



VAYAHEALTH



# Understanding Ethnic Health Disparities

Brooke Baker


PharmD. Candidate, 2021

UNC Eshelman School of Pharmacy





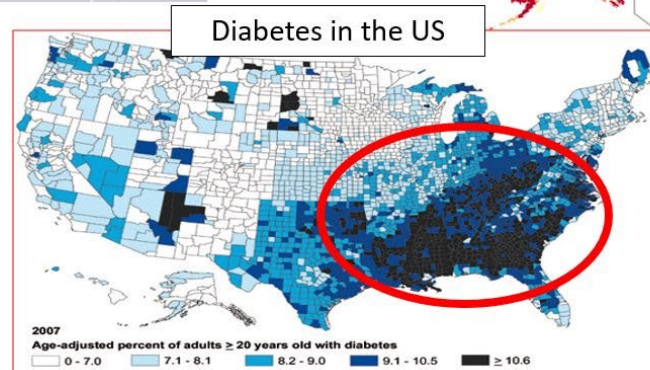
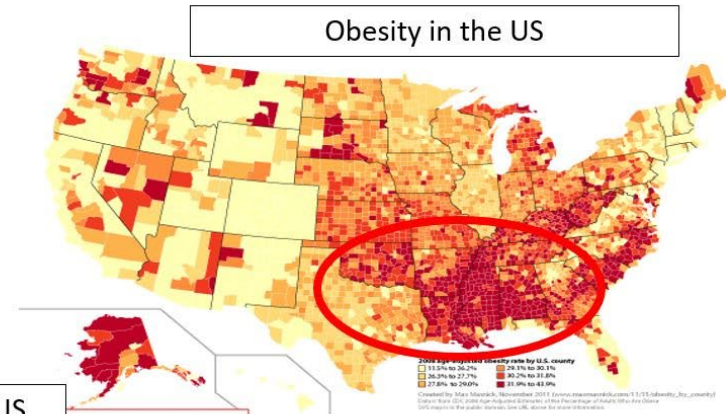
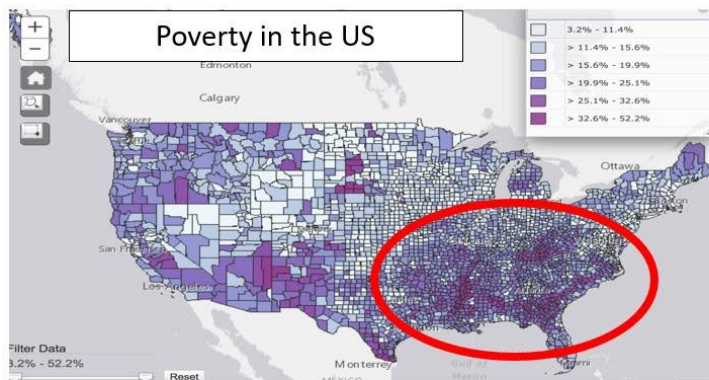
# Health Disparities



***Health disparities adversely affect groups of people who have systematically experienced greater social or economic obstacles to health based on their racial or ethnic group, religion, socioeconomic status, gender, age, or mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.***

**Healthy People  
(2020)**

# How is poverty a disparity?



# More examples of health disparities:

- Native Americans and Alaska Native adults are twice as likely to have diagnosed type 2 diabetes than Non-Hispanic adults.
- Latinx are about 50% more likely to die from diabetes or liver disease.
- Racial/ethnic disparities in health persist today ***even when comparing groups of similar socioeconomic status.***
  - For example, the infant mortality rate for college educated Black women is higher than that for white women with similar education (11.5 vs. 4.2 per 1,000 live births).

