

Steps Towards Achieving Health Equity: Understanding The Impact of Bias and Racism on Health

Jessica Addison MD, MS, MPH
Frinny Polanco Walters, MD, MPH
October 12, 2022

Objectives

- Review the concept of race, racism, and three levels of racism
- Discuss the history of racism in medicine and the impact of racism on health
- Present options to address racism at the personal and institutional levels

Ground rules

- Acknowledge this is a difficult topic
- Respect each other
- Use “I” statements
- Stay engaged
- Safe/brave spaces
- Expect and accept nonclosure
- Experience discomfort
- What is shared in this webinar will stay in this webinar
- What is learned in this webinar will leave this webinar

Part I:

TAKING A CLOSER LOOK

Figure 1

Social Determinants of Health

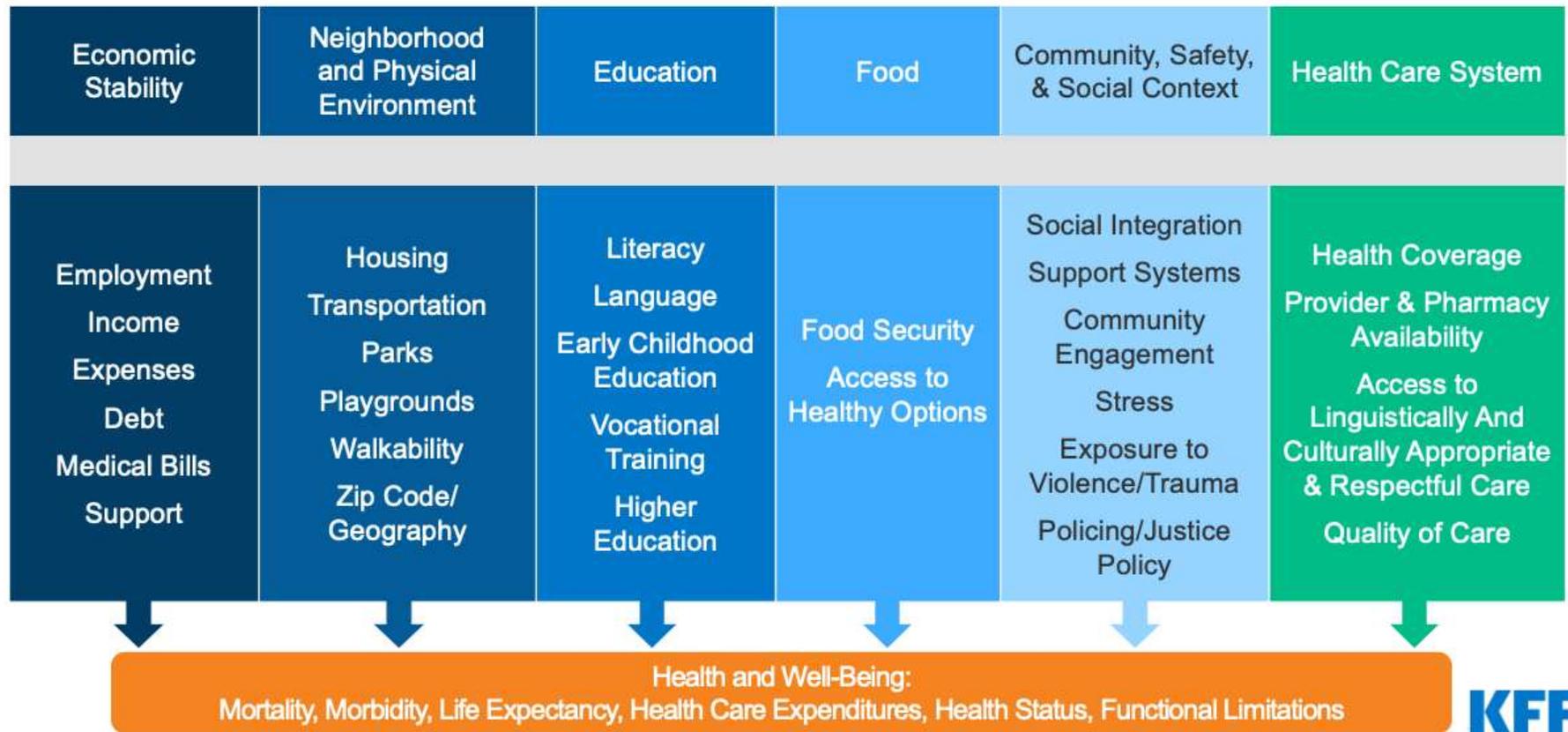
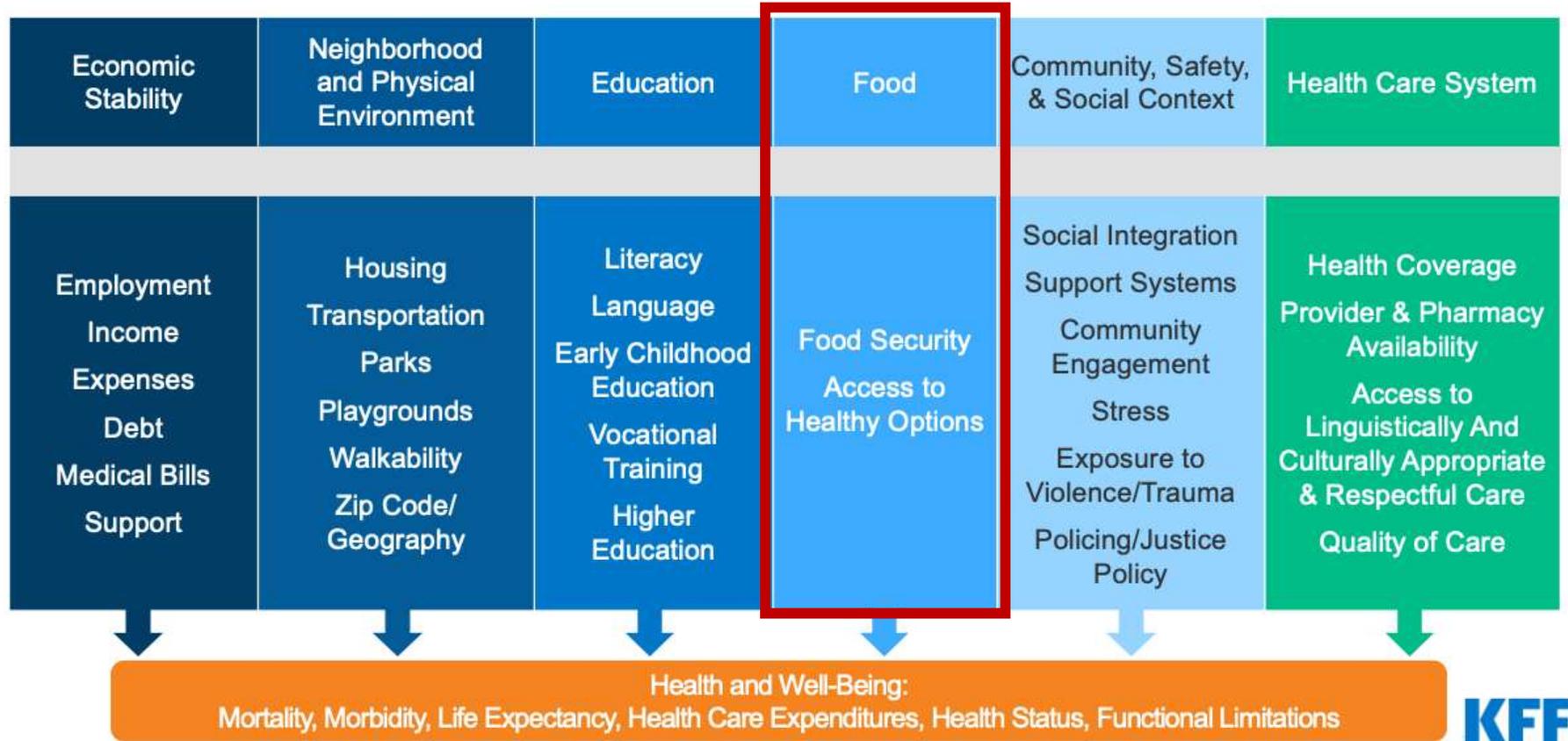


