Cancer Disparities – Solutions for Maryland

E. Albert Reece, MD, PhD, MBA
Vice President for Medical Affairs, University of Maryland
John Z. and Akiko K. Bowers Distinguished Professor and
Dean, University of Maryland School of Medicine

November 29th, 2011
Hunt Valley, MD
Cancer Disparities

• Overview: What Do We Know About the Problem?
  – Scope
  – Demographics of disparity
  – Risk factors
  – Populations in peril

• What We Plan To Do About the Problem?
  – Maryland Comprehensive Cancer Control Program
  – Maryland Health Quality and Cost Council: Health Disparities Workgroup
What Do We Know About The Problem?

- Cancer Burden in MD
- Cancer Demographics in MD
- Risk Factors
Cancer Is The Second Leading Cause of Death in Maryland & U.S.

Figure 9. Percent Distribution* of the Leading Causes of Death, Maryland, 2009.

- Heart disease: 25.5%
- Malignant neoplasms: 23.7%
- All other causes: 26.5%
- Nephritis, nephrosis: 1.8%
- Alzheimer's disease: 2.1%
- Influenza & pneumonia: 2.2%
- Septicemia: 2.4%
- Diabetes mellitus: 2.7%
- Accidents: 3.2%
- Chronic respir. dis.: 4.7%
- Cerebrovascular dis.: 5.2%

*Percent does not total exactly to 100 due to rounding.
CANCER IN MARYLAND

- ~25,000 Marylanders are diagnosed with cancer annually
- ~10,000 Marylanders annually succumb to this disease
- Maryland’s cancer mortality rate (~187/100,000)* is slightly higher than the national rate (~181/100,000)

* Incidence per 100,000 people
As on the national level, Maryland cancer disparities occur in a variety of categories including:

- Racial/ethnic
- Geographic
- Gender
- Age
- Socioeconomic status
### Racial/Ethnic Disparities in MD

#### African Americans have a significantly higher cancer mortality rate compared to Whites

#### The reasons for this disparity are multi-factorial

---

**TABLE 3.1**  
Maryland Cancer Incidence and Mortality, All Sites Combined, 2002-2006

<table>
<thead>
<tr>
<th>RACE/ETHNIC GROUP</th>
<th>OVERALL INCIDENCE</th>
<th>OVERALL MORTALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American/Black</td>
<td>448.8</td>
<td>222.6</td>
</tr>
<tr>
<td>White</td>
<td>473.5</td>
<td>188.7</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>330.6</td>
<td>76.8</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>233.4</td>
<td>97.6</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>155.4</td>
<td>102.1</td>
</tr>
</tbody>
</table>

Rates are per 100,000 and are age-adjusted to the 2000 US standard population.  

---

**TABLE 3.2**  
Colorectal Cancer Incidence and Mortality by Race in Maryland, 2002-2006

<table>
<thead>
<tr>
<th>RACE/ETHNIC GROUP</th>
<th>INCIDENCE</th>
<th>MORTALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American/Black</td>
<td>53.4</td>
<td>25.2</td>
</tr>
<tr>
<td>White</td>
<td>46.7</td>
<td>18.1</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>35.5</td>
<td>8.1</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>28.4</td>
<td>9.0</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Rates are per 100,000 and are age-adjusted to the 2000 US standard population.  

---

**TABLE 3.3**  
Prostate Cancer Incidence and Mortality by Race in Maryland, 2002-2006

<table>
<thead>
<tr>
<th>RACE/ETHNIC GROUP</th>
<th>INCIDENCE</th>
<th>MORTALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American/Black</td>
<td>217.4</td>
<td>56.3</td>
</tr>
<tr>
<td>White</td>
<td>147.3</td>
<td>23.1</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>136.3</td>
<td>12.3</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>64.2</td>
<td>10.5</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>58.2</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Rates are per 100,000 and are age-adjusted to the 2000 US standard population.  

