

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

2 December 2025
11:10 a.m.–12:10 p.m.

Virtual Meeting
SUMMARY

Subcommittee Members

- Dr. Karen Winkfield - Chair
- Dr. Nilofer Azad
- Dr. Callista Clarke
- Ms. Ysabel Duron
- Dr. Karen Emmons
- Ms. Tamika Felder
- Dr. Christopher Friese
- Dr. Andrea Hayes Dixon
- Dr. Ana Navas-Acien
- Dr. Edjah Nduom
- Dr. Fred Tabung

Other Participants

Dr. John Carpten, Chair, NCAB	Mr. David Higgins (NIH/OD/ORS)
Dr. Boris Wawrick, Ex-Officio, DOE	Dr. Kristin Komschlies McConville, NCI
Dr. J. Gordon, Ex-Officio, CPSC	Dr. Luke Cocchi, Ex-Officio, EPA
Dr. Rebecca Zinn, Ex-Officio, NIEHS	Dr. Michelle Heacock, Ex-Officio, NIEHS
Dr. Anthony Letai, Director, NCI	Dr. Lori Minasian, NCI
Dr. Warren Kibbe, Deputy Director, Dr.	Dr. Peter Ujhazy, NCI
Dr. Gary Ellison, DCCPS, NCI	Dr. Randiak Alaro, NCI
Dr. Katrina Goddard, DCCPS, NCI	Ms. Shayla Beckham, NCI
Dr. Krzysztof Ptak, OCC, NCI	Ms. Anne Lubenow, NCI
Dr. Satish Gopal, CGH, NCI	Mr. Ricardo Rawle, NCI
Dr. David Chambers, NCI	Dr. Shamala Srinivas, NCI
Ms. Erica Moshtahedian, NCI	Ms. Thu Nguyen
Dr. George Sigounas, NCI	Mr. Weston Ricks, NCI

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, and Dr. Gary Ellison, Deputy Director, Division of Cancer Control and Population Sciences (DCCPS), NCI

Dr. Karen Winkfield, Subcommittee Chair, welcomed subcommittee members and reminded the attendees that the role of subcommittee is to advise the NCAB and the NCI Director on strategic approaches and opportunities to enhance NCI's contribution to population science, epidemiology, and disparities. Because of the disparities in research surveillance and patient care, the subcommittee is ready to form a work group in support of

NCI's mission to improve population health by using systems and multi-level approach for cancer control.

A Proposal for Multi-Level and Systems Approaches in Cancer Control Ad Hoc Working Group

*Dr. Karen Emmons, Professor, Department of Social and Behavioral Science
Harvard T.H. Chan School of Public Health*

Dr. Emmons reminded the subcommittee that the plan to create a working group was informed in part by a presentation given by Dr. David Berrigan, DCCPS, NCI, during the December 2024 meeting of this subcommittee, making the connection between cancer and obesity. The new *ad hoc* work group, if approved, would consider multi-level approaches and interventions for cancer control to evaluate the existing portfolio and make recommendations for future work.

Dr. Emmons stated the problem that most cancer prevention interventions target single levels (individual, provider, policy, etc.) in isolation, missing the synergistic benefits of addressing multiple interconnected factors simultaneously. The proposed solution is that multi-level and systems interventions that target 3+ levels, leverage interactions across levels, and address dynamic interplay rather than treating factors as independent.

As an example, Dr. Emmons presented a case study from Chicago Breast Cancer Disparities. Between 1990 and 2010, there was a dramatic divergence in breast cancer mortality; mortality among whites declined sharply while mortality among blacks remained flat although pre-1990, mortality among blacks and whites was not evident. This gap in mortality persisted despite tamoxifen approval showing it was a life-saving treatment. The root cause of this disparity was at multiple interconnected levels. (1) Facility and location: 17/20 highest mortality communities were African American; only one of the American College of Radiology's "Centers of Excellence" for breast imaging was in these high mortality black communities; and there were significant quality differences between safety-net and non-safety-net facilities. (2) Transportation and Infrastructure issues: Black communities either lost rail access (1800s-2019) or never had it; white/affluent areas gained or retained rail access; and "transportation deserts" were created preventing access to quality care. (3) Segregation: Chicago is one of most racially/economically segregated U.S. cities and geographic segregation amplifies all other disparities. The key insight is that by addressing just one factor (education, provider training, policy), the problem cannot be solved as the problems are interconnected across geography, infrastructure, healthcare quality, and social structures.

