STROUDWATER

UNDERSTANDING YOUR MARKET THROUGH A HEALTH EQUITY LENS

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TODAY'S WEBINAR

- Rural America faces disproportionate social and economic disparities compared to urban settings, often leading to poor health outcomes for rural patients and their communities.
- Now is the time to leverage data at the local level to begin to reduce healthcare disparities and develop interventions to improve health.
- Today's webinar will address the following:
  - **Understand the importance of health equity and social determinants of health data**
  - **Identifying what the data tells us about health disparities and priorities within a specific service area or county**
  - **Appreciating how this data can support a health equity strategy and recognizing your Circle of Influence**

HEALTH EQUITY AND SOCIAL DETERMINANTS OF HEALTH

WHY HEALTH EQUITY DATA MATTERS

Unless specifically measured, **disparities in health and healthcare can go unnoticed** even as stakeholders seek to improve healthcare

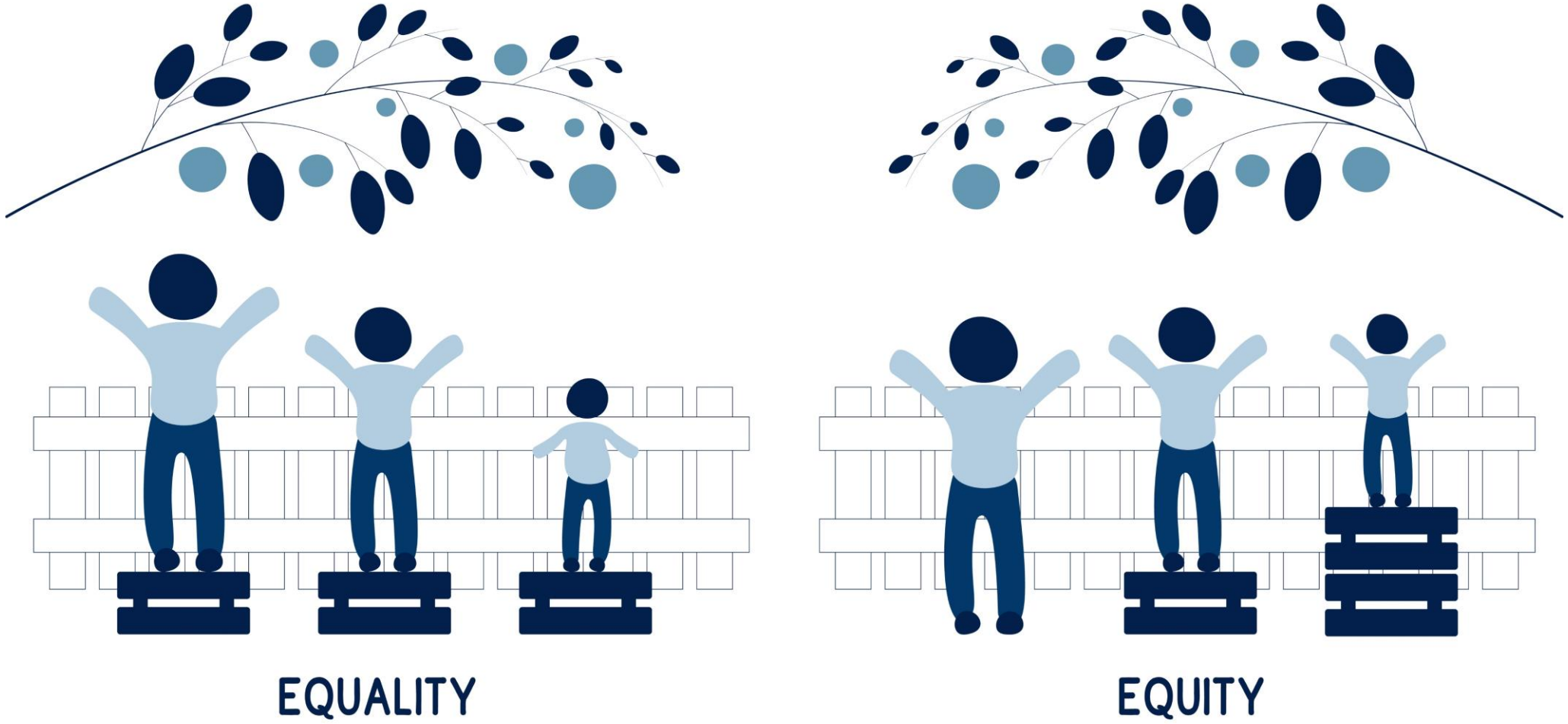
Stratifying healthcare data by race, ethnicity, language and other demographic factors such as age, sex, health literacy, sexual orientation, gender identity, socioeconomic status and geography is **vital for understanding and addressing health disparities**

Healthcare organizations often **underestimate the magnitude of disparities** in their own patient populations, and they may be unaware of barriers patients face

Closely examining stratified quality and health outcome data is the **most reliable way to reveal the type and magnitude of disparity** and then **allocate or reallocate resources accordingly**

Sources: https://www.chcs.org/resource/using-data-to-reduce-disparities-and-improve-quality-a-guide-for-health-care-organizations/; https://www.chcs.org/media/Using-Data-to-Reduce-Disparities-2021_Final.pdf

EQUITY VS. EQUALITY



HEALTH EQUITY GENERALLY REFERS TO INDIVIDUALS ACHIEVING THEIR HIGHEST LEVEL OF HEALTH THROUGH THE ELIMINATION OF DISPARITIES IN HEALTH AND HEALTH CARE. (KFF.ORG)

HEALTH INEQUITY

- Health inequities are unjust differences in health status due to things like **discrimination, exclusion of certain groups of people, and lack of power and financial mobility**
- The ability of people to access health services and to meet their basic needs (food, housing, etc.) are affected by:
  - **Income level**
  - **Educational attainment**
  - **Race/ethnicity**
  - **Health literacy**

Source: https://www.ruralhealthinfo.org/topics/social-determinants-of-health#rural-difference
https://www.ahip.org/the-impact-of-social-determinants-of-health-on-health-equity-and-their-root-causes/

HEALTH DISPARITIES TODAY IN RURAL AMERICA

Significant rural-urban disparity in life expectancy exists in the United States

A recent study of the five leading causes of death in the United States (heart disease, cancer, unintentional injury, chroniclower respiratory disease, and stroke) found that the **age-adjusted death rate for each was higher among rural residents**.

Higher rates of potentially excess deaths in rural communities.

- The CDC consider excess deaths to include those that "**might . . . be prevented through improved public health programs** that support healthier behaviors and neighborhoods or better access to health care services."