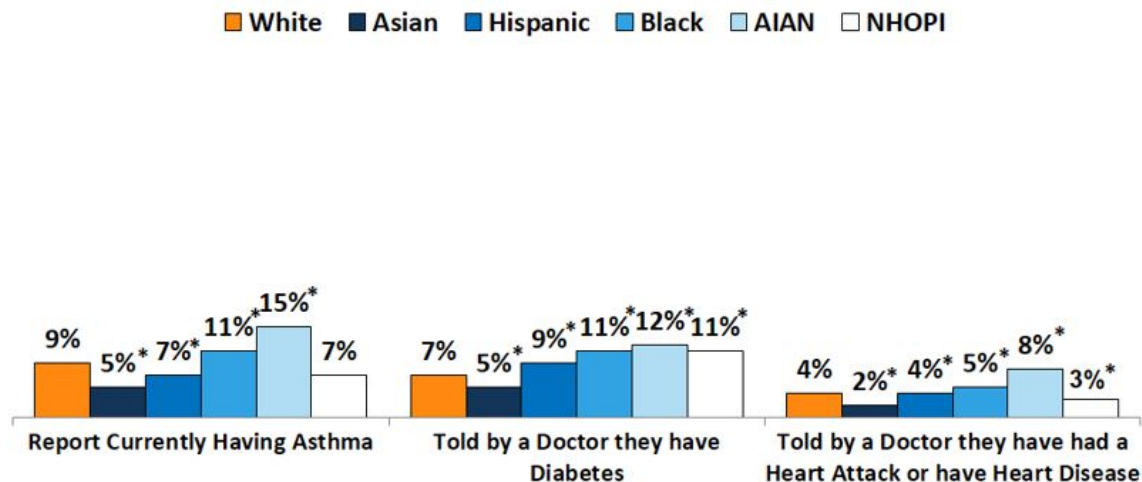


# How to look at selected health conditions by race/ethnicity:

- Healthy People 2020 Health Disparities Data Widget: [healthypeople.gov](https://healthypeople.gov)

Figure 4

## Percent of Nonelderly Adults with Selected Health Conditions by Race/Ethnicity, 2014



\* Indicates statistically significant difference from the White population at the  $p < 0.05$  level.

NOTE: AIAN refers to American Indians and Alaska Natives. NHOPi refers to Native Hawaiians and Other Pacific Islanders. Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic. Includes nonelderly individuals 18-64 years of age.

SOURCE: Kaiser Family Foundation analysis of CDC, Behavioral Risk Factor Surveillance System, 2014.



# True or False?

- African Americans receive an equal number of referrals to renal transplantation compared to white patients.
  - True
  - False





# True or False?

- African Americans receive an equal number of referrals to renal transplantation compared to white patients.
  - True
  - **False**

Correct! A study of patients with end-stage renal disease (ESRD) from four regional networks in geographically diverse areas found that African American patients were less likely to be rated as appropriate candidates for transplantation, referred for evaluation, placed on a waiting list for a transplant, and to ultimately undergo the procedure compared to white patients.



# True or False?

- Hispanics and African Americans are less likely to receive rehabilitative care after traumatic brain injury (TBI)
  - True
  - False



# True or False?

- Hispanics and African Americans less likely to receive rehabilitative care after traumatic brain injury (TBI)
  - **True**
  - False

Correct! In a study of traumatic brain injury the authors identified ~300,000 TBI incidents:

~200,000 non-Hispanic white

~30,000 Hispanic

~37,000 African Americans



# True or False?

- African American children have a rate of hospitalization for asthma that is 4 to 5 times higher than the rate for white children.
  - True
  - False



# True or False?

- African American children have a rate of hospitalization for asthma that is 4 to 5 times higher than the rate for white children.
  - **True**
  - False

Correct!

