

Ad Hoc Subcommittee on Population Science, Epidemiology and Disparities

Agenda

1. *Welcome, Introductions, and Opening Remarks*
2. *Strategic Approaches and Opportunities in Systems and Multi-level Approaches in Cancer Control Ad Hoc Working Group*
3. *Working Group Definitions and Portfolio Analysis Plan*
4. *Discussion*
5. *Closing Remarks and Adjournment*

Welcome

Dr. Karen Winkfield
Chair

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

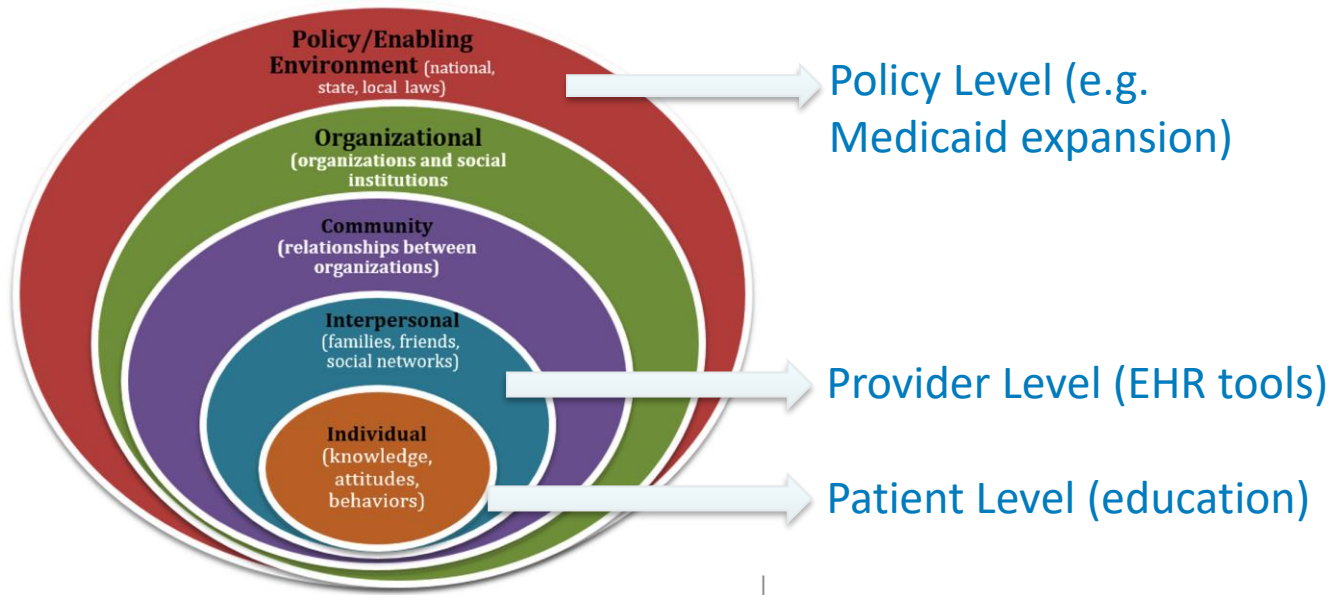
- **Mission Statement:** The purpose of this subcommittee is to advise the National Cancer Advisory Board (NCAB) and the Director, NCI on strategic approaches and opportunities to enhance NCI's contribution to population science, epidemiology and disparities. The subcommittee will be responsible for identifying opportunities to address populations facing disparities through multidisciplinary programs in research, surveillance, patient care, primary prevention, education and cancer control.
- **Members:** Dr. Karen Winkfield – Chair; Dr. Nilofer Azad; Dr. Callisia Clarke; Ms. Ysabel Duron; Dr. Karen Emmons; Ms. Tamika Felder; Dr. Christopher Friese; Dr. Ana Navas-Acien; Dr. Edjah Nduom; Dr. Fred Tabung
- **Executive Secretary:** Dr. Gary Ellison



