Patient-Centered Clinical Care for African Americans

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Why is Patient-Centered Care for African Americans Relevant?

1. Ohio Demographics: 13% is Deceptive
2. Clinical Outcomes: The Worst
3. Approaches to Improved Care: Many Opportunities
   a) Importance of Trust
   b) Differences that Impact Quality Outcomes
   c) Evidence-Based Care
   d) Remove protocols that worsen disparities
Ohio Demographics: 13% is Deceptive
Ohio Demographics (2016)

- White: 81%
- African American: 13%
- Hispanic Latino: 4%
- Asian Pacific Islanders: 0%
- American Indian/Alaskan: 0%
Ohioans with Medicare

- White: 83
- African American: 13
- Hispanic Latino: 6
Ohioans with Medicaid

- 67% White
- 3% African American
- 1% Hispanic Latino
- 1% Other
<table>
<thead>
<tr>
<th>Location</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio</td>
<td>67%</td>
<td>29%</td>
<td>3%</td>
<td>1%</td>
<td>100%</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>54%</td>
<td>12%</td>
<td>16%</td>
<td>18%</td>
<td>100%</td>
</tr>
<tr>
<td>Oregon</td>
<td>63%</td>
<td>4%</td>
<td>21%</td>
<td>12%</td>
<td>100%</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>56%</td>
<td>25%</td>
<td>13%</td>
<td>6%</td>
<td>100%</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>34%</td>
<td>7%</td>
<td>16%</td>
<td>43%</td>
<td>100%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>41%</td>
<td>46%</td>
<td>6%</td>
<td>7%</td>
<td>100%</td>
</tr>
<tr>
<td>South Dakota</td>
<td>55%</td>
<td>3%</td>
<td>4%</td>
<td>38%</td>
<td>100%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>60%</td>
<td>29%</td>
<td>5%</td>
<td>5%</td>
<td>100%</td>
</tr>
<tr>
<td>Texas</td>
<td>21%</td>
<td>16%</td>
<td>50%</td>
<td>13%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Ohio Overall Budget

- Because of poor health outcomes of chronic diseases, there is a disproportional number of African Americans on Medicaid.
- Medicaid represents a significant part of Ohio’s overall budget with the African American burden comprising almost one third.
Figure 5

Major components of state budget expenditures, FY 2016-17

- K-12 education: 42%
- Medicaid: 21%
- Higher education: 10%
- Other HHS: 8%
- Cash Assistance: 1%
- Corrections: 7%
- Local Government Funds: 3%
- Other: 8%

Source: Policy Matters Ohio, based on LSC historical expenditure – Table 2 (State source GRF, Lottery Profits Education Fund (LPEF) and Local Government Funds (LGF)).
### Top Populated States with African Americans

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Black Population</th>
<th>Percent Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>New York</td>
<td>3,792,045</td>
<td>19%</td>
</tr>
<tr>
<td>2</td>
<td>Texas</td>
<td>3,755,316</td>
<td>14%</td>
</tr>
<tr>
<td>3</td>
<td>Florida</td>
<td>3,717,392</td>
<td>18%</td>
</tr>
<tr>
<td>4</td>
<td>Georgia</td>
<td>3,430,662</td>
<td>33%</td>
</tr>
<tr>
<td>5</td>
<td>California</td>
<td>2,994,626</td>
<td>8%</td>
</tr>
<tr>
<td>6</td>
<td>North Carolina</td>
<td>2,383,097</td>
<td>23%</td>
</tr>
<tr>
<td>7</td>
<td>Illinois</td>
<td>2,002,304</td>
<td>16%</td>
</tr>
<tr>
<td>8</td>
<td>Maryland</td>
<td>1,945,309</td>
<td>32%</td>
</tr>
<tr>
<td>9</td>
<td>Virginia</td>
<td>1,789,312</td>
<td>21%</td>
</tr>
<tr>
<td>10</td>
<td>Pennsylvania</td>
<td>1,667,095</td>
<td>13%</td>
</tr>
<tr>
<td>11</td>
<td>Ohio</td>
<td>1,650,075</td>
<td>14%</td>
</tr>
</tbody>
</table>
Race and Ethnicity

Percentage of the total population.

