Three hundred years ago the majority of us of African descent would have been slaves. Now we have CEOs of major fortune 500 companies, we have had tremendous success in sports and entertainment and who would have thought we would have an African American living the White House?

However, this progress could make us complacent or worse blind to the needs that still exist. In spite of the victories many have not benefited. The disparity in health outcomes emphasizes this point. “That all is not what it seems.”

— Dr. Marcus L Williams, President of the ABC,
Remarks at the Presidential Address 03/13/2010
CHD in Race & Ethnicity
“Of all the forms of inequality, injustice in health care is the most inhumane.”

— Martin Luther King, Jr.
Health Disparities

**Disparities in health**, which refer to differences in health outcomes and status; and

**Disparities in health care**, which refer to differences in the preventative, diagnostic and treatment services offered to people with similar health conditions, as well as, health care access.
Leading Causes of Death by Race

White
- CVD: 36.2%
- Cancer: 23.1%

Hispanic
- CVD: 29.6%
- Cancer: 19.7%

Leading Causes of Death by Race

White
- CVD: 36.2%
- Cancer: 23.1%

Hispanic
- CVD: 29.6%
- Cancer: 19.7%

Black
- CVD: 33.6%
- Cancer: 21.6%

Leading Causes of Death by Race

White
- CVD: 36.2%
- Cancer: 23.1%

Black
- CVD: 33.6%
- Cancer: 21.6%

Hispanic
- CVD: 29.6%
- Cancer: 19.7%

Asian
- CVD: 34.8%
- Cancer: 26.4%


Sunday, March 13, 2011
Source: NCHS and NHLBI.
LEADING CAUSE OF DEATH FOR

A: Total CVD
B: Cancer
C: Accidents
D: COPD
E: Pneum/Influenza

White bar = males
Yellow bar = women

Fuster V. Circulation. 1999;99:1132-1137
Estimated Disease Costs

Estimated Total Direct and Indirect Costs (in billions of US dollars)

- Total CVD: 431.8
- Heart Diseases: 277.1
- Stroke: 62.7
- Hypertensive Diseases: 66.4000
- Heart Failure: 33.2
- Cancer (2004)*: 190
- HIV (1999)†: 29

*Estimated cost of all cancers was $190 billion in 2004. †Estimated costs of HIV infections was $28.9 billion in 1999.

Leading Causes of Death for African American Males and Females

United States: 2001

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Total CVD</td>
<td>33.5</td>
</tr>
<tr>
<td>B</td>
<td>Cancer</td>
<td>5.9</td>
</tr>
<tr>
<td>C</td>
<td>Accidents</td>
<td>4.6</td>
</tr>
<tr>
<td>D</td>
<td>Assault (Homicide)</td>
<td>20.8</td>
</tr>
<tr>
<td>E</td>
<td>HIV (AIDS)</td>
<td>20.8</td>
</tr>
<tr>
<td>F</td>
<td>Diabetes Mellitus</td>
<td>2.9</td>
</tr>
<tr>
<td>G</td>
<td>Nephritis, Nephrotic Syndrome, and Nephrosis</td>
<td>2.8</td>
</tr>
</tbody>
</table>

CVD=cardiovascular disease.
Age-adjusted death rates for CHD, stroke, lung and breast for white and black females (United States: 2006). Source: NCHS.
CVD Claims 500,000 Women’s Lives Every Year

- CVD — kills more women than the next 7 causes of death combined
- Breast cancer — kills 1 in 30 women
- CVD — kills 1 of every 2.5 women
Prevalence of CHD and Stroke in Adults ≥20 Years by Age and Sex: NHANES: 1999-2004


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CHD in African Americans

CHD death rates per 100,000 persons among African Americans and Whites
CHD in African Americans

CHD death rates per 100,000 persons among African Americans and Whites

Source: NHANES 2000
Incidence Rate of First Myocardial Infarction Increases With Age and Is Most Prevalent in Black Men*

*Atherosclerosis Risk in Communities (ARIC) surveillance study, 1987-2000.

Stroke Mortality in the U.S.

Age-adjusted rate per 100,000 population

Source: AHA Statistical Update (2010)

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<table>
<thead>
<tr>
<th>Nonmodifiable</th>
<th>Modifiable</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Male sex</td>
<td>• Hypertension</td>
</tr>
<tr>
<td>• Age</td>
<td>• Smoking</td>
</tr>
<tr>
<td>• Family history of premature CVD</td>
<td>• Overweight/obesity</td>
</tr>
<tr>
<td></td>
<td>• Diabetes mellitus</td>
</tr>
<tr>
<td></td>
<td>• Lipids</td>
</tr>
</tbody>
</table>

HBP in African Americans

Prevalence of HBP is among the highest in the world.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>24.3%</td>
<td>28.1%</td>
<td>3.8%</td>
</tr>
<tr>
<td>African-American</td>
<td>35.8%</td>
<td>41.4%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

