Pilot Prostate Cancer Education, Screening and Treatment Program: A Model for Policy Research on Health Disparities

Claudia R. Baquet, MD, MPH
Professor of Medicine
Associate Dean Policy and Planning
Director Comprehensive NIH Center for Health Disparities, Research, Training & Outreach
University of Maryland School of Medicine (UMSOM)

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Presentation Overview

This presentation will provide an overview on:

- The role of policy research and advocacy in health disparities research and programs

- Maryland model for comprehensive approach related to health disparities
  - transforming an academic health center will be described and includes:
  - fostering disparities research continuum on tobacco related diseases and health disparities,
  - fostering community engagement and public trust,
  - addressing diversity in clinical trial accrual, and
  - policy research to promote sustainability and research translation.

- A community-initiated, prostate cancer education, early detection and treatment program for underserved, rural men will be described.
  - The development of this program, grounded in a social-ecological conceptual framework, will be described.
  - The importance of policy research and intervention in rural, uninsured men, particularly African Americans, will be highlighted.
The Changing Face of the United States

**Healthy People 2010: Overarching Goal**

*Elimination of health disparities*

*US Department of Health and Human Services (HHS)*

- Community and patient diversity
- Culture, race, ethnicity, nationality
- Aging population
- Access barriers include uninsured and underinsured
- Literacy and language
Health Disparities Research

- Definition is evolving
- Multidisciplinary
- Across the continuous spectrum of:
  - characterization
  - explanation
  - intervention
  - translation and application
  - policy formulation*

*Baquet CR, et al. JAAMP.*
Historical Timeline

Cancer Health Disparities

1974: L. Leffall & U. Henscke noted alarming cancer death rates in blacks

1984: First intervention trials to address tobacco and cancer screening factors for African Americans (Baquet et al.)

1984-1985: Secretary Heckler/Malone Task Force on Black and Minority Health
- 60,000 excess and preventable deaths
- Cancer Chapter (Baquet et al.)
- Health Services Utilization Chapter (Baquet et al.)
  Cancer Among Blacks and Other Minorities
  - Statistical Profiles: (Baquet, Ringen et al.)
  Cancer In Blacks: An Annotated Bibliography

1985: National Cancer Institute (NCI) expanded reporting cancer statistics by race

1990: Minority based CCOP implemented

1993: National Institutes of Health (NIH) Revitalization Act
Research To Policy Model: Addressing Tobacco-related and Cancer Health Disparities in Maryland

Cigarette Restitution Fund (CRF)
- Maryland was one of 46 states to participate in a multi-state lawsuit against major tobacco manufacturers.
- Maryland receives $4.9 billion over 25 years
- Task Force to Conquer Cancer established to decide how to distribute the funds
- Policy led to legislation in 2000 Academic health center grant (one of several programs)
Key Elements of Maryland Comprehensive Approach to Health Disparities

• Infrastructure and Community Capacity: local offices
• Partnerships:
  • Community organizations, HBCUs, local health care providers, faith-based organizations, local media, FQHCs, and health departments
• Programs data & evidence-guided
• Multidisciplinary research across the continuum
• Science-guided policy and policy research
• Diversity in clinical trials participation
• Leveraging resources for sustainability
Funding Distributions to UMB Schools, Community Partners, and Non-UMB Academic Partners
FY 1997-2008
PI: Claudia R. Baquet, MD, MPH
Total Funding Distributed for All Grants and Contracts: $67,701,603 (Actual)
University of Maryland Statewide Health Network (UMSHN)
Community, Telemedicine/Video Linkages

Unique Infrastructure

UMSHN Offices
1. Central Office/Baltimore City Office
2. Eastern Shore Regional Office - Salisbury
3. Western Maryland Regional Office - Hagerstown
4. Southern Maryland Regional Office - Waldorf

Telemedicine/Videoconference Linkages (28)

(#) reflects number of TM/VC linkages
Disparities Research and Program Reach (2000-2007)

Community Awareness and Education

UM Mini-Med School Program
- Baltimore City – UMSOM
- Montgomery County – Universities at Shady Grove In Spanish
- Allegany County – Allegany College of MD
- Lower Eastern Shore Region – UMES
- Southern Maryland – College of Southern MD

Health Care Professional Education:
- Continuing education (CE/ME) for over 6,380 health care professionals

Breathmobile® – Baltimore City and Prince Georges County
- Chronic and Acute Pulmonary Disease Project for School Age Children
- Asthma services in 48 schools, 14 Headstart programs, and to children from 16 surrounding schools in Prince George’s County

Supported Sisters Circle
- Promote health improvement for older African-American women.
- Received the 2006 Purpose Prize from Civic Ventures, a think tank for leaders in social innovation
Research and Policy Initiatives