Scope: population of Ohio and Cleveland

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Cleveland</th>
<th>Ohio</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td></td>
<td>34.3%</td>
<td>134k</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.1%</td>
<td></td>
<td>39.3k</td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td>50.8%</td>
<td>198k</td>
</tr>
<tr>
<td>Asian</td>
<td>2.0%</td>
<td></td>
<td>7,759</td>
</tr>
<tr>
<td>Mixed</td>
<td>2.4%</td>
<td></td>
<td>9,310</td>
</tr>
<tr>
<td>Other</td>
<td>0.4%</td>
<td></td>
<td>1,508</td>
</tr>
</tbody>
</table>

Note: Count indicates the number of members in ethno-racial group

1: non-Hispanic
2: excluding black and Asian Hispanics
Race and Ethnicity

Percentage of the total population.

Scope: population of Ohio and Cincinnati

- **White**
  - Count: 146k
  - Percentage: 48.8%

- **Hispanic**
  - Count: 8,765
  - Percentage: 2.9%

- **Black**
  - Count: 128k
  - Percentage: 43.1%

- **Asian**
  - Count: 5,359
  - Percentage: 1.8%

- **Mixed**
  - Count: 8,489
  - Percentage: 2.8%

- **Other**
  - Count: 1,544
  - Percentage: 0.5%

Note: Counts are the number of members in each ethno-racial group.

1 non-Hispanic
2 excluding black and Asian Hispanics
Columbus, Ohio

Race and Ethnicity

Percentage of the total population.

Scope: population of Ohio and Columbus

<table>
<thead>
<tr>
<th></th>
<th>Columbus</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td></td>
<td>57.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>5.4%</td>
<td>44.8k</td>
</tr>
<tr>
<td>Black</td>
<td>28.0%</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>4.9%</td>
<td>41.2k</td>
</tr>
<tr>
<td>Mixed</td>
<td>3.7%</td>
<td>31.3k</td>
</tr>
<tr>
<td>Other</td>
<td>0.5%</td>
<td>4,267</td>
</tr>
</tbody>
</table>

Count: number of members in ethno-racial group

1 non-Hispanic  2 excluding black and Asian Hispanics
Dayton, Ohio

Race and Ethnicity

Percentage of the total population.

Scope: population of Ohio and Dayton

<table>
<thead>
<tr>
<th>Race</th>
<th>Dayton</th>
<th>Ohio</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>52.1%</td>
<td>73.5k</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>3.6%</td>
<td>5,044</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>39.8%</td>
<td>56.1k</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>1.1%</td>
<td>1,484</td>
<td></td>
</tr>
<tr>
<td>Mixed</td>
<td>3.1%</td>
<td>4,388</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0.4%</td>
<td>604</td>
<td></td>
</tr>
</tbody>
</table>

Count: number of members in ethno-racial group

1 non-Hispanic  2 excluding black and Asian Hispanics
Toledo, Ohio

Race and Ethnicity

Percentage of the total population.

Scope: population of Ohio and Toledo

<table>
<thead>
<tr>
<th>Race</th>
<th>Toledo</th>
<th>Ohio</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td></td>
<td></td>
<td>60.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7.7%</td>
<td></td>
<td>21.7k</td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td>27.2%</td>
</tr>
<tr>
<td>Asian</td>
<td>1.4%</td>
<td></td>
<td>3.821</td>
</tr>
<tr>
<td>Mixed</td>
<td>3.3%</td>
<td></td>
<td>9.295</td>
</tr>
<tr>
<td>Other</td>
<td>0.4%</td>
<td></td>
<td>1.219</td>
</tr>
</tbody>
</table>

Count: number of members in ethno-racial group

1 non-Hispanic
2 excluding black and Asian Hispanics
Youngstown, Ohio

Race and Ethnicity

Percentage of the total population.

Scope: population of Ohio and Youngstown

- White: 42.4% (Youngstown: 27.6k, Ohio: 27.6k)
- Hispanic: 9.2% (Youngstown: 6,011, Ohio: 6,011)
- Black: 43.7% (Youngstown: 28.4k, Ohio: 28.4k)
- Asian: 0.5% (Youngstown: 337, Ohio: 337)
- Mixed: 3.8% (Youngstown: 2,473, Ohio: 2,473)
- Other: 0.4% (Youngstown: 287, Ohio: 287)

Count: number of members in ethno-racial group

1 non-Hispanic  2 excluding black and Asian Hispanics
African Americans in Ohio
13% Population is Deceiving

