Race, Racism and Health

Healthiest State Summit
August 6, 2015

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Bush Medical Fellow, 2008-2009
Hackman Consulting Group

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Racial Identity

- When did you first learn what your racial identity was in the U.S.?
- How did it happen?
- How did it impact you?
- How did you respond?
Race Matters: Perceptions of Race and Racism in a Sickle Cell Center

Stephen C. Nelson, MD¹* and Heather W. Hackman, EdD²

Background. Health care disparities based on race have been reported in the management of many diseases. Our goal was to identify perceptions of race and racism among both staff and patients/families with particular attention to provider attitudes as a potential contributor to racial healthcare disparities. Procedure. A confidential survey addressing issues of race and health care was given to all patients with sickle cell disease and their families upon arrival to clinic. The survey was made available online to all staff in the hematology/oncology program. Free text comments were obtained. Results. We received completed surveys from 112 patients/families. Surveys were completed by 135 of 158 staff members (85% return rate). The majority (92.6%) of patients/families identified as black, while 94.1% of staff identified as white (P < 0.001). More patients/families felt that race affects the quality of health care for sickle cell patients (50% vs. 31.6%, P = 0.003). More staff perceived unequal treatment of patients, especially in the inpatient setting (20.9% vs. 10.9%, P = 0.03). Conclusions. Provider attitudes contribute to continued racial health care disparities. We propose training health care providers on issues of race and racism. Training should provide critical thinking tools for improving medical providers’ comfort and skills in caring for patients who are of a different race than their own. Pediatr Blood Cancer 2013;60:451–454. © 2012 Wiley Periodicals, Inc.

Key words: health care disparity; race; sickle cell disease
It is less useful to continue to characterize an insidious problem if these efforts do not result in the design and implementation of interventions that lead to meaningful change.
U.S. Death Rates - 2009

- Black deaths: 286,928
  - Crude death rate: 924 per 100K

- Asian deaths: 49,508
  - Crude death rate: 413 per 100K
U.S. Black Deaths

- 128,248 excess deaths per year
- 10,687 deaths per month
- 2466 deaths per week
- 351 deaths per day
- 14 deaths per hour
- 1 death every 5 minutes
Why?

- Genetics
- SES, insurance, access, education
- Racism, Unconscious bias, Stereotypes
Human Genome Project

- 1990s
- > 60 families’ genes analyzed
- NO people of African descent
- Howard University belatedly invited

- Race has no genetic basis
- Human subspecies do not exist
- Most variation is within, not between “races”
- www.understandingrace.org
“racial disparities health”
2003- present
5271 citations!!
439 per year
over 8 articles per week
Disparities: Access measures for which members of selected groups experienced better, same, or worse access to care compared with reference group, 2012

- Blacks had worse access to care than Whites for about half of access measures.
- Hispanics had worse access to care than Whites for two-thirds of access measures.
- Asians and American Indians and Alaska Natives had worse access to care than Whites for about one-third of access measures.
Disparities: Number and percentage of quality measures for which members of selected groups experienced better, same, or worse quality of care compared with reference group.

- People in poor households received worse care than people in high-income households on more than half of quality measures (green).
- Blacks received worse care than Whites for about one-third of quality measures.
- Hispanics, American Indians and Alaska Natives, and Asians received worse care than Whites for some quality measures and better care for some measures.
2014 National Healthcare Quality and Disparities Report

Racial/Ethnic Disparities
- Quartile With Fewest Disparities
- Second Quartile
- Third Quartile
- Quartile With Most Disparities
- Insufficient Disparities Data Available
OVERALL HEALTH SYSTEM PERFORMANCE FOR LOW-INCOME POPULATIONS

Source: Commonwealth Fund Scorecard on State Health System Performance for Low-Income Populations, 2013.
NHDR Results

- Race is an independent factor
Health Care and Medical Education

Biology  Behavior  Society  Structure

DOWNSTREAM  UPSTREAM
Advancing Health Equity in Minnesota: Report to the Legislature January 15, 2014

Figure 10: Per capita income in the past 12 months, Minnesota 2012

- Black or African American: $14,820
- American Indian: $17,014
- Asian: $25,121
- Hispanic*: $15,569
- White: $32,750

Total Minnesota per capita income: $30,529
Labor Force Characteristics by Race and Ethnicity, 2013

Chart 4. Unemployment rates by race and Hispanic or Latino ethnicity, 2013 annual averages

Percent

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
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<tr>
<td>Total</td>
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<td>13.1</td>
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<tr>
<td>Asian</td>
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<td>American Indian and Alaska Native</td>
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<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
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<td>11.0</td>
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<tr>
<td>Hispanic or Latino</td>
<td>9.1</td>
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</table>

Note: People whose ethnicity is identified as Hispanic or Latino may be of any race. Source: U.S. Bureau of Labor Statistics, Current Population Survey (CPS).
LABOR FORCE CHARACTERISTICS BY RACE AND ETHNICITY, 2013