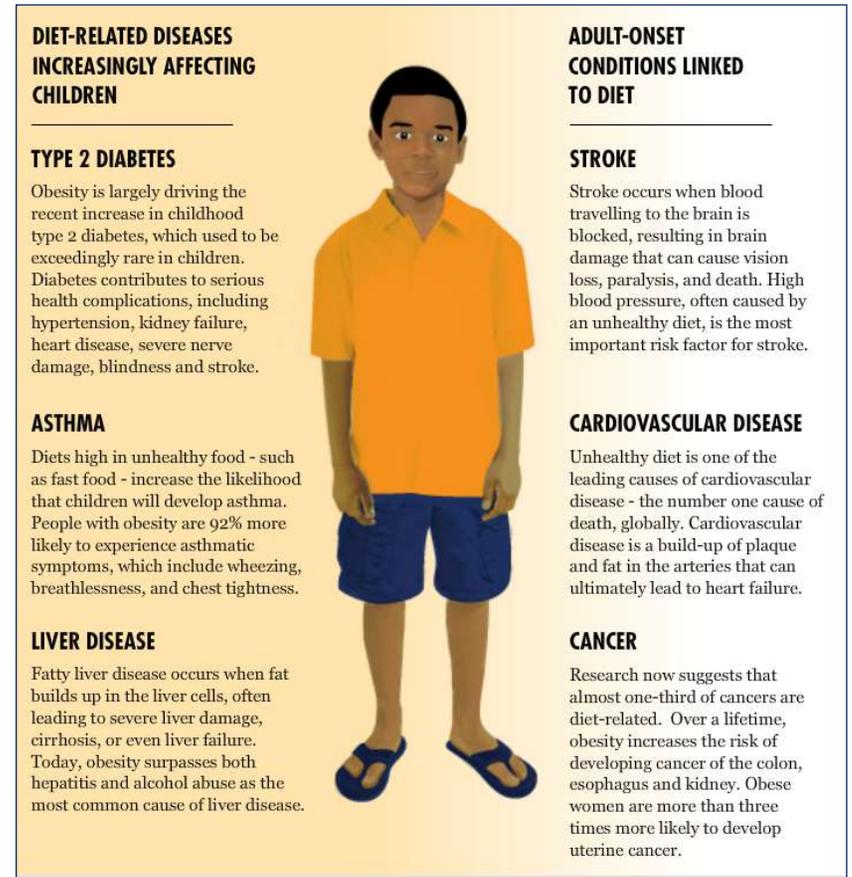
Figure 1

Social Determinants of Health



Health Effects of Food Insecurity

- Children living in food insecure households
 - get sick more often
 - recover more slowly from illness
 - have poorer overall health
 - are hospitalized more frequently
- Children and adolescents affected by food insecurity are more likely to be iron deficient.
- Early childhood malnutrition tied to cardiovascular disease later in life.
- Impair a child's ability to concentrate and perform well in school; higher levels of behavioral and emotional problems.



DIET-RELATED DISEASES INCREASINGLY AFFECTING CHILDREN

TYPE 2 DIABETES
Obesity is largely driving the recent increase in childhood type 2 diabetes, which used to be exceedingly rare in children. Diabetes contributes to serious health complications, including hypertension, kidney failure, heart disease, severe nerve damage, blindness and stroke.

ASTHMA
Diets high in unhealthy food - such as fast food - increase the likelihood that children will develop asthma. People with obesity are 92% more likely to experience asthmatic symptoms, which include wheezing, breathlessness, and chest tightness.

LIVER DISEASE
Fatty liver disease occurs when fat builds up in the liver cells, often leading to severe liver damage, cirrhosis, or even liver failure. Today, obesity surpasses both hepatitis and alcohol abuse as the most common cause of liver disease.

ADULT-ONSET CONDITIONS LINKED TO DIET

STROKE
Stroke occurs when blood travelling to the brain is blocked, resulting in brain damage that can cause vision loss, paralysis, and death. High blood pressure, often caused by an unhealthy diet, is the most important risk factor for stroke.

CARDIOVASCULAR DISEASE
Unhealthy diet is one of the leading causes of cardiovascular disease - the number one cause of death, globally. Cardiovascular disease is a build-up of plaque and fat in the arteries that can ultimately lead to heart failure.

CANCER
Research now suggests that almost one-third of cancers are diet-related. Over a lifetime, obesity increases the risk of developing cancer of the colon, esophagus and kidney. Obese women are more than three times more likely to develop uterine cancer.