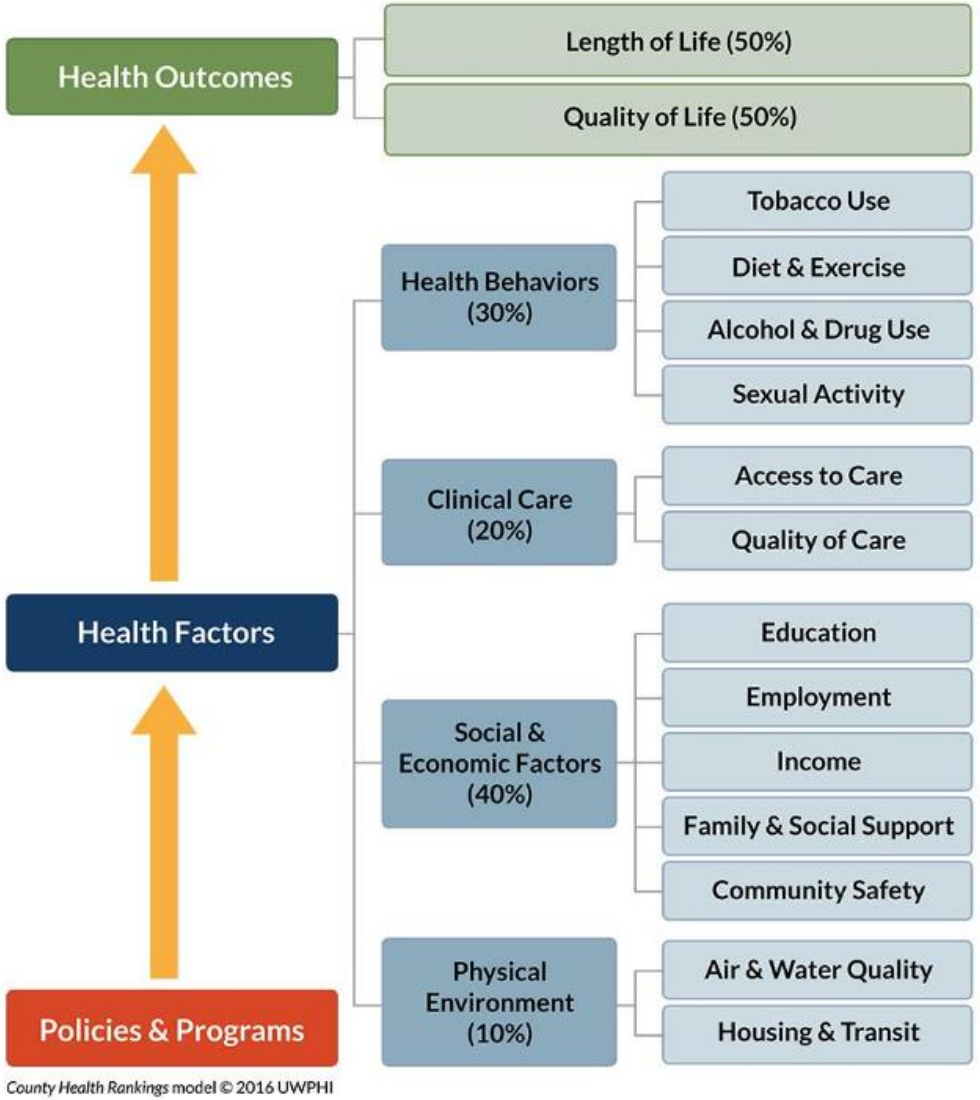
Part of the challenge for understanding and improving the health of rural populations lies in **disentangling the underlying causes of their ill-health and death**, which is further complicated by the socioeconomic and geographic heterogeneity of rural places and populations.

Exacerbating efforts to tease out these differences**, rural health experts have noted increasingly poor access to data on rural health**, as financial issues and concerns for privacy have limited the availability of geographic indicators in many federal health surveys.

Source: https://www.americanbar.org/groups/crsj/publications/human_rights_magazine_home/the-state-of-healthcare-in-the-united-states/health-equity-challenges-in-rural-america/

COUNTY HEALTH RANKINGS

- The health of a community depends on many factors, including environment, education and jobs, access to and quality of healthcare, and individual behaviors
- Our schools, workplaces, and neighborhoods all influence our health
- For some to achieve optimal health outcomes resources are readily available; for others, the opportunities are significantly limited.
  - These limitations are directly related to the imbalance of policies, programs, and resource allocation.
- **Where does your county rank?**



Source: County Health Rankings UWPHI

SOCIAL DETERMINANTS OF HEALTH ("SDOH")

- The social determinants of health exemplify how multiple factors in a community can impact overall health including general well-being and health outcomes

- Social determinants of health (SDOH) are, according to Healthy People 2030, "the conditions in the environments where 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"

Source: https://www.ruralhealthinfo.org/topics/social-determinants-of-health#rural-difference

HEALTH-RELATED SOCIAL NEEDS (HRSN)

- HRSNs are a proximate cause of poor health outcomes for individual patients as opposed to SDOH, which is a term better suited for describing populations.
- Understanding individual patients' HRSNs can be critical for designing practical, patient-centered care plans.

A care plan for the control of diabetes may be unsafe for someone with food insecurity

Outpatient radiation therapy may be a challenge for someone who lacks reliable transportation to treatment

CMS – HEALTH EQUITY QUALITY MEASURES

- To address health care disparities in hospital inpatient care and beyond, CMS is adopting three health equity-focused measures in the IQR Program.
- The first measure assesses a hospital's commitment to establishing a culture of equity and delivering more equitable health care by capturing concrete activities across five key domains

- The second and third measures **capture screening and identification of patient-level, health-related social needs** — such as food insecurity, housing instability, transportation needs, utility difficulties, and interpersonal safety.

Source: https://www.ruralhealthinfo.org/topics/social-determinants-of-health#rural-difference
https://www.ahip.org/the-impact-of-social-determinants-of-health-on-health-equity-and-their-root-causes/

JOINT COMMISSION: REQUIREMENTS TO REDUCE HEALTHCARE DISPARITIES

The Standard includes the following Elements of Performance (EP):

- Designating an officer to lead a **strategy** for reducing health disparities.
- **Screening** patients for health-related social needs, also referred to as social determinants of health.
- Developing a written **action plan** that describes how it will address at least one of the health care disparities identified in its patient population.
- Identifying health care disparities in its patient population by **stratifying quality and safety data** using the sociodemographic characteristics.
- **Acting** when it does not achieve or sustain the goal(s) in its action plan to reduce health care disparities.
- At least annually, **informing key stakeholders**, including leaders, licensed practitioners, and staff, about its progress to reduce identified health care disparities.