Chart 5. Unemployment rates by race and Hispanic or Latino ethnicity, 1973–2013 annual averages

Note: People whose ethnicity is identified as Hispanic or Latino may be of any race. Data for Asians only available since 2000.
Unemployment Rates Of Minnesota Labor Force By Race/Ethnicity 2009

2009 ACS
## Disparities in employment

### Table 1: The black and white gap

<table>
<thead>
<tr>
<th>Unemployment rate for...</th>
<th>Fourth quarter 2007</th>
<th>Second quarter 2009</th>
<th>Second quarter 2011</th>
<th>Difference between African Americans and whites for respective groups in second quarter 2011 (in percentage points)</th>
<th>Change since start of Great Recession (fourth quarter 2007 to second quarter 2011)</th>
<th>Difference in change since start of Great Recession between African Americans and whites for respective groups</th>
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</thead>
<tbody>
<tr>
<td>African American</td>
<td>8.4</td>
<td>14.8</td>
<td>18.1</td>
<td>8.2</td>
<td>7.7</td>
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<td>White</td>
<td>4.0</td>
<td>8.3</td>
<td>7.9</td>
<td>3.9</td>
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<tr>
<td>African American men</td>
<td>9.2</td>
<td>18.0</td>
<td>18.3</td>
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<td>White men</td>
<td>4.1</td>
<td>9.2</td>
<td>8.8</td>
<td>4.2</td>
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<td></td>
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<td>African American women</td>
<td>7.6</td>
<td>12.1</td>
<td>14.1</td>
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<td>White women</td>
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<td>7.4</td>
<td>3.5</td>
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<td></td>
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<tr>
<td>African American, no high school</td>
<td>13.6</td>
<td>26.7</td>
<td>26.0</td>
<td>14.0</td>
<td>12.4</td>
<td>72</td>
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<td>White, no high school</td>
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<td>13.6</td>
<td>12.0</td>
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<td>African American, high school</td>
<td>7.1</td>
<td>13.9</td>
<td>15.0</td>
<td>7.5</td>
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<td>41</td>
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<td>White, high school</td>
<td>5.9</td>
<td>8.5</td>
<td>8.4</td>
<td>4.5</td>
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<td></td>
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<tr>
<td>African American, college</td>
<td>3.0</td>
<td>7.6</td>
<td>6.9</td>
<td>3.0</td>
<td>3.9</td>
<td>16</td>
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<td>White, college</td>
<td>1.8</td>
<td>4.1</td>
<td>3.0</td>
<td>2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American, 35 to 44</td>
<td>6.4</td>
<td>12.2</td>
<td>12.6</td>
<td>6.1</td>
<td>6.2</td>
<td>23</td>
</tr>
<tr>
<td>White, 35 to 44</td>
<td>3.1</td>
<td>6.9</td>
<td>6.5</td>
<td>3.4</td>
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<td></td>
</tr>
<tr>
<td>African American, 65+</td>
<td>4.4</td>
<td>6.9</td>
<td>9.4</td>
<td>3.5</td>
<td>5.0</td>
<td>23</td>
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<tr>
<td>White, 65+</td>
<td>3.2</td>
<td>6.2</td>
<td>5.9</td>
<td>2.7</td>
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<td></td>
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</tbody>
</table>

Note: All unemployment rates are percentages. All changes and differences are in percentage points.

The unemployment rate of African Americans increased substantially faster than that of whites, regardless of breakdowns by gender, education, and age, since the start of the Great Recession.

“Twin Cities unemployment divide for black, white people is nation’s widest”
Laura Yuen, Minnesota Public Radio October 12, 2011
Disparities in Education
NAEP Percentage of All Students At or Above Proficient in 4th Grade Reading: 2009

Top Ten States
Bottom Ten States
Middle States

Source: National Assessment of Educational Progress
### Table 11: High school students graduating on time by racial and ethnic group, Minnesota 2012

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
<th>Disparity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>51.0</td>
<td>1.6</td>
</tr>
<tr>
<td>American Indian</td>
<td>45.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Asian</td>
<td>74.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>53.0</td>
<td>1.6</td>
</tr>
<tr>
<td>White (non-Hispanic)</td>
<td>83.9</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Figure 13: Incarceration rate disparity ratio, Minnesota as of July 1, 2013

- Black or African American: 10.3
- American Indian: 13.4
- Asian: 1.0
- Hispanic: 2.3
Figure 11: Minnesota Prison Population by Ethnicity. *Data on Black population excludes those held as mentally ill patients.*

*Source: Council on Crime and Justice (2012b)*
## 5. Race and ethnicity of homeless adults and youth compared to overall Minnesota population

