

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

November 30, 2020
1:15–2:15 p.m. EST
Virtual Meeting

SUMMARY

Subcommittee Members

Dr. Electra D. Paskett, Chair
Dr. Francis Ali-Osman
Dr. Deborah Watkins Bruner
Mr. Lawrence O. Gostin (absent)

Dr. Margaret R. Spitz
Dr. Susan Thomas Vadaparampil
Dr. Deborah M. Winn, Executive Secretary

Other Participants

Dr. Melissa Antman, National Cancer Institute (NCI)
Dr. Anna Barker, NCAB
Dr. Dafna Bar-Sagi, Board of Scientific Advisors (BSA)
Dr. Michael J. Becich, BSA
Dr. Mary Beckerle, BSA
Dr. Melissa Bondy, BSA
Dr. Otis Brawley, BSA
Dr. Phillip E. Castle, NCI
Dr. David Chambers, NCI
Dr. Yuan Chang, NCAB
Dr. Robert T. Croyle, NCI
Dr. Howard J. Fingert, NCAB
Dr. Carol Ferrans, BSA
Dr. Paulette S. Gray, NCI
Dr. Andrea A. Hayes-Jordan, NCAB
Dr. Scott W. Hiebert, NCAB

Dr. Nikan Khatibi, NCAB
Dr. Karen Knudsen, BSA
Dr. James Lacey, BSA
Dr. Michelle M. Le Beau, BSA
Dr. Thu Nguyen, NCI
Mr. Ricardo Rawle, NCI
Dr. Leslie Robison, BSA
Dr. Robert D. Schreiber, BSA
Dr. Victoria L. Seewaldt, BSA
Dr. Norman Sharpless, NCI
Dr. Dinah S. Singer, NCI
Ms. Stacey Vandor, NCI
Dr. Max S. Wicha, NCAB
Dr. Peter Wirth, NCI
Ms. Joy Wiszneauckas, NCAB
Dr. Robyn Engel, The Scientific Consulting Group, Inc., Rapporteur

Welcome and Opening Remarks

Drs. Electra Paskett, Director, Division of Cancer Prevention and Control, College of Medicine, The Ohio State University, and Deborah M. Winn, Senior Advisor to the Director, Division of Cancer Prevention (DCP), NCI

Dr. Electra Paskett, Subcommittee Chair, welcomed the participants to the NCAB *ad hoc* Subcommittee on Population Science, Epidemiology, and Disparities (Subcommittee) meeting. In September 2020, the Subcommittee discussed asking NCI staff to present a portfolio analysis on chosen population groups. Black/African American populations were proposed as the larger group, and other groups—including Asian/Pacific Islanders and American Indian and Alaska Native populations were discussed as smaller groups. Generating preliminary data for the Black/African American population was labor-intensive, and adequate time to prepare data for other populations was not available. Dr. Paskett thanked Dr. Michelle

Bennett, Director, NCI Center for Research Strategy (CRS), and CRS staff for the office's work in compiling the data for today's presentation. The Subcommittee also will discuss a formal working group charge and decide what areas of expertise are needed for that working group.

Dr. Deborah M. Winn, Executive Secretary, announced that she would be retiring in January 2021. Her replacement as Executive Secretary will be Dr. Phillip E. Castle, Director, DCP, NCI. Dr. Paskett thanked Dr. Winn for her service to the NCI and the Subcommittee and welcomed Dr. Castle.

Overview of Analysis of Extramural Cancer Grants

Drs. Deborah M. Winn, Senior Advisor to the Director, DCP, NCI, and Melissa Antman, Senior Scientific Program Analyst, CRS, NCI

Dr. Winn remarked on a pilot approach to identify NIH-funded cancer research involving Black/African American populations. The product of the work—a list of grants relevant to understanding the NCI research portfolio involving Black populations—was distributed to Subcommittee members. The Subcommittee previously discussed different portfolio analyses on minority and underserved populations conducted by the NIH and NCI, but those reports were compiled for specific purposes and include information that is not germane to this Subcommittee. Dr. Winn noted that she and Dr. Melissa Antman would discuss the process used to compile the list, the limitations of the process, and the decisions to be made as the working group looks for gaps in research and opportunities for improvement.

Dr. Winn commented that the pilot approach could be used to identify NIH-funded research projects involving other minority and underserved populations in the future. The current list is not intended to be a comprehensive or formal portfolio analysis but should allow the working group to conduct an initial screen and provide feedback. The long-term goal is to use the list of projects to enable portfolio analysis by a working group on cancer research in minority and underserved populations.