- Because of population distributions and an increased burden of chronic diseases, providers in Ohio urban areas see 40 to 50 percent of their patient population as African American.
- Providers in rural areas see comparatively few.
- Ohio Medicaid spending is almost at 30%
Endeavors to improve the clinical care of African Americans can be focused and effective.
Clinical Outcomes: The Worst
Thought Activity: Assign the racial/ethnic group

- African Americans
- Asian/Pacific Islander Americans
- White Americans
- Hispanic/Latino Americans
United States Life Expectancy in Years by Race (2016)

- African Americans: 74.8
- White Americans: 78.5
- Hispanic/Latino Americans: 81.8
- Asian/Pacific Islander Americans: 86.5

National Vital Statistics Report, Vol 67, No. 5, July 26, 2018
CDC FastStats Life Expectancy
Mortality Rate

![Bar chart showing mortality rates by race/ethnicity and gender.](chart.png)
Mortality Rate
Figure 3. Contribution of the leading causes of death to the difference in life expectancy between black and white persons: United States, 2010

African American Clinical Care Outcomes

- Worst death from Cardiovascular disease outcomes:
  - 321 per 100,000 African American
  - 245 per 100,000 White American
  - 188 per 100,000 Hispanic Latino
  - 178 per 100,000 Native American
  - 137 per 100,000 Asian Pacific Islanders
African American Clinical Care Outcomes

- Worst death from Diabetes outcomes:
  - 50 per 100,000 African American
  - 45 per 100,000 Native American
  - 36 per 100,000 Hispanic Latino
  - 22 per 100,000 White American
  - 17 per 100,000 Asian Pacific Islanders
African American Clinical Care Outcomes in Cancer

**Worst outcomes in:**
- Lung cancer
- Breast cancer
- Ovarian cancer
- Cervical cancer
- Colon cancer
- Prostate cancer
- Pancreatic cancer
- Liver cancer
- Thyroid cancer
- Head & neck cancers
Age-Adjusted Death Rates for Top Five Causes of Cancer Death (CDC)
Approaches to Improved Care: Many Opportunities
Patient-Centered Clinical Care

- Improve patient trust in providers/medical system.
- Gain better knowledge of genetic & epigenetic risks.
- Better implementation of evidenced-based care differences.
Patient Centered Clinical Care

- Establish Trust
- Genetic & Epigenetic Difference Awareness
- Evidence-Based Care
Low Trust Leads to Poor Compliance
“Improving medication adherence may have a greater influence on the health of our population than in the discovery of any new therapy. Patients are non-adherent to their medicine 50% of the time.”
“A review of the literature highlights critical predictors of adherence including trust, communication and empathy”

“Multifactorial solutions to improve medication adherence include efforts to improve patients’ understanding of medication benefits, access, and trust in their provider and health system”
Medication Adherence: Truth and Consequences

Marie T. Brown, MD*, Jennifer Bussell, MD, Suparna Dutta, MD, MPH†, Katherine Davis, RN, BSN‡, Shelby Strong, APN, MSN§, Suja Mathew, MD

[Bar chart showing cost implications of adherence vs. non-adherence to medications, with categories for Heart Failure, Hypertension, and Diabetes.]
C. H. Halbert published a study in JAMA in 2006 looking at racial differences in trust in healthcare providers.

Her study of almost 1000 African Americans compared to over 500 European Americans found that "compared with Whites, African Americans were most likely to report low trust in health care providers."

Of African Americans, 44.7% reported low trust compared with 33.5% of whites. The quality of interactions with health care providers was significantly lower among African Americans with low trust compared with those with high trust.

L. E. Boulware, MD, in addition to confirming much lower levels of trust in African American patients, also found **elevated concerns about personal privacy and the potential for harmful experimentation.**
Tuskegee Syphilis Study

- 1932 to 1972
- The U.S. Public Health Service studying the natural progression of untreated syphilis in rural African-American men in Alabama under the guise of receiving free health care from the United States government.
- 600 men total, 399 with syphilis and 201 without.
COLORED PEOPLE
Do You Have Bad Blood?

Free Blood Tests
Free Treatment
By
County Health Department
and Government Doctors

You May Feel Well And Still Have
Bad Blood

Come And Bring All
Your Family

Every Week at the Same Time

FRIDAY
1942
Syphilis Victims in U.S. Study Went Untreated for 40 Years

By JEAN HELLER
The Associated Press

WASHINGTON, July 25—For 40 years the United States Public Health Service has conducted a study in which human beings with syphilis, who were induced to serve as guinea pigs, have gone without medical treatment for the disease and a few have died of its late effects, even though an effective therapy was eventually discovered.