Source: https://www.ruralhealthinfo.org/topics/social-determinants-of-health#rural-difference

USING HEALTH DATA TO UNDERSTAND COMMUNITY HEALTH

IMPORTANCE OF HEALTH DATA

- Understanding the effects of health disparities in our communities is essential to fulfilling the mission and supports the IHI's Triple Aim:
  - Improving the patient experience of care (including quality and satisfaction);
  - Improving the health of populations; and
  - Reducing the per capita cost of healthcare
- Hospitals and health systems can identify health disparities by querying data sets to see how processes or outcomes differ by demographics or geography
- One of the most basic inquiries a healthcare organization can make is to stratify a process or outcome by race, ethnicity and language, sexual orientation and gender identity, religion, age, gender, disability, employment, education, socioeconomic status, insurance status, geographic location, ZIP code or another demographic or socioeconomic variable
- Mapping data shows inequities at the community level by overlaying health data onto maps and seeing which neighborhoods have a higher prevalence of certain diseases to figure out what populations may be at additional risk

DATA COLLECTION FRAMEWORK

- A uniform data collection framework provides a process improvement tool for health care organizations to **systematically collect demographic data from patients or their caregivers**. Using a uniform framework results in more accurate and complete data.
- According to AHA's Institute for Diversity and Inclusion, the elements of a uniform framework include:
  1. A rationale for why the patient is being asked to provide this information.
  2. A script for staff to use each time so that they ask questions in a uniform fashion.
  3. A method for allowing patients to self-report their information.
  4. A standardized approach for "rolling up" granular responses to the U.S. Office of Management and Budget categories for analytical and reporting purposes.
     - Race: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. Ethnicity: Hispanic or Latino and Not Hispanic or Latino
  5. Assurances that the data will be held confidential and that a limited number of people will have access to the data and a mechanism to ensure compliance.

Source: https://ifdhe.aha.org/system/files/media/file/2021/04/ifdhe_real_data_toolkit_1.pdf

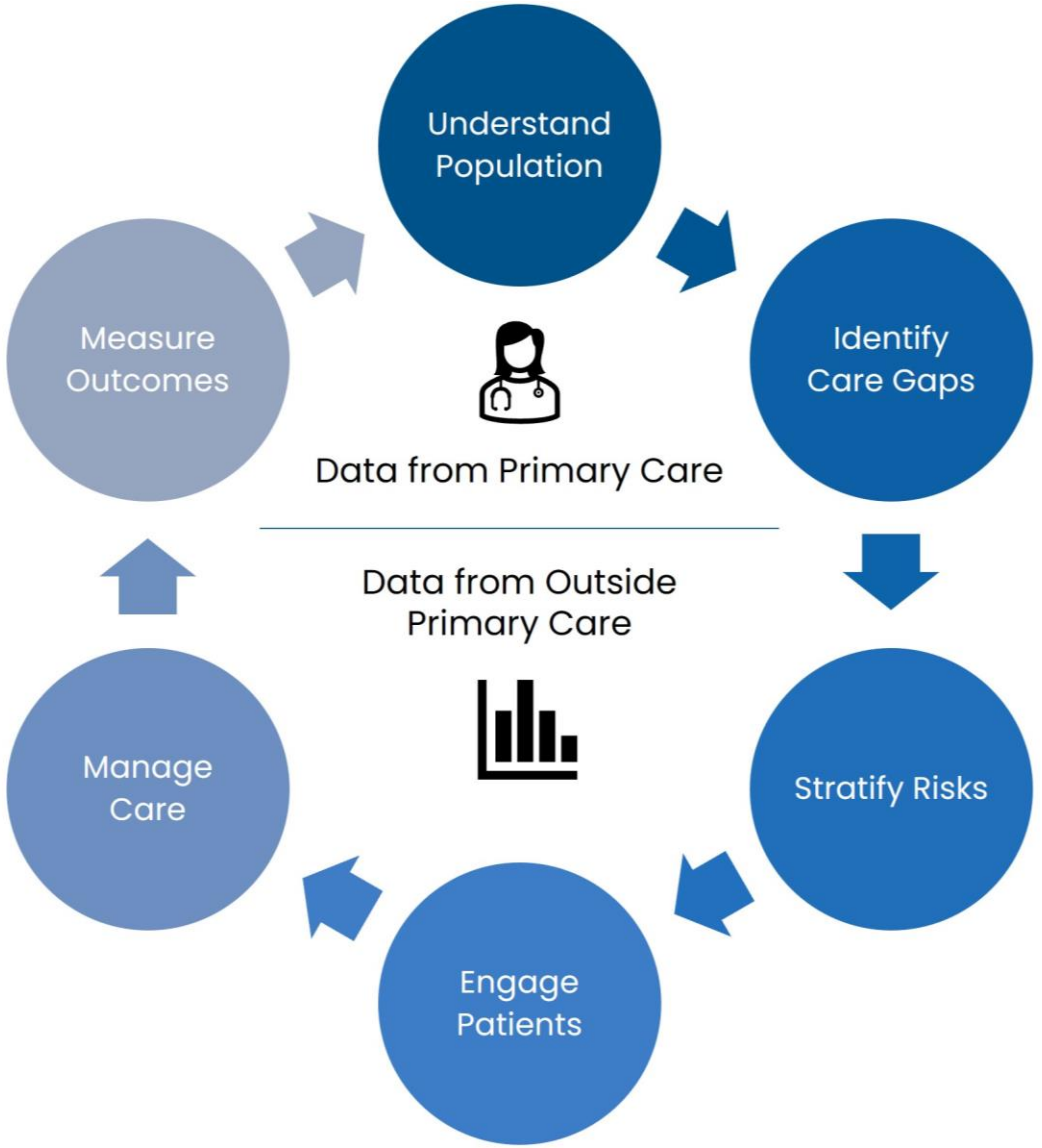
DATA SETS

Internal Data

- Referral information
- Utilization
- Clinical outcomes
- SDOH (food security, housing, employment)

External Data

- Health information exchanges (HEIs)
- State & Federal data sets
- Claims data



Data source: https://publications.jsi.com/JSIInternet/Inc/Common/_download_pub.cfm?id=18633&lid=3

USING ICD-10 DATA TO IDENTIFY COMMUNITY NEEDS

- Every hospital/healthcare provider has access to their community's health data through the medical coding system ICD-10, which they must use to submit claims to payers
- In ICD-10, Social Determinants of Health (SDOH codes) are found in categories Z55-Z65:
  - **Z55, Problems related to education and literacy**
  - **Z56, Problems related to employment and unemployment**
  - **Z57, Occupational exposure to risk factors**
  - **Z58, Problems related to physical environment**
  - **Z59, Problems related to housing and economic circumstances**
  - **Z60, Problems related to social environment**
  - **Z62, Problems related to upbringing**
  - **Z63, Other problems related to primary support group, including family circumstances**
  - **Z64, Problems related to certain psychosocial circumstances**
  - **Z65, Problems related to other psychosocial circumstances**