Dr. Antman described the pilot approach to identify research that is potentially relevant to Black/African American populations. She reiterated that the compiled list is available as an Excel spreadsheet to be shared with the working group, who can help refine the definitions and search based on its goals. An automated text mining approach was used to search all fiscal year (FY) 2020 grants included in the NIH category, including cancer research projects funded by Institutes and Centers other than the NCI. The search used the extracted, processed text of the title, abstract, and specific aims of each project.

Dr. Antman explained that the team leveraged tools already available at the NIH, such as the Research, Condition, and Disease Categorization (RCDC) thesaurus. NIH-awarded grants and subprojects from FY 2020 were included in the preliminary list if they were categorized as cancer research and included specific terms in the title, abstract, or specific aims (e.g., African American, African Caribbean, Black, or Black/White disparity). Two automated project categorization schemes are provided for the list; one uses RCDC definitions and cancer types, and another assigns the Common Scientific Outline (CSO) code to identify where a project falls along a cancer research continuum. There are six main CSO codes, ranging from "Biology" to "Cancer Control, Survivorship, and Outcome." CSO categorization could be helpful for understanding the broader landscape of research projects and for identifying gaps and opportunities. As a final step, the CRS staff manually reviewed the list to make initial suggestions for inclusion. Projects were placed into three categories: relevant to Black/African American populations, not relevant to Black/African American populations, or not enough information to determine relevance.

Dr. Antman reviewed some limitations of the pilot approach. She reiterated that this is not yet a formal portfolio analysis and will require some refinement. The approach is separate from the framework for required NIH official reporting on minority health and health disparities. Some relevant projects may not have been included because the final information for FY 2020 is not yet available or because the title,

abstract, and specific aims fields were not searchable. Overlooked projects will need to be identified by methods other than a text mining approach. The pilot approach can be refined following input from a working group, but a manual review of the data may always be needed. Similar approaches can be used for a wider spectrum of populations, but identification of a portfolio in health disparities may require separate definitions and a different approach.

Dr. Winn remarked on the current state of the pilot approach and next steps. The NCI has identified a draft list of NIH extramural cancer grants that are potentially relevant to research in Black/African American populations. This pilot illustrated that the information could be assembled using automated systems with manual curation. Dr. Winn noted that this was a broad screen using available NIH text and text-mining capabilities. The list can be refined by feedback from the Subcommittee and working group and used to conduct portfolio analyses to understand the landscape of NIH-funded research relevant to these populations. Funding gaps and research opportunities can be identified for Black/African American populations and for other minority and underserved populations. Artificial intelligence tools eventually could be used to eliminate the need for manual curation.

Discussion

Dr. Francis Ali-Osman asked whether the data could be analyzed or queried according to the type of research (e.g., mechanistic, epidemiological, genetic) and whether each grant was being codified. Dr. Winn replied that the pilot approach examined specific grant aims, titles, and abstracts. A coding scheme could be developed to categorize projects according to study type. Dr. Antman added that the CSO codes may allow some categorization by study type. Categorization by cancer type and the CSO codes already have been applied, but other models are available. Dr. Winn noted that the Division of Cancer Control and Population Sciences cancer disparities coding system could be supplemented to address the full spectrum of NCI research and might be included in a future automated system.

Dr. Susan Vadaparampil wondered whether the pilot approach could capture diversity supplements to an R01 grant and asked for further clarification about the time required for manual review. Dr. Antman responded that diversity supplements can be captured, but the text in some supplements may be the same as the overarching grant. The initial manual review is straightforward and quick. The search could be refined based on the needs of the working group, and refinements may require a more time-consuming manual component. Dr. Winn added that the team had not delved deeply into abstracts because the process should be directed by feedback from the Subcommittee and the working group.

Dr. Margaret Spitz remarked that the data will need to be categorized or summarized into concrete groups to compare populations. Dr. Ali-Osman added that many projects will involve multiple minority populations. Dr. Winn explained that the pilot was conducted on Black/African American populations as an example; a successful approach could be replicated in other groups. Dr. Paskett noted that studies including multiple racial and ethnic groups would be included in searches for each group.

Discussion of Proposed Working Group Name and Functional Statement

Dr. Electra Paskett

Dr. Paskett directed the Subcommittee to consider the formation of the *ad hoc* Working Group on Strategic Approaches and Opportunities for Research on Cancer Among Racial and Ethnic Minorities and Underserved Populations. The Subcommittee members were sent a draft charge for the working group including the proposed name and functional statement.