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent of HOMELESS adults</th>
<th>Percent of all Minnesota adults</th>
<th>Percent of unaccompanied HOMELESS youth age 21 and under</th>
<th>Percent of all Minnesota youth 10-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian</td>
<td>10%</td>
<td>1%</td>
<td>13%</td>
<td>2%</td>
</tr>
<tr>
<td>Asian American</td>
<td>1%</td>
<td>4%</td>
<td>2%</td>
<td>6%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>38%</td>
<td>5%</td>
<td>40%</td>
<td>7%</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>42%</td>
<td>86%</td>
<td>33%</td>
<td>76%</td>
</tr>
<tr>
<td>Other/Mixed race</td>
<td>8%</td>
<td>3%</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>Hispanic (any race)</td>
<td>7%</td>
<td>4%</td>
<td>10%</td>
<td>7%</td>
</tr>
</tbody>
</table>

**Sources:** Wilder Research 2012 survey of homelessness and U.S. 2010 Census

**Note:** Column totals may be more than 100% because Hispanic ethnicity is asked independent of race.
Minnesota Uninsurance Rates by Race/Ethnicity

Source: Minnesota Department of Health, Minnesota Health Access Survey
Health Care and Medical Education

Biology
Behavior
Society
Structure

DOWNSTREAM
UPSTREAM
Minnesota Infant Mortality Rate*/Disparity Ratio Comparison

*per 1000 births
CDC
2007-2009

- Life Expectancy in Minnesota
  - White: 81.1 years
  - Black: 75.4 years

- Cancer deaths per 100,000 American men
  - White: 217.8
  - Black: 281.5

- Cancer deaths per 100,000 Minnesota men
  - White: 205.5
  - Black: 295.0
10. Mortality rates* by race and ethnicity, Twin Cities 7-county region

<table>
<thead>
<tr>
<th>Race/Origin</th>
<th>Mortality Rate</th>
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<tbody>
<tr>
<td>American Indian</td>
<td>814</td>
</tr>
<tr>
<td>Black, U.S.-born</td>
<td>704</td>
</tr>
<tr>
<td>Southeast Asian, Foreign-born</td>
<td>275</td>
</tr>
<tr>
<td>ALL</td>
<td>248</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>232</td>
</tr>
<tr>
<td>Black, foreign-born</td>
<td>225</td>
</tr>
<tr>
<td>Hispanic</td>
<td>213</td>
</tr>
<tr>
<td>Asian, other</td>
<td>132</td>
</tr>
</tbody>
</table>

*Age-standardized deaths per 100,000, among the population age 25-64 during the years 2005 to 2007.
Source: Minnesota Department of Health (mortality rates calculated by Wilder Research).
10. Mortality rates* by race and ethnicity, Twin Cities 7-county region

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Rate</th>
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<tbody>
<tr>
<td>American Indian</td>
<td>814</td>
</tr>
<tr>
<td>Black, U.S.-born</td>
<td>704</td>
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<tr>
<td>Southeast Asian, Foreign-born</td>
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<tr>
<td>ALL</td>
<td>248</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>232</td>
</tr>
<tr>
<td>Black, foreign-born</td>
<td>225</td>
</tr>
<tr>
<td>Hispanic</td>
<td>213</td>
</tr>
<tr>
<td>Asian, other</td>
<td>132</td>
</tr>
</tbody>
</table>

* Age-standardized deaths per 100,000, among the population age 25-64 during the years 2005 to 2007.
Source: Minnesota Department of Health (mortality rates calculated by Wilder Research).
Twin Cities Mortality-Wilder Study

- Race is an independent factor
Children with long bone fracture
ED 1-yr period
N=880 with pain scores
Time from injury to arrival in ED

- White 8.3 hours
- Black 10.7 hours  $p=0.014$
- Biracial 11.9 hours  $p=0.004$
- Native American 18.4 hours  $p=0.025$
76,931 ED encounters

Mar 2, 2009 - Mar 31, 2010

Wait Times

- White: 32 minutes
- Black: 37 minutes
- Native American: 41 minutes
- Hispanic: 39 minutes

P < 0.001
- 76,931 ED encounters
- Mar 2, 2009- Mar 31, 2010
- Odds Ratio of LWCET
  - Black: 2.04
  - Native American: 3.59
  - Hispanic: 2.15
  - Biracial: 2.77

$P < 0.001$
- Children with long bone fracture
- ED 1-yr period
- N=878
- Opioid-containing prescription
  - White 67.4%
  - Black 47.1%  RR 0.59
  - Hispanic 47.9%  RR 0.61
  - Native American 58.3%  RR 0.93
  - Biracial 40.3%  RR 0.45
NACHRI October 2011

- Chart review long bone fractures
- Jan 1 2008-Dec 31 2010
- 2206 patients
  - 1386 M 820F
- Bone
  - Radius/ulna 1116
  - Humerus 566
  - Ankle 189
  - Tib/fib 173
  - Femur 162
NACHRI October 2011