Understand how SDOH data can be gathered and tracked using ICD-10 Z codes

https://www.thehaugengroup.com/2022-guidelines-for-reporting-social-determinants-of-health/

IDENTIFY AND UNDERSTAND HEALTH INEQUITIES

Do not rely on assumptions about what health inequities exist in your community

Gain a comprehensive understanding of the identified health inequities

Examine multiple aspects of health in your community to get a clearer picture of health inequities

Use appropriate tools to identify health inequities

Engage community members and partners in data collection and interpretation

“What gets measured gets improved” – Peter Drucker

USING DATA TO IDENTIFY INEQUITIES: QUERY EXAMPLES

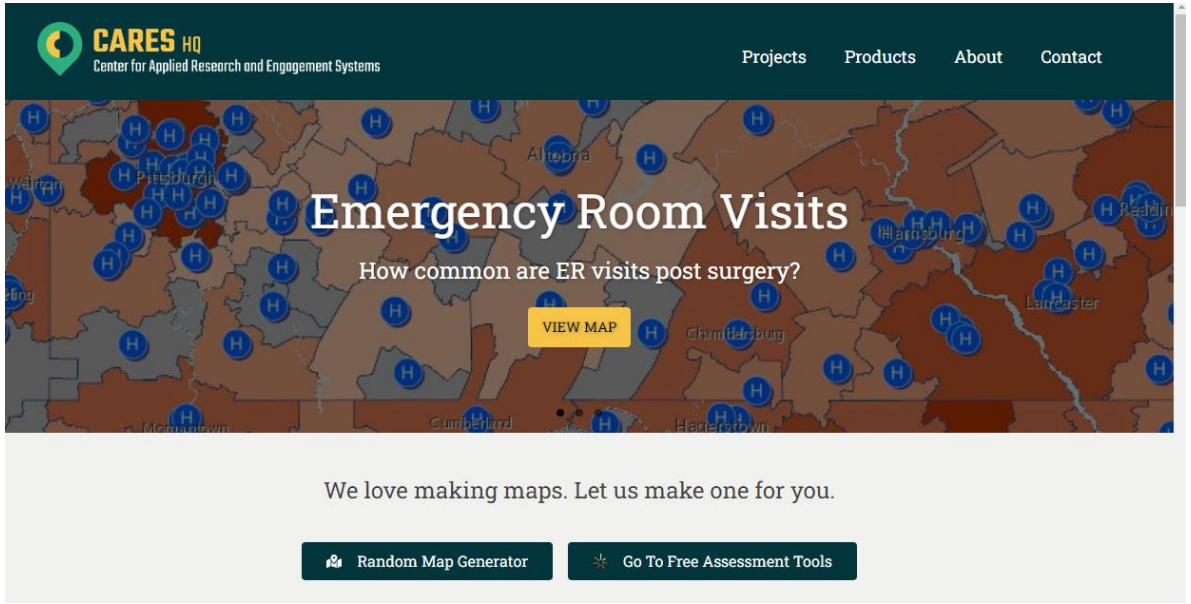
PROCESS query examples (treatment, procedure, encounter)	OUTCOME query examples
• Percentage breakdown by race of female patients who were screened for breast cancer • Percentage of male patients who had a colonoscopy, by ethnicity • Percentage of patients with chronic health conditions who filled prescriptions, by ZIP code	• Breakdown of readmitted patients by insurance status • Ethnicity breakdown of patients who suffered a fall during an inpatient stay • Breakdown of Hispanic patients hospitalized for COVID-19, by English-speaking and non-English-speaking

https://www.aha.org/system/files/media/file/2021/03/Market_Insights_Disparities_Data.pdf

WHAT DOES THE DATA TELL US ABOUT OUR COMMUNITY?

CENTER FOR APPLIED RESEARCH AND ENGAGEMENT (CARES)

- The Center for Applied Research and Engagement Systems (CARES) is affiliated with the University of Missouri system. CARES helps organizations and planners learn more about their community by providing access to data from the US Census Bureau, American Community Survey (ACS), Centers for Disease Control and Prevention (CDC), United States Department of Agriculture (USDA), Department of Transportation, Federal Bureau of Investigation, and more. These data focus on health, the environment, the economy, education, agriculture, and safety.



- Data geographies range from national, state, county, city, census tract, school district, and ZIP code levels

- The data supplied by CARES are timely and reliable. Where applicable, the data allow for breakouts of information and incidences by detailed racial, ethnic, and socioeconomic categories.

CARES DASHBOARD COMPONENTS/ELEMENTS

CARES data include nearly 650 individual indicators, organized by the following categories: Clinical Care and Prevention, Demographics, Education, Health Behaviors, Health Outcomes, Healthcare Workforce, Housing and Families, Income and Economics, Other Social and Economic Factors, Physical Environment, and Special Topics (currently focused on COVID-19 metrics).

Stroudwater's dashboard dropdown menus and radio buttons allow the user to quickly focus on each individual indicator under these categories