PSED Working Group on Systems and Multi-level Factors in Cancer

*Dr. Karen Emmons
Working Group Co-Chair*

Social Ecological Model

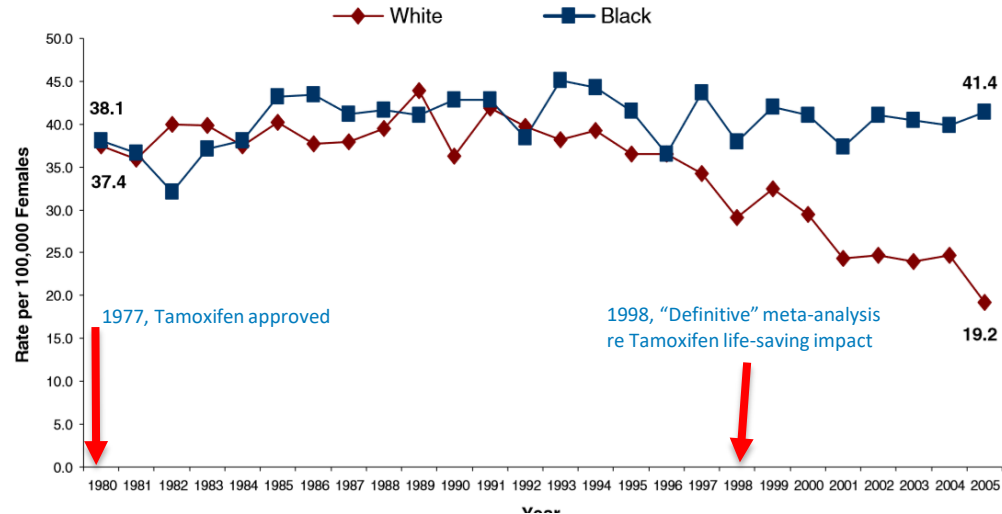


Multiple levels: Behavior affects and is affected by multiple levels of influence – **Reciprocal causation:** Individual behaviors shapes, and is shaped by, the social environment

Source: Adapted from the Centers for Disease Control and Prevention (CDC), The Social Ecological Model: A Framework for Prevention, <http://www.cdc.gov/violenceprevention/overview/social-ecologicalmodel.html> (Retrieved April 21, 2014).

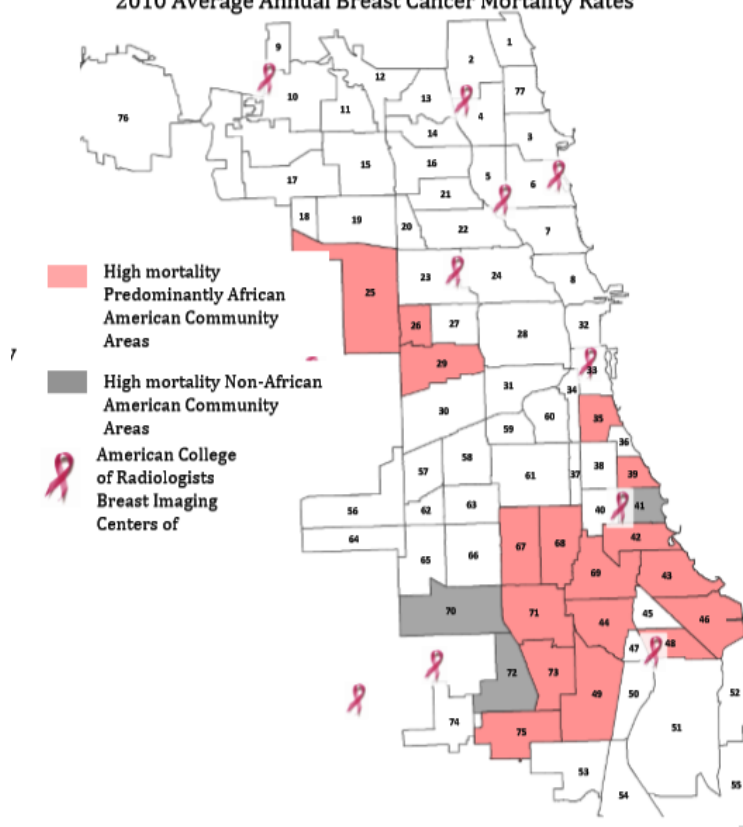
Black and White Age-Adjusted Breast Cancer Mortality, Chicago 1980-2005