<https://fromhungertohealth.wordpress.com/category/good-food-bad-food/>

Food insecurity is an example of an SDOH that can lead to adverse health outcomes in children and adults. The following highlight the impact of food insecurity in Maine in 2018:

- 14.4% of Maine’s households are considered food insecure
- 1 in 5 children in Maine are food insecure
- 16% of Maine seniors are at risk of going hungry
- Maine is ranked 9th in the nation for food insecurity¹¹

HEALTH CARE > Posted May 9, 2021

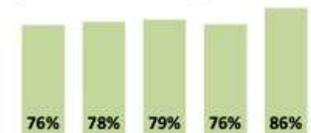
Maine confronts wide race disparity in health care for expecting mothers

Black women in Maine are four times more likely than white women to start prenatal care late, or not at all, a disparity tied with Texas as the nation's largest.

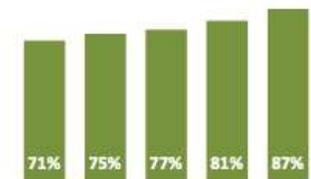
BY GILLIAN GRAHAM STAFF WRITER

Mainers with less income are less likely than those with higher incomes to have preventive health screenings.

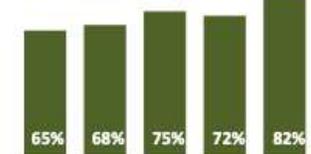
Cholesterol checked in past 5 years, adults 18+ years*



Mammogram in past 2 years, women 50-74 years



Colorectal cancer screening up to date, adults 50-75 years



Annual household income

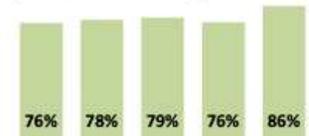
Boston Children's Hospital
 Where the world comes for answers

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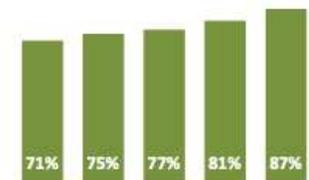
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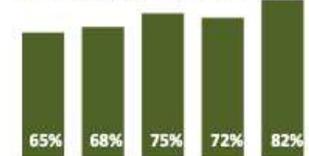
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Less than \$15,000
\$15,000-24,999
\$25,000-34,999
\$35,000-49,999
\$50,000 or more

Boston Children's Hospital
Where the world comes for answers

Annual household income

HEALTH CARE > Posted May 9, 2021

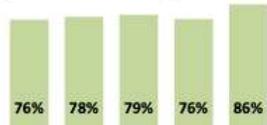
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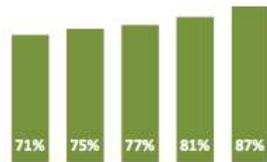
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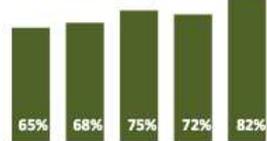
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Behavioral Risk Factor Surveillance System, 2016
*Behavioral Risk Factor Surveillance System, 2015

HEALTH CARE > Posted May 9, 2021

INCREASE FONT S

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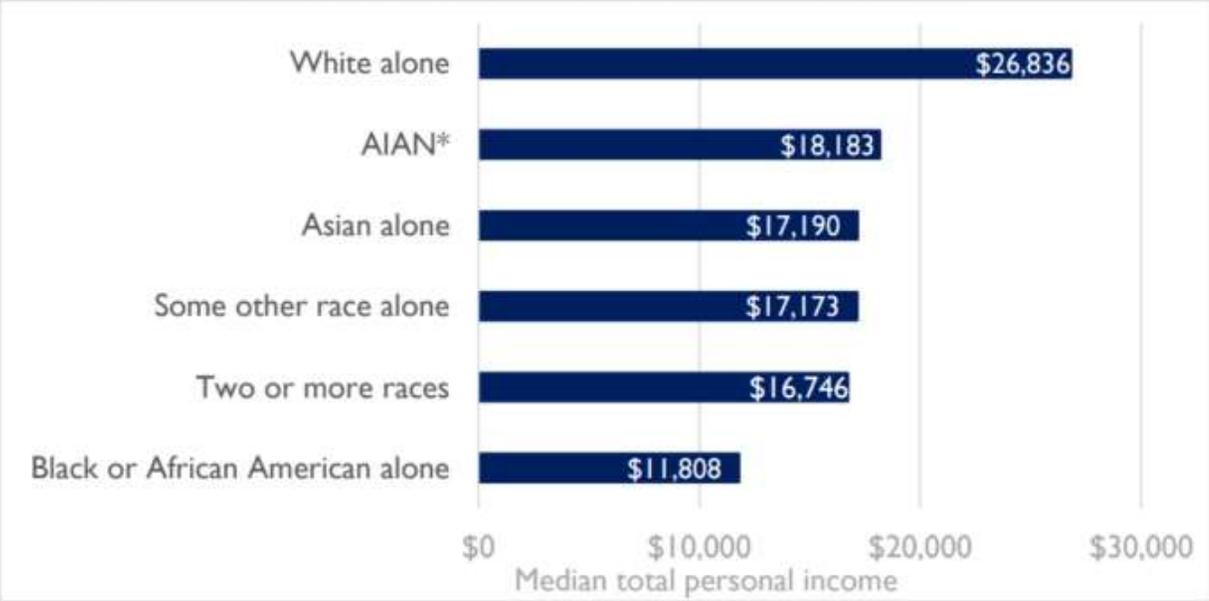


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Stark Racial Disparities in Maine's Median Personal Income

Figure 1. Median total personal income by race in Maine, 2015-2019



*AIAN = American Indian & Alaska Native

Note: Reported total personal income has been adjusted to constant dollars (inflation-adjusted to 2019 dollars).