↓ scheduled maintenance inhaler prescribed

↑ rescue inhaler use

↑ ED visits



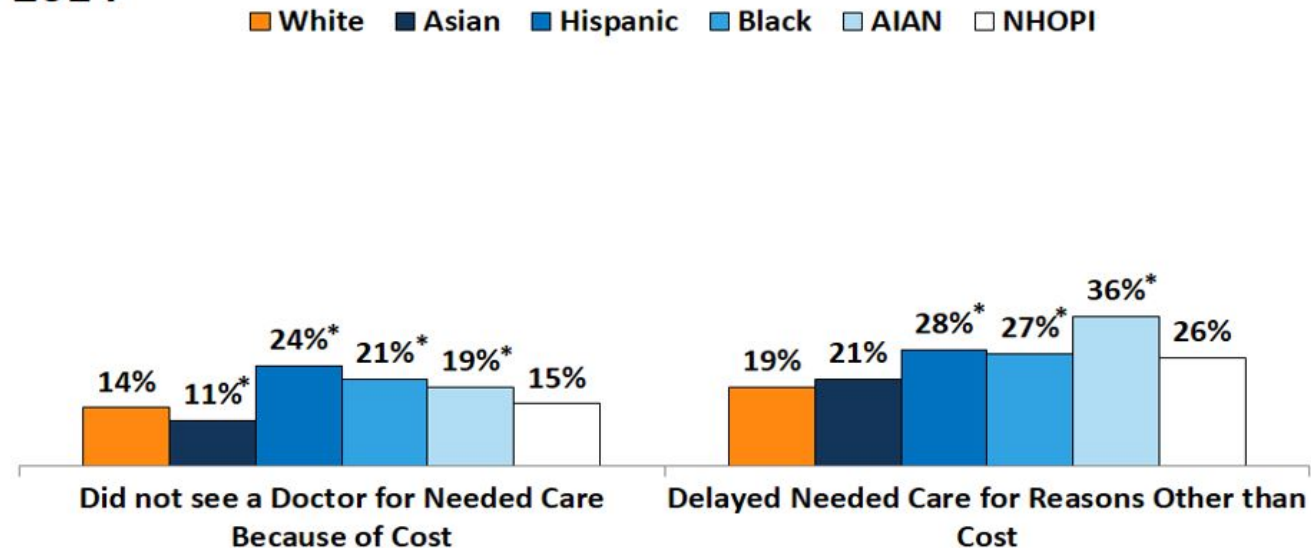
# Why do health disparities exist?

- History of discrimination in healthcare
  - 1932-1972: Tuskegee Syphilis Experiment
  - 1951: Henrietta Lacks cells stolen
  - 1969: Latinx women given placebos instead of contraception without their knowledge or consent
  - 1973-1976: IHS sterilized 3000 Native Americans without adequate consent



Figure 3

## Percent of Nonelderly Adults who did not Receive or Delayed Care in the Past 12 Months by Race/Ethnicity, 2014



\* Indicates statistically significant difference from the White population at the  $p < 0.05$  level.

NOTE: AIAN refers to American Indians and Alaska Natives. NHOPI refers to Native Hawaiians and Other Pacific Islanders. Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic. Includes nonelderly individuals 18-64 years of age.

SOURCE: Kaiser Family Foundation analysis of CDC, Behavioral Risk Factor Surveillance System, 2014.



# "The Effect of Race and Sex on Physicians' Recommendations for Cardiac Catheterization"



- Same patient
- Different gender
- Different race

What do you think the different outcomes were?