The study was conducted to determine from autopsies what the disease does to the human body.

Officials of the health service who initiated the experiment have long since retired. Current officials, who say they have serious doubts about the morality of the study, also say that it is too late to treat the syphilis in any surviving participants.

Doctors in the service say they are now rendering whatever other medical services they can give to the survivors while the study of the disease’s effects continues.

Dr. Merlin K. DuVal, Assistant Secretary of Health, Education and Welfare for Health and Scientific Affairs, expressed shock on learning of the study. He said that he was making an immediate investigation.

The experiment, called the Tuskegee Study, began in 1932 with about 600 black men,
The victims of the study, all African American, included numerous men who died of syphilis, 40 wives who contracted the disease, and 19 children born with congenital syphilis.
Johns Hopkins looked at awareness of the Tuskegee Syphilis Study and found:

- **81 percent** of African Americans were aware of the study and outcomes.
- **28 percent** of whites had any knowledge of the study.

J. Marion Sims, MD
1813 - 1883

photographed by Jim.henderson, Public Domain,
https://commons.wikimedia.org/w/index.php?curid=4209143
The ‘Father of Modern Gynecology’ Performed Shocking Experiments on Slaves

He was a medical trailblazer, but at what cost?

BRYNN HOLLAND
A surgeon experimented on slave women without anesthesia. Now his statues are under attack.

HEALTH

The Surgeon Who Experimented on Slaves

Fellow doctors have been some of the most prominent defenders of J. Marion Sims, the controversial “father of gynecology.”

SARAH ZHANG  APRIL 18, 2018

The ‘Father of Modern Gynecology’ Performed Shocking Experiments on Slaves

BRYNN HOLLAND
Grave Robbing, Black Cemeteries, and the American Medical School

In the 19th century, students at American medical schools stole the corpses of recently-buried African Americans to be used for dissection.
How Grave Robbers And Medical Students Helped Dehumanize 19th Century Blacks And The Poor

Kristina Killgrove  Senior Contributor  
Science
Archaeologist, Writer, Scientist

Evidence of craniotomy at the 19th century cemetery of the Erie County Poorhouse. (Photo used with kind permission of Ken Nystrøm.)
Meet Grandison Harris, the Grave Robber Enslaved (and then Employed) By the Georgia Medical College

For 50 years, doctors-in-training learned anatomy from cadavers dug up by a former slave
Landmark transplant in 1960s Virginia performed with heart stolen from a Black man

Mindy Weisberger · 8/11/2020

© Provided by Live Science · Bruce Tucker was brought to the Medical College of Virginia Hospital on May 24, 1968, after falling and suffering a skull fracture.
Trust Issues are based on a lived history.
AMA apologizes for racist past

By Jeff Kunerth, Sentinel Staff Writer
ORLANDO SENTINEL

AMA Apologizes for Past Racial Discrimination

AMA apologizes for past inequality against black doctors

Black physician leaders welcome the apology but call for more efforts to diversify the physician work force and reduce racial health disparities.

By — Posted July 28, 2008
Distrust, Race, and Research

Giselle Corbie-Smith, MD, MSc; Stephen B. Thomas, PhD; Diane Marie M. St. George, PhD

Distrust of Health System Keeps Black Males From Getting Care

Those 'highly distrustful' were two to three times as likely to delay routine check-ups, study finds

Minorities Distrust Medical System More

Study finds levels of skepticism correlate with lower cancer screening rates

The lasting harm of medical mistrust

By ARTHUR L. CAPLAN and BRIT TROGEN
APR 21, 2017 | 9:37 AM
Non-adherence to medication regimens among older African-American adults

Mohsen Bazargan, James Smith, Hamed Yazdanshenas, Masoud Movassaghi, David Martins, and Gail Orum

“Poor adherence to prescribed medications precludes older African American adult patients from the potential benefits of prescription medications and may in fact contribute to the disproportionate burden of morbidity and mortality in this population.”

Disparities in hypertension and cardiovascular disease in blacks: The critical role of medication adherence

Keith C. Ferdinand, MD, Kapil Yadav, MD, Samar A. Nasser, PhD, MPH, PA-C, Helene D. Clayton-Jeter, OD, John Lewin, MD, Dennis R. Cryer, MD, and Fortunato Fred Senatore, MD, PhD

“Medication non-adherence is a leading cause of inadequate hypertension management leading to CVD, stroke, and chronic kidney disease.”

