for identifying opportunities to address populations facing disparities through multidisciplinary programs in research, surveillance, patient care, primary prevention, education, and cancer control. Dr. Winkfield invited the Subcommittee members to briefly introduce themselves and welcomed Dr. W. Kimryn Rathmell, NCI Director, to the meeting.

MCD Technology: Will It Close or Widen the Gap?

Dr. Philip E. Castle, Director, Division of Cancer Prevention, and Senior Investigator, Division of Cancer Epidemiology and Genetics, NCI

Dr. Philip E. Castle noted that NCI is investing in the evaluation of novel blood-based multi-cancer detection (MCD) technologies. He emphasized that such screening is more than simply a test; it is a care continuum. The currently available MCDs represent only the tip of the iceberg, as a multitude of additional technologies are currently in development. MCDs represent a very promising technology, but no evidence to date indicates that these tests provide any clinical benefit. Furthermore, some of these tests are being offered to the public, who are not being given enough information to or cannot make an informed decision. Dr. Castle expressed his belief that one or more of these tests will be demonstrated to provide a clinical benefit (such as early detection), but it remains unclear which one(s), for whom, for which cancers, and what the magnitude of benefit will be. He characterized MCDs as a disruptive technology and noted that health care guidelines and infrastructure are not in place to support their use. Marginalized individuals and communities will face significant challenges in accessing the tests and downstream care following a positive result.

To address MCDs and other new screening and detection technologies, NCI established the [Cancer Screening Research Network \(CSRN\)](#), which includes seven centers and the U.S. Department of Defense and U.S. Department of Veterans Affairs. Dr. Castle emphasized the tremendous population diversity covered by the catchment areas of the CSRN centers. He described the Vanguard Study, a feasibility study funded through the Cancer MoonshotSM. If the preliminary Vanguard study demonstrates feasibility and funding is available, plans are in place to move forward with a large platform randomized control trial that compares MCD technologies to a standard-of-care arm. It will not be possible to compare across MCDs because they target different cancers. It is expected that common cancers (e.g., lung, colorectal) will drive sample size.

Dr. Castle used the example of the many steps in the cervical cancer screening care continuum to demonstrate that cancer screening is not just a test. Even this relatively simple technology has led to profound health disparities by race and ethnicity based on national cervical cancer rates; this also will be a challenge associated with MCDs moving forward. One solution is to allow for self-collection. Dr. Castle described the NCI Cervical Cancer ‘Last Mile’ Initiative’s Self-collection for HPV testing to Improve Cervical Cancer Prevention (SHIP) Trial Network, which is expected to launch in the next week. SHIP will be a nationwide multicenter clinical trial and associated studies, with independent evaluation of multiple self-collection devices and human papillomavirus assays for usability, acceptability, accuracy, and effectiveness. Increased screening will lead to increased cervical cancer detection; overcoming the challenges associated with getting those with positive tests into appropriate care is critical.

Turning to implementation challenges associated with MCDs, Dr. Castle referenced education, medical mistrust, insurance and the ability to pay, specimen collection, access to providers who know how to manage a positive result, access to imaging, and access to oncologists to treat the cancer. Given the order-of-magnitude greater complexity of MCD testing compared with single-cancer screening, Dr. Castle stated that the health care community is not ready for these technologies. Despite this, he estimated that roughly 200,000 people have already been MCD tested. He summarized that significant educational, financial, and geographical barriers to accessing MCD testing and follow-up care exist. These will differentially and negatively affect marginalized people, communities, and populations. Whether or not those facing these barriers will choose MCD testing over proven life-saving cancer screenings, especially the cervical and colorectal screenings that actually prevent cancer, remains to be seen.

Discussion

Ms. Ysabel Duron asked Dr. Castle how he would address the challenges associated with MCD technologies. He responded that even with regard to screening in general, he would involve community health workers in the medical home with reimbursement; this issue has been discussed for years and has been implemented in many countries outside of the United States. He suggested that people are needed to go into communities to promote screening on the front end and to serve as patient navigators on the back end. Community health workers who look like the community, know the community, can speak the community's language, and can engage the community are needed. Incentives to enter this type of medical field (e.g., a payment program) also are needed.

In response to a question from Dr. Gloria D. Coronado, Dr. Castle noted that direct-to-consumer marketing has been ongoing for several years, but NCI can do little to control it. Dr. Douglas R. Lowy commented on a pending implementation problem: If the MCD research being conducted demonstrates some type of mortality benefit and an MCD is approved by the U.S. Food and Drug Administration, those younger than Medicare age may be reimbursed for the screening test, but coverage for the follow-up diagnostic analysis remains a question.