- Patient navigation research program
  - Breast and colorectal cancer screening using Community Health Worker (CHW) Model
- Policy research
  - Legislation: Prostate cancer pilot program for uninsured men in rural Charles County (SB 283)
    - Lead Sponsor: Senator Thomas “Mac” Middleton
  - Coverage of clinical trial costs
- Mandated Benefits
Breast cancer screening and treatment legislation for uninsured women

- Appropriation: $2.5 million per year for limited time to promote screening through the state hospital rate setting system
- Age eligibility: under age 50
- Covers screening, follow up of abnormal screens, diagnostic, and treatment costs
  - Sponsor: Delegate Shirley Nathan-Pulliam

2008 and Ongoing Legislation

- 2000-Present: CRF Continuation
- 2008: SB 459: Rural Physician Workforce Task and Pilot Rural Residency Track FCM
  - Senator Thomas “Mac” Middleton Sponsor
Definitions

**Policy:**
- Activities or strategies developed to achieve anticipated outcomes; in the case of health policy, activities are expected to impact the health care delivery or health related factors.
- Policy may influence access or target scarce resources and/or guide funding decisions.
- Policy may be implemented through legislation or regulation.

**Legislation:**
- Making or enacting laws through a legislative body of elected members; making statutory law

**Regulation:**
- Authoritative rule adopted by a federal or state executive body the carries out the law; usually specifies the details NOT in legislation
Ten Significant Maryland Cancer Related Health Mandates

Mandates for prevention, screening and treatment in insurance

**Article**
- 15-804 Coverage for off label use of drugs
- 15-809 Hospice Care
- 15-814 Mammography coverage
- 15-815 Reconstructive Breast Surgery coverage
- 15-825 Prostate Cancer screening coverage
- 15-827 Clinical trials coverage
- 15-832 Length of stay mastectomies and prostate surgeries
- 15-834 Prosthesis after mastectomy
- 15-836 Wigs after chemotherapy
- 15-837 Colorectal cancer screening
- Requires Maryland Health Care Commission (MHCC) to include racial, ethnic variations in existing consumer performance report cards for HMOS, nursing homes and hospitals
- Requires DHMH, in collaboration with MHCC and other interested parties specifically the UMSOM Center for Health Disparities, to annually prepare a health disparities policy report card

SB 728 – Telemedicine – Use and Reimbursement Study
- Requires the University of Maryland School of Medicine, in consultation with the School of Nursing and other stakeholders, to study:
  1. Current use of telemedicine in the State;
  2. Use of and reimbursement for telemedicine in other states;
  3. How reimbursements for telemedicine in other states have increased access to health care in those states;
  4. Any current barriers to reimbursement for telemedicine; and
  5. Potential for telemedicine to improve access to health care in underserved areas of the state;
  6. A report was due to MGA on January 1, 2007.
Community-initiated Prostate Cancer Program for Uninsured Men in Rural Charles County, Maryland
Prostate Cancer - An Overview

- 2\textsuperscript{nd} most common cancer in men in the US in 2008.\textsuperscript{1}
  - 186,320 estimated new cases and 28,660 estimated deaths (US).\textsuperscript{1}
  - 3,420 estimated new cases and 550 estimated deaths in Maryland.\textsuperscript{1}

- Racial/ethnic Disparities:
  - 1.4 times higher incidence in black males in Maryland (230.8 in blacks compared to 156.4 in whites in 2007)\textsuperscript{2}
  - African American/black men have the highest incidence rate for prostate cancer in the US and are more than twice as likely as white men to die of the disease.\textsuperscript{3}
    - The lowest death rates for prostate cancer are found in Asian/Pacific Islander men.\textsuperscript{1}

\textsuperscript{1} American Cancer Society (ACS). Cancer Facts and Figures 2008.
\textsuperscript{2} American Cancer Society (ACS). South Atlantic Division Cancer Facts and Figures 2007.
Prostate Cancer - An Overview

- The natural history of clinically localized prostate cancer is such that the risk of prostate cancer specific mortality among men who do not receive definitive treatment is tumor grade and age dependent.\(^1\)
  - Among men diagnosed with early prostate cancer and who did not receive treatment, younger age at diagnosis and higher tumor grade are associated with greater risk of dying from prostate cancer.\(^1\)

- Though the best treatment option for clinically localized prostate cancer is unknown, prostate cancer specific survival is higher among men receiving radical prostatectomy, compared to watchful waiting.\(^2\)

- Disparities in healthcare are not limited to race. Socioeconomic status also has a major role in cancer severity at diagnosis and treatment received when diagnosed with a treatable cancer.\(^3-5\)

Accounting for age, grade, socioeconomic status, and comorbidity, African-American men were 26% less likely to receive aggressive therapy than white men (OR=0.74; 95% CI=0.70, 0.79). ¹

That black men diagnosed with poorly differentiated cancers were significantly less likely to receive definitive therapy is extremely important in understanding the cause of racial/ethnic disparities in prostate cancer mortality. ²