“When compared with white patients, blacks are disproportionately afflicted by poor adherence to cardiovascular medications, such as angiotensin-converting enzyme inhibitors, β-blockers, and statins, even in environments with equitable access to prescription drugs.”
Cardiovascular Health in African Americans: A Scientific Statement From the American Heart Association
“Population-wide reductions in cardiovascular disease incidence and mortality have not been shared equally by African Americans.”

Carnethon M et al. Circulation 2017;136:e393-e423
“Across nearly every metric, African Americans have poorer overall cardiovascular health than non-Hispanic whites, and CVD mortality is higher in African Americans than whites.”

Carnethon M et al. Circulation 2017;136:e393-e423
Cardiovascular Differences

1.4 fold increased risk for hypertension

1.5 to 2 fold increased risk for coronary heart disease

2-fold increased risk for heart failure

3 to 4-fold increased risk for stroke

Carnethon M et al. Circulation 2017;136:e393-e423
An African American at age 45 is over 5-times as likely to experience intracerebral hemorrhage.

Cerebrovascular Disease/Stroke

Hypertension was present in 90% of hemorrhagic strokes.

Owolabi M et al. Stroke 2017;48(5): 1169-1175
African Americans were twice as likely to experience sudden cardiac death.

Carnethon M et al. Circulation 2017;136:e393-e423
“Hypertension is arguably the most potent risk to the cardiovascular health of African Americans, as well as the greatest area of opportunity for the prevention of disease if effectively managed and prevented.”

Carnethon M et al. Circulation 2017;136:e393-e423
Hypertension

The magnitude of the association between systolic BP levels and stroke risk is 3 times greater in African Americans than in Whites; a 10-mm Hg difference in SBP is associated with an 8% increase in the stroke risk in Whites but a 24% increase in African Americans.

Carnethon M et al. Circulation 2017;136:e393-e423
“Blacks had 1.5 to 2 times higher risk for hypertension . . . regardless of baseline blood pressure level.”
Incidence of Hypertension

Cumulative Incidence of Hypertension by Race and Gender
“Given that racial differences in hypertension emerged before 30 years of age, **primordial prevention** should be considered for blacks at a young age.”
Hypertension Treatment

1. ACEi or ARB
   + CCB or Diuretic

2. ACEi or ARB + CCB + Diuretic

3. ACEi or ARB + CCB + Diuretic
   • Add spironolactone, alpha blocker or beta blocker
In African Americans, thiazide-type diuretics were **better** at reducing blood pressure and preventing cardiovascular events.

Angiotensin-converting enzyme (ACE) inhibitors and angiotensin II receptor blocker (ARB) medications are **less effective** in African Americans for blood pressure control.

**Hypertension: The ALLHAT Trial**
Hypertension: The ALLHAT Trial

ACE inhibitors were associated with a significant increase in stroke, heart failure, and combined cardiovascular disease when compared with calcium channel blockers or thiazide diuretics.

“The inferior outcomes with ACE inhibitors were largely similar to that of beta blockers in this population.”
Original Reports: Cardiovascular Disease and Risk Factors
Prescribing Patterns in the Treatment of Hypertension among Underserved African American Elderly

Hamed Yazdanshenas, MD, Mohsen Bazargan, PhD, Gail Orum, PharmD, Leila Loni, MD, Navid Mahabadi, MS, and Baqar Husaini, PhD
## Use of Anti-Hypertension Drugs Among Hypertensive Elderly

<table>
<thead>
<tr>
<th></th>
<th>All Hypertensive Patients, $n = 341$</th>
<th>Hypertensive Patients with DM and/or CKD, $n = 162$</th>
<th>Hypertensive Patients without DM and CKD, $n = 179$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>%</td>
<td>$n$</td>
</tr>
<tr>
<td>No medication total</td>
<td>18</td>
<td>5.3</td>
<td>3</td>
</tr>
<tr>
<td>One medication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>28.7</td>
<td>42</td>
</tr>
<tr>
<td>A</td>
<td>42</td>
<td>42.8</td>
<td>23</td>
</tr>
<tr>
<td>B</td>
<td>12</td>
<td>12.2</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>26</td>
<td>26.5</td>
<td>11</td>
</tr>
<tr>
<td>D</td>
<td>18</td>
<td>18.4</td>
<td>4</td>
</tr>
</tbody>
</table>
"Treatment of hypertension appears to be inconsistent with the prevailing treatment guidelines for nearly one-third of the aged African Americans."