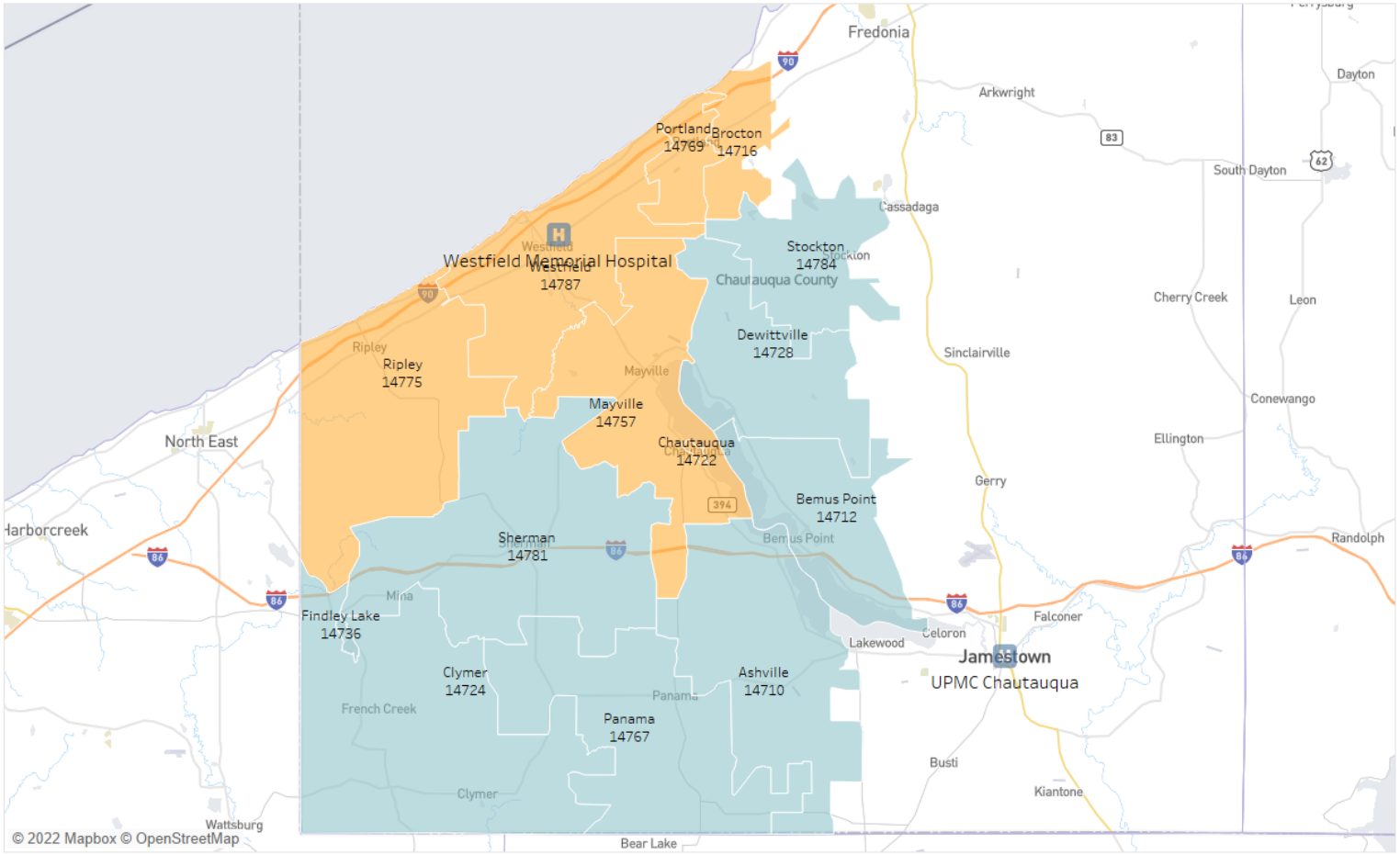
The dashboard includes data for the aggregate custom report area, the county or counties related to the custom geography, the state benchmarks, and national benchmarks

For comparison purposes, most indicators focus on percentages of or rates per a defined population. Where applicable, whole number values are shown.

Some indicators allow for ZIP Code-level breakdowns of the data. A separate tab mapping these comparisons is included.

SERVICE AREA

Service Area Map



Service Area
- Westfield 75%
- Westfield Additional

Service Area
- [x] Westfield 75%
- [x] Westfield Additional

PO Name
- [x] Ashville
- [x] Bemus Point
- [x] Brocton
- [x] Chautauqua
- [x] Clymer
- [x] Dewittville
- [x] Findley Lake
- [x] Mayville
- [x] Panama
- [x] Portland
- [x] Ripley
- [x] Sherman
- [x] Stockton
- [x] Westfield

Define a service area

Source: Administration and Stroudwater analysis

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POPULATION

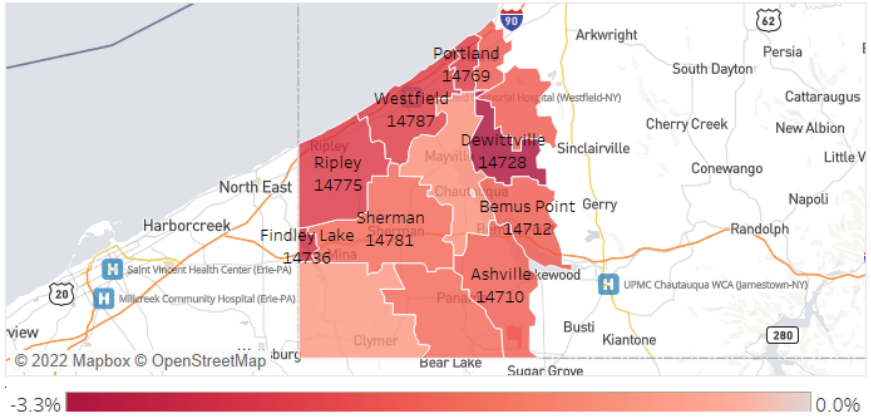
Population

Current	5-Year	# Change	% Change
29,850	29,335	-515	-1.7%

Age Group Detail

Age Groups	Current	5-Year	5-Year #	5-Year %
<18	6,127	5,920	-207	-3.4%
18-44	8,977	9,005	28	0.3%
45-64	8,271	7,352	-919	-11.1%
65+	6,475	7,058	583	9.0%

5-Year Change (%) by ZIP Code



Source: IBM-Watson Health

ZIP Code Population Detail

ZIP Name	ZIP Code	Current	5-Year	# Change	% Change
Ashville	14710	3,403	3,345	-58	-1.7%
Bemus Point	14712	3,227	3,171	-56	-1.7%
Brocton	14716	2,645	2,598	-47	-1.8%
Chautauqua	14722	137	137	0	0.0%
Clymer	14724	2,614	2,595	-19	-0.7%
Dewittville	14728	975	943	-32	-3.3%
Findley Lake	14736	311	303	-8	-2.6%
Mayville	14757	3,531	3,500	-31	-0.9%
Panama	14767	1,901	1,872	-29	-1.5%
Portland	14769	835	816	-19	-2.3%
Ripley	14775	2,382	2,326	-56	-2.4%
Sherman	14781	2,035	2,004	-31	-1.5%
Stockton	14784				

Service Area
- Westfield 75%
- Westfield Additional

ZIP Name
- Ashville
- Bemus Point
- Brocton
- Chautauqua
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- Findley Lake
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- Westfield

