# Social Determinants of Health and the Need for Equity-Oriented Primary Care Services

## By the Numbers within NCCHCA

Impact 2022

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Primary Care Conference

Wilmington, NC

# Affiliations

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# Social Determinants of Health

- The conditions of life in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.

"The social conditions in which people live have a dramatic impact on their health"

Healthy People 2020, CDC

# Examples of SDOH

- Poverty, poor schooling, food insecurity, housing conditions, deficient sanitation in early childhood, exposure to toxic agents
- Racism, discrimination, relative social standing, social exclusion & persistent marginalization and lack of opportunity to develop useful emotional & occupational skills needed in modern society

Urban Modernization is a New Form of Human Settlement

In Two Centuries, our Species are City Dwellers working in the interest of trade and commerce

…….And with comes the challenges of a capitalistic society

……Over 50 percent of premature morbidity and mortality is caused by behavioral and social determinants of health such as smoking, diet, exercise, and socioeconomic status.

# Determinants are Multifactorial

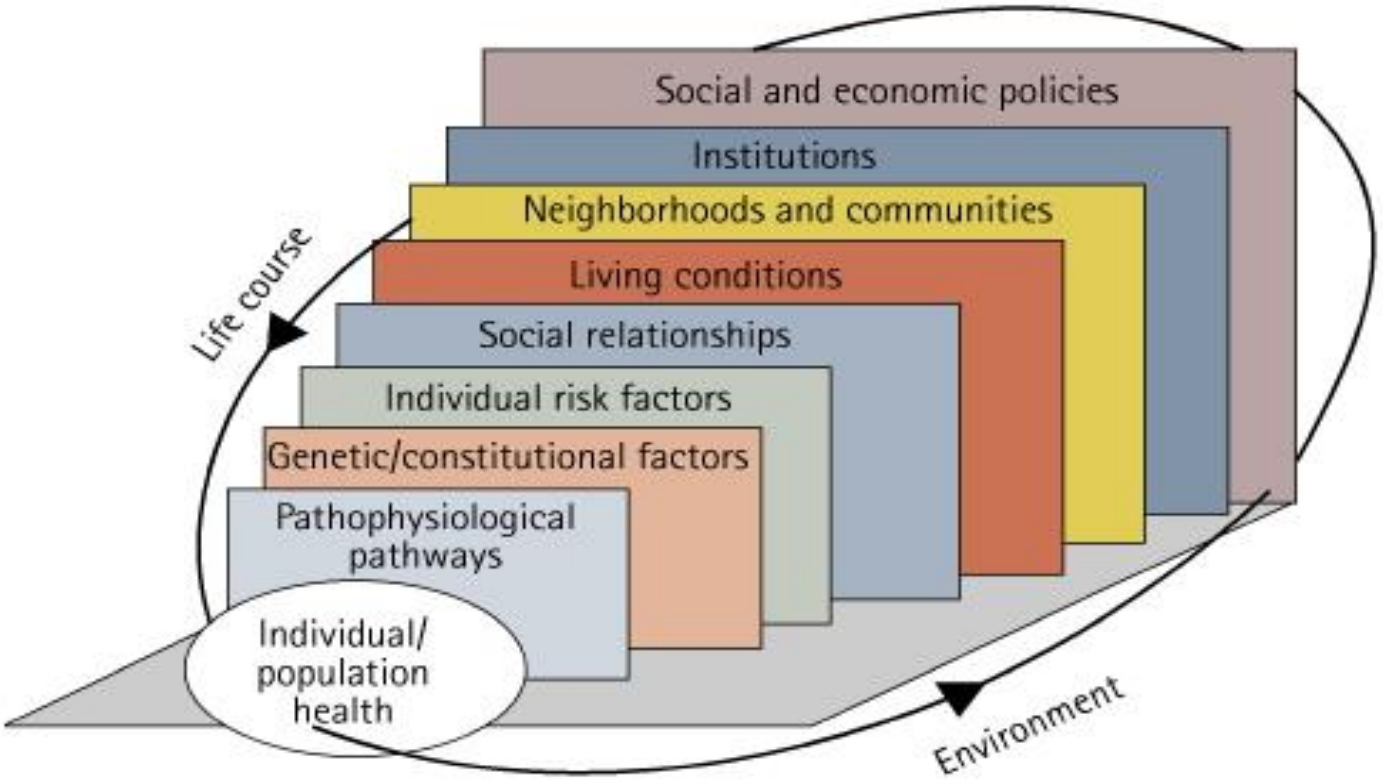
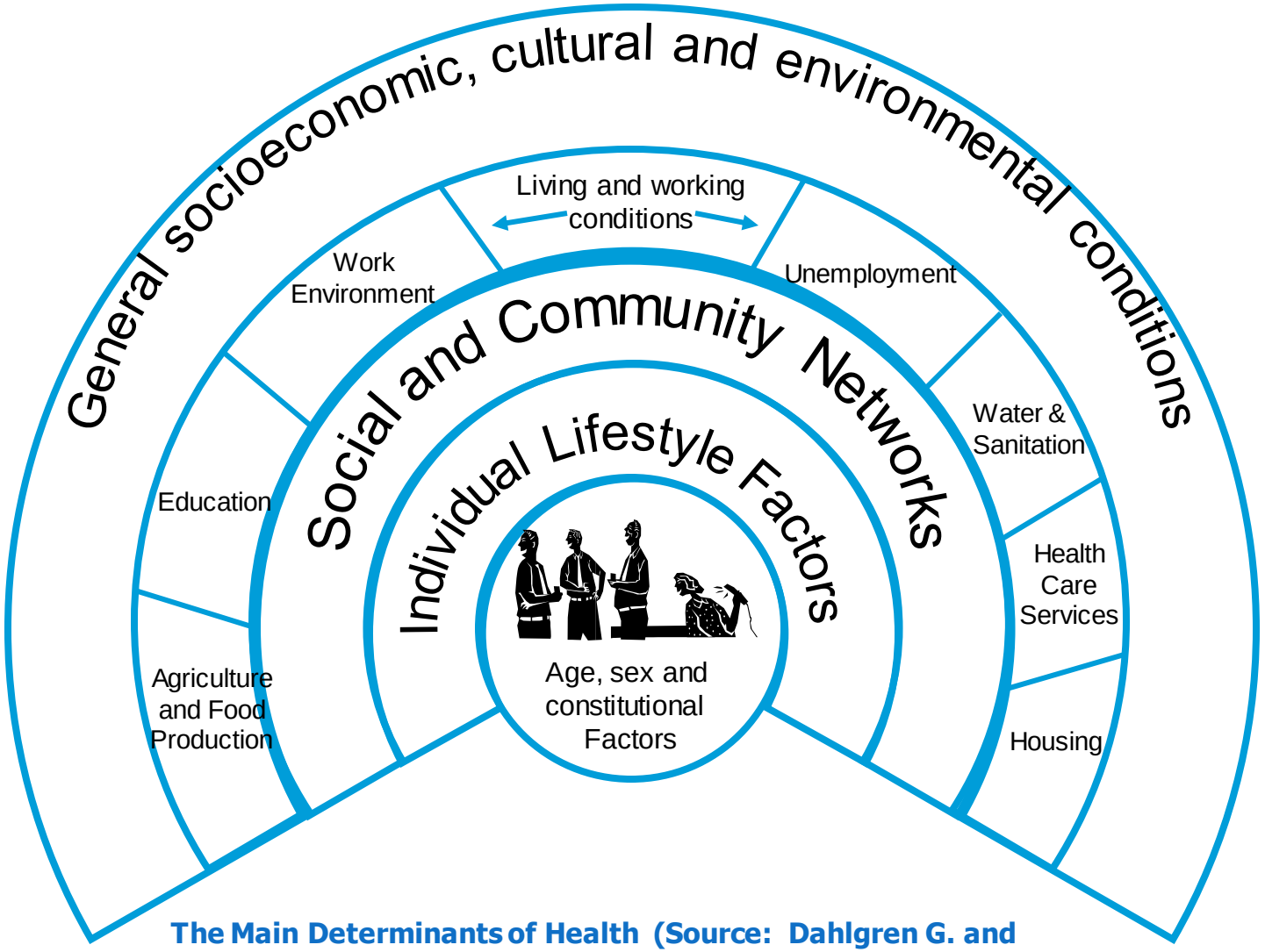