Hypertension: The ALLHAT Trial

African Americans along with Asian Pacific Islanders have a greater incidence of ACE-related cough and a higher rate of discontinuation due to cough compared to all other racial groups.

ALLHAT. 2002. JAMA 18;288(23):2981-97
Heart Failure
Heart Failure

The first Veterans Administration Cooperative Vasodilator—Heart Failure Trial (V-HeFT I) showed a significant mortality benefit of hydralazine-isosorbide dinitrate in comparison to placebo — with a greater response in African Americans events

Among African-Americans fewer than one-fourth of eligible patients received guideline-recommended H-ISDN therapy.
Lipids

- African Americans, in general, have more favorable lipid profiles than matched White Americans including having higher HDL cholesterol levels, lower triglycerides, and lower LDL cholesterol levels.

- The lipid profile “under identifies” African Americans at risk for cardiovascular disease.


*Interethnic Differences in Serum Lipids and Implications for Cardiometabolic Disease Risk in African Ancestry Populations.*

Bentley AR¹, Rotimi CN².
Diabetes Type 2
Hospital admissions for uncontrolled diabetes without complications per 100,000 population, age 18 and over, by race/ethnicity stratified by income, 2013

- White
- Black
- Hispanic

Key: Q1 represents the lowest income quartile and Q4 represents the highest income quartile based on the median income of a patient's ZIP Code of residence.


Denominator: U.S. resident population age 18 and over.

Note: For this measure, lower rates are better.

Rates are adjusted by age and gender using the total U.S. resident population for 2010 as the standard population; when reporting is by age, the adjustment is by gender only; when reporting is by gender, the adjustment is by age only.
Diabetes Type 2

New cases of end stage renal disease due to diabetes, per million population, by ethnicity, 2003-2013

- Total
- White
- Black
- Asian
- AI/AN

2008 Achievable Benchmark: 90 per Million Population

Key: AI/AN = American Indian or Alaska Native.
Denominator: U.S. resident population.
Note: For this measure, lower rates are better. Rates are adjusted by age, sex, and interactions of age and sex. Adjusted rates use the 2011 ESRD cohort as reference.
Diabetes Type 2: HbA1c

- In all, HbA1c value differences in African Americans essentially equates to a 0.4% difference (higher) for glucose matched White American patients.
<table>
<thead>
<tr>
<th>NAME</th>
<th>VALUE</th>
<th>REFERENCE RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEMOGLOBIN A1C</td>
<td>6.3 H</td>
<td>&lt;5.5 (%)</td>
</tr>
<tr>
<td>AVERAGE WHOLE BLOOD GLUCOSE</td>
<td>134 H</td>
<td>66-114 (mg/dL)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HEMOGLOBIN A1c</th>
<th>DEGREE OF GLUCOSE CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5 - 6.0%</td>
<td>Increased risk of diabetes</td>
</tr>
<tr>
<td>6.0 - 6.4%</td>
<td>Strong risk of diabetes</td>
</tr>
<tr>
<td>5.7 - 6.4%</td>
<td>A diagnostic criterion for pre-diabetes</td>
</tr>
<tr>
<td>&gt;= 6.5%</td>
<td>A diagnostic criterion for diabetes</td>
</tr>
</tbody>
</table>

NOTE: ASSAY MAY BE AFFECTED BY HEMOGLOBINOPATHIES (SICKLE CELL ANEMIA, S-C DISEASE, OTHERS) OR ARTIFICIALLY LOWERED BY DECREASED RED CELL SURVIVAL (HEMOLYTIC ANEMIAS, BLOOD LOSS, ETC.). CONSIDER ALTERNATE TESTING OR LABORATORY CONSULTATION.
High rates of severe hypoglycemia among African American patients with diabetes: the surveillance, prevention, and Management of Diabetes Mellitus (SUPREME-DM) network

Andrew J Karter 1, Kasia J Lipska 2, Patrick J O’Connor 3, Jennifer Y Liu 4, Howard H Moffet 4, Emily B Schroeder 5, Jean M Lawrence 6, Gregory A Nichols 7, Katherine M Newton 8, Ram D Pathak 9, Jay Desai 3, Beth Waitzfelder 10, Melissa G Butler 11, Abraham Thomas 12, John F Steiner 5, SUPREME-DM Study Group
High rates of severe hypoglycemia among African American patients with diabetes: the surveillance, prevention, and Management of Diabetes Mellitus (SUPREME-DM) network

“African Americans had consistently higher severe hypoglycemia rates compared with Whites, while Latinos and Asians had consistently lower rates compared with Whites”
Racial Differences: Colon Cancer

- Colonoscopy is indicated at age 45 in African Americans due to earlier onset and faster growing tumors.