Fig. 1 Black and white age-adjusted breast cancer mortality, Chicago 1980–2005



Screening And Early Detection Access

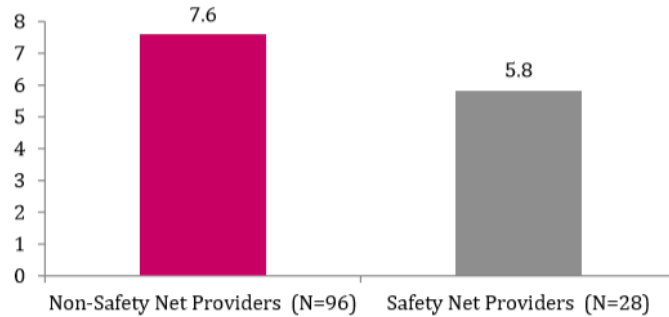
Figure 6. Chicago Community Areas with the Highest 2006-2010 Average Annual Breast Cancer Mortality Rates



Data Source: Illinois Department of Public Health Vital Statistics.

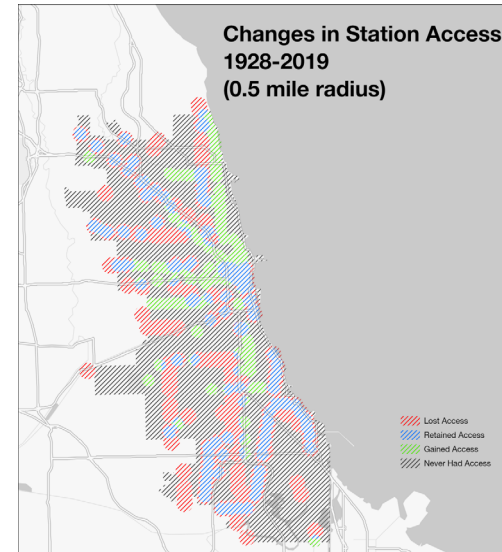
Diagnostic Quality of Chicago Mammography Facilities – 2005

Figure 17. Benchmark Attainment for Safety Net vs Non-Safety Net Facilities



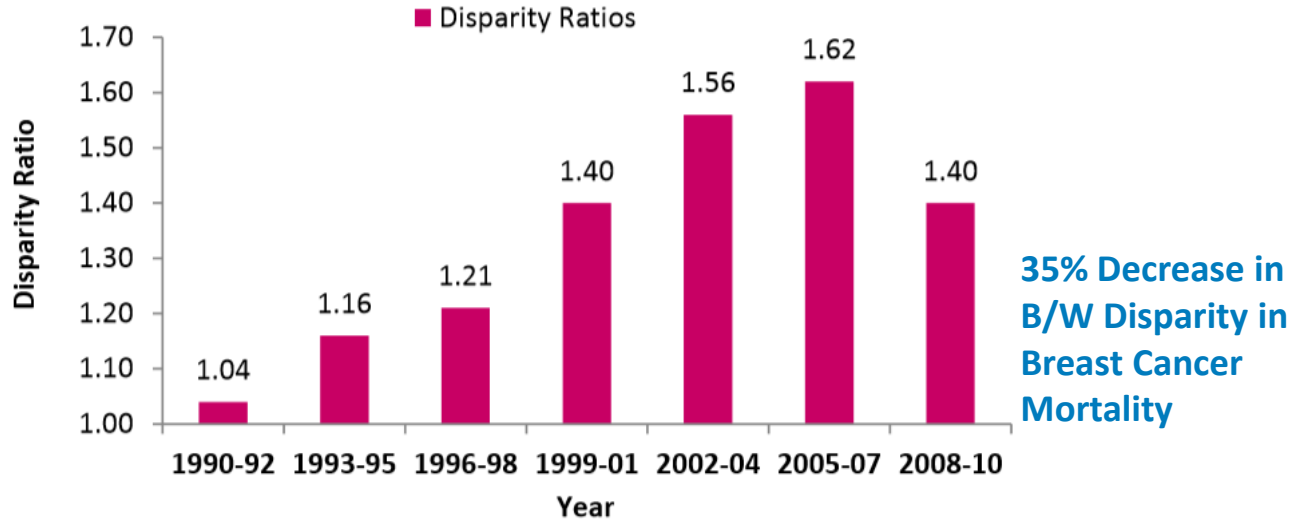
Metropolitan Chicago Breast Cancer Report, 2014