- Mean time to getting pain med 50.3 min
- Black 64 minutes
- White 45 minutes
- IV narcotics
  - White 57.8%
  - Black 48.4%  p <0.001
Conclusions

- Racial and cultural differences need study to identify:
  - Variable tolerance to pain
  - Hesitation to reporting pain based on culture or poor health care literacy
Health Care and Medical Education

Biology
Behavior
Society
Structure

DOWNSTREAM
UPSTREAM
Health Care Barriers

- **System**
  - insurance
  - poverty
  - geography
  - transition to adult care
  - research and support money
  - racism

- **Patients**
  - lack of knowledge
  - fear
  - trust

- **Community**
  - advocacy
  - public awareness

- **Providers**
  - bias
  - attitudes/expectations
## EXHIBIT ES-1. OVERALL RANKING

<table>
<thead>
<tr>
<th>Country Rankings</th>
<th>AUS</th>
<th>CAN</th>
<th>FRA</th>
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<th>NOR</th>
<th>SWE</th>
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<td><strong>Overall Ranking (2013)</strong></td>
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<td>2</td>
<td>2</td>
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### Notes:
* Includes ties. ** Expenditures shown in $US PPP (purchasing power parity); Australian $ data are from 2010.

OECD countries’ health care spending and longevity

Per capita spending US$
Factors that affect health

UPSTREAM
- Social Determinants: 40%
- Health Behavior: 30%
- Physical Environment: 10%
- Genes/Biology: 10%
- Clinical Care: 10%

DOWNSTREAM
OECD Health Data 2009
OECD Health Data 2009
Public Health Funding by State

State dollars dedicated to public health and federal dollars directed to states by CDC and the HRSA

Minnesota $48 = #44
Sickle Cell Disease: A Question of Equity and Quality

Lauren A. Smith, Suzette O. Oyeku, Charles Homer and Barry Zuckerman

Pediatrics 2006;117;1763-1770
<table>
<thead>
<tr>
<th>Variable</th>
<th>SCD</th>
<th>Cystic Fibrosis</th>
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<td>US prevalence</td>
<td>80,000</td>
<td>30,000</td>
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<tr>
<td>Federal support</td>
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<tr>
<td>NIH fiscal-year 2004 funding, in millions of dollars</td>
<td>90</td>
<td>128</td>
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<tr>
<td>NIH funding per person with disease, $</td>
<td>1125</td>
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<tr>
<td>No. of federal grants</td>
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<tr>
<td>No. of grants funded in 1968c</td>
<td>22</td>
<td>65</td>
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<tr>
<td>No. of grants funded in 1972, after Sickle Cell Anemia Control Act</td>
<td>215</td>
<td>80</td>
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<tr>
<td>No. of grants funded in 2004</td>
<td>331</td>
<td>459</td>
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<tr>
<td>Private philanthropic support, $</td>
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<tr>
<td>Cystic Fibrosis Foundation 2003 annual revenue</td>
<td></td>
<td>152,231,000</td>
</tr>
<tr>
<td>Sickle Cell Disease Association of America 2003 annual revenue</td>
<td>498,577</td>
<td></td>
</tr>
<tr>
<td>Revenue per person affected with disease, $</td>
<td>6</td>
<td>5074</td>
</tr>
<tr>
<td>Total NIH and private support, in millions, $</td>
<td>90.4</td>
<td>280.2</td>
</tr>
<tr>
<td>Total support per person affected with disease, $</td>
<td>1130</td>
<td>9340</td>
</tr>
</tbody>
</table>
37th National Sickle Cell Disease Scientific Meeting
Strouse et al
Sunday April 13, 2014

- Funding per patient
  - NIH: 3.8-fold higher for CF
  - Foundation: 350-fold higher for CF
  - Combined: 11-fold greater for CF

- NIH Career Development Awards
  - same

- New Drug Approval (2009-2013)
  - CF: 5
  - SCD: 0

- Publications (2005-2010)
  - 2:1 CF:SCD
Health Care Barriers

- **System**
  - insurance
  - poverty
  - geography
  - transition to adult care
  - research and support money
  - **Whiteness/racism**
- **Providers**
  - bias
  - attitudes/expectations
  - **Whiteness/racism**
- **Patients**
  - lack of knowledge
  - fear
  - trust
- **Community**
  - advocacy
  - public awareness
## US Census

- **Population**: 308,745,538
- **97.1% identify as one race**

<table>
<thead>
<tr>
<th>Race</th>
<th>2010</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>72.4%</td>
<td>75.1%</td>
</tr>
<tr>
<td>Black</td>
<td>12.6%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>4.8%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Latino</td>
<td>16.3%</td>
<td>12.5%</td>
</tr>
</tbody>
</table>
Minnesota

- Population 5,303,925
- 97.6% identify as one race

<table>
<thead>
<tr>
<th>Race</th>
<th>2010</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>85.3%</td>
<td>89.4%</td>
</tr>
<tr>
<td>Black</td>
<td>5.2%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Asian</td>
<td>4.0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Latino</td>
<td>4.7%</td>
<td>2.9%</td>
</tr>
</tbody>
</table>
2013