- Sigmoidoscopy is contraindicated due to an increased incidence of right sided polyps in African Americans.
For African Americans Colo-Rectal Screening should begin at 45

Mar 21, 2005 - 6:09:00 PM

The Committee recommends colonoscopy as a "first line" screening procedure for colorectal cancer for African Americans rather than flexible sigmoidoscopy because of the high overall risk and as well as some evidence that African Americans have more right-sided cancers and polyps.
Prostate Cancer Mortality

- Whites: **19 per 100,000** persons
- Blacks: **44 per 100,000** persons
Prostate Cancer Mortality

- Whites: 19 per 100,000 persons
- Blacks: 44 per 100,000 persons

- COVID-19: 52 per 100,000 persons (US)
- Influenza: 2 per 100,000 persons (US)

https://www.cdc.gov/nchs/fastats/flu.htm
The course of prostate cancer has been shown to be different in African American men. Prostate cancer volume is greater in African American men and advanced metastatic prostate cancer occurs at a 4:1 ratio (compared to white men).
The risk of death from prostate cancer in African Americans was consistently higher than in whites in all socioeconomic status strata.

Among patients with the same socioeconomic status, cancer screening with a PSA was more common in Whites than African Americans, and cancer detection was earlier in Whites.
Prostate Cancer

- African American patients are more likely to have elevated PSA levels in the presence of prostate cancer.

- The PSA is better as a prostate cancer screen in African Americans.
All Routine PSA Tests For Prostate Cancer Should End, Task Force Says

May 21, 2012 · 8:20 PM ET
Heard on All Things Considered

Why most men don't need a PSA test for prostate cancer
Much of what you’ve heard about how to prevent, detect, and treat this common cancer is wrong
Published: February 13, 2015 04:00 PM

PSA Testing Controversy Reignites ‘Over-Screening’ Debate

BY JASON KANE  October 17, 2011 at 2:00 PM EDT
Remove protocols that worsen disparities
Researchers Find Racial Bias in Hospital Algorithm

Healthier white patients were ranked the same as sicker black patients, according to study published in the journal Science

By Melanie Evans and Anna Wilde Mathews

Updated Oct. 25, 2019 8:39 am ET
51 year old African American morbidly obese male with a history of DM2, hypertension, hyperlipidemia presents COVID positive with pneumonia and acute kidney failure and was in the hospital for 8 days.

Discharge Vitals:

- BP: 160/90
- Temp: 99.5
- P: 95
- RR: 22
- Wt: 363
- BMI: 53
Discharge Summary

Discharge Summary

ADMISSION DATE: 3/27/2020
DISCHARGE DATE: 04/05/2020

ATTENDING PHYSICIAN: [Redacted]

Code Status: Not on file

Highest Readmission Risk Score: 27

The 30 day readmissions risk score is derived from an internally validated risk model which evaluates patient level characteristics, utilization history, medication orders and lab results up until the day of discharge. Patients with a score of 40 or above are considered highest risk for readmission. Specific patient level drivers will be listed at the bottom of the summary.
The patient's risk for 30-day readmission is determined using the following contributing factors:

Pt variables contributing to increased readmission risk:

20 Active Medication Orders
10 Most Recent BUN Result
8.4 First Resulted Calcium During Admission
2 Number of Previous ED Visits (6 mos.)
1 Previous ED Visit (6 mos.)?
1 Insurance - Private Coverage
1 Active Anticoagulant
1 Number of Hospitalizations (12 mos.)
What’s missing?
Chart 1. 30-Day, All-Cause FFS Readmission Rates – National and by Race - 2007 through 2013
Patient Centered Clinical Care

Establish Trust

Genetic & Epigenetic Difference Awareness

Evidence-Based Care

→
Providers with an increased African American patient population will have worse outcomes because African Americans have worse outcomes.