Dr. Winkfield asked whether NCI should pursue MCD research with the knowledge that it may exacerbate disparities. Dr. Castle responded that NCI should invest in this research because the technologies are already available. NCI should be a fair broker that provides unbiased analysis to determine which MCD technologies work for whom; industry will not be motivated to act in this manner.

Center for Cancer Health Equity: Reorganization, Current Programs and Initiatives, Cancer Equity Leaders

Sanya A. Springfield, Ph.D., Director, Center for Cancer Health Equity, NCI

Dr. Sanya A. Springfield announced that the former NCI Center to Reduce Cancer Health Disparities (CRCHD) has been reorganized and renamed the NCI Center for Cancer Health Equity (CCHE). The Center was renamed to reflect a more positive tone and to more accurately reflect its current activities. She also thanked Dr. Rathmell for her leadership in renaming and reorganizing the Center. The CCHE mission remains the same as that of CRCHD: achieving health equity by working toward eliminating health disparities; advancing inclusive research across basic, translational, and population-based studies; promoting a diverse workforce; and enhancing community engagement. CCHE's vision is to eliminate cancer health disparities (CHD) and achieve cancer health equity. The CCHE mission is associated with, and in conjunction with, the National Cancer Plan (NCP), particularly with regard to the following three NCP goals: eliminate inequities, engage every person, and optimize the workforce. As a result of the reorganization, CCHE now has four branches: (1) Community Outreach, Research, and Engagement Branch (CORE, formerly the Integrated Networks Branch); (2) Disparities Research Branch (DRB, formerly the Disparities and Equity Program); (3) Diversity Training and Biomedical Workforce Development Branch (DTBWDB, formerly the Diversity Training Branch); and (4) Innovative Programs Branch (IPB, a new branch).

CCHE CORE seeks to explore strategies for equitable participation in underserved communities to support engagement, bidirectional communication, and community-engaged cancer disparities research. It further endeavors to foster cancer education, outreach, partnership, and dissemination efforts. One of the CORE programs is [Connecting Underrepresented Populations to Clinical Trials](#), which is intended to implement and evaluate multilevel and culturally tailored outreach and education interventions with the primary goal of increasing referral of racial/ethnic minority populations to NCI-supported clinical trials. Another CORE program is the [Transformative Educational Advancement and Mentoring Network \(TEAM\)](#). The purpose of TEAM is to pilot test the use of training champions at minority-serving

institutions to provide education and career development navigation for underrepresented scholars and increase the pool of R01 applicants from underrepresented populations. CORE also manages collaborative research supplements to promote new CHD research and collaborations, accelerate and strengthen multidisciplinary cancer disparities research, and increase the number and competitiveness of CHD-related grant proposals submitted to NCI.

CCHE DRB seeks to promote the goal of health equity through the development and implementation of research initiatives designed to address cancer disparities. Disparities research initiatives within DRB span numerous disciplines—Dr. Springfield offered examples from basic research, social science, translational/clinical research, and transdisciplinary and multidisciplinary research. Partnerships across NCI are critical to ensure the success of these initiatives.

CCHE DTBWDB supports and administers programs and initiatives to develop a diverse pool of cancer researchers. These include fellowships, research career development awards, and cancer education grants for students and scientists at all career levels. The [Continuing Umbrella of Research Experiences \(CURE\)](#) program is located within DTBWDB. CURE offers unique training and career development opportunities to enhance and increase diversity in the cancer and cancer health disparities research workforce. The CURE program supports promising candidates from middle school through junior investigator levels and provides them with a continuum of competitive funding opportunities. CURE funding opportunities provide an ecosystem of support and represent vehicles for career independence.

CCHE IPB accelerates innovative approaches toward eliminating health disparities by developing and implementing programs, including a focus on enhancing cancer research capacity; leading efforts to integrate cancer research and training expertise; and working across CCHE, NCI, and NIH to lead coordination of initiatives aimed at achieving cancer health equity. Dr. Springfield highlighted two programs within IPB: [Partnerships to Advance Cancer Health Equity \(PACHE\)](#) and [Intramural Continuing Umbrella of Research Experiences \(iCURE\)](#). PACHE is intended to develop and maintain comprehensive, long-term, and mutually beneficial partnerships between NCI-Designated Cancer Centers and institutions serving underserved populations and underrepresented students. The goals of iCURE are to enhance research workforce diversity at NCI, promote career advancement of scholars, and foster an inclusive environment in the NCI intramural community.