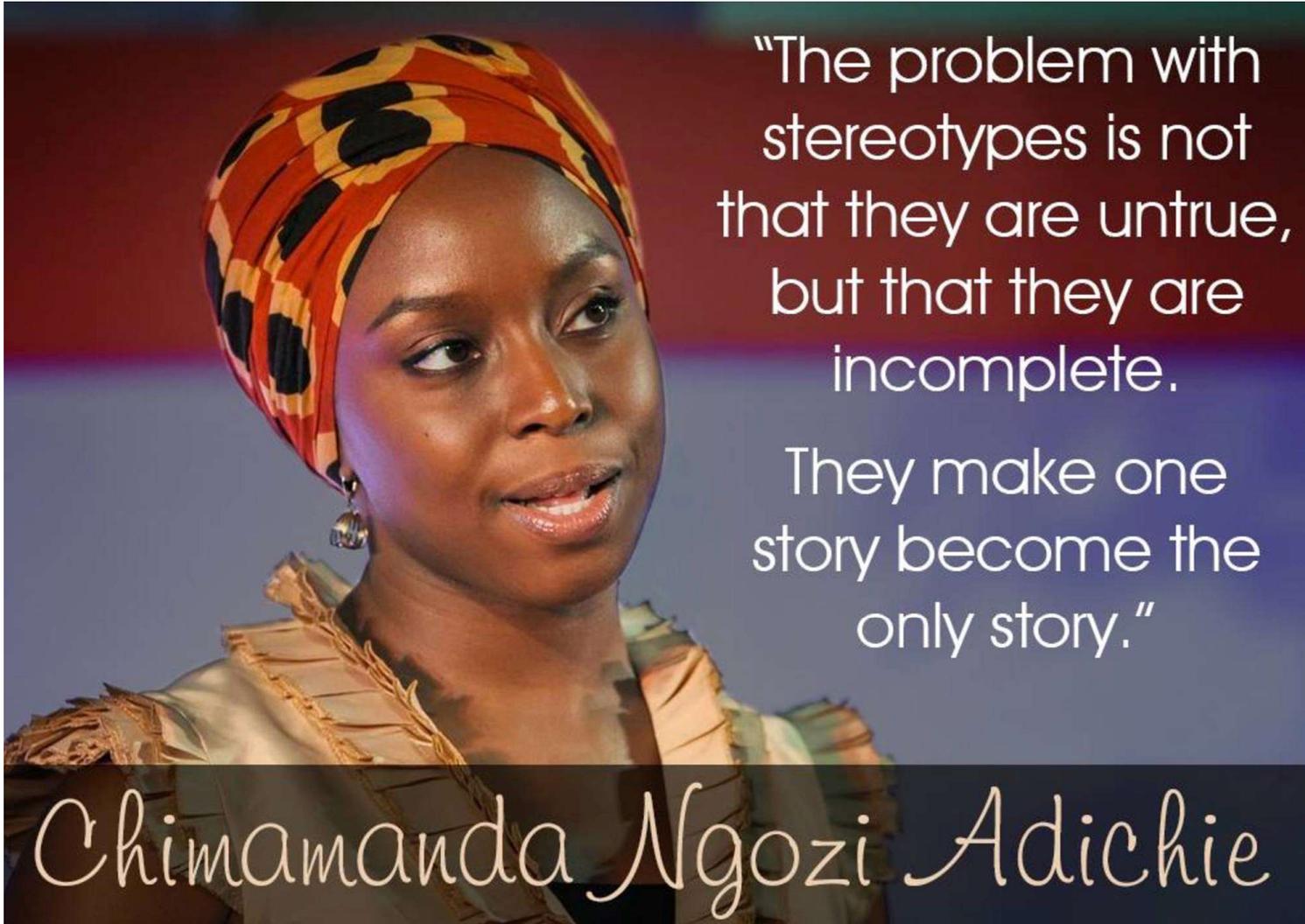
Source: Carsey School of Public Policy analysis of American Community Survey, 2019 5-year estimates

PART II:

BIAS, RACISM, AND LEVELS OF RACISM

Definitions

- **Bias:** attitudes and stereotypes
 - Attitudes: how we evaluate people, places, and even ideas
 - Stereotypes: beliefs about groups of people
- **Explicit:** influence our thinking + we are aware
- **Implicit:** influence our thinking + we are not aware + cannot control



“The problem with stereotypes is not that they are untrue, but that they are incomplete.

They make one story become the only story.”

Chimamanda Ngozi Adichie

Project Implicit

<https://implicit.harvard.edu/implicit>



Project Implicit

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Presidents IAT

Presidents ('Presidential Popularity' IAT). This IAT requires the ability to recognize photos of Joseph Biden and one or more previous presidents.

Gender-Science IAT

Gender - Science. This IAT often reveals a relative link between liberal arts and females and between science and males.

Gender-Career IAT

Gender - Career. This IAT often reveals a relative link between family and females and between career and males.

Disability IAT

Disability ('Physically Disabled – Physically Abled' IAT). This IAT requires the ability to recognize figures representing physically disabled and physically abled people.

Race IAT

Race ('Black - White' IAT). This IAT requires the ability to distinguish faces of European and African origin. It indicates that most Americans have an automatic preference for white over black.