In another case study, Dr. Emmons talked about the challenges due to obesity. About 16-22% of cancers are associated with obesity (largely preventable) and obesity rates climbing despite interventions. Although individual-level solutions exist major limitations include GLP-1 agonists whose cost is ~\$260B/year cost, extensive side effects, and 2/3 discontinue in first year. Additionally, behavioral interventions (like Look AHEAD trial) are very intensive,

hard to maintain, and weight returns when stopped. Overall, population-level impact is not occurring because systemic drivers (food environment, built environment, economic factors, etc.) are not adequately addressed.

Dr. Emmons presented a success story about tobacco control where a combined regulatory, legislative, social, and pharmacologic interventions were put in place. The interventions were additive - early interventions continued as new ones were added with changed social norms, not just individual behavior. Overall success was due to multi-level approach targeting everything from individual cessation aids to advertising bans to taxation.

The proposed next steps are to create an *ad hoc* working group and review NCI's existing portfolio in this area, make recommendations for future work, and understand how to strategically select intervention combinations for maximum synergy.

Discussion

Ms. Duron inquired if the Latino population in the Chicago study was counted in the white category or disaggregated in the data because of their language barriers and additional disparities. Dr. Emmons responded that Chicago data specifically looked at Black versus non-Hispanic white population. Because different population groups are likely to have different interactions with different systems (food systems, healthcare systems), a multi-level approach can help understand disparities across broad population groups in ways clinical interventions have not.

Dr. Winkfield clarified the primary goals of the Working Group – to conduct a landscape analysis, to identify gaps in knowledge and opportunities, identify what has worked and what has not worked to make recommendations to NCAB and the NCI Director.

Dr. Stegmaier noted that there is a growing obesity incidence in children and adolescents/young adults (AYA) that sets the stage for adult health outcomes. For early-onset cancers, obesity may be a factor, but evidence is unclear. The work group needs to add lifespan considerations.

Dr. Heacock raised questions regarding windows of susceptibility-if there are critical developmental windows where interventions/exposures have greater impact such as puberty, adolescence, perimenopause/post menopause, times when exposures interrupt cellular processes and set pathways toward cancer?

Ms. Duron added that genetic and indigenous factors such as liver cancer among Latino community may be more prevalent due to obesity and diabetes. Additionally, 48% of Mexicans are predisposed to liver disease, possibly driven by genetic factors. She suggested that genetic factors alongside environmental/systems factors should be considered.

Functional Statement

Dr. Gary Ellison read the functional statement for the NCAB’s new *Ad Hoc* Working Group on ‘Multi-level and Systems Approaches in Cancer Control’—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 that involves systems and multi-level approaches in cancer control. The NCAB *ad hoc* Subcommittee has identified this area of focus for potential impact on accelerating the pace of interventions to reduce cancer risk and disparities. The Working Group is charged with identifying and evaluating the status, barriers to progress, and potential strategic approaches to embed research on systems that influence cancer risk, diagnosis, treatment, and outcomes to better address cancer control and reduce disparities, and potential actions to implement new strategic research approaches.

The interventions will target multi-level and system level factors across the cancer control continuum to reduce the cancer burden. The working group would be charged with identifying and evaluating the status barriers to progress and potential strategic approaches to embed research on systems that influence cancer risk, diagnosis, treatment, and outcomes to better address cancer control and reduce disparities and potential actions to implement new strategic research approaches. Dr. Karen Winkfield and Emmons will chair the *ad hoc* Working Group and Dr. Ellison will be the designated federal official for the work group.

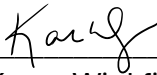
Motion. A motion to approve the establishment of a working group on Multi-level and Systems Approaches in Cancer Control was unanimously approved.

Discussion

The size of the Working Group will be about 12 to 13 members, like the previous working group. There will be some NCAB members, NCI, NIH, and potentially extramural individuals who have expertise in the scientific area.

Adjournment

Dr. Winkfield thanks the Subcommittee members for the great discussion and adjourned the Subcommittee meeting at 1:10 p.m. EST.



Dr. Karen Winkfield



Date

Dr. Gary Ellison

Date