**Figure 2.** Upstream and downstream determinants of population health.

# Levels of Determinants

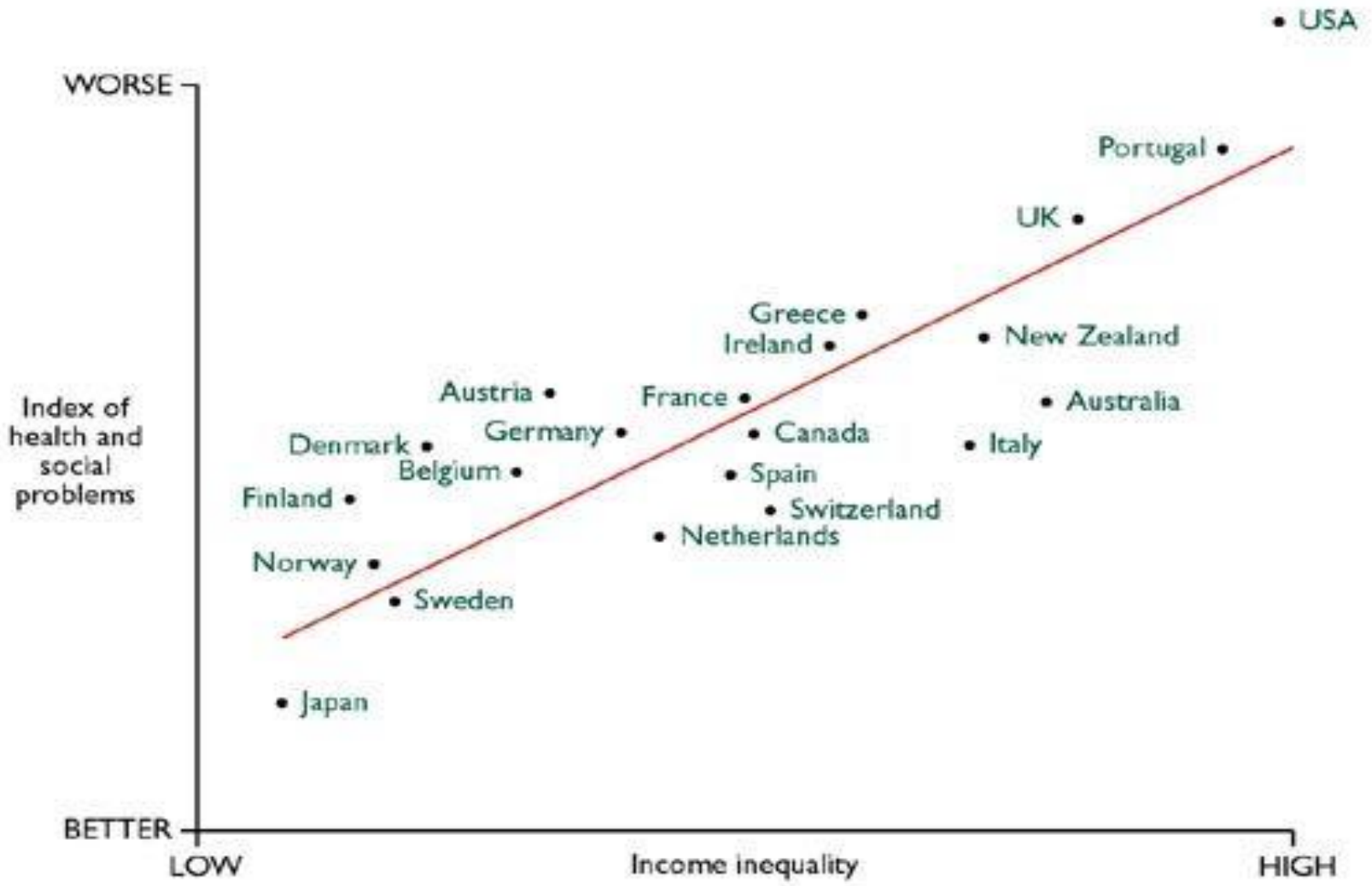



**The Main Determinants of Health (Source: Dahlgren G. and Whitehead M (1991)**

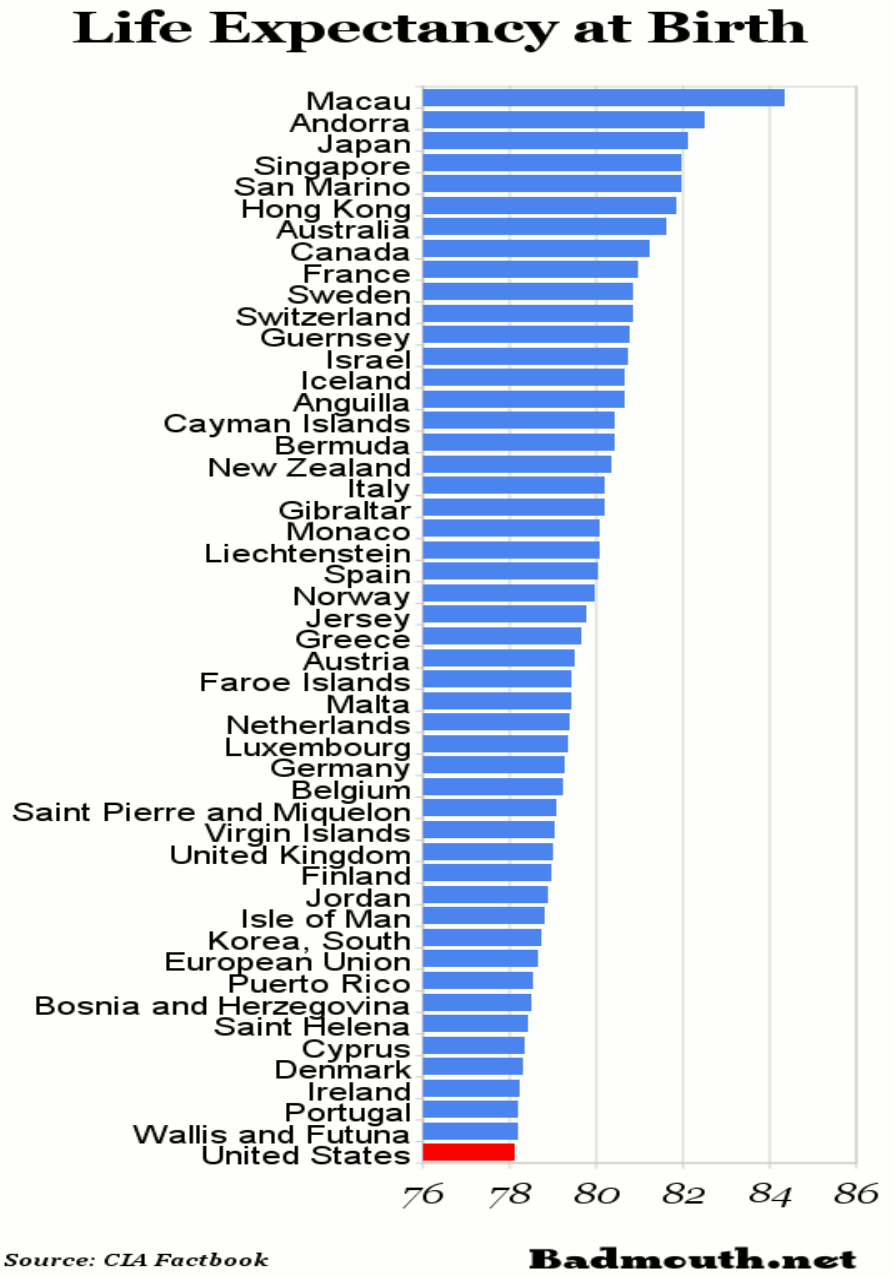
# Health Follows a Social Gradient

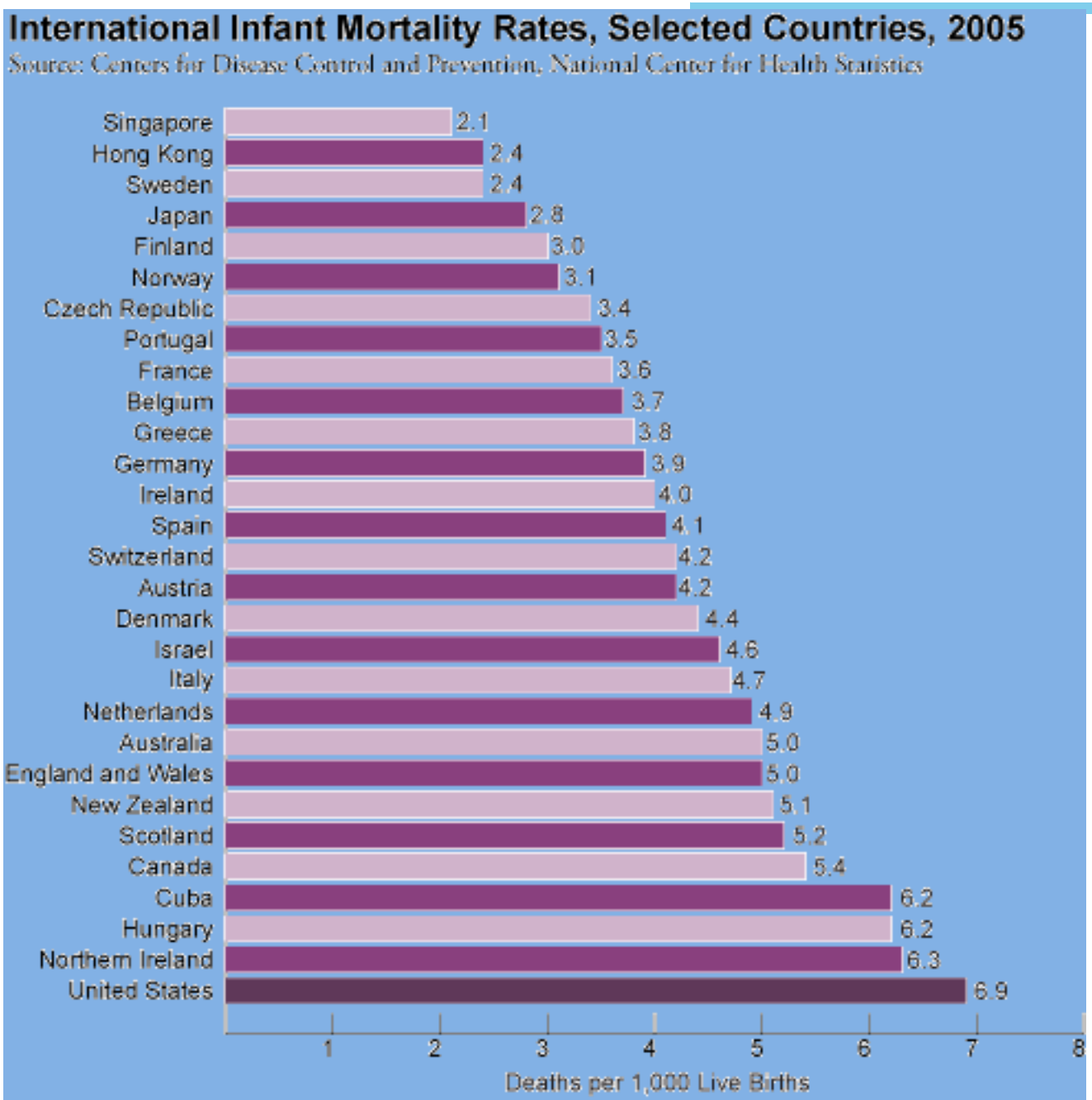
- Economic and social factors influence differences in health status in both individual and population health
  - Factors of inequality influence health, disease, and mortality rates substantially
- These dynamics influence patient behavior as well as provider behavior toward patient

# How does the US fair?



- Result of income inequality on life and health are catastrophic




International Infant Mortality Rates, Selected Countries, 2005
Source: Centers for Disease Control and Prevention, National Center for Health Statistics
Singapore 2.1
Hong Kong 2.4
Sweden 2.4
Japan 2.8
Finland 3.0
Norway 3.1
Czech Republic 3.4
Portugal 3.5
France 3.6
Belgium 3.7
Greece 3.8
Germany 3.9
Ireland 4.0
Spain 4.1
Switzerland 4.2
Austria 4.2
Denmark 4.4
Israel 4.6
Italy 4.7
Netherlands 4.9
Australia 5.0
England and Wales 5.0
New Zealand 5.1
Scotland 5.2
Canada 5.4
Cuba 6.2
Hungary 6.2
Northern Ireland 6.3
United States 6.9
1
2
3
4
5
6
7
8
Deaths per 1,000 Live Births

# THE SOCIAL DETERMINANTS: 10 TIPS FOR BETTER HEALTH

1. Don't be poor.
   - If you can, stop. If you can't, try not to be poor for long.
2. Don't have poor parents.