Religion IAT

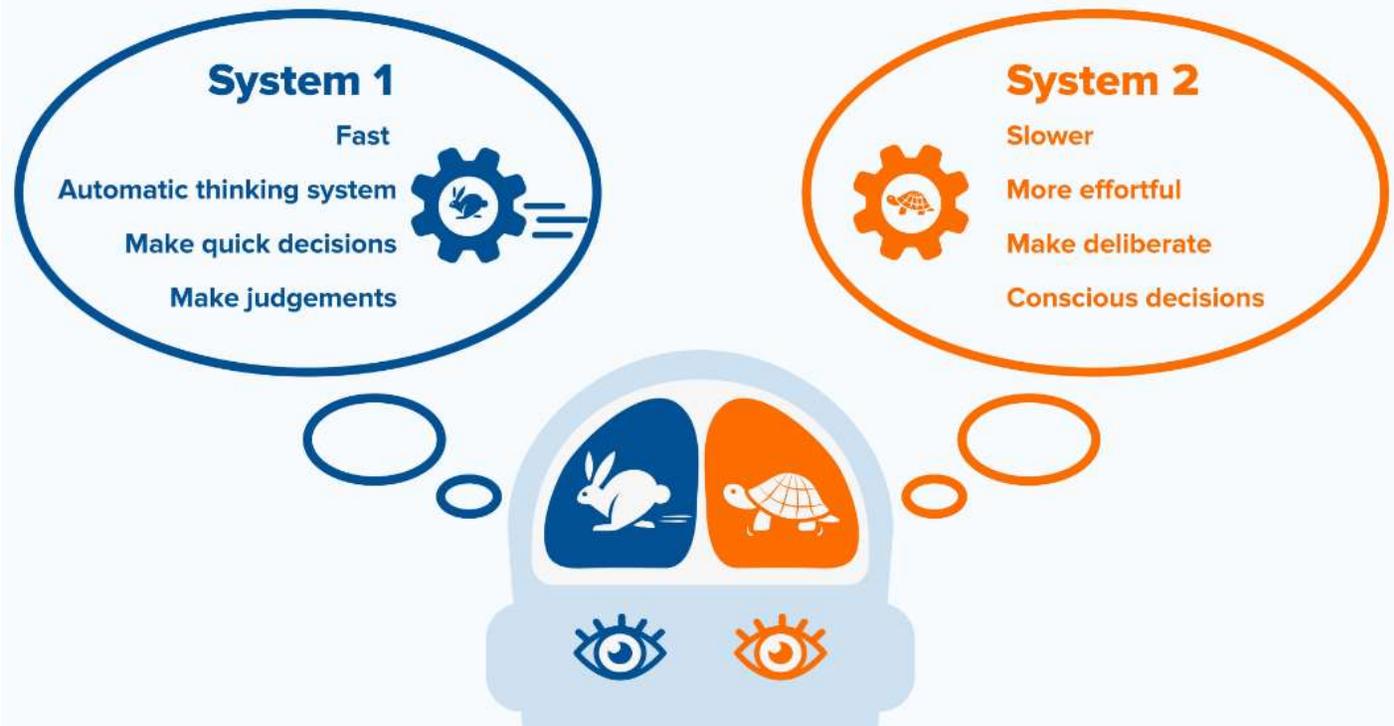
Religion ('Religions' IAT). This IAT requires some familiarity with religious terms from various world religions.

Sexuality IAT

Sexuality ('Gay - Straight' IAT). This IAT requires the ability to distinguish words and symbols representing gay and straight people. It often reveals an automatic preference for straight relative to

System one and System two thinking in hiring process

FairHire.org



Definitions cont.

- **Race:** social interpretation of how one looks
 - NOT A BIOLOGICAL CONSTRUCT THAT REFLECTS INNATE DIFFERENCES
- **Racism:** system of structuring opportunity and assigning value based on race, which unfairly disadvantages some individuals and communities, unfairly advantages other individuals and communities.

FIGURE 2

Modeling the cost of health inequities in 2040



Note: All values are in US dollars.

Sources: Deloitte analysis.

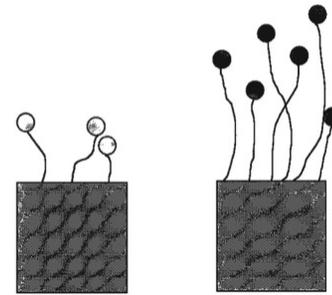
Deloitte Insights | deloitte.com/insights

Telling Stories:
Allegories on “Race,” Racism, and Anti-Racism
Dr. Camara Jones



Levels of racism

- **Institutionalized:** differential access to the goods, services, and opportunities of society by race



Institutionalized racism

- Initial historical insult
- Structural barriers
- Inaction in face of need
- Societal norms
- Biological determinism
- Unearned privilege

Jones C. Launching an APHA presidential initiative on racism and health. *The Nation's Health*. January 2016;45(10):3

- **Personally mediated:** differential assumptions about the abilities, motives, and intentions of others
- **Internalized:** acceptance by members of the stigmatized races of negative messages about their own abilities and intrinsic worth

Activity #1

Take a few seconds to think about contemporary examples of racism in your fields of practice. These could be in your research, clinical settings, etc.

PART III:

RACISM AND HEALTH MECHANISMS

Racism and Health: Mechanisms

- Institutional discrimination can restrict socioeconomic attainment that result in group differences in SES and health.
- Segregation can create pathogenic residential conditions.
- Discrimination can lead to reduced access to desirable goods and services.
- Internalized racism (acceptance of society's negative characterization) can adversely affect health.
- Racism can create conditions that increase exposure to traditional stressors (e.g. unemployment).
- Experiences of discrimination may be a neglected psychosocial stressor.

Potential Determinants of Health Disparities within the Health Care System



Hospital leaders need to be willing to discuss the possibility of disparities

- Physicians/leaders committed to doing right thing
- Reluctance to consider gaps in care by demographics
- Must gather data → analyze the data → examine evidence to provide quality, equitable care

Why Understanding is so important

Hospital and healthcare leaders...

- Did not believe that disparities existed in healthcare delivered to different populations
- Perceived disparities as a function of social and economic factors beyond their control
- Participating in a collaborative to reduce disparities would be considered an admission of inequitable care

B. Siegel et al. *Journal of Health Care Quality* (2007)

Why understanding is so important

- **N. Lurie, et al. *Circulation* (2005)**
 - 344 Cardiologists:
 - 34% agree disparities exist overall
 - 12% believe disparities exist in own hospital
 - 5% believe disparities exist in own practice
- **S. Taylor, et al. *Annals of Thoracic Surgery* (2006)**
 - 208 Cardiovascular Surgeons:
 - 13% believe disparities occur often or very often
 - 3% believe disparities occur often or very often in own practice
- **T. Sequist, et al. 2008, *Journal of General Internal Medicine* (2008)**
 - 169 Primary Care Clinicians
 - 88% acknowledged that disparities in diabetes care existed in U.S.
 - 40% acknowledged disparities in own practice

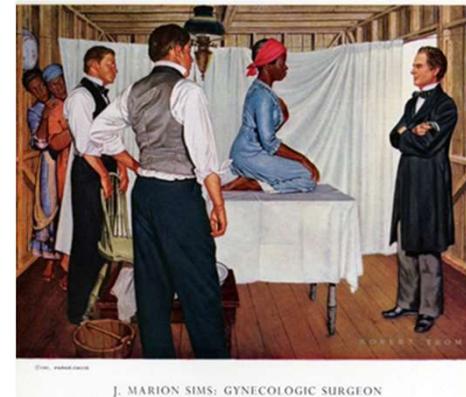
History of Racism and Medicine in Patients, Past & Current



Romana Klee/Flickr Creative Commons/CC BY-SA 2.0

- **Dr. J. Marion Sims, Father of American Gynecology**
 - Performed Vesico-vaginal fistulae (incontinence) on 12 enslaved women between 1844 to 1849 without anesthesia

Owens, D. C. (2017). *Medical Bondage: Race, Gender, and the Origins of American Gynecology*. University of Georgia Press.