Identify total population, age cohorts and projected change by ZIP Code

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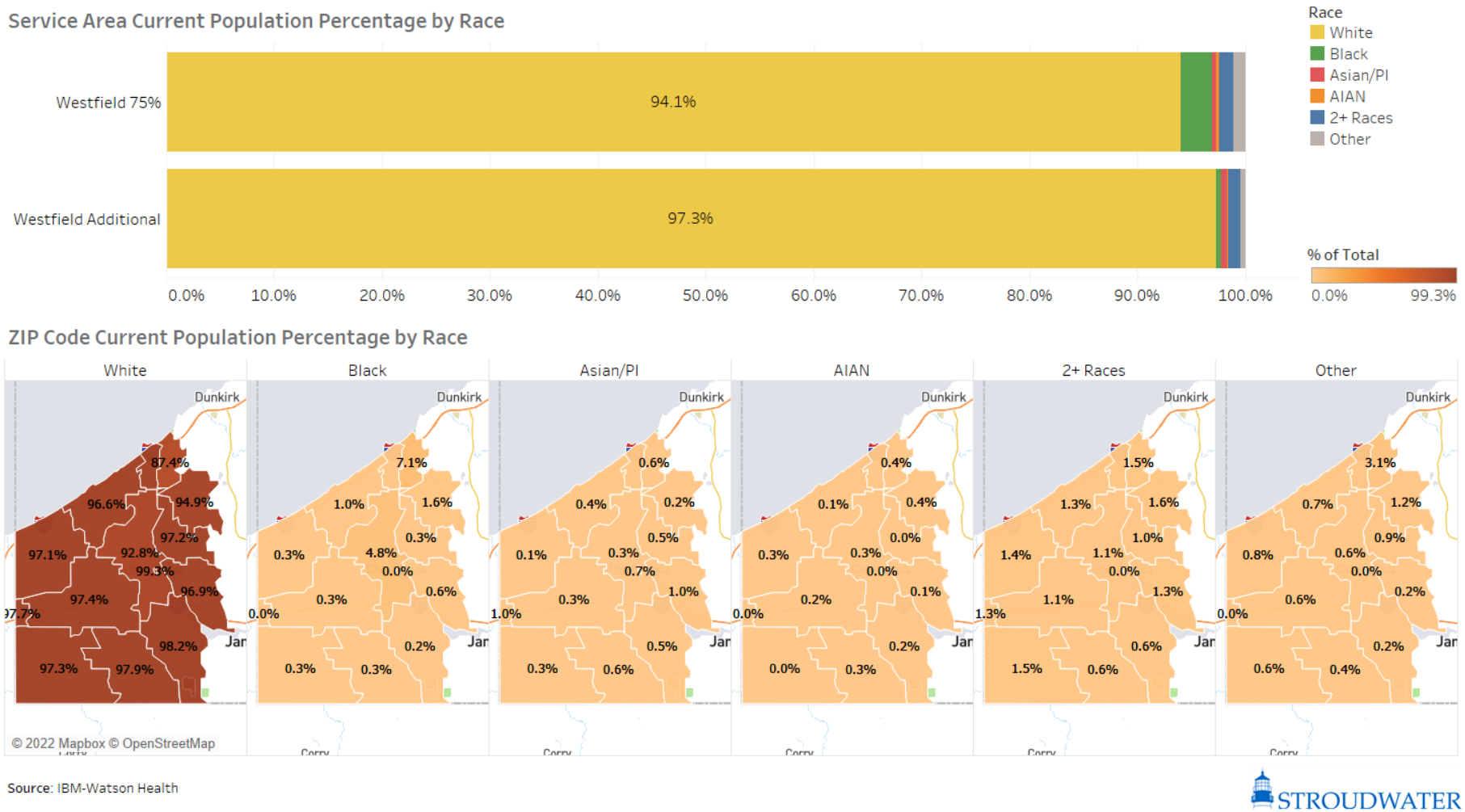
POPULATION BY RACE

Population by Race



Source: IBM-Watson Health

Identify high level population distribution by race

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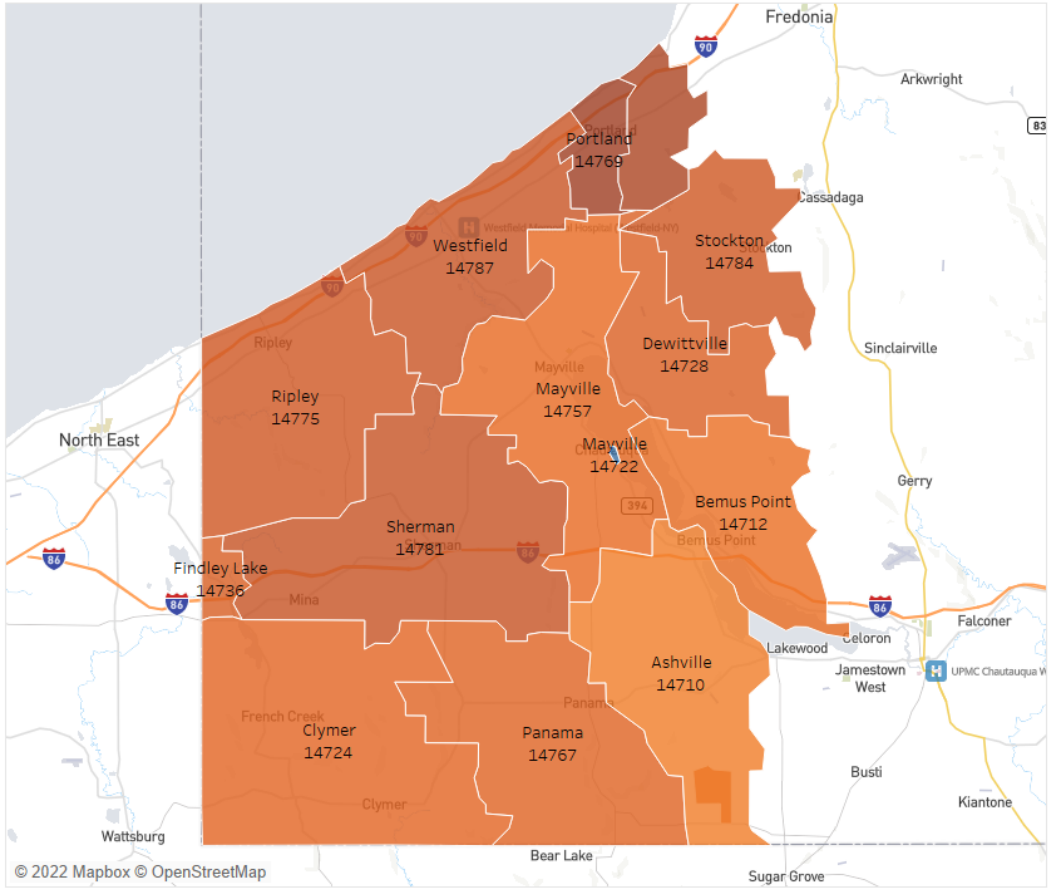
MEDIAN HOUSEHOLD INCOME