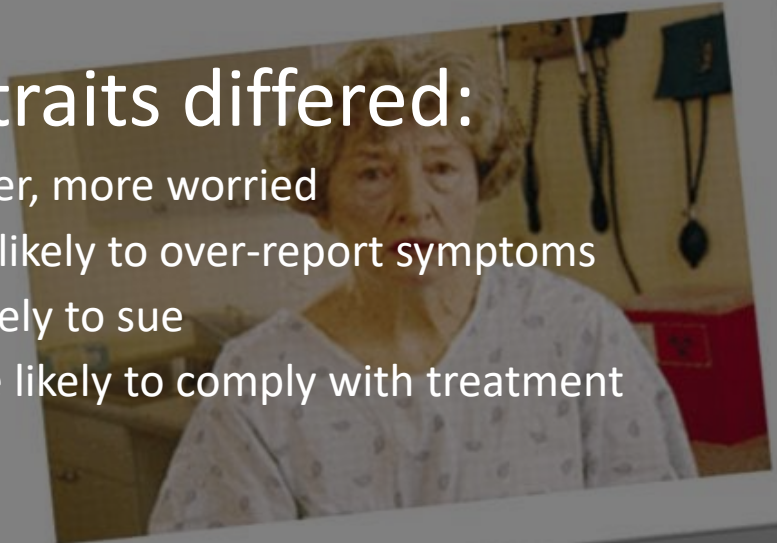
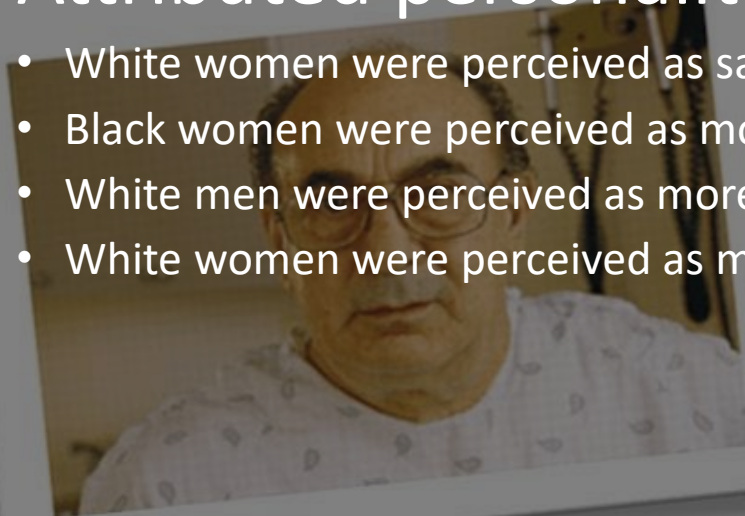
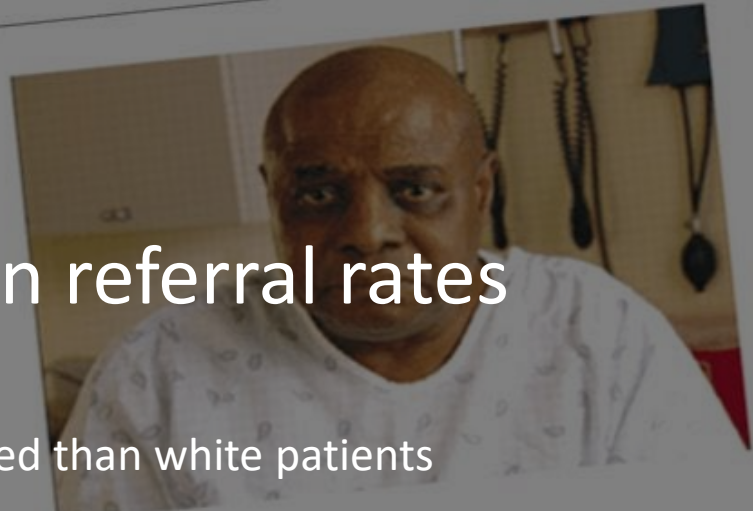
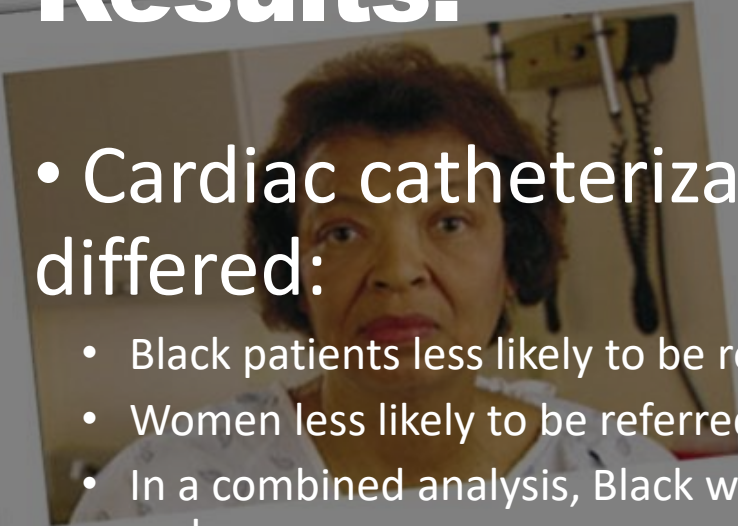
# Results:

- Cardiac catheterization referral rates differed:

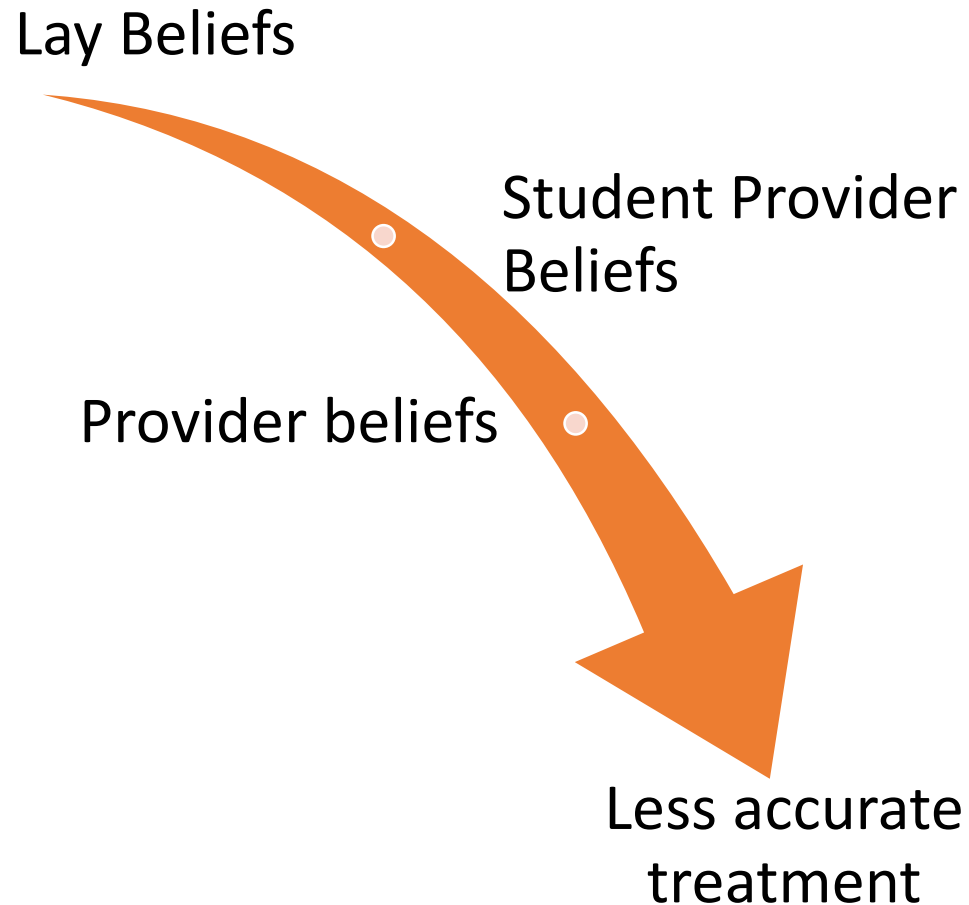
- Black patients less likely to be referred than white patients
- Women less likely to be referred than men
- In a combined analysis, Black women fared the worst as compared to white males

- Attributed personality traits differed:

- White women were perceived as sadder, more worried
- Black women were perceived as more likely to over-report symptoms
- White men were perceived as more likely to sue
- White women were perceived as more likely to comply with treatment




# Provider Bias and Misinformation





# **Social Determinants of Health**



***The social determinants of health are the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics.***

**World Health Organization  
(2008)**



**Bottom Line:** the issue is that there is a difference between the health status of one population compared to another population

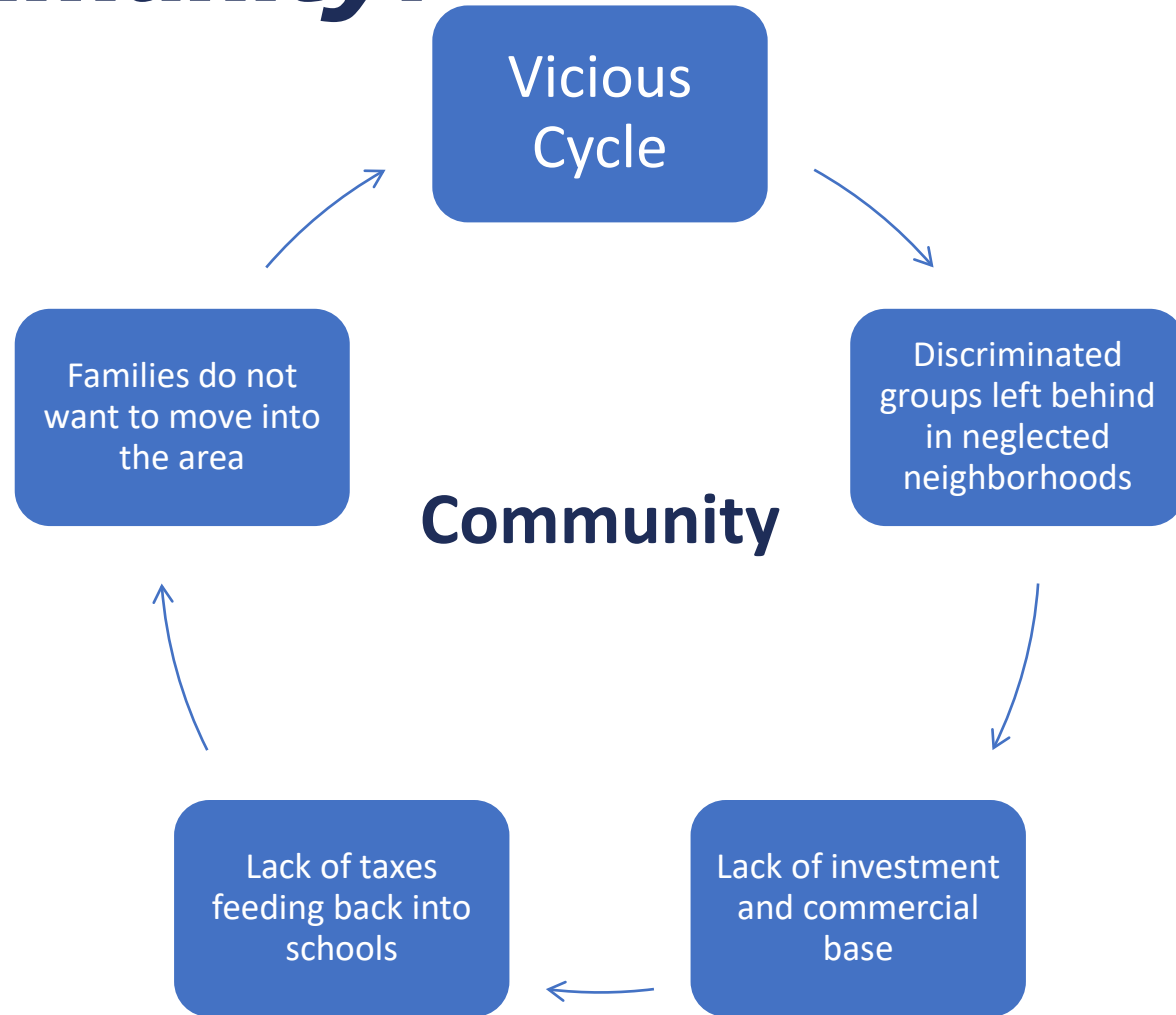
# What are the social determinants of health (SDOH)?