Dr. Spitz agreed the working group title was acceptable and noted that the pre-meeting reading materials included an excellent report from a BSA working group (i.e., *Ad hoc Working Group on Prevention*)

charged with investigating cancer research and early detection. One of their cross-cutting themes addressed health disparities in underserved populations. She suggested members from that working group might be included to decrease duplication of effort. Dr. Paskett commented that whether to include members from the BSA working group should be discussed relevant to needed expertise. Dr. Gray remarked that the draft working group report has not been accepted by the BSA and its contents should not be discussed.

Dr. Paskett responded to a chat comment from Dr. Castle about addressing all health disparities rather than only racial and ethnic issues. The proposed working group title includes underserved populations, which should address multiple populations experiencing health disparities.

Dr. Paskett asked for comments from the Subcommittee on the following section of the proposed working group functional statement:

“The National Cancer Advisory Board (NCAB) *ad hoc* Subcommittee on Population Science, Epidemiology and Disparities will convene an *ad hoc* Working Group that will advise on strategic approaches and opportunities for research on cancer among racial and ethnic minorities and underserved populations. The NCAB *ad hoc* Subcommittee has identified this area of focus as having high potential impact and the Working Group is charged with identifying and evaluating the current status, barriers to progress, new potential strategic approaches to better address research on racial and ethnic minorities and underserved populations, and potential actions to implement the new strategic research approaches effectively.”

Dr. Deborah Bruner commented (via chat) that the working group should address context, such as percent populations and burden of cancer. Dr. Paskett added that in-depth portfolio analysis should help to meet this need.

In response to a chat comment by Dr. Andrea Hayes-Jordan, Dr. Paskett remarked that the working group could use the existing definition of populations that experience disparities.

Dr. Winn stated that the working group could address several underserved populations, but the number should be limited to allow for reachable goals and reasonable time commitments for the working group members. Dr. Paskett relayed a chat comment from Dr. Bob Croyle that the working group should address key variables that are missing from national surveys and self-reported data sources, such as gender identity. In response to a chat comment by Dr. Leslie Robison, Dr. Paskett remarked that age is included in the definition of populations that experience health disparities.

Dr. Norman Sharpless thanked Dr. Winn for her service to the NCI and urged the Subcommittee to choose focused questions for the working group, adding that including every underserved population in the scope of work will not be possible. Dr. Paskett agreed that the working group task could become monumental with inadequate focus. She then invited comments on the remaining wording of the proposed functional statement:

“Working Group membership will include participants of the NCAB *ad hoc* Subcommittee, as well as participants from the scientific community with appropriate expertise.

“The Working Group will advise the NCAB *ad hoc* Subcommittee on Population Science, Epidemiology and Disparities and the National Cancer Advisory Board.”

No additional comments or suggestions were provided regarding the proposed wording of the functional statement. Dr. Paskett and Dr. Winn encouraged the Subcommittee to make suggestions regarding areas of focus for the working group.

Action Items and Other Business

The Subcommittee unanimously approved the formation of the *ad hoc* Working Group on Strategic Approaches and Opportunities for Research on Cancer Among Racial and Ethnic Minorities and Underserved Populations with the charge as given.

Dr. Paskett asked for comments regarding four areas of focus for the working group. Racial and ethnic minorities, underserved age, rural, sexual and gender minorities, and handicapped populations all are possible focus areas. She noted that Black/African American populations already have been selected.

Dr. Spitz suggested that the working group focus on an underserved population other than a specific racial or ethnic population. Dr. Hayes-Jordan noted that Hispanic/Latino populations include genetic differences that are tangentially related to African Americans because of the influence of the slave trade. Dr. Bruner suggested via chat that racial and ethnic groups, age groups, and rural communities be the focus areas, noting that gender differences should be examined within any group.

Dr. Vadarampil remarked that older or adolescent and young adult (AYA) groups would be interesting to study. Dr. Paskett remarked that the NCI is interested in rural populations because they have one of the highest cancer rates, and Dr. Spitz suggested including rural populations as an underserved group.

Dr. Paskett summarized that the group had suggested African Americans, Hispanic/Latino populations, rural populations, and AYA or older adult populations. Dr. Winn noted that the NCI has multiple ongoing efforts involving rural populations and childhood cancers. Dr. Hayes-Jordan agreed that the NCI already has substantial childhood cancer initiatives, but more attention is needed for the older population. Dr. Paskett reiterated that the four focus groups would be Black/African American populations, Hispanic/Latino populations, rural populations, and older adults.

Dr. Winn and Dr. Paskett suggested that the Subcommittee also offer input on areas of expertise needed for the working group.

Adjournment

Dr. Paskett thanked the Subcommittee members and adjourned the meeting at 2:15 p.m. EST.

Dr. Electra Paskett
Chair

Date

Dr. Deborah M. Winn
Executive Secretary

Date