Median Household Income

Median Household Income by ZIP Code



ZIP Code Median Household Income Detail

ZIP Name	ZIP Code	
Mayville	14722	$103,125
	14757	$55,303
Ashville	14710	$59,461
Bemus Point	14712	$56,552
Clymer	14724	$54,052
Panama	14767	$53,220
Dewittville	14728	$52,174
Findley Lake	14736	$51,500
Stockton	14784	$49,595
Ripley	14775	$49,309

State Median (NY)

Current MHHI

$38,900 — $103,125

Service Area
- Westfield 75%
- Westfield Additional

ZIP Name
- Ashville
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Evaluate areas with higher and lower MHHI

Source: IBM-Watson Health

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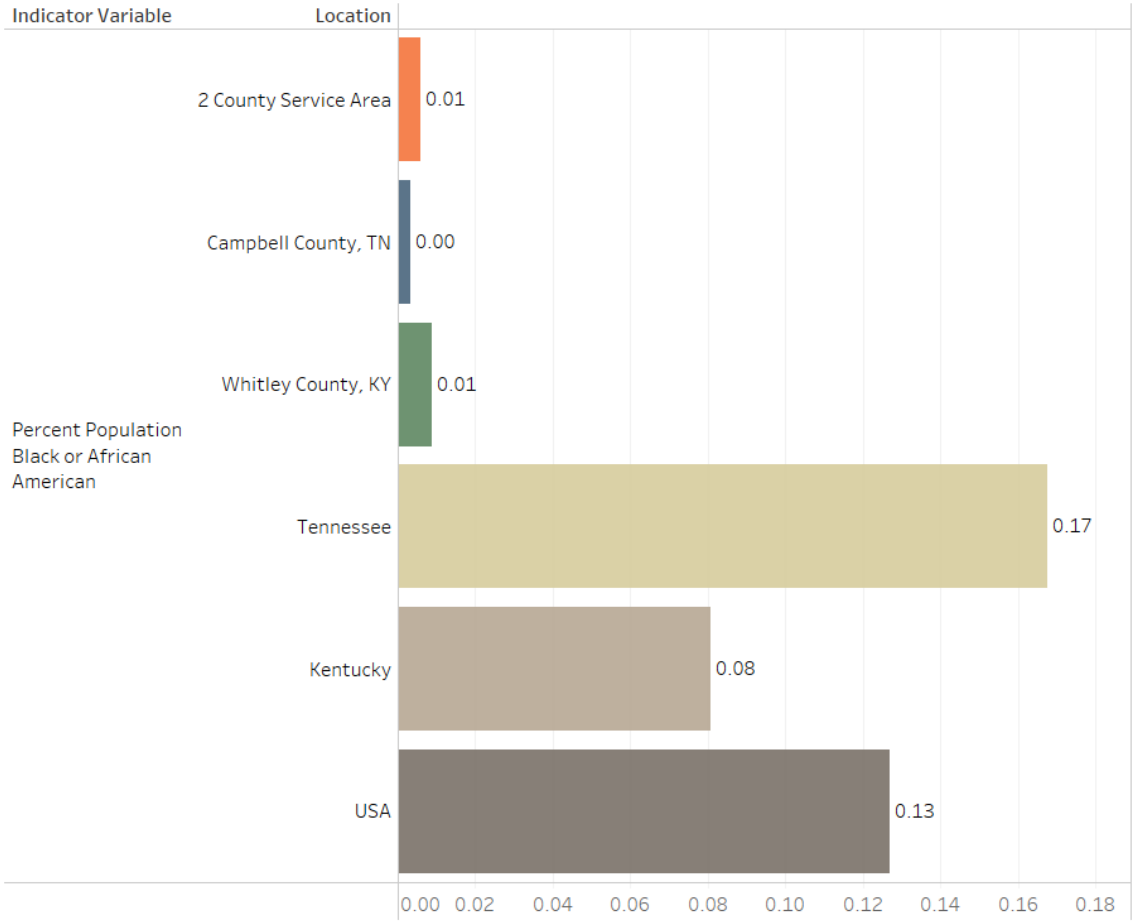
DEMOGRAPHICS

Demographics

Black or African American Population



Category
Demographics

Data Indicator
- (●) Black or African American Population
- ( ) Citizenship Status
- ( ) Families with Children
- ( ) Female Population
- ( ) Foreign-Born Population
- ( ) Group Quarters Population
- ( ) Hispanic Population
- ( ) Male Population
- ( ) Median Age
- ( ) Migration Patterns - Total Population
- ( ) Migration Patterns - Young Adult
- ( ) Non-Hispanic White Population
- ( ) Population Age 0-4
- ( ) Population Age 5-17
- ( ) Population Age 18-24
- ( ) Population Age 18-64
- ( ) Population Age 25-34
- ( ) Population Age 35-44
- ( ) Population Age 45-54
- ( ) Population Age 55-64
- ( ) Population Age 65+
- ( ) Population Geographic Mobility
- ( ) Population in Limited English Households

Indicator Variable
All

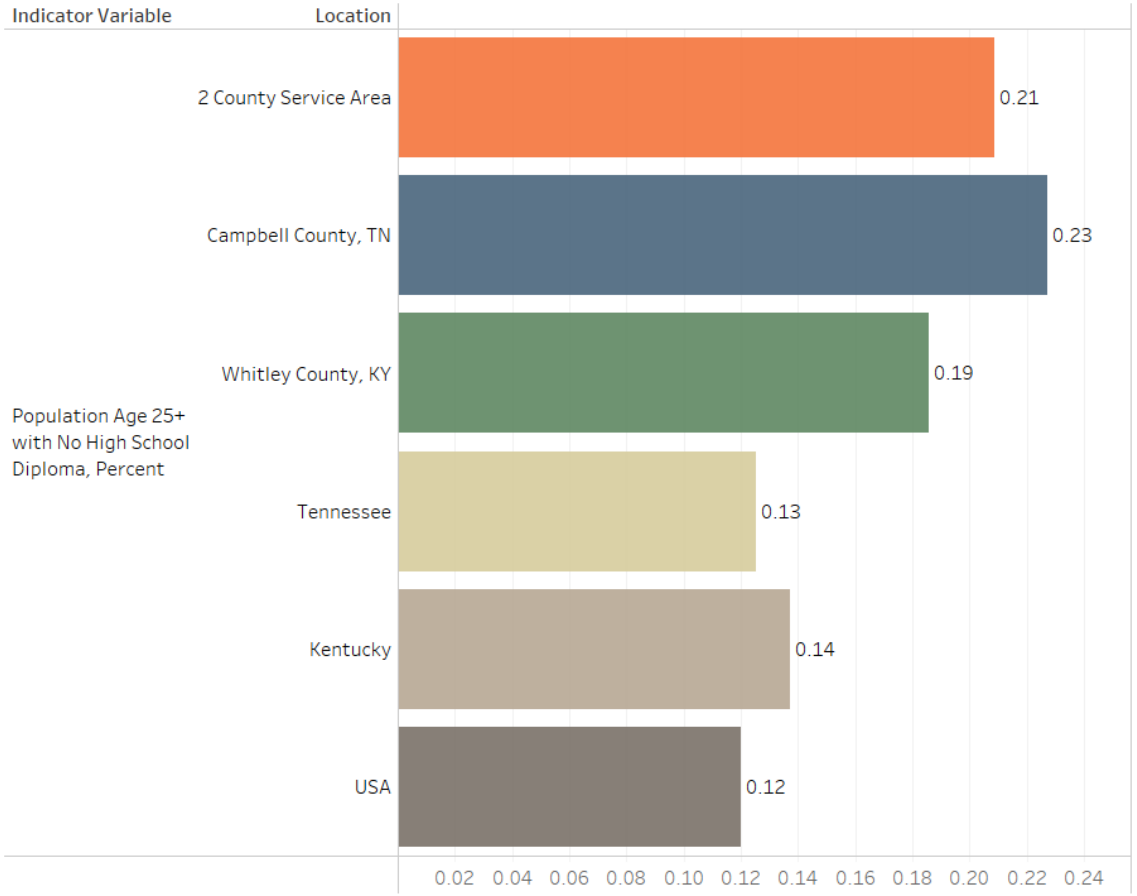
Data Source: US Census Bureau, American Community Survey. 2015-19. Source geography: Tract