Transportation Deserts Limit Access



Multi-Level Interventions Reduce Disparities in Mortality

Figure 2. Breast Cancer Mortality Disparity Trend, 1990 - 2010



Data Source: Illinois Department of Public Health Vital Statistics
1990-2007 Data Prepared By: Sinai Urban Health Institute
2008 - 2010 Data Prepared By: Chicago Department of Public Health

Definitions for Multilevel Research, Interventions and Systems Interventions

Concept	Defining Feature
Multilevel research	Examines determinants or outcomes at ≥ 2 levels of influence
Multilevel intervention	Actively targets ≥ 2 levels of influence
NCI-style multilevel intervention research	Targets ≥ 2 levels, measures ≥ 3 levels, evaluates cross-level effects
Systems intervention	Targets the system of care via structural/organizational change

Important note:

A systems intervention can be multilevel, but a multilevel intervention is not necessarily a systems intervention unless the system itself is the unit of change.

Initial Questions to Inform Ad Hoc Working Group

- How has NCI and NIH defined Multilevel and Systems Interventions in Cancer?
- What are some examples of multilevel and systems interventions in cancer from the funded portfolio?
- What are scientific and research infrastructure questions we should seek to ask to achieve our goal?



Working Group Update and Portfolio Analysis Plan

*Dr. Gary L. Ellison
Executive Secretary*

Establishing Strategic Approaches and Opportunities in Systems and Multi-level Approaches in Cancer Control Ad Hoc Working Group



Expertise: cancer control, behavioral and health systems interventions, rural health, epidemiology, surveillance, cancer survivorship, systems interventions, research designs and survey methodology, health disparities, social determinants of health, tobacco control, Obesity interventions, policy, chronic disease, social network analysis, research methods, behavior change, health communication, Integrated biology and behavioral science, population science, community engagement, genomics, and more...

Multilevel and Systems Interventions Ad Hoc Working Group Portfolio Analysis Overview

Phase I:
Identify NCI active
grants
FY 2019-2024

I. Grants and Notices of Funding Opportunities (NOFOs)

- What is NCI's current investment in Multilevel and Systems Interventions?
- What NOFOs have specified Multilevel and Systems Interventions to grow this portfolio?

Phase II:
Analyze identified
grants to answer key
analytic questions

II. Analytic Questions for Portfolio Analysis

- What **levels of influence** are targeted (individual, interpersonal, organizational, community, policy/structural)?
- How **many levels** are targeted per grant?
- What **outcomes** are examined (behavioral, clinical, implementation, system-level)?
- Where do **gaps** exist by level, outcome, population, or cancer focus?

Phase III:
Summarize findings
to present to working
group to answer
scientific questions

III. Scientific Directions Questions for the NCI Portfolio:

- Where can research and intervention science grow?
- What areas of cancer are not being addressed?
- How can NCI grow the potential of these for population impact to achieve its organizational mission?
- What cancer outcomes are especially primed for this type of approach?

Thank You.



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