3. Own a car.
4. Don't work in a stressful, low-paid manual job.
5. Don't live in damp, low-quality housing.
6. Be able to afford to go on a vacation and sunbathe.
7. Practice not losing your job and don't become unemployed.
8. Make sure you have access to benefits, particularly if you are unemployed, retired, or sick or disabled.
9. Don't live next to a busy major road or near a polluting factory.
10. Learn how to fill in the complex housing benefit/shelter application forms before you become homeless and destitute.

- The Centre for Social Justice, a Canadian advocacy organization with its roots in the Jesuit social justice movement, offers the following tips for better health, as a complement to the more traditional tips to stop smoking, eat more fruits and vegetables, and wear sunblock.
- Source: Centre for Social Justice, Social Determinants Across the Lifespan

# Primary Social Factors Determining Disease

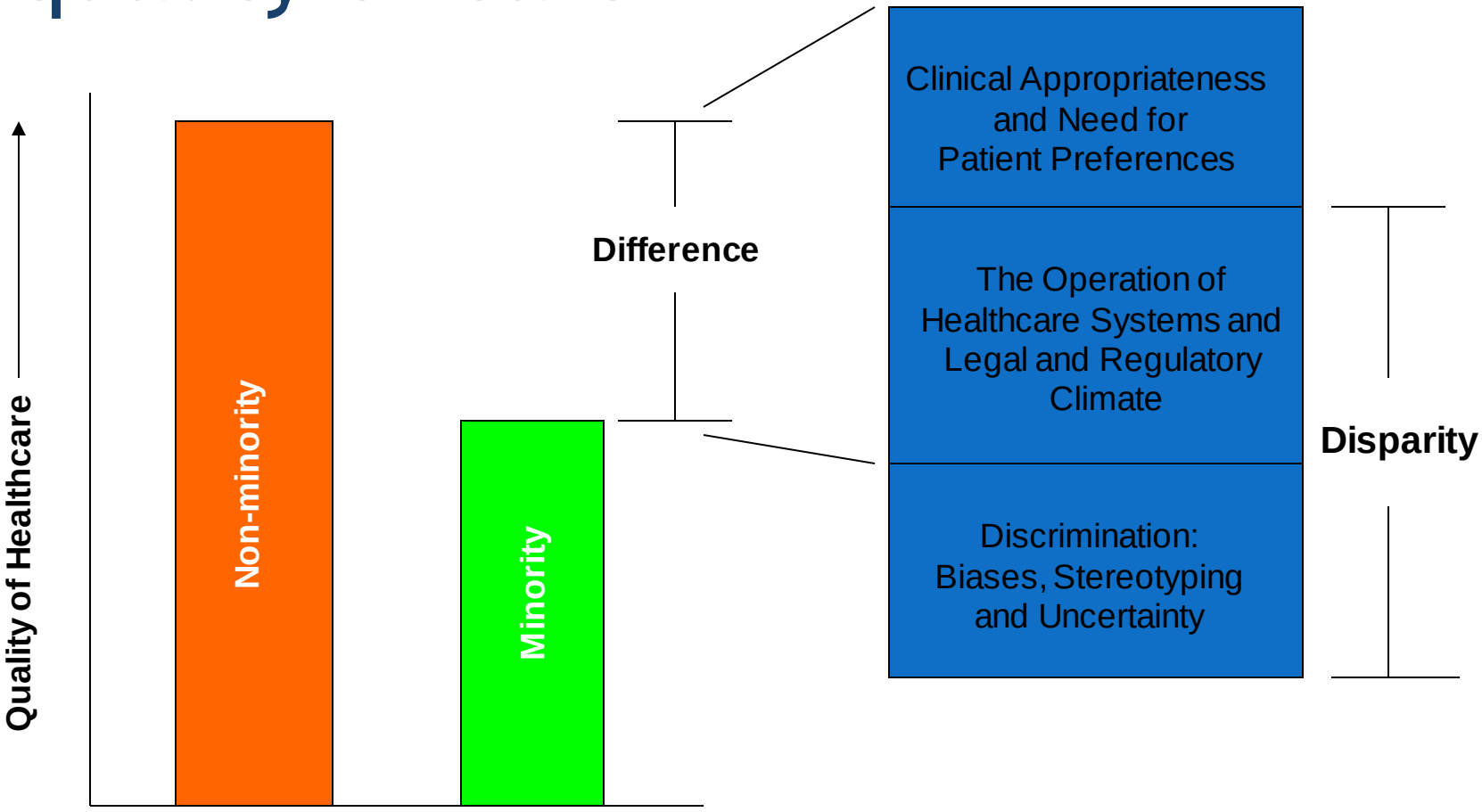
- Race and ethnicity
- Income and employment
- Social standing
- Access

……All elements are related to social marginalization by other humans

# Social Determinants

## Racial Inequality

# The evidence says "race matters" in quality of care




Differences, disparities, and discrimination: Populations with equal access to healthcare. SOURCE: Gomes and McQuire, 2001

# Social Justice

- “Of all the forms of inequality, injustice in health care is the most shocking and inhumane.”