How we fail black patients in pain

Janice A. Sabin, PhD, MSW

January 6, 2020

I find it shocking that 40% of first- and second-year medical students endorsed the belief that “black people’s skin is thicker than white people’s.”

Racial and ethnic disparities in pain treatment are not intentional. ... Instead, inequities are the product of complex influences, including implicit biases that providers don’t even know they have.

History of Racism and Medicine in Patients, Past & Current

- Historical examples of racism tied heavily to institutional/structural racism & stereotypes
 - Facility built in 1910 by U.S. Public Health Service & Bureau of Immigration to “sanitize” Mexican and other Latino/a/x immigrants.
 - *Madrigal v. Quilligan* (1975)
 - Sterilization of 10 women in Los Angeles
 - Bullied by nurses and doctors after having cesarean section
 - Form of “family planning” (“she already had five kids”)



Dolores Madrigal (left) and attorney Antonia Hernández (right) at a press conference announcing the 1975 lawsuit *Madrigal v. Quilligan*. NBC Universal Archives

- Latinos are least likely to utilize health services (Census, 2014)

Perceived Discrimination:

individuals' perception of negative attitude, judgment, or unfair treatment due to their specific characteristics such as gender, race, ethnicity, and social status

	HHS Public Access Author manuscript Peer-reviewed and accepted for publication
About author manuscripts	Submit a manuscript

[Psychol Bull.](#) Author manuscript; available in PMC 2009 Sep 21.

PMCID: PMC2747726

Published in final edited form as:

NIHMSID: NIHMS134591

[Psychol Bull.](#) 2009 Jul; 135(4): 531–554.

PMID: [19586161](#)

doi: [10.1037/a0016059](#)

Author Manuscript

Perceived Discrimination and Health: A Meta-Analytic Review

[Elizabeth A. Pascoe](#) and [Laura Smart Richman](#)

Everyday Discrimination and Subclinical Disease

In the study of Women's Health Across the Nation (SWAN):

- Everyday Discrimination was positively related to subclinical carotid artery disease for black but not white women
- chronic exposure to discrimination over 5 years was positively related to coronary artery calcification

- Troxel et al. 2003; Lewis et al. 2006

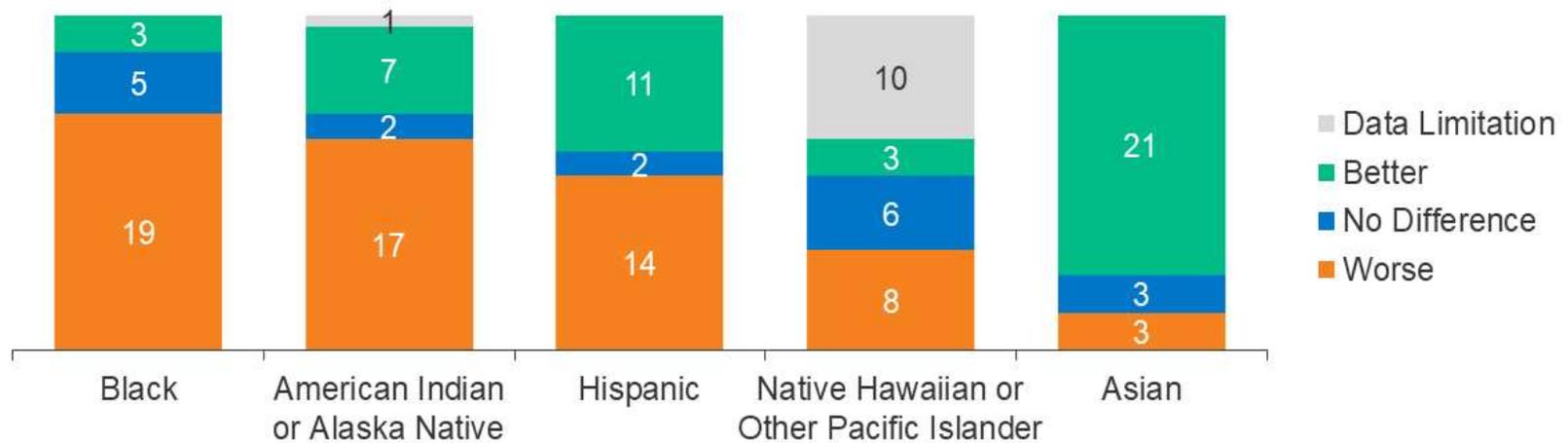
Arab American Birth Outcomes

- Well-documented increase in discrimination and harassment of Arab Americans after 9/11/2001
- Arab American women in California had an increased risk of low birthweight and preterm birth in the 6 months after Sept. 11 compared to pre-Sept. 11
- Other women in California had no change in birth outcome risk pre- and post-September 11

Figure 2

People of Color Fare Worse than their White Counterparts Across Many Measures of Health Status

Number of health status measures for which group fared better, the same, or worse compared to White counterparts:



Note: Measures are for 2018 or the most recent year for which data are available. "Better" or "Worse" indicates a statistically significant difference from Whites at the $p < 0.05$ level. No difference indicates no statistically significant difference. "Data limitation" indicates data are no separate data for a racial/ethnic group, insufficient data for a reliable estimate, or comparisons not possible due to overlapping samples. Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic.

Harvard Public Health

What science tells us about structural racism's health impact

Research shows a clear and ongoing connection between practices such as redlining and disparities in illness and mortality between Black and white Americans.



DIVERSITY AND INCLUSION | COMMUNITY ENGAGEMENT | MEDICAL EDUCATION

Medical schools overhaul curricula to fight inequities

Stacy Weiner, Senior Staff Writer

May 25, 2021

A growing number of medical school leaders say that isolated mentions of health inequities are not enough. Instead, social drivers need to be woven into the very fiber of medical education.

Number of black or African American male medical school applicants (bars) versus percentage of black or African American applicants who matriculated (line), 1978–2014.