---

**TABLE 3.4**  
Lung and Bronchus Cancer Incidence and Mortality by Race in Maryland, 2002-2006

<table>
<thead>
<tr>
<th>RACE/ETHNIC GROUP</th>
<th>INCIDENCE</th>
<th>MORTALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American/Black</td>
<td>66.2</td>
<td>59.2</td>
</tr>
<tr>
<td>White</td>
<td>69.8</td>
<td>55.4</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>32.1</td>
<td>12.8</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>26.8</td>
<td>22.1</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>N/A</td>
<td>32.2</td>
</tr>
</tbody>
</table>

Rates are per 100,000 and are age-adjusted to the 2000 US standard population.  
Multi-Factorial Causes of Cancer Mortality
Disparities in MD:

- Poverty/Low Socioeconomic Status
- Cultural Beliefs
- Social Injustice
- Racial Bias
- Other
The City of Baltimore and Somerset County have highest cancer mortality rates in Maryland (> 25% above U.S. rate)
Gender/Age Disparities

AA males have highest mortality rates after age 45

**Figure 1.7**

All Sites Cancer Age-Specific Mortality Rates by Race and Gender in Maryland, 2002-2006

- Rates are per 100,000 population.
Emerging Populations for Cancer Disparities in MD

- **LGBT individuals:**
  - May be less likely to seek preventive services
  - Have more behaviors that present health risks (alcohol, tobacco, etc.).

- **Immigrants:**
  - Are at an increased risk for some cancers due to exposures in their home country such as:
    - Viruses and bacteria
    - Chemicals,
    - Air pollutants
    - Etc.
What Are The Risk Factors for Cancer

65% of cancer deaths are lifestyle related and preventable!

TABLE 1.7

Estimated Proportions of Cancer Deaths Attributable to Various Risk Factors

<table>
<thead>
<tr>
<th>RISK FACTOR</th>
<th>DOLL AND PETO ESTIMATE</th>
<th>HARVARD ESTIMATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>30% 30%</td>
<td></td>
</tr>
<tr>
<td>Adult Diet/Obesity</td>
<td>35% 30%</td>
<td></td>
</tr>
<tr>
<td>Sedentary Lifestyle</td>
<td>- 5%</td>
<td></td>
</tr>
<tr>
<td>Occupational Factors</td>
<td>4% 5%</td>
<td></td>
</tr>
<tr>
<td>Family History of Cancer</td>
<td>- 5%</td>
<td></td>
</tr>
<tr>
<td>Viruses/Other Biologic Agents</td>
<td>10% 5%</td>
<td></td>
</tr>
<tr>
<td>Perinatal Factors/Growth</td>
<td>- 5%</td>
<td></td>
</tr>
<tr>
<td>Reproductive Factors</td>
<td>7% 3%</td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>3% 3%</td>
<td></td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>- 3%</td>
<td></td>
</tr>
<tr>
<td>Environmental Pollution</td>
<td>2% 2%</td>
<td></td>
</tr>
<tr>
<td>Ionizing/Ultraviolet Radiation</td>
<td>3% 2%</td>
<td></td>
</tr>
<tr>
<td>Prescription Drugs/Medical Procedures</td>
<td>1% 1%</td>
<td></td>
</tr>
<tr>
<td>Salt/Other Food Additives/Contaminants</td>
<td>- 1%</td>
<td></td>
</tr>
</tbody>
</table>

What We Plan to do About the Problem

Two Recent Initiatives:

• Maryland Comprehensive Cancer Control Plan

• Maryland Health Quality and Cost Council: *Health Disparities Workgroup*
Published in 2010

Developed by a broad partnership of public and private stakeholders

Focus is on controlling cancer by:

- Reducing risk
- Detecting cancers early
- Improving treatment
- Enhancing survivorship

Available at:
http://fha.maryland.gov/cancer/cancerplan/
Goal 1: Reduce cancer disparities in Maryland.