Low-income men experienced 22-40% greater prostate-cancer specific mortality than patients in the highest income bracket (defined as median household income greater than $43,875 annually). ³

Prostate cancer stage at diagnosis is inversely correlated with income and health insurance status, particularly among black men. ⁴

Men who did not participant in a prostate cancer screening program the two years prior to their diagnosis were more likely to be diagnosed with late stage cancer. ⁵

Policy Research and Data Guided Advocacy Program Development

- Initiated by community leader who served as PI of the rural SMD CBPR grant from NCI MSPN and prostate cancer survivors in Southern Maryland
  - Community noted that uninsured men including, African American men, were diagnosed late and were dying of prostate cancer in the region
  - Community organized “community prostate cancer disparity breakfast” to present data on the disease and request assistance from state elected official and legislative leader from the region (Senator Thomas “Mac” Middleton, Chair Maryland Senate Finance Committee) to support solutions
- Senator Middleton was responsive to this community-identified need and had a track record of support for health legislation related to rural health and disparities.
  - Strong ongoing technical assistance from Policy and Planning.
Community partners and local prostate cancer survivors partnered with the University of Maryland School of Medicine Export Center (P60) and NCI funded Community Network Program to document the prostate cancer clinical and educational needs and barriers for rural and uninsured men in Southern Maryland, including African American men.

Data driven advocacy and technical assistance, followed by series of hearings and testimony at Senate and House hearings in the state legislature, led to passage of Senate Bill (SB) 283 (2007).

Legislation Tracking: Despite passage of SB 283, due to state budget crisis, state funding eliminated for the program.
The University of Maryland School of Medicine Comprehensive Health Disparities Research, Training and Outreach Center (P60 NCMHD) provided $80,000 to fund the research and evaluation aspects of the pilot program.

Additional funding provided by:
- Secretary of Maryland Department of Health & Mental Hygiene
- Charles County Commissioners: local county government

Program administered by local county public health department with a Community Advisory Board

This 3 year pilot program includes provision of prostate cancer education, screening, early detection, and treatment and tracking of uninsured men.

*P 60 Export Center: NCHMD/NIH MD000532*
# Social-Ecological Analysis – Pilot Prostate Cancer Education, Screening, Early Detection, and Treatment Program

<table>
<thead>
<tr>
<th>Individual Level</th>
<th>Interpersonal Level</th>
<th>Organizational Level</th>
<th>Community Level</th>
<th>Societal / Policy Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ↑ knowledge and understanding of prostate cancer epidemiology and disparities</td>
<td>• Promote ↑ communication between spouses, friends and family about importance of screening and early detection for prostate cancer</td>
<td>• ↑ organizational capacity to provide access to and use of screening and treatment services to uninsured or underserved populations</td>
<td>• Community-driven data collection and review, advocacy and action to identify and address disparities in prostate cancer detection and care for high risk population</td>
<td>• Legislative technical assistance</td>
</tr>
<tr>
<td>• ↑ screening and early detection for prostate cancer</td>
<td></td>
<td>• Local public health department and state public health department</td>
<td></td>
<td>• Science/data guided advocacy</td>
</tr>
<tr>
<td>• ↑ available timely treatment for prostate cancer</td>
<td></td>
<td></td>
<td>• Develop policy solution, built consensus, Implement policy changes around cancer detection and treatment</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Leveraging of funding to support and sustain program</td>
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Conclusions - 1

- Addressing health disparities requires a multi-faceted approach: research, community engagement and capacity enhancement; policy research and leveraging for sustainability.

- Maryland health disparity model includes policy research to address access and quality issues in healthcare and support sustainability.

- A community initiated prostate cancer program demonstrates the essential role and ownership of affected communities in identifying and proposing solutions and monitoring of critical health issues.
Conclusions -2

- Prostate cancer remains a significant source of morbidity and mortality for uninsured men and rural and African American men in Charles County, MD.

- Policy research coupled with community capacity enhancement led to development of a program to improve education, screening and early detection and prostate cancer treatment, with the potential to significantly reduce disparities in prostate cancer mortality for a rural county in Maryland.

- A community driven program that targets multiple levels in the social ecological framework increases the likelihood for program outcomes and sustainability.
Funding To Eliminate Health Disparities

- Maryland Cigarette Restitution Fund Program (CRF)
- “Maryland Special Populations Cancer Research Network” and “Maryland Community Network Program”: (NCI 5U01CA-086249/U01CA114650)
- UMES-UMB Comprehensive Cancer Research Planning Grant (NCI U56 CA096303)
- Comprehensive Health Disparities Research, Training and Outreach Center (P 60 Export Center: NCH MD000532)
Acknowledgements

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- Community Partners
- MSPN Team
- Office of Policy and Planning

- Senator Thomas Middleton
- Charles County Health Department
- Maryland Department of Health and Mental Hygiene