Hypertension Death Rates By Race, 2006

Age-adjusted Death Rate per 100K

Native Americans
Asians
Hispanics
Blacks
Non-hispanic White

INCIDENT OT TYPE II DM

African Americans Vs. Whites

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th></th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AA</td>
<td>W</td>
<td>AA</td>
</tr>
<tr>
<td>N</td>
<td>1670</td>
<td>5093</td>
<td>976</td>
</tr>
<tr>
<td>Incident</td>
<td>298</td>
<td>425</td>
<td>161</td>
</tr>
<tr>
<td>Incident/1000</td>
<td>25.1</td>
<td>10.4</td>
<td>23.4</td>
</tr>
</tbody>
</table>

- Absolute risk for AA Vs W > for women 2.41 and men at 1.47.
- 47% risk attributed to adiposity for AA women
- Hypertension more prevalent in AA

ARIC TRIAL: JAMA 2000;283:2253-2259
# Prevalence of Diabetes by Race/Ethnicity, Michigan & U.S.

<table>
<thead>
<tr>
<th>Race/Ancestry</th>
<th>US 2005</th>
<th>MI 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>6.8%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Black</td>
<td>11.4%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6.6%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Other</td>
<td>7.2%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Multi-Racial</td>
<td>8.3%</td>
<td>9.6%</td>
</tr>
</tbody>
</table>

Impact of Modifiable CV Risk Factors

Tobacco

Smoking increases risk of CHD death by 2 to 3X

Overweight/Obesity

The odds of stroke death are 4.4x higher for people who are obese

Nutrition

High salt, low omega-3, high trans fats are the major dietary risk factors

Source: AHA Statistical Update (2010)
Prevalence of current smoking for Adults age 18 and older by race/ethnicity and sex (NHIS:2007).
Source: MMWR. 2008;57:1221-26. NH – non-Hispanic
Changing Pattern of Obesity


Note: Obesity is defined as a BMI of 30.0 or higher.
Youth Obesity Patterns by Race

Figure 16-3. Total U.S. Food Expenditures Away from Home and At Home, 1977 and 2007. Source: United States Department of Agriculture Economic Research Service

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Prevalence of students in grades 9-12 who met currently recommended levels of physical activity during the past 7 days by race/ethnicity and sex


Note: “Currently recommended levels” is defined as activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes/day on 5 or more of the 7 days preceding the survey.
Disparities in CVD Treatment

The American College of Cardiology Foundation and Kaiser Family Foundation concluded that racial/ethnic differences in cardiovascular procedures persist even after adjusting for potentially confounding factors.

Web-based Survey of Cardiologists: Do Clinically Similar Patients Receive Different Care Based on Race/Ethnicity?

Cardiologists Responding “Very/Somewhat Likely”

- Healthcare in general: 30%
- Cardiovascular care: 30%
- Your hospital/clinic: 20%
- Patients you treat: 10%

Differences and Disparities in Health Care Quality

- Clinical Appropriateness and Need
- Patient Preferences
- The Operation of Healthcare Systems and Legal and Regulatory Climate
- Discrimination: Biases, Stereotyping, and Uncertainty

Quality of Health Care

Non-Minority

Minority

Difference

Disparity

CREDO 2010
Disparities In Resources

- **Manpower shortage** for cardiologists in certain ethnic groups
- Lost physician revenue means **lost patient access**
- Disproportionate **uninsured and underinsured**
- Centralizing health care in hospitals **threatens access**

continued
Lack of excellent/adequate research on certain populations

Divergent compliance with evidence-based clinical guidelines

Lack of empowerment in the community

Low priority for local, state and federal governments
Does Race Matter?

- What is the health care experience for people based on skin color?
- Shades and Shapes do matter in the US
  - The darker the skin color
  - The less European the facial and hair features
Today, 1 in 3 of All Americans are...

Minorities
35%

White
65%

Source: 2008 US Census Projections
Today, 1 in 3 of All Americans are...

minorities

Minorities 35%

White 65%

Source: 2008 US Census Projections
By 2020

Source: 2008 US Census Projections

Minorities 40%

White 60%
And in 2050

Minorities 54%

White 46%

Source: 2008 US Census Projections
The Changing Face of America

Percentage of Population by Race/Ethnicity: 2000 and 2025

*Indicates non-Hispanic

US Census Bureau, 2000

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Our **Mission** is to champion the elimination of cardiovascular disparities through **Education, Research and Advocacy**

### Education
- CME programs
  - National Conferences
  - Regional Symposia
  - Online/Enduring
- Patient Education Programs
- Fellowships
- Mentoring

### Research
- Clinical Trials
  - Steering Committee
  - Investigator & Patient Recruitment
  - Information Dissemination
- Basic Research
- Quality & Performance Improvement

### Advocacy
- Outreach
  - eNewsletter
  - Website
  - Social Media
- Community Programs
- Health Policy
- Membership
- Collaborations
Goal: To reduce disparities in CV care and outcomes **20%** by the year **2020**
ABC 2020 Targets for 20% Reduction

- Mortality from CAD
- Mortality from Stroke
- Patient behavior/outcomes
  - Smoking cessation
  - BMI < 25 Kg/m2
  - Physical activity as exercise
  - Dietary changes
  - Total Cholesterol < 200 mg/dL
  - Blood Pressure < 140/90 mmHg
  - Glucose < 100 mg/dL
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ABC 2020 Target Population
ABC 2020 Target Population

- AA
- Women
- Latino

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“Diversity makes for a rich tapestry, and we must understand that all the threads of the tapestry are equal in value no matter what their color.”