  - Martin Luther King Jr.

# IOM Summary Report: Unequal Treatment

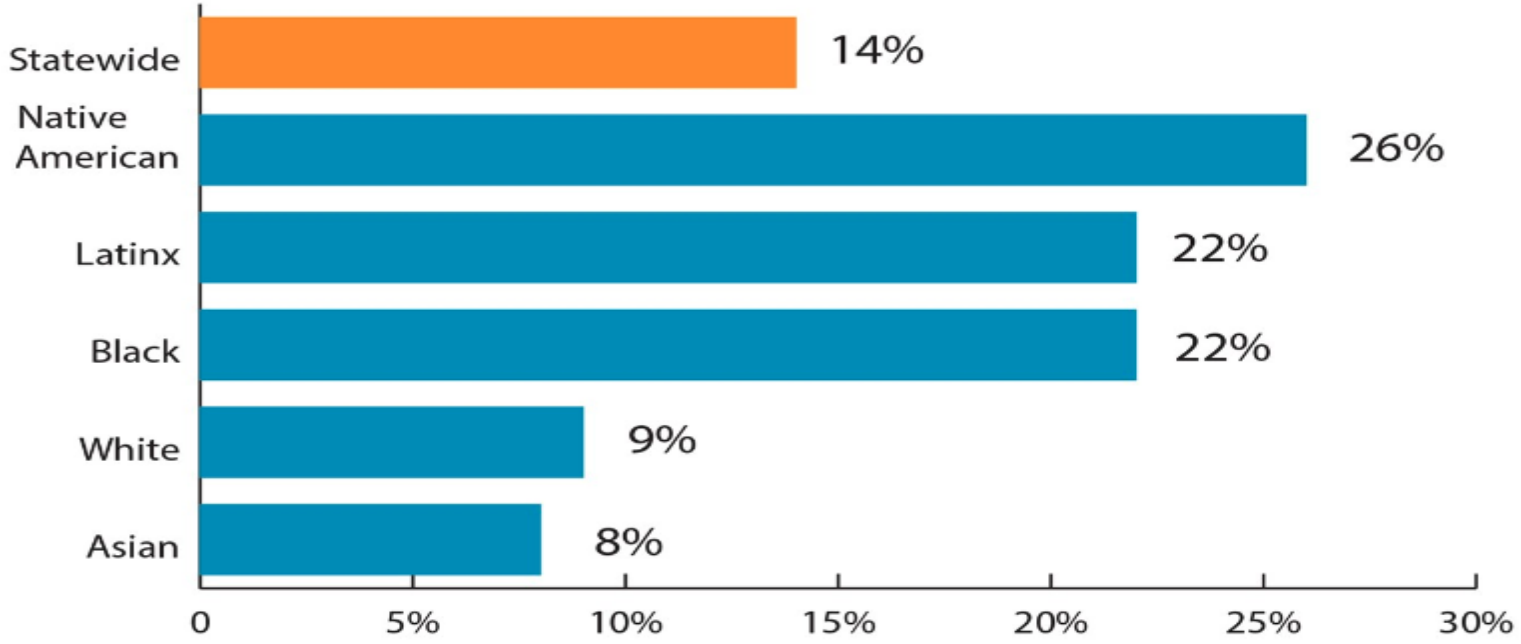
- Racial and ethnic disparities in health care occur in the context of broader historic and contemporary social and economic inequality
- Evidence of persistent racial and ethnic discrimination in many sectors of America
- Many sources – including health systems, health care providers, patients, and administrators – contribute to racial and ethnic disparities in health care.

# Race as an Influencer

- Race is a primary influencer in all other social determinants
  - Plays a role in all societal institutions
- Direct link between race and lower SEC, higher rate of food scarcity, poor housing, higher rates of unemployment

# People of color in N.C. experience disproportionately high poverty rates

POVERTY RATE BY RACE AND ETHNICITY IN N.C., 2019




Source: American Community Survey one-year estimates, Table B17001

# Social Determinants

## Income and Employment

# Income Affects Quality of Life

- High personal debt leads to poorer health outcomes
  - More likely to experience ulcers, digestive tract issues, severe anxiety, headaches and depression

Financial Effects and It's Physical Effects on Individuals and It's Communities. Lauria Choi, Federal Reserve Bank of San Francisco, September 2011

# Low Income

- Lack of income influences ability to:
  - Access to health care
  - Purchase healthy food
  - Live in decent housing
  - Attend a good school
  - Access recreation

# Employment & Income Determined by Educational Attainment

- High School Diploma:
  - Unemployment Rate 4.5%
  - Median weekly earning $626
- Bachelors Degree:
  - Unemployment rate 3.8%
  - Median weekly earnings $1038
- Doctoral Degree:
  - Unemployment rate 1.9%
  - Median weekly incomes $1550

# Income Inequality

- Health is linked to income
- Income is linked to employment and opportunity

# Employment Realities

- Employed people have better health than the unemployed
- Well paid jobs and poorly compensated jobs have drastically different outcomes

**Socioeconomic Disparities In Health: Pathways And Policies; Nancy E. Adler and Katherine Newman; http://content.healthaffairs.org/content/21/2/60.full**

# Employment Policies

- Threat of unemployment and job insecurity can affect health as well
  - People with low power have low locus of control
- Stress (job threats) linked to increases in blood pressure/heart disease

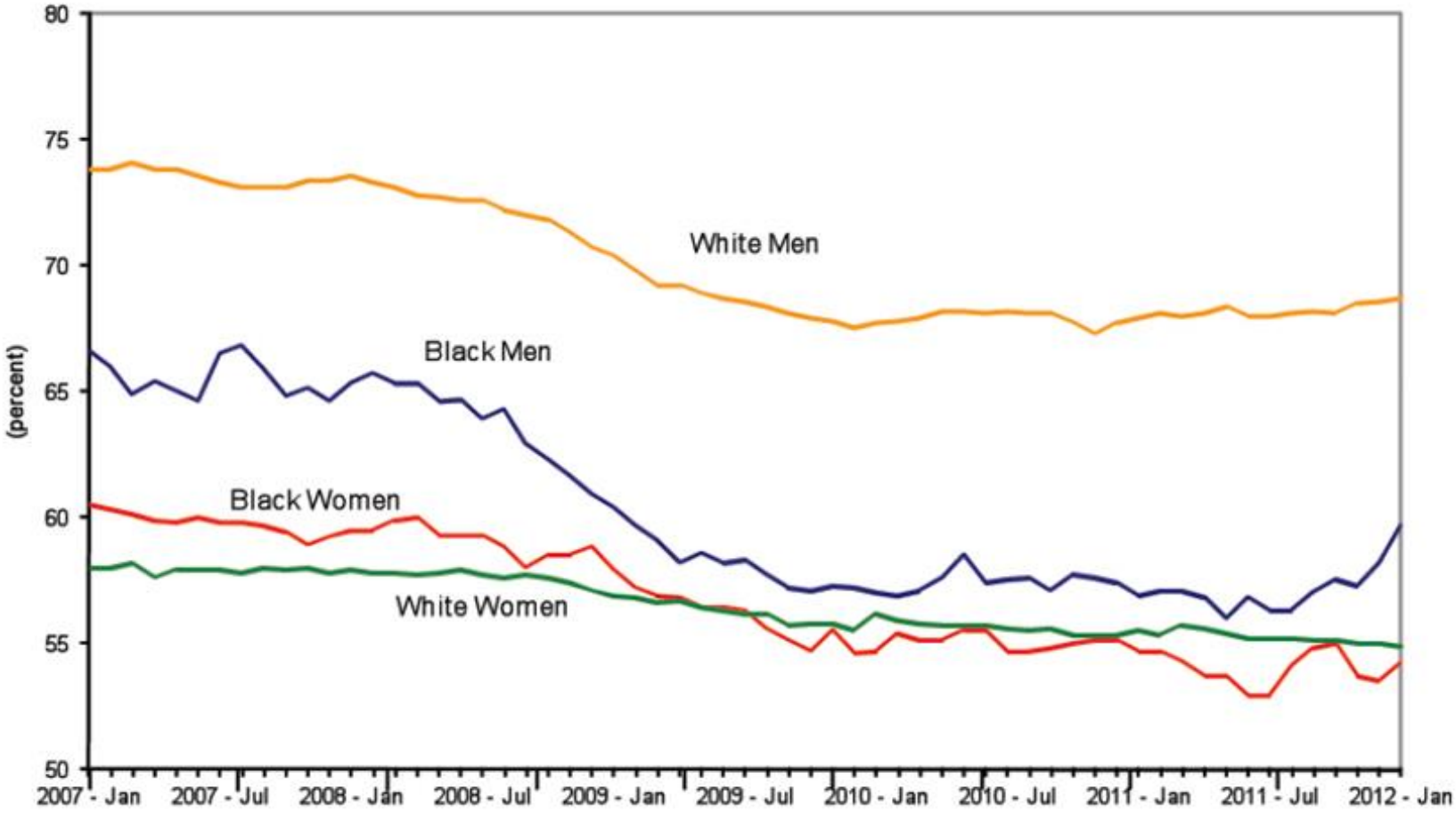
**Socioeconomic Disparities In Health: Pathways And Policies; Nancy E. Adler and Katherine Newman; http://content.healthaffairs.org/content/21/2/60.full**