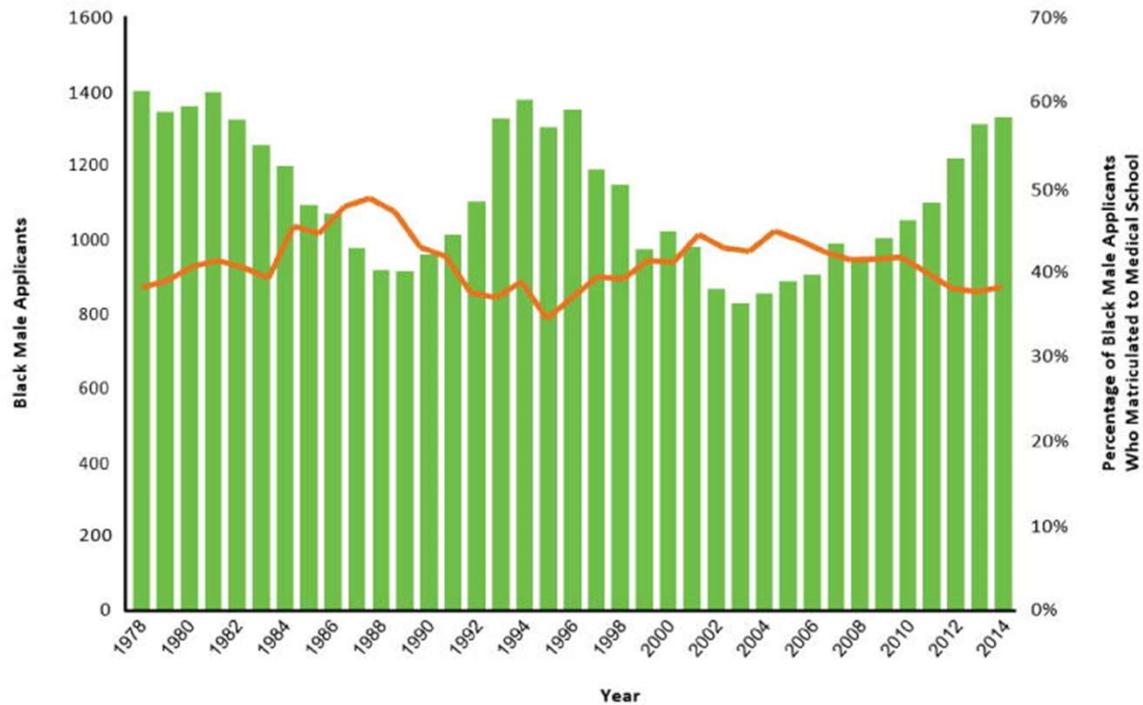
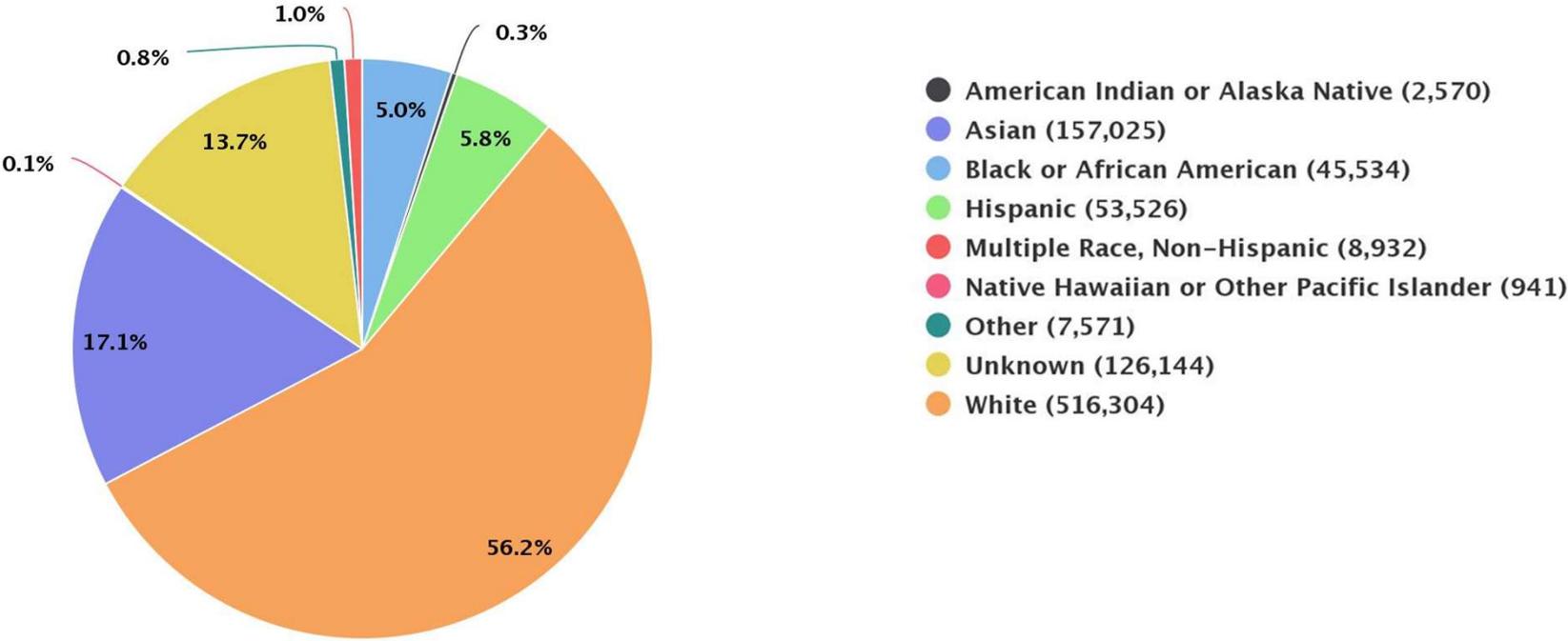
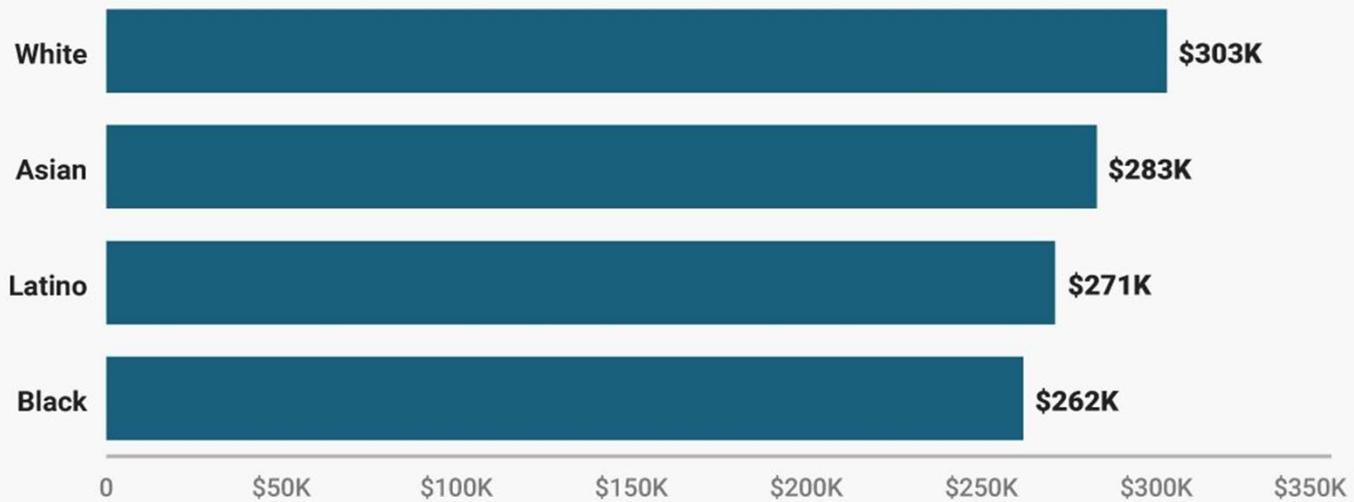