Objective 1: Reduce racial/ethnic minority vs. white cancer disparities in Maryland by:

- Increasing community engagement
- Enhancing Maryland’s safety-net insurance plans
- Increasing diversity in the healthcare workforce
- Increasing access to cancer screening services
- Increasing rigorous public health research
MCCCP Cancer Disparities Recommendations (Cont’d)

Objective 2:

By 2015, create and implement a plan to improve systems to identify and track cancer disparities by partnering with:

- The Maryland Behavioral Risk Factor surveillance systems
- The Maryland Cancer Registry
- The Maryland’s Vital Statistics Administration
Maryland Health Quality and Cost Council: Health Disparities Workgroup

- Council established in 2007 by Gov. O’Malley’s Executive order
- Seeks to:
  - Improve the health of Maryland’s citizens,
  - Maximize the quality of health care services, and
  - Contain health care costs.
- Council established a Health Disparities Workgroup in May 2011: Dr. E. Albert Reece, Chair
Disparities Workgroup Charge

Develop recommendations for best practices, monitoring, and financial incentives for the reduction of disparities, such as:

- Workforce disparities
- Disparities in quality of care within an office or hospital setting
- Disparities in access to care within a health plan or health care system
- Disparities in understanding of care within a health care setting
- Others disparities as determined by the Committee
- Recommendations due December 2011
Preliminary Interventions Proposed by the Workgroup

1. Create Health Empowerment Zones (HEZ)

2. Create the “Maryland Health Prize”

3. Expand the scope of Maryland’s current reimbursement incentives for quality and make them race and ethnicity-specific
### Health Empowerment Zone: Strategies and Actions

#### Strategies & Incentives in HEZ
- State income tax and/or local property tax incentives for providers
- Utilization of city and/or county-owned property for little or no rent to providers
- Provide loan repayment programs for practitioners
- Institute financial assistance to adopt Health Information Technology through interest-free loans and grants
- Utilize Community Health Workers
- Make cultural competency and health literacy training a requirement
- Utilize home monitoring technology/equipment to allow for periodic observation and earlier intervention

#### Actions to Implement
- Legislation
- Legislation
- CMS approval of LARP
- Legislation to reimburse for Community Health Workers
- Changes to physician and nurse licensing requirement
Recommend that:

- HSCRC's current and future *quality incentives* promote equity and reduce disparities

- The Patient Centered Medical Home *shared savings incentive* promotes equity and reduces disparities

- All health insurers in Maryland offer all of their providers a *shared savings opportunity*, with the Medical Home Project as a model, whether in a medical home or not, that promotes equity and reduces disparities

* Disparities Workgroup will continue to develop implementation strategies
Create the “Maryland Health Prize”

• Encourage and reward social entrepreneurship to stimulate development and innovation of community health interventions

• Incentivize competition that will:
  – Expand successful efforts
  – Yield solutions not yet developed
  – Generate national media attention to community health improvement efforts
Next Steps

- Develop Justification/Rationale
- Determine the Expected Benefits
- Create Action Steps for Implementation
- Identify Responsible Parties/Partners
- Outline Required Resources/Policies
- Determine Assessment Benchmarks
- Establish Timeframes/Milestones
Summary

• There are **significant** ethnic, geographic, gender, and socioeconomic **cancer disparities** in Maryland
• **African Americans**, particularly AA men, have a significantly **greater cancer mortality rate** than other races; the reasons are multi-factorial
• **LGBT individuals and immigrants** are emerging at-risk populations
• The good news is that the **majority** (65%) of cancers are **highly preventable**
• The **State of Maryland** has recently launched **two** high-profile, **comprehensive initiatives** to address this issue
THANK YOU!

Disparity Workgroup Members

- E. Albert Reece, MD, PhD, MBA, Chair
- Oxiris Barbot, MD
- Claudia Baquet, MD, MPH
- Michael Chiaramonte, MBA
- Lisa Cooper, MD, MPH, Renee Fox, MD
- Darrell Gaskin, PhD
- Jay Magaziner, PhD,
- Marcos Pesquera, RPh, MPH
- Ligia Peralta, MD

- Steven Ragsdale
- John Ruffin, PhD
- Stephen Thomas, PhD

Ex-officio/Staff:
- Carlessia Hussein, RN, DrPH
- David Mann, MD
- Ben Stutz
- Brian DeFilippis
University of Maryland School of Medicine

A Third Century

America’s Oldest Public Medical School –
Where Discovery Transforms Medicine