9.9% of RNs in the US are Black

57,639 RNs in Minnesota

2997 Black RNs in Minnesota (5.2%)
Graph A
Non-White Registered Nurses by Year of First License
Minnesota 2011-2012

*Hispanic origin is asked separately from race, so individuals identifying as Hispanic can be of any race.
Diversity in the Physician Workforce: Facts & Figures 2010
Figure 1: U.S. MD Physicians by Race and Ethnicity, 2008

- White: 75.0% (353,311)
- Asian*: 12.8% (60,090)
- Black or African American: 6.3% (29,775)
- Hispanic or Latino**: 5.5% (25,717)
- American Indian/Alaska Native***: 0.5% (2,515)

Note: The data include U.S. medical school graduates from 1978 to 2008 only. N = 471,408.
*Asian includes Chinese, Filipino, Korean, Japanese, Vietnamese, Indian/Pakistani, and Other Asian.
**Hispanic or Latino includes Mexican American, C'Vealth Puerto Rican, Mainland Puerto Rican, and Other Hispanic.
***From 1997 to 2000, the category “American Indian/Alaska Native” also included Native Hawaiian.
Prior to 1997 and since 2001, this category only includes American Indian/Alaska Native.
Figure 15: Black or African-American U.S. MD Physicians by Graduation Year and Sex, 1978 - 2008

Note: The data include U.S. medical school graduates from 1978 to 2008 only. N = 29,774.

2014: Women (675)
2014: Men (377)
<table>
<thead>
<tr>
<th>University of Minnesota</th>
<th>Total Graduates</th>
<th>Predicted black (5.2%)</th>
<th>Actual black graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>220</td>
<td>11</td>
<td>1</td>
</tr>
</tbody>
</table>

| 2014 | 5 |
Minnesota Physicians 2013

- 13,083 physicians
- 5.2% Black = 680
- Black physicians = 261
Race and ethnicity of licensed physicians in Minnesota

Race

- White: 72%
- Asian: 8%
- Black: 2%
- Multiple races: 1%
- Other: 3%
- Unknown*: 14%

Ethnicity

- Non-Hispanic: 84%
- Hispanic/Latino: 2.4%
- Unknown*: 14%

Source: 2013 MDH Physician Workforce Survey. Respondents may choose not to answer certain questions on the survey. 1,399 out of 10,809 (14 percent) did not answer the survey question about race. 1,388 (13.9 percent) of respondents did not answer the survey question about ethnicity.
Figure 20: U.S. Medical Schools Graduating 499 or More Black or African-American MD Physicians, 1978-2008

- Howard: 2,325 graduates
- Meharry: 1,907 graduates
- Illinois, University of: 780 graduates
- Wayne State: 701 graduates
- Morehouse: 599 graduates
- Temple: 581 graduates
- North Carolina: 555 graduates
- Harvard: 528 graduates
- SUNY-Downstate: 508 graduates
- Michigan, University of: 499 graduates

Figure 24: U.S. Medical Schools Graduating 4,386 or More White MD Physicians, 1978-2008

- Indiana: 7,202
- Minnesota: 5,910
- Illinois, University of: 5,856
- Wayne State: 5,692
- Jefferson: 5,363
- Ohio State: 5,175
- Georgetown: 4,706
- Wisconsin, Medical College of: 4,531
- Georgia, Medical College of: 4,491
- Kansas: 4,386

Clinical Trials

- National Institutes of Health
- Revitalization Act of 1993 signed into law
- NIH policy requiring “that women and members of minority groups and their subpopulations must be included in all NIH-funded clinical research”
Inclusion of Minorities and Women in Cancer Clinical Trials, a Decade Later: Have We Improved?

Kat Kwiatkowski, MPH¹; Kathryn Coe, PhD¹; John C. Bailar, MD²; and G. Marie Swanson, PhD, MPH¹

**TABLE 3.** Enrollment Characteristics of Studies which Included Minorities and Women

<table>
<thead>
<tr>
<th>Enrollment Characteristic</th>
<th>2001-2010</th>
<th>1990-2000</th>
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</thead>
<tbody>
<tr>
<td>Treatment trials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Articles that reported race/ethnicity</td>
<td>143 (51.6)</td>
<td>57 (35.1)</td>
</tr>
<tr>
<td>Number of participants included</td>
<td>104,337</td>
<td>45,815</td>
</tr>
<tr>
<td>when race/ethnicity information was</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>86,484 (82.9)</td>
<td>40,803 (89.0)</td>
</tr>
<tr>
<td>African American</td>
<td>6403 (6.1)</td>
<td>4811 (10.5)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2333 (2.2)</td>
<td>183 (0.4)</td>
</tr>
<tr>
<td>Asian</td>
<td>3398 (3.3)</td>
<td>18 (0.04)</td>
</tr>
<tr>
<td>American Indian</td>
<td>79 (0.1)</td>
<td>NR</td>
</tr>
<tr>
<td>Other</td>
<td>5640 (5.4)</td>
<td>NR</td>
</tr>
</tbody>
</table>
Participation in Pediatric Oncology Research Protocols: Racial/Ethnic, Language and Age-Based Disparities