–Maya Angelou
Questions?

Marcus L. Williams, MD, FACC
President, Association of Black Cardiologists, Inc.

mlwson99@verizon.net

www.abcardio.org

Association of Black Cardiologists, Inc.
Saving the Hearts of a Diverse America
Contributing Factors

- Poverty
- Education Level
- Cultural Attitudes, Norms, and Values
- Minority Mistrust of Healthcare System
- Language
Contributing Factors...

- Provider Cultural Competency
  “Health is really a social transaction that has a scientific base. You need to have doctors who have the basic knowledge, but that alone is not enough. You have to have a physician that is able to communicate in a way a patient understands.”

  Dr. Louis Sullivan, former U.S. Secretary of Health and Human Services

- Stereotypes held by Healthcare Providers

- Access to Health Care
ACCESS to Health Care

- 45.8 million Americans (15.7% of the total population) lacked health insurance in 2005.

- Minorities are more likely than whites to be uninsured
  - 32.7% of Hispanics are uninsured
  - 29.9% of Native Americans and Alaska Natives are uninsured
  - 19.6% of African-Americans are uninsured
  - 17.9% of Asians are uninsured
  - 11.3% of white non-Hispanics are uninsured

- 7.8% of Michigan residents, or almost 800,000 people are uninsured at any one time.
The ABC: Catalyst at the Center

Stakeholders

ABC

Spoke of Influence
ABC Member

Stakeholders

Stakeholders

Stakeholders

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Specific Groups Recommendations

**Schools (K-12):** Add prevention messages to Comprehensive School Health Education Curriculum. Urge the adoption of policies on healthy foods and beverages.

- Culturally-Sensitive Health Toolkit

**Higher Education:** Increase number of ethnically diverse/culturally competent providers

- Mentoring Program
- Fellowships
- Career Development
Specific Groups Recommendations...

**Healthcare Organizations:** Partner with professional organizations to improve awareness, knowledge and skills among health care providers.

**Community Organizations:** Promote messages and use of lay health workers among faith-based and other community organizations.

**State Government:** Target funding to reduce health disparities
  - Implementation of Health Reform in High-Risk Communities

**Media’s Role:** Implement public awareness campaign of health disparities.
General Recommendations

- New knowledge about the determinants of disease
  - Outcomes Studies in High-Risk Populations
  - Guideline

- Develop infrastructure capacity of community-based organizations

- Programs must emphasize behavioral risk-reduction and other prevention strategies

- Communities must assist at-risk individuals in accessing programs designed to diagnose and treat conditions early

- Greater role of local leaders including faith-based and fraternal organizations

- Community level interventions to promote normative change

- Evidence-based strategies
General Recommendations...

- Public Health safety net
- Integration of healthcare services, one stop shopping
- Development of comprehensive community health centers
- Comprehensive health screening programs for communities of color
- Culturally and gender appropriate skills-building workshops
- Mobile Outreach
Eliminating Disparities

“We cannot become what we need to be by remaining what we are”

Max Depree


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The Impact of Cardiovascular Disease

The Impact of Cardiovascular Disease

- 1.5 million heart attacks per year, 100,000 are AA (1999)\(^1\)

The Impact of Cardiovascular Disease

- 1.5 million heart attacks per year, 100,000 are AA (1999)\(^1\)
- 159,877 fatal strokes (1997)\(^2\)

The Impact of Cardiovascular Disease

- 1.5 million heart attacks per year, 100,000 are AA (1999)\textsuperscript{1}
- 159,877 fatal strokes (1997)\textsuperscript{2}
- 726,974 coronary deaths (1997)\textsuperscript{2}


\textsuperscript{2} National Center for Health Statistics. Available at: http://www.cdc.gov/nchs/default.htm

Sunday, March 13, 2011
The Impact of Cardiovascular Disease

- 1.5 million heart attacks per year, 100,000 are AA (1999)\(^1\)
- 159,877 fatal strokes (1997)\(^2\)
- 726,974 coronary deaths (1997)\(^2\)
- 57,793 deaths due to end-stage renal disease (1997)\(^1\)

CHD DEATHS IN THE USA

DEATHS (No.)

DEATHS

DEATHS

<35 35-44 45-54 55-64 65-74 75-84 >84

Age at Death

1973 1993

Fuster V. Circulation. 1999;99:1132-1137

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Heath Care Disparities

- AA are 3 times more likely to be operated on by “high risk” surgeon
- Over 50% of the Hispanic elderly are cared for by 5% of American hospitals
- Some American Indian tribes have over 50% occurrence of diabetes
- Death rate for heart disease was 40% higher in poor men compared to wealthier ones

Data from AHA