- They are the inter-related, complex, overlapping social and economic factors that influence health.
  - Socioeconomic status
  - Discrimination
  - Institutional racism
  - Housing
  - Physical environment (i.e., near sewer plant, location to highways or factories, green space)
  - Food security
  - Child development
  - Culture
  - Social support and connection
  - Health care services/access
  - Transportation
  - Working conditions
  - Civic participation

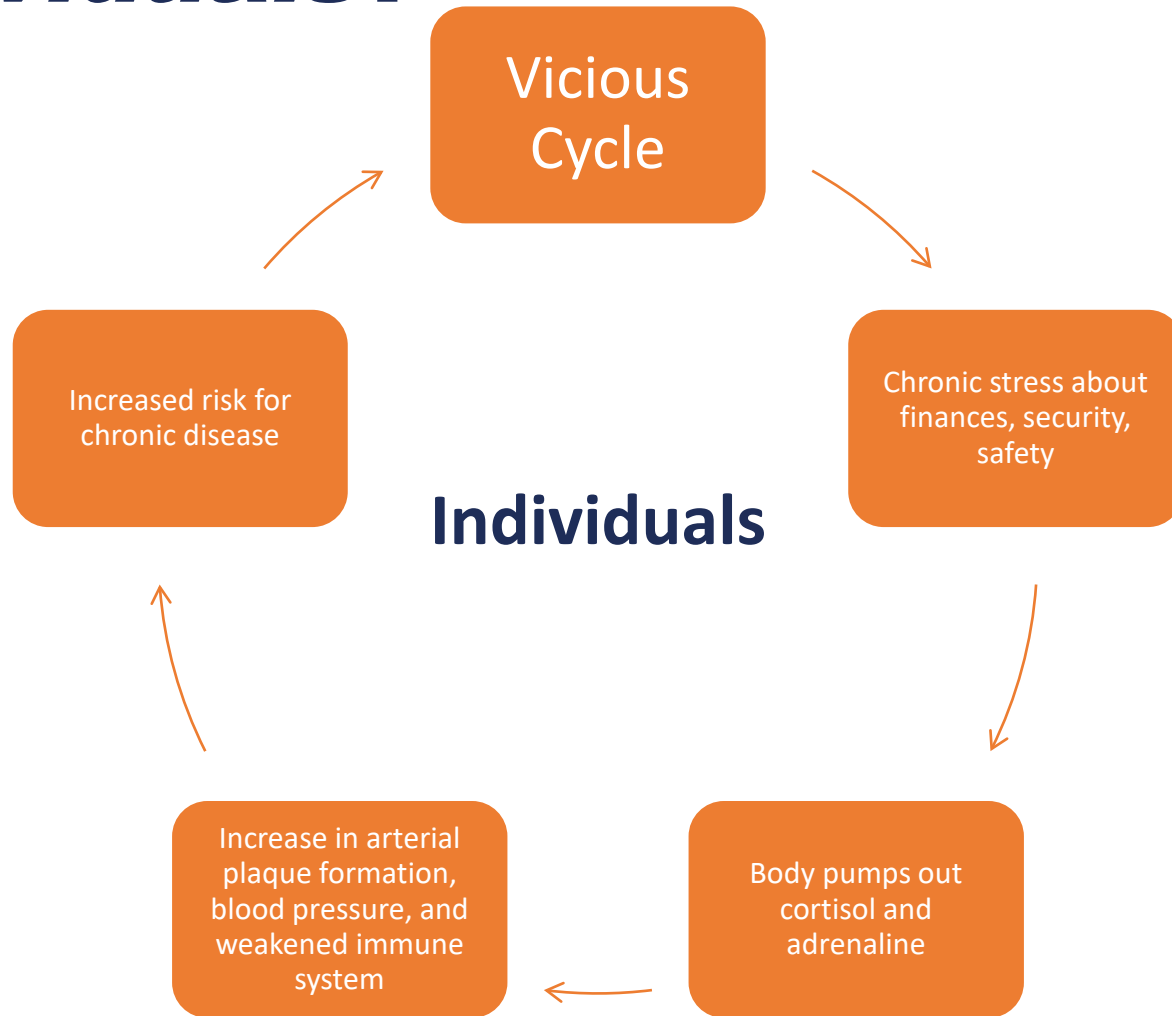




# How do SDOH manifest in the *community*?



# How do SDOH manifest in *individuals*?





**How do we address this?**

# Tools for overcoming health disparities and the SDOH

- Rebuild Trust
- Cultural Humility
- Patient-Provider Communication



# Questions?

Contact:

[Brooke.Baker@vayahealth.com](mailto:Brooke.Baker@vayahealth.com)

[Brooke\\_Baker@unc.edu](mailto:Brooke_Baker@unc.edu)



# Resources

1. "Healthy People 2020." Healthy People 2020 |, [www.healthypeople.gov/](http://www.healthypeople.gov/). Accessed 18 August 2020.
2. "Office of Minority Health." Diabetes and American Indians/Alaska Natives - The Office of Minority Health, [minorityhealth.hhs.gov](http://minorityhealth.hhs.gov). Accessed 17 August 2020.
3. "Hispanic Health." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 5 May 2015, [www.cdc.gov/vitalsigns](http://www.cdc.gov/vitalsigns). Accessed 17 August 2020.
4. "Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 6 Sept. 2019, [www.cdc.gov](http://www.cdc.gov). Accessed 17 August 2020.