Paula Aristizabal, MD, MASC, Jenelle Singer, MPH, Renee Cooper, MPH, Kristen J. Wells, PhD, MPH, Jesse Nodora, DrPH, Mehrzad Milburn, RN, BSN, CCRC, Sheila Gahagan, MD, MPH, Deborah E. Schiff, MD, and Maria E. Martinez, PhD

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Not enrolled (N = 48)</th>
<th>Enrolled (N = 206)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic White</td>
<td>11 (12%)</td>
<td>80 (88%)</td>
<td>1.00</td>
</tr>
<tr>
<td>Hispanic</td>
<td>27 (25%)</td>
<td>82 (75%)</td>
<td>0.42 * (0.19, 0.90)</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>5 (26%)</td>
<td>14 (74%)</td>
<td>0.39 (0.12, 1.28)</td>
</tr>
<tr>
<td>Black Non-Hispanic</td>
<td>2 (29%)</td>
<td>5 (71%)</td>
<td>0.34 (0.06, 1.99)</td>
</tr>
<tr>
<td>Mixed/multiple</td>
<td>3 (11%)</td>
<td>25 (89%)</td>
<td>1.15 (0.30, 4.44)</td>
</tr>
</tbody>
</table>
Medical Education

- **Who teaches us?**
  - White physicians
  - 4% faculty AA, Latino, Native American (AAMC 2009)

- **What are we taught?**
  - Downstream issues
  - The almighty p value
  - Evidence-based protocols developed by majority white researchers, using majority white patients, carried out by the majority white health care system

- **What are we not taught?**
  - Upstream issues
  - Humanism
  - Racism
Health Care Barriers

- **System**
  - insurance
  - poverty
  - geography
  - transition to adult care
  - research and support money
  - **racism**

- **Patients**
  - lack of knowledge
  - fear
  - trust

- **Community**
  - advocacy
  - public awareness

- **Providers**
  - bias
  - attitudes/expectations
“When the Bough Breaks”

Structural Racism and Health
Special Article

DIFFERING BIRTH WEIGHT AMONG INFANTS OF U.S.-BORN BLACKS, AFRICAN-BORN BLACKS, AND U.S.-BORN WHITES

RICHARD J. DAVID, M.D., AND JAMES W. COLLINS, JR., M.D., M.P.H.

(N Engl J Med 1997;337:1209-14.)
Race and Birth weight

- Adjustment for
  - age
  - education
  - marital status
  - gravidity
  - prenatal care
  - history of fetal loss
Race and Birth weight

- US-born whites
  - 3144 grams
- African-born blacks
  - 3130 grams
- US-born blacks
  - 2942 grams
Race and Birth weight

- If this were about genetics, birth weights should be better for US-born Black women compared to West African born mothers.
- The opposite is true.
- A woman’s exposure to racial discrimination, starting as a young child could adversely affect birth weight in the next generation.
10. Mortality rates* by race and ethnicity, Twin Cities 7-county region

<table>
<thead>
<tr>
<th>Race/Category</th>
<th>Mortality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian</td>
<td>814</td>
</tr>
<tr>
<td>Black, U.S.-born</td>
<td>704</td>
</tr>
<tr>
<td>Southeast Asian, Foreign-born</td>
<td>275</td>
</tr>
<tr>
<td>ALL</td>
<td>248</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>232</td>
</tr>
<tr>
<td>Black, foreign-born</td>
<td>225</td>
</tr>
<tr>
<td>Hispanic</td>
<td>213</td>
</tr>
<tr>
<td>Asian, other</td>
<td>132</td>
</tr>
</tbody>
</table>

* Age-standardized deaths per 100,000, among the population age 25-64 during the years 2005 to 2007.
Source: Minnesota Department of Health (mortality rates calculated by Wilder Research).
Health Care Barriers

- System
  - insurance
  - poverty
  - geography
  - transition to adult care
  - research and support money
  - racism
- Patients
  - lack of knowledge
  - fear
  - trust
- Community
  - advocacy
  - public awareness
- Providers
  - bias
  - attitudes/expectations
"[Harriet A. Washington] has unearthed an enormous amount of shocking information and shaped it into a riveting, carefully documented book."

—THE NEW YORK TIMES

MEDICAL APARTHEID
The Dark History of Medical Experimentation on Black Americans from Colonial Times to the Present

HARRIET A. WASHINGTON
Dying While Black
Vernellia Randall, J.D.