# Demographic of Labor Force

- More females in workforce, in college/university
  - Lack of childcare
  - Lack of parental support/supervision
- Pandemic laid bare this ugly truth

**Effects of employment policies on health and health disparities, Jody Heymann, MD, 2006**

# Employment Rates per Race



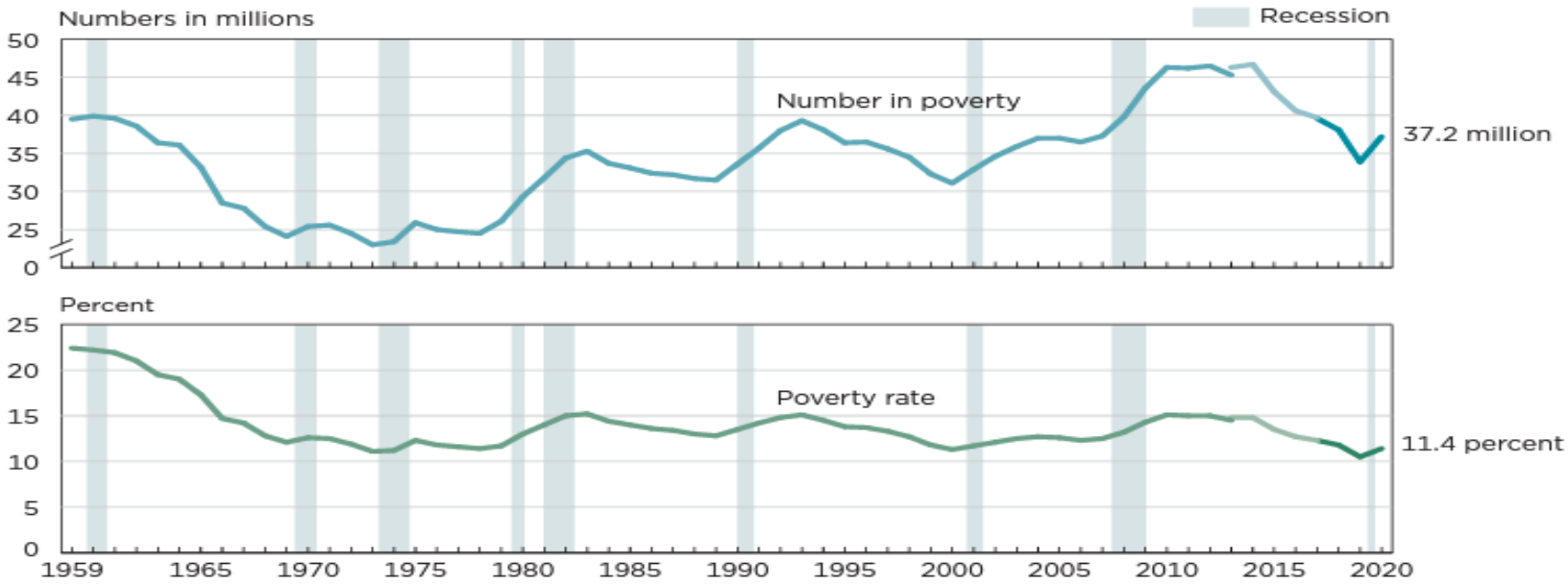

http://www.dol.gov/_sec/media/reports/blacklaborforce/

# Number of People in Poverty 1959-2020

Figure 8.

**Number In Poverty and Poverty Rate: 1959 to 2020**

(Population as of March of the following year)

