Breast Cancer in Underserved Communities in the U.S.

Patricia Dawson, MD, PhD
Healthcare Equity, UW Medicine (USA)
Mission

To improve the health of the public

UW Medicine
Breast Cancer
United States

Most common form of cancer among women

1. Second most common cause of cancer deaths in women – second to lung cancer
2. White women have historically had higher incidence rates than black women – in 2012 the rates converged
3. Breast cancer survival rates have increased for both black & white women
4. Survival rates remain 10% lower among black women, compared to their white counterparts
Trends by race / ethnicity
Breast Cancer INCIDENCE AND MORTALITY


UW Medicine

Copyright 2018©, BHGI. All rights reserved. With the exception of a copy for personal use, no part of this publication may be reproduced or transmitted in any other form or by any means, electronic or mechanical, without first obtaining written permission from Breast Health Global Initiative.
Trends by race / ethnicity
Excess Death Among Black Women AGE 18 – 64

- Insurance differences accounted for one-third of the excess risk of death in black women.
- Improved access to care could substantially reduce ethnic/racial disparities in overall breast cancer mortality.

Jemal et al. J Clin Oncol 36:14, 2018

UW Medicine
## Color Codes Defined using UW Medicine Rates

<table>
<thead>
<tr>
<th>Metric</th>
<th>White</th>
<th>Black or African American</th>
<th>Asian</th>
<th>American Indian or Alaska Native</th>
<th>Multiple races</th>
<th>Native Hawaiian or Other Pacific Islander</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes A1c</td>
<td>6,394</td>
<td>1,494</td>
<td>1,244</td>
<td>158</td>
<td>90</td>
<td>184</td>
<td>796</td>
</tr>
<tr>
<td>Diabetes BP</td>
<td>6,394</td>
<td>1,494</td>
<td>1,244</td>
<td>158</td>
<td>90</td>
<td>184</td>
<td>796</td>
</tr>
<tr>
<td>Diabetes Eye</td>
<td>6,394</td>
<td>1,494</td>
<td>1,244</td>
<td>158</td>
<td>90</td>
<td>184</td>
<td>796</td>
</tr>
<tr>
<td>Hypertension</td>
<td>12,157</td>
<td>2,212</td>
<td>2,050</td>
<td>177</td>
<td>101</td>
<td>139</td>
<td>526</td>
</tr>
<tr>
<td>Breast Cancer Screening</td>
<td>11,516</td>
<td>1,584</td>
<td>1,740</td>
<td>200</td>
<td>94</td>
<td>95</td>
<td>913</td>
</tr>
<tr>
<td>Cervical Cancer Screening</td>
<td>16,429</td>
<td>2,444</td>
<td>3,032</td>
<td>345</td>
<td>242</td>
<td>214</td>
<td>2,228</td>
</tr>
<tr>
<td>Colon Cancer Screening</td>
<td>20,463</td>
<td>3,103</td>
<td>2,775</td>
<td>326</td>
<td>141</td>
<td>191</td>
<td>1,787</td>
</tr>
<tr>
<td>Pneumococcal Vaccine</td>
<td>18,518</td>
<td>1,416</td>
<td>2,810</td>
<td>155</td>
<td>51</td>
<td>106</td>
<td>1,056</td>
</tr>
<tr>
<td>Pediatric Vaccine</td>
<td>203</td>
<td>96</td>
<td>98</td>
<td>95</td>
<td>38</td>
<td>7</td>
<td>75</td>
</tr>
</tbody>
</table>

- **Dark Green**: Higher than average, statistically significant
- **Light Green**: Higher than average, not statistically significant
- **Light Red**: Lower than average, not statistically significant
- **Dark Red**: Lower than average, statistically significant
Data

UW Medicine PCPs treated ≈ 250K people

Anonymized Clinics by Code

Measures

- A1c controlled: A1c ≤ 9 (patients with diabetes)
- BP controlled: < 140/90 (patients with diabetes)
- Eyes screened: (last 2 years – patients with diabetes)
- Breast cancer screening (last 5 years)
- Colon cancer screening (last 10 years scope – last year FIT)
- Cervical Cancer (last 2 years)
Disparity Index (DI) Defined

\[
DI = \frac{\text{How often a quality measure doesn’t get done in the minority group}}{\text{How often a quality measure doesn’t get done in the majority group}}
\]

Example

- Good glucose control is not happening in 33% of African American patients
- Good glucose control is not happening in 26% of Caucasian American patients