An indepth look at a crisis in the American healthcare system.
Health Care Barriers

- System
  - insurance
  - poverty
  - geography
  - transition to adult care
  - research and support money
- Patients
  - lack of knowledge
  - fear
  - trust
- Community
  - advocacy
  - public awareness
- Providers
  - bias
  - attitudes/expectations
FDA

- FDA approved drugs
- HIV-1981

37
FDA

- FDA approved drugs
- Sickle Cell disease – 1910
Why is this true?

- Whites
  - NHF
  - ACT UP
- Blacks
  - SCDAA
- System
- Power
- Money
Health Care Barriers

- **System**
  - insurance
  - poverty
  - geography
  - transition to adult care
  - research and support money
  - racism

- **Patients**
  - lack of knowledge
  - fear
  - trust

- **Community**
  - advocacy
  - public awareness

- **Providers**
  - bias
  - stereotyping
  - attitudes/expectations
THE EFFECT OF RACE AND SEX ON PHYSICIANS’ RECOMMENDATIONS FOR CARDIAC CATHETERIZATION

Race and sex of a patient independently influence how physicians manage chest pain.

Provider Barriers to Hydroxyurea Use in Adults with Sickle Cell Disease: A Survey of the Sickle Cell Disease Adult Provider Network

Sophie Lanzkron, MD; Carlton Haywood Jr., MA; Kathryn L. Hassell, MD; and Cynthia Rand, PhD

JOURNAL OF THE NATIONAL MEDICAL ASSOCIATION VOL. 100, NO. 8, AUGUST 2008
Unpacking Racism and its Health Consequences

April 2011

THE IMPACT OF RACISM ON CLINICIAN COGNITION, BEHAVIOR, AND CLINICAL DECISION MAKING

Michelle van Ryn et al.

Dept of Family Medicine and Community Health
University of Minnesota
Unconscious biases

- Common
- Rooted in stereotyping
  - cognitive process where we use social categories to acquire, process, and recall information about people
- Helps us organize complex information
- Heavy cognitive load
  - rely on stereotyping to process information
  - consciously reducing this is hard work
“Crisis”

- http://www.youtube.com/watch?v=FuelQDB0xXI

- CRISIS: Experiences of people with sickle cell disease
HIGHLIGHT
by Alexis A. Thompson, MD, MPH*

Sickle Cell Disease and Racism: Real or False Barriers?

“It is less useful to continue to characterize an insidious problem if these efforts do not result in the design and implementation of interventions that lead to meaningful change.”
"Unequal Treatment"

- Institute of Medicine
- March 2002
- Findings
  - Racial disparities exist and are unacceptable
  - These exist within broader social inequalities
  - Multifactorial
  - Bias, stereotyping and prejudice on the part of health care providers contribute to racial and ethnic disparities
  - Small number of patients refuse therapy, this does not fully explain disparities
IOM Recommendations

- Raise awareness of disparities
- Legal, regulatory and policy changes
- Health systems changes
- Help patients navigate the system
- Cross-cultural education for providers
- Collect data on race, SES, language
- Research sources of disparities and interventions
Provider Training

- Diversity Training
  - Awareness
  - Appreciation

- Cultural Competency
  - Cross-cultural communication
  - Information gathering
  - Skills training
Provider Training

- Social Justice
  - Oppression
  - Power
  - Societal resources
  - Structural barriers
  - Race/racism/whiteness
Provider Trainings

- Address the definition of race/racism and history of the social construction of race
- Differentiate among diversity, cultural competency, and social justice
- Explore our current health care system (racial make-up of providers, how insurance became tied to employment, what we’re taught/not taught in school, evidence-based medicine, racial disparities)
- Examine racism/whiteness in our society, including examples of racism/whiteness in medicine
- Examine how race affects each of the Institute of Medicine's six measures of quality care, and provide trainees tools for understanding these effects
- Introduce critical thinking tools for improving medical providers’ comfort and skills in caring for patients of color
Pilot Training

- N=19, Family Medicine residents
- 5 M, 14 F
- 10 white, 7 Asian, 2 black
- Mean age 31.9 years
  - M= 32.8 yrs
  - F= 31.6 yrs
Assessment