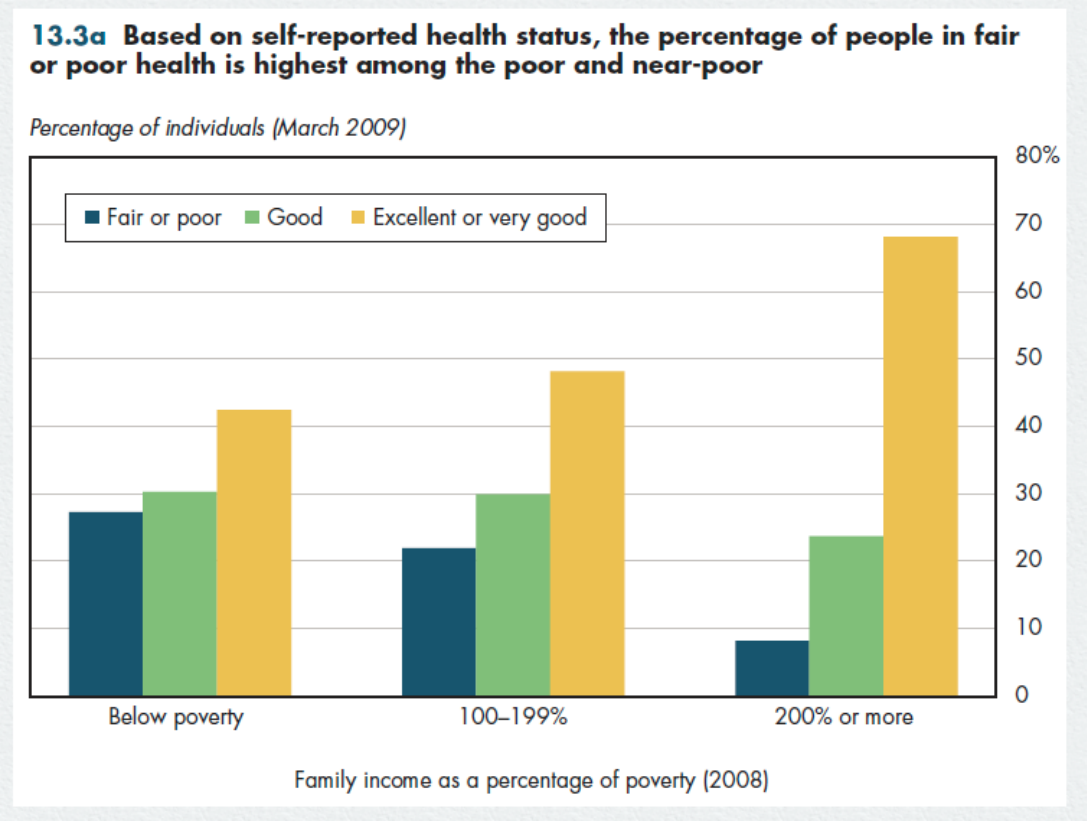


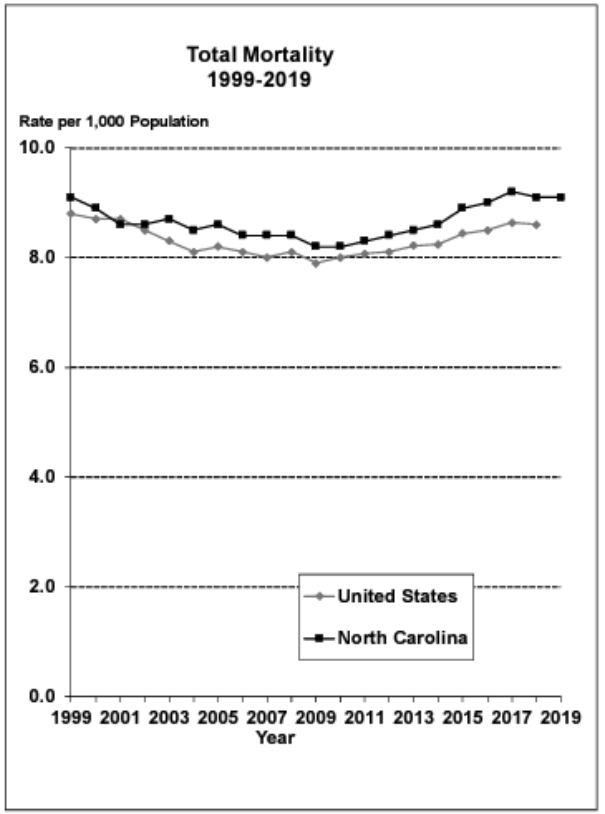

Notes: The data for 2017 and beyond reflect the implementation of an updated processing system. The data for 2013 and beyond reflect the implementation of the redesigned income questions. Refer to Table B-4 for historical footnotes. The data points are placed at the midpoints of the respective years. Information on recessions is available in Appendix A. Information on confidentiality protection, sampling error, nonsampling error, and definitions is available at <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar21.pdf>.

Source: U.S. Census Bureau, Current Population Survey, 1960 to 2021 Annual Social and Economic Supplements (CPS ASEC).

# Poverty on morbidity & mortality

- Almost 30% of those living in poverty report poor to fair health.



# Social Determinants

## Social Standing and Access

# Social Economic Status

- Those lower on the socioeconomic pyramid exposed to more formidable and ongoing stressors
  - Job insecurity
  - Unpaid bills
  - Inadequate childcare
  - Underperforming schools
  - Dangerous or toxic living conditions

# Access

- Income and race directly tied to lack of access to:
  - Healthcare
  - Housing
  - Healthy food

# Access to Healthcare

- U.S. healthcare expenditures are 2x more per capita of other developed nations → Yet, outcomes are poorer
- Healthcare and health insurance are out of the reach for many

Papanicolas, I., Woskie, L. R., & Jha, A. K. (2018). Health care spending in the United States and other high-income countries. *Jama*, *319*(10), 1024-103

- In 2009 the number of uninsured Americans increased from 46.3 million to 50.7 million

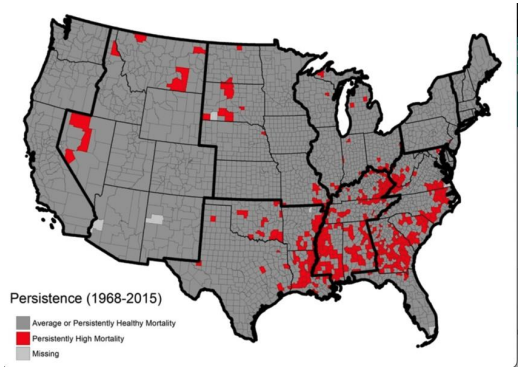
| Health Center Name | City | State | Patients at or below 200% of poverty | Patients at or below 100% of poverty | Uninsured | Me |
|---|---|---|---|---|---|---|
| ADVANCE COMMUNITY HEALTH | RALEIGH | NC | 96.21% | 66.63% | 38.06% | |
| ANSON REGIONAL MEDICAL SERVICES | WADESBORO | NC | 72.52% | 44.73% | 10.35% | |
| APPALACHIAN DISTRICT HEALTH DEPARTMENT | SPARTA | NC | 97.09% | 81.64% | 53.61% | |
| APPALACHIAN MOUNTAIN COMMUNITY HEALTH CENTERS. | ASHEVILLE | NC | 96.84% | 75.81% | 33.45% | |
| BAKERSVILLE COMMUNITY MEDICAL CLINIC, INC. | BAKERSVILLE | NC | 80.23% | 46.44% | 23.65% | |
| BERTIE COUNTY RURAL HEALTH ASSOCIATION | WINDSOR | NC | 89.25% | 48.36% | 10.42% | |
| BLUE RIDGE COMMUNITY HEALTH SERVICES, INC. | HENDERSONVLLE | NC | 92.70% | 62.03% | 48.61% | |
| CABARRUS ROWAN COMMUNITY HEALTH CENTERS, INC | CONCORD | NC | 80.68% | 60.50% | 49.48% | |

# Forgo Medical Care to Save Cost

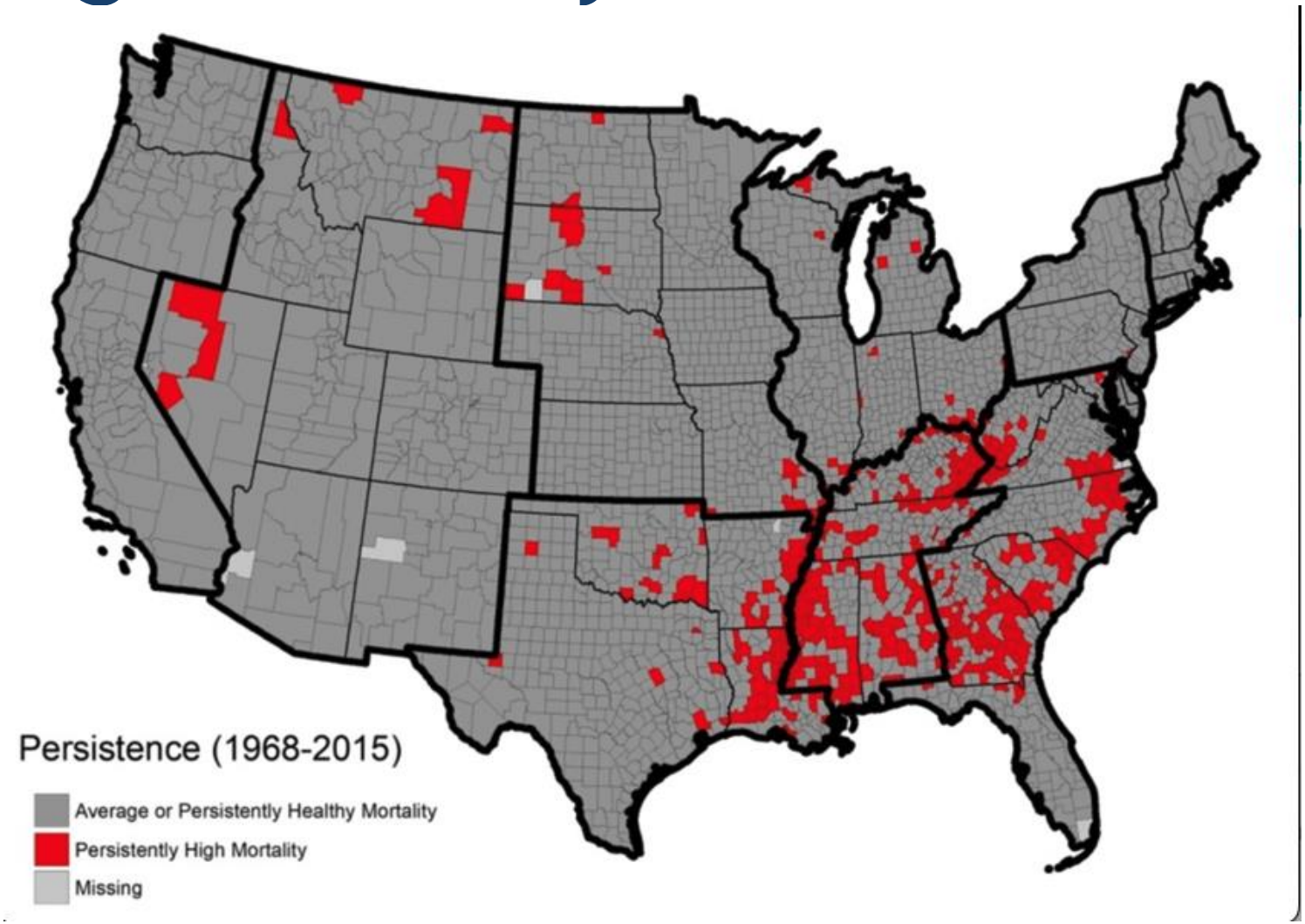
- Many Americans are skipping medical care to save costs
  - Unfilled prescriptions
  - Taking less medicine than prescribed
  - Skipping a medical test or procedure