5. Epstein AM, Ayanian JZ, Keogh JH, et al. Racial disparities in access to renal transplantation--clinically appropriate or due to underuse or overuse?. *N Engl J Med*. 2000;343(21):1537.
6. ZIZitoTO, J. M., Safer, D. J., Dosreis, S., & Riddle, M. A. (1998). Racial Disparity in Psychotropic Medications Prescribed for Youths With Medicaid Insurance in Maryland. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37(2), 179–184.
7. D. Crocker, C. Brown, R. Moolenaar, et al. Racial and ethnic disparities in asthma medication usage and health-care utilization: data from the National Asthma Survey. *Chest*, 136 (2009), pp. 1063-1071.
8. Written by Harry Kretchmer, Senior Writer. "A Brief History of Racism in Healthcare." World Economic Forum, [www.weforum.org/agenda/2020/07/medical-racism-history-covid-19/](http://www.weforum.org/agenda/2020/07/medical-racism-history-covid-19/). Accessed 18 August 2020.
9. Schulman KA, Berlin JA, Harless W, et al. The effect of race and sex on physicians' recommendations for cardiac catheterization [published correction appears in *N Engl J Med* 1999 Apr 8;340(14):1130]. *N Engl J Med*. 1999;340(8):618-626.
10. Hoffman KM, Trawalter S, Axt JR, Oliver MN. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *Proc Natl Acad Sci U S A*. 2016;113(16):4296-4301. doi:10.1073/pnas.1516047113
11. Ada Stewart, M.D. "Cultural Humility Is Critical to Health Equity." AAFP Home, 18 Apr. 2019, [www.aafp.org/news/blogs/leadervoices/entry/20190418lv-humility.html](http://www.aafp.org/news/blogs/leadervoices/entry/20190418lv-humility.html).





VAYAHEALTH