Figure 18. Percentage of all active physicians by race/ethnicity, 2018.



Note: Figure 18 shows the percentage of active physicians by race and ethnicity as of July 1, 2019.

HOW MUCH MONEY PHYSICIANS MAKE, BY RACE



SOURCE: Medscape

BUSINESS INSIDER

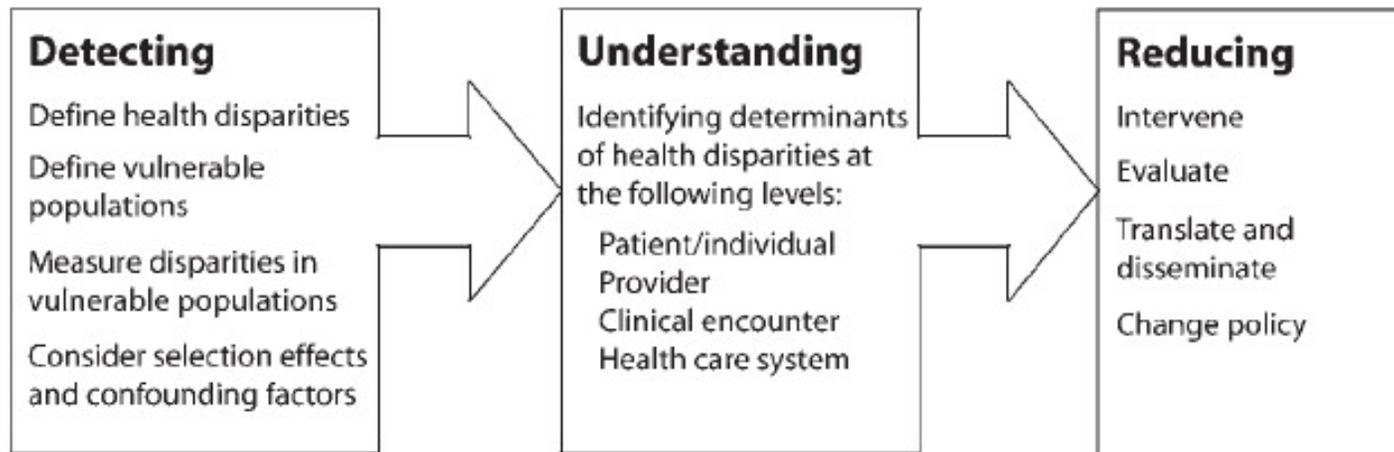
What can we do ?

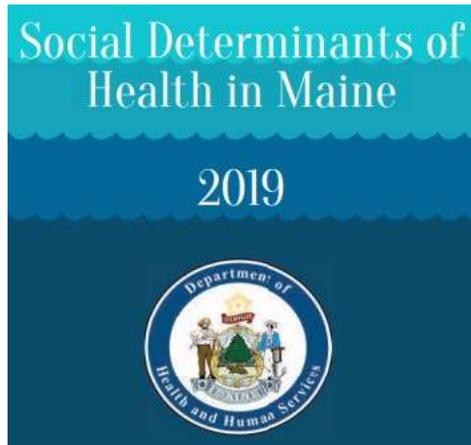
*Address actions towards racism and work
towards achieving health equity*

Key Actions to Avoid Exacerbating Disparities- Training programs and workforce

- Robust recruitment policies
 - *GME subcommittee
 - *New fellow applicants
- Develop, promote and retain a diverse and inclusive workforce
- Address inequalities in health care
 - *Clinical Care
 - *Research Studies

Reducing Disparities Within the Health Care System





#1: Improve our understanding of inequities in Maine.

- Use data to highlight inequities of marginalized populations.
- Ensure that data collection systems adequately capture quantitative and qualitative data on social determinants of health, including experiences of discrimination.

#6: Ensure equal access to quality care and health insurance.

- Increase the percentage of children and adults in Maine who have affordable health insurance.
- Increase the number of primary care, dental care, and mental health providers in the state, especially in Maine's rural areas.
- Increase the number of medical residencies, including dental residencies, located in rural areas.

Cultivating Open-mindedness



- Get to know people who are different than you.
- Learn by reading diverse literature, attending meetings on race, bias and identity, and challenge racism.
 - Plant seeds of doubt in your brain.
 - asking questions and being active about searching for information that challenges your beliefs.
 - Encompasses the belief that other people should be free to respectfully express their beliefs and arguments, even if you do not necessarily agree with those views.



TAKE HOME POINTS

- **Race is a social construct (It is a “problem of racism”, not a problem of race) and biologically determined differences between the races do not exist.**
- **Racism does exist and it is negatively impacting the health of individuals and communities.**
- **There are many ways in which we can make an impact to achieve health equity.....how are YOU making an impact?**



Frinny.PolancoWalters@childrens.harvard.edu
Jessica.Addison@childrens.harvard.edu
THANK YOU!