# Rural Area Access

- 75% of high mortality counties are rural
- The persistence of mortality is heavily concentrated in the South (88%)
- High mortality counties <3% in other census divisions



# High Mortality in Rural Areas




James et al. 2018. Persistence of death in the United States: The remarkably different mortality patterns between America's Heartland and Dixieland

# Gates County, NC

- Gates County continues to see mortality rates higher than the national average
- Age-adjusted death rate due to diabetes between 2012-2016 was 36.4 (*per 100,000*) compared to a U.S. average of 21.1

# Gates County

Figure 43. Services Needing the Most Improvement, as Ranked by Survey Respondents

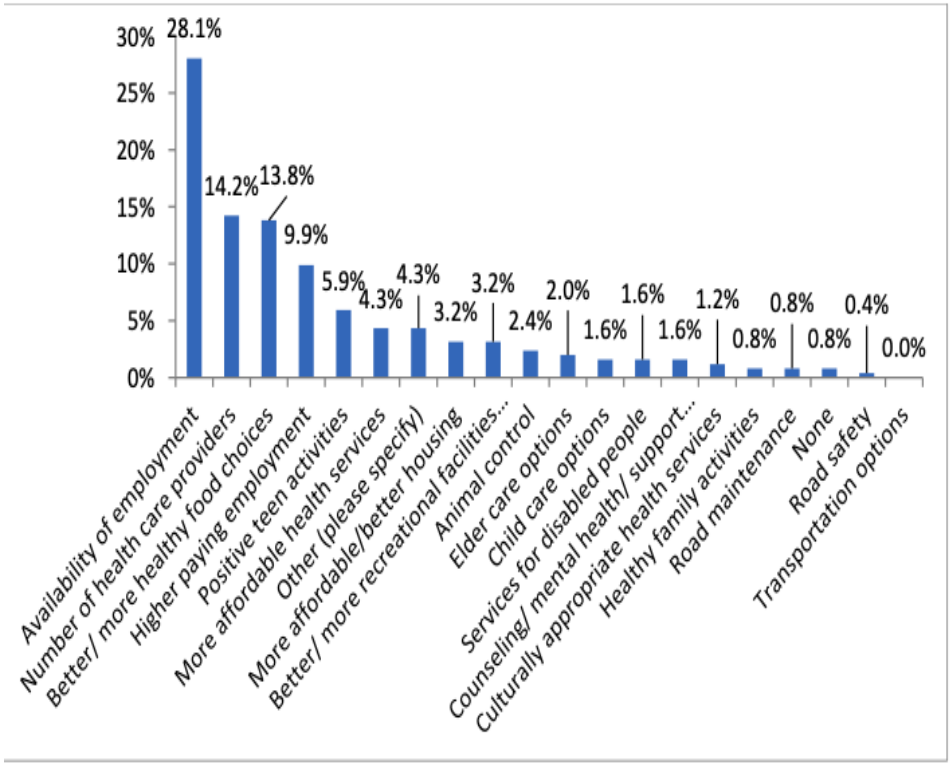
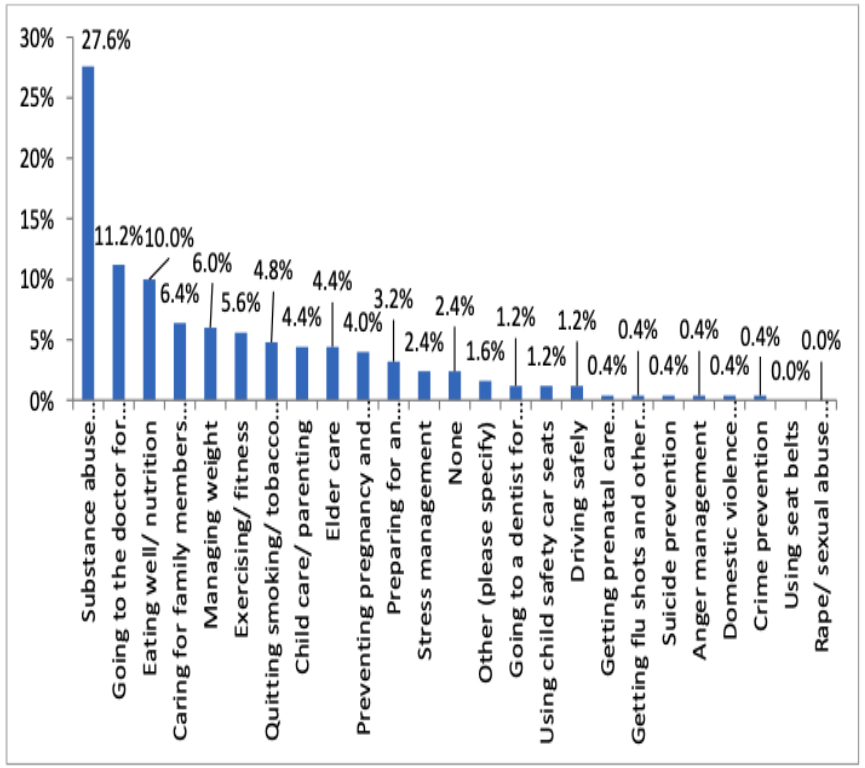



Figure 44. Health Behaviors that Residents Need More Information About, As Ranked by Survey Respondents




https://schs.dph.ncdhhs.gov/

# Access to Affordable Housing

- Housing quality—safety issues:
  - Mold, lead, noise, fires, falls
- Physical neighborhood attributes:
  - Lack of bike trails, green space, public transportation
- Social and community attributes:
  - Segregation and concentration of poverty

Housing and Health: New Opportunities for Dialogue and Action, National Center for Health Housing, July 16, 2012

# Housing Matters

- Unaffordable housing causes:
  - Financial stress
  - Reallocation of finances
  - Crowding
  - Pandemic evictions

A Look Inside Food Desserts, http://www.cdc.gov/Features/fooddeserts/index.html
Learning democracy through food justice movements, Charles Z. Levkoe, Agriculture and Human Values (2006) 23: 89–98

# Access to Healthy Foods

- Human and environmental health go hand in hand
- What matters is not just "what" is eaten, but "how" it is produced and distributed

A Look Inside Food Desserts, http://www.cdc.gov/Features/fooddeserts/index.html
Learning democracy through food justice movements, Charles Z. Levkoe, Agriculture and Human Values (2006) 23: 89–98

# Food Deserts

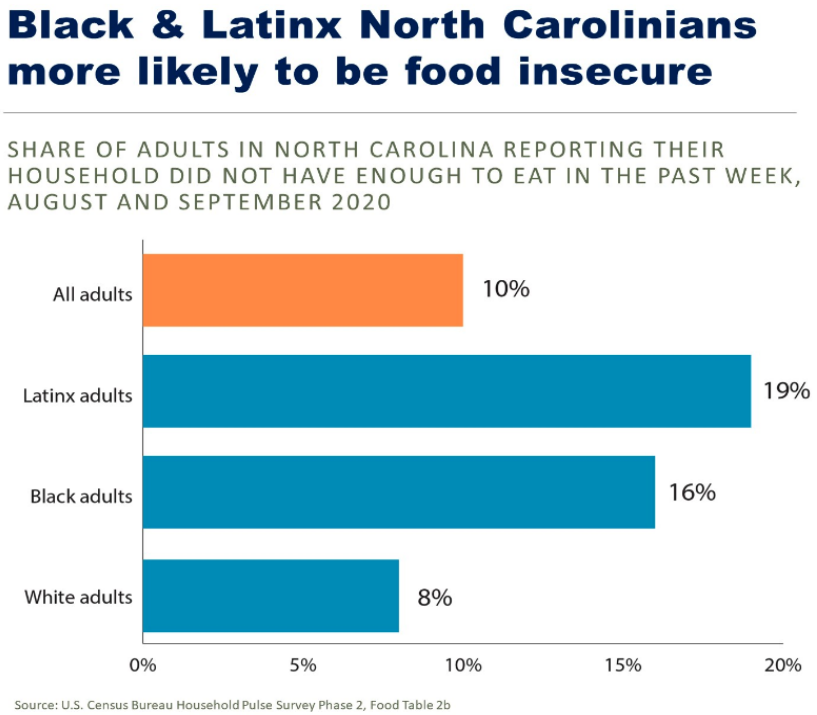
- Lack of access to affordable healthy food choices

**FIGURE 2.**
**Food Deserts in North Carolina by 2020 Model Prediction**


Source. Food Access Research Atlas. United States: USDA Economic Research Service; 2019. http://www.ers.usda.gov/. Food Hardship Index. United States: Cape Fear Collective; 2020.