Dr. Springfield described the [Cancer Moonshot Scholars Program](#), which started in 2023 and aligns with the priorities identified by the White House Cancer Cabinet to inspire and support the next generation of diverse cancer researchers. The program is intended to promote scientific advances in cancer research by increasing diversity of thought and perspective, support early stage investigators from diverse backgrounds, and increase the number of funded R01 investigators from diverse backgrounds across the cancer research continuum. Dr. Springfield also identified numerous NIH-wide CHD working groups and other collaborations in which CCHE participates. One example is the [NIH Faculty Institutional Recruitment for Sustainable Transformation Program \(FIRST\)](#), the goal of which is to create cultures of inclusive excellence (establishing and maintaining scientific environments that can cultivate and benefit from a full range of talent) at NIH-funded institutions.

With regard to CCHE funding, Dr. Springfield noted that the Center operates on a limited budget yet continues to be highly productive. None of its work has been duplicated at any other NIH institute or center. CCHE seeks to achieve more with additional funding.

Dr. Springfield introduced the Cancer Equity Leaders (CELs), an elite cadre of experts who are further reimagining and transforming the future of cancer health equity. Six of the 13 CELs are CURE graduates. NCAB Chair Dr. John D. Carpten also is a CEL. The CEL team will host a 2025 event to hear and learn from diverse perspectives across the cancer community to further advance NCI's health equity efforts.

Discussion

Ms. Duron asked how CCHE is promoted to external communities and whether a demographic breakdown of those participating in CCHE programs is available. Dr. Springfield stated that demographic data on CCHE program participants can be made available to the Subcommittee and offered to present this information at a future Subcommittee meeting. She noted that CCHE engages in a number of outreach activities. CCHE has successful outcomes to promote, and it intends to present NCI in the best possible light.

In response to questions from Dr. Lisa Newman, Dr. Springfield commented that the Native American population is one of the most difficult to reach, and CCHE is working to address this. She reported that an increasing number of K recipients through CCHE programs are moving into disparities-related research, estimating that 25 percent of K awardees are doing so now, compared to roughly 5 percent 10 years ago.

Dr. Carpten commended CCHE for its progress. He asked about the Center's level of engagement with clinical research and workforce development in that area. Dr. Springfield acknowledged that CCHE could do more in every area, particularly to address the lack of African American men in clinical cancer research.

Discussion: Priorities/Agenda Moving Forward

Dr. Winkfield asked members for their feedback on what the Subcommittee should focus on moving forward. Dr. Christopher R. Friese expressed concern about the average 15-minute clinical encounter, noting that clinicians are overwhelmed and being asked to do more (e.g., MCD testing) without adequate information or support. He suggested critically evaluating what type of work needs to be done so that as discoveries move forward, the 15-minute average clinic visit is purposeful while achieving the desired outcomes with the current workforce.

Dr. Mark P. Doescher commented that policy research is an area that the Subcommittee should consider in its future work.

Dr. Rathmell suggested that the Subcommittee could focus on ways to help the many successful programs focused on addressing health disparities and disparities in the workforce penetrate deeper into the community. Subcommittee input on making connections across the cancer research community would be beneficial, as would a more systematic outreach approach that relies on more than just CCHE outreach efforts.

Dr. Ana Maria Lopez indicated that focusing on team-based care and working backward from the desired outcomes could be a useful area of focus, as would exploring ways to engage patients beyond the clinic visit to increase sustainable health care outcomes.

Dr. Winkfield reminded the group that at a previous meeting, it was suggested that a presentation from the [Community Partnerships to Advance Science for Society Program \(ComPASS\)](#) may be useful to the Subcommittee.

Ms. Duron emphasized the importance of engaging the community in community engagement, through systems and into systems, from prevention to end of life. She also pointed to the importance of proper and equitable investment in community health workers, which could help employ many in underemployed communities while starting to address medical mistrust issues.

Dr. Coronado suggested that artificial intelligence and its opportunities to impact population science could be an area to consider.

Dr. Ana Navas-Acien noted her interest in learning about environmental exposures and their effects on communities, as well as NIH's research portfolio in this area.

Dr. Winkfield indicated that Subcommittee members will be sent an email or survey soliciting additional feedback on topics for future consideration.

Adjournment

Dr. Winkfield thanked the participants and adjourned the meeting at 7:46 p.m. EDT.

Dr. Karen M. Winkfield
Chair

Date

Dr. Philip E. Castle Executive
Secretary

Date