1. My awareness level of issues of racism in the U.S. is:

2. The impact of racism on health care delivery is:

3. I am as effective at caring for white patients as I am at caring for patients of color.

4. I feel well equipped to care for patients of color.

5. The impact of racism on my ability to deliver quality care is:
## Results

<table>
<thead>
<tr>
<th>Statement</th>
<th>Pre</th>
<th>Post</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Awareness of racism</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>3.40</td>
<td>3.89</td>
<td>0.036</td>
</tr>
<tr>
<td>WHITE</td>
<td>3.40</td>
<td>3.45</td>
<td>0.422</td>
</tr>
<tr>
<td>POC</td>
<td>3.40</td>
<td>4.50</td>
<td>0.009</td>
</tr>
<tr>
<td><strong>Impact of racism on health care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>3.89</td>
<td>4.52</td>
<td>0.0004</td>
</tr>
<tr>
<td>WHITE</td>
<td>4.00</td>
<td>4.54</td>
<td>0.0108</td>
</tr>
<tr>
<td>POC</td>
<td>3.78</td>
<td>4.50</td>
<td>0.013</td>
</tr>
<tr>
<td><strong>Effective caring for white patients as POC</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ALL</td>
<td>4.10</td>
<td>3.10</td>
<td>0.0018</td>
</tr>
<tr>
<td>WHITE</td>
<td>4.00</td>
<td>2.55</td>
<td>0.0016</td>
</tr>
<tr>
<td>POC</td>
<td>4.22</td>
<td>3.87</td>
<td>0.1785</td>
</tr>
<tr>
<td><strong>Well-equipped to care for POC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>3.84</td>
<td>3.36</td>
<td>0.037</td>
</tr>
<tr>
<td>WHITE</td>
<td>3.70</td>
<td>3.00</td>
<td>0.039</td>
</tr>
<tr>
<td>POC</td>
<td>4.00</td>
<td>3.87</td>
<td>0.329</td>
</tr>
<tr>
<td><strong>Impact of racism on delivering quality care</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>2.58</td>
<td>3.58</td>
<td>0.0046</td>
</tr>
<tr>
<td>WHITE</td>
<td>2.70</td>
<td>3.82</td>
<td>0.0055</td>
</tr>
<tr>
<td>POC</td>
<td>2.44</td>
<td>3.25</td>
<td>0.1206</td>
</tr>
</tbody>
</table>

POC = person of color
Discussion

- Awareness of racism and its impact on delivering quality care increased significantly in all participants.
- Deconstructed white providers’ previously held beliefs about race and racism.
  - first step in working on our own racism and unconscious biases.
- This was a small cohort.
- Further study is warranted to define and refine the best training methods.
<table>
<thead>
<tr>
<th>Pattern</th>
<th>GENDER</th>
<th>CLASS</th>
<th>AGE</th>
<th>N</th>
<th>S</th>
<th>Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>male</td>
<td>first</td>
<td>adult</td>
<td>175</td>
<td>57</td>
<td>32.5</td>
</tr>
<tr>
<td>2</td>
<td>male</td>
<td>first</td>
<td>child</td>
<td>5</td>
<td>5</td>
<td>100.0</td>
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<tr>
<td>3</td>
<td>male</td>
<td>second</td>
<td>adult</td>
<td>168</td>
<td>14</td>
<td>8.3</td>
</tr>
<tr>
<td>4</td>
<td>male</td>
<td>second</td>
<td>child</td>
<td>11</td>
<td>11</td>
<td>100.0</td>
</tr>
<tr>
<td>5</td>
<td>male</td>
<td>third</td>
<td>adult</td>
<td>462</td>
<td>75</td>
<td>16.2</td>
</tr>
<tr>
<td>6</td>
<td>male</td>
<td>third</td>
<td>child</td>
<td>48</td>
<td>13</td>
<td>27.1</td>
</tr>
<tr>
<td>7</td>
<td>male</td>
<td>crew</td>
<td>adult</td>
<td>862</td>
<td>192</td>
<td>22.3</td>
</tr>
<tr>
<td>8</td>
<td>female</td>
<td>first</td>
<td>adult</td>
<td>144</td>
<td>140</td>
<td>97.2</td>
</tr>
<tr>
<td>9</td>
<td>female</td>
<td>first</td>
<td>child</td>
<td>1</td>
<td>1</td>
<td>100.0</td>
</tr>
<tr>
<td>10</td>
<td>female</td>
<td>second</td>
<td>adult</td>
<td>93</td>
<td>80</td>
<td>86.0</td>
</tr>
<tr>
<td>11</td>
<td>female</td>
<td>second</td>
<td>child</td>
<td>13</td>
<td>13</td>
<td>100.0</td>
</tr>
<tr>
<td>12</td>
<td>female</td>
<td>third</td>
<td>adult</td>
<td>165</td>
<td>76</td>
<td>46.1</td>
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<tr>
<td>13</td>
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<td>third</td>
<td>child</td>
<td>31</td>
<td>14</td>
<td>45.2</td>
</tr>
<tr>
<td>14</td>
<td>female</td>
<td>crew</td>
<td>adult</td>
<td>23</td>
<td>20</td>
<td>87.0</td>
</tr>
</tbody>
</table>

Total: 2,201, 711, 32.2
“Of all forms of inequity, injustice in healthcare is the most shocking and inhumane.”

Martin Luther King, Jr.
National Convention of the Medical Committee for Human Rights, Chicago-1966
“Not everything that is faced can be changed. But nothing can be changed until it is faced”

James Arthur Baldwin - novelist, essayist, playwright, poet
(August 2, 1924 – December 1, 1987)