# NC Food Desert

- Limited food budgets make it a struggle to consume recommended daily value of essential nutrients




Monsavis, Agarwall, & Drewnowksi. Following Federal Guidelines to Increase Nutrient Consumption

# Burdening the System

## Patients Suffer, American Healthcare System Suffers

# Burdening the System

- These disparities are putting a financial burden on our healthcare system and society at large:
  - Caring for sicker patients cost more
  - Lost productivity and absenteeism
  - Lost wages
  - Premature death

# Costs of Inequities

- Between 2003 and 2006, 31% of direct medical care expenditures for African Americans, Asians, American Indians and Hispanics were excess costs *due to health inequalities*

The Economic Burden of Health Inequalities in the United States. Joint Center for Political and Economic Students. September 2009.

# Tracking the Numbers

- To Advance health equity you must first understand the root causes
  - Reach beyond the clinic
  - Engage in the community
  - Make the connection
- And the only way to know your specific causes in your clinic is to *TRACK YOUR NUMBERS*

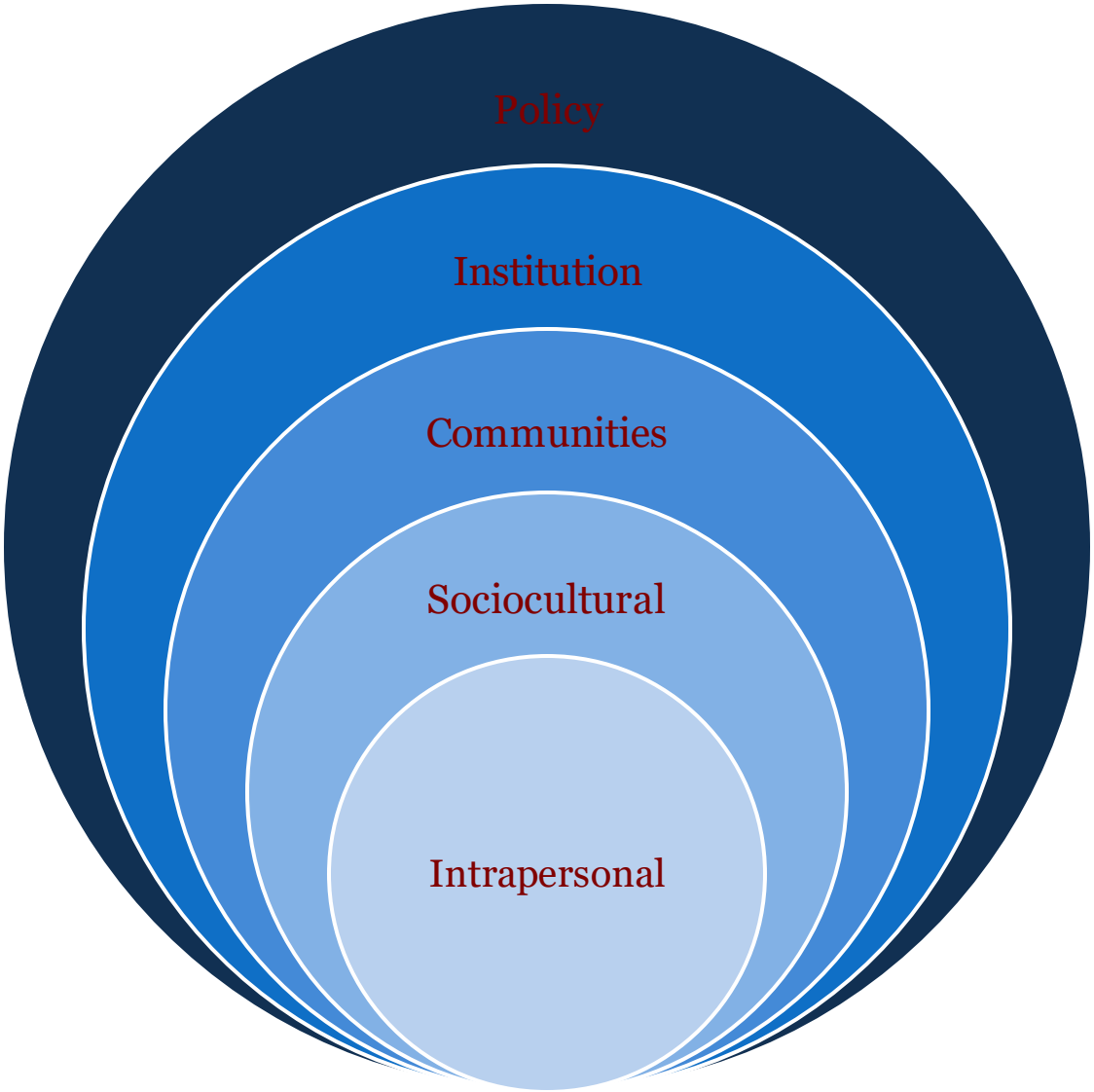
# Reducing Disparities

## A Multi-Level Approach

# What We Know

- SOCIAL INEQUALITY inhibits access to the conditions for optimal health
- Multi-level interventions warranted to appreciate changes

# Multi-level Interventions



# Improving Access

- Improve patient outcomes by increasing providers that represent the community they serve
- Providers return to communities from which they came
- NCCHCA working to create a pipeline of qualified providers of color

# Improving Healthy Food Access

- Grassroots, food-based organizations
- Urban agriculture programs
- Influence policy makers

# Reducing Disparities

## Re-examining Patient & Provider Behaviors

# Behavioral Factors

- Patient-Level
  - Patient preferences
  - Care seeking behaviors and attitudes
  - Clinical appropriateness of care
- Health Care Systems-Level
  - Lack of interpretation and translation services
  - Time pressures in clinical encounters
- Provider-Level ***
  - Unexamined bias and stereotyping
  - Clinical uncertainty
  - Beliefs, stereotypes and assumptions about the behavior or health of minority patients

# The Core Paradox?

- How could well-meaning and highly educated health professionals create a pattern of care that appears to be discriminatory?

# Disparities in the Clinical Encounter

- *Unconscious Bias*
- *Clinical Uncertainty* – particularly when providers treat patients that are dissimilar in cultural or linguistic background
- *Stereotyping* – through use of 'cognitive shortcuts'

# Unconscious Bias

- Is a learned stereotype that operates automatically – unconsciously – when interacting with people.
- Different from bigotry or overt racism
- Data supports the fact that people can and do genuinely believe in equality, while simultaneously engaging in behavior that favors dominant groups.

What is Unconscious Bias? http://writers.unconsciousbias.org/

# Bias in Clinical Encounters

- Approximately 40% of 1st and 2nd year medical students believe Black people have thicker skin
- Misinformation and hidden biases fuel inadequate treatment of minorities' pain
- Fosters an environment of mistrust and hostility

Sabin J. 2020. How we fail Black patients in pain. AAMC

# Stereotyping

- Can exert powerful effects on thinking and actions at an implicit, unconscious level
- Can influence how information is processed and recalled
- Can exert "self-fulfilling" effects, as patients' behavior may be affected by providers' overt or subtle attitudes and behaviors

# Strategies for Reducing Unconscious Bias

- Awareness training of bias and stereotypes and their effect on clinical decision making
- Practice self-reflection
- Individuation vs. categorization
- Perspective-taking and affective empathy
- Partnership building

Medscape Family Medicine, Cultural Competency in Healthcare, Module 1: Recognizing and Addressing Bias
http://www.medscape.org/viewarticle/573591_3

# What Can We Do?

- **START BY TRACKING YOUR NUMBERS AT YOUR CLINIC**
  - In order to institute specific strategies for improvement, we must have data
- Emphasis on health promotion and disease prevention
- Patient-centered = improved self-care

Papanicolas, I., Woskie, L. R., & Jha, A. K. (2018). Health care spending in the United States and other high-income countries. *Jama*, *319*(10), 1024-103

# QUESTIONS?