Calculation Example

\[
\text{Glucose Control DI} = \frac{33\% \text{ among African Americans}}{26\% \text{ among Caucasian Americans}} = 1.3
\]

DI > 1 means a disparity in care exists

UW Medicine
Disparity Index – Breast Cancer Screening

African non-English Speakers vs. Caucasian English Speakers
### Intersectionality – Race & Language

#### Metric

<table>
<thead>
<tr>
<th>Metric</th>
<th>All</th>
<th>WhiteEnglish</th>
<th>AfricanEnglish</th>
<th>African AmericanEnglish</th>
<th>AsianEnglish</th>
<th>American Indian or Alaska NativeEnglish</th>
<th>Native Hawaiian or Other Pacific IslanderEnglish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast Cancer Screening</td>
<td>27,556</td>
<td>19,650</td>
<td>4,355</td>
<td>1,511</td>
<td>1,564</td>
<td>72</td>
<td>2,036</td>
</tr>
<tr>
<td>Cervical Cancer Screening</td>
<td>31,806</td>
<td>26,760</td>
<td>5,046</td>
<td>1,707</td>
<td>1,959</td>
<td>103</td>
<td>2,383</td>
</tr>
<tr>
<td>Colon Cancer Screening</td>
<td>35,613</td>
<td>30,849</td>
<td>4,764</td>
<td>1,592</td>
<td>1,701</td>
<td>97</td>
<td>2,396</td>
</tr>
<tr>
<td>PHQ9 Evaluation</td>
<td>14,284</td>
<td>10,121</td>
<td>4,163</td>
<td>1,635</td>
<td>1,852</td>
<td>728</td>
<td>726</td>
</tr>
</tbody>
</table>

#### Benchmark

- <50th percentile
- 50th percentile
- 50th percentile
- 50th percentile
- 50th percentile
Intersectionality – Language

Breast Cancer Screening Rates

- English: 151
- Amharic (Ethiopia): 239
- Tigrinya (Ethiopia, Eritrea): 124
- Swahili: 16
- Somali (Somalia): 152
- Oromo (Ethiopia, Kenya, Somalia): 26
Elements of Health Disparities

- Social determinants, individual behaviors, beliefs
- Biological elements and genetics
- Physical and cultural environmental factors
- Clinical events and healthcare
Social Determinants, Behaviors, Beliefs

• Response to chronic stress, racism
• Childhood adverse conditions
• Food insecurity
• Immigrant stress
• Limited English proficiency
• Low health literacy
• Cultural beliefs and myths
• Poverty
Biological Elements & Genetics

African American Women

• Have higher incidence of “triple negative” breast cancer & high-grade cancers
• Are diagnosed at younger ages
• Stage-for-stage, have lower survival when controlling for comorbidities, ER & HER2 status
• Have a significant frequency of BRCA mutations – yet are tested almost 50% less often
Physical & Cultural Environmental Factors

- Toxic elements in the environment (lead, etc.)
- Access to green space
- Food deserts
- Zip Code
- Community resources
- Overlaps with social determinants
Clinical Events and Healthcare

- Black women are diagnosed with cancer are more advanced stage
- Access to screening and treatment
- Insurance coverage
- Institutional racism
- Distrust of healthcare institutions
- Differential treatments
- Poor communication
- Utilization of shared decision making
Strategies

Expand access
- Utilization of expanded provider team—ARNP, Pas
- Creative utilization of telemedicine
- Strategic deployment of resources

Coordination of Care
- Navigators and care coordinators
- Enhanced care systems

Patient-centered care
- Provider instruction in effective communication, shared decision making
- Effective and standardized use of interpreters
- Understanding of individual autonomy vs collectivism
- Understanding and asking what is most important to the patient/family

Acknowledge and work on institutional racism
- Training in unconscious bias and cultural humility
- Intentional review of institutional processes and procedures
- Training in understanding and mitigating poor health literacy
Strategies

Proactively measure and address disparities
- RACE data
- Disparity index
- Monitor performance measures

Standardized treatment pathways/protocols
- BRCA testing
- Treatment protocols

Provider training in effective communication and cultural humility
- Training in unconscious bias and cultural humility
- Intentional review of institutional processes and procedures
- Training in understanding and mitigating poor health literacy
- Understanding of intersections of healthcare and race/ethnicity
References


References


QUESTIONS?