Multiple demographic categories are included

EDUCATION

Education

Attainment - No High School Diploma



Category
Education

Data Indicator
- Access - Head Start
- Access - Preschool Enrollment (Age 3-4)
- Attainment - Associate's Level Degree or Higher
- Attainment - Bachelor's Degree or Higher
- Attainment - High School Graduation Rate
- (●) Attainment - No High School Diploma
- Attainment - Overview
- Attainment - Some Post-secondary Education
- Chronic Absence Rate
- Proficiency - Student Math Proficiency (4th Grade)
- Proficiency - Student Reading Proficiency (4th Grade)

Indicator Variable
All

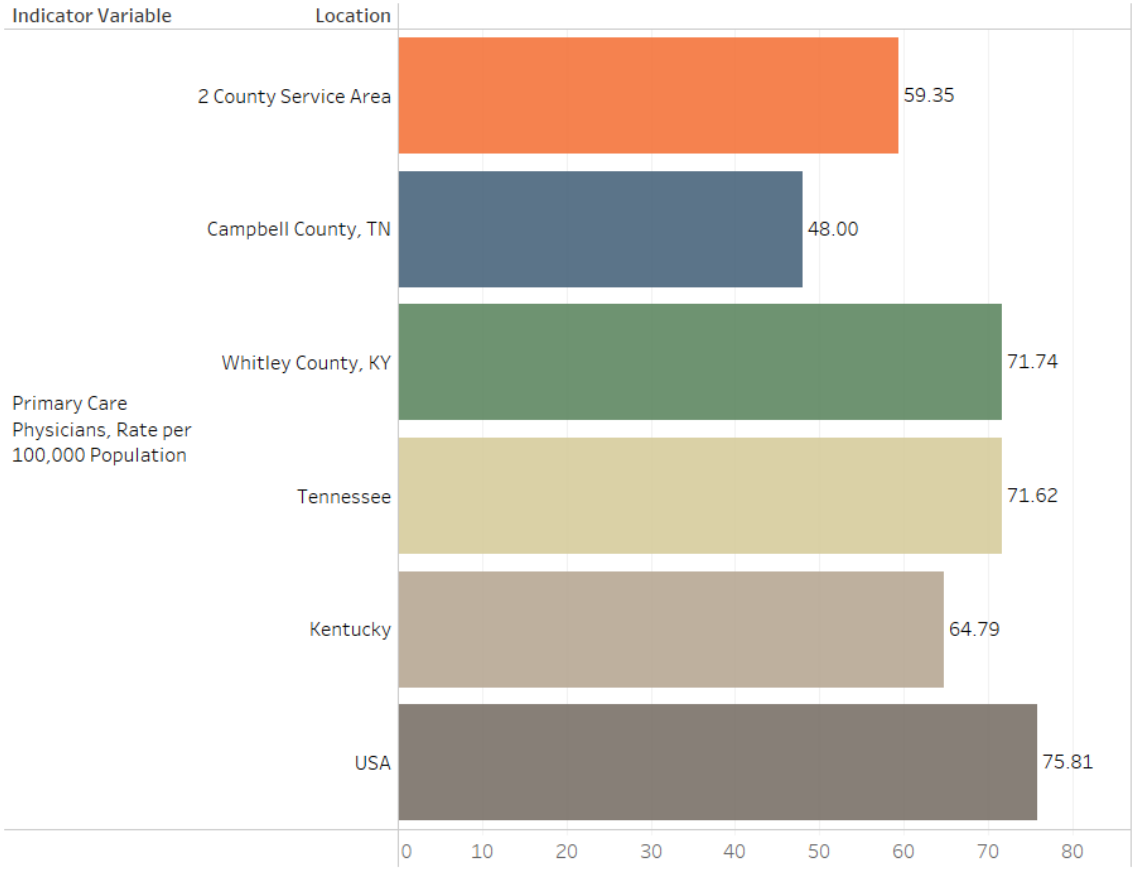
Note: This indicator is compared to the lowest state average. Data Source: US Census Bureau, American Community Survey. 2015-19. Source geography: Tract

Indicators highlight differences in educational attainment and proficiencies among the population

HEALTHCARE ACCESS

Healthcare Workforce

Access to Care - Primary Care



Note: This indicator is compared to the highest state average. Data Source: US Department of Health & Human Services, Health Resources and Services Administration, HRSA - Area Health Resource File. Accessed via County Health Rankings. 2017. Source geography: County

Category
Healthcare Workforce

Data Indicator
- Access to Care - Addiction/Substance Abuse Providers
- Access to Care - Buprenorphine Providers
- Access to Care - Dental Health
- Access to Care - Dental Health Providers
- Access to Care - Mental Health
- Access to Care - Mental Health Providers
- Access to Care - Nurse Practitioners
- (●) Access to Care - Primary Care
- Access to Care - Primary Care Providers
- Federally Qualified Health Centers
- Health Professional Shortage Areas - Dental Care
- Hospitals with Cardiac Rehabilitation Units
- Population Living in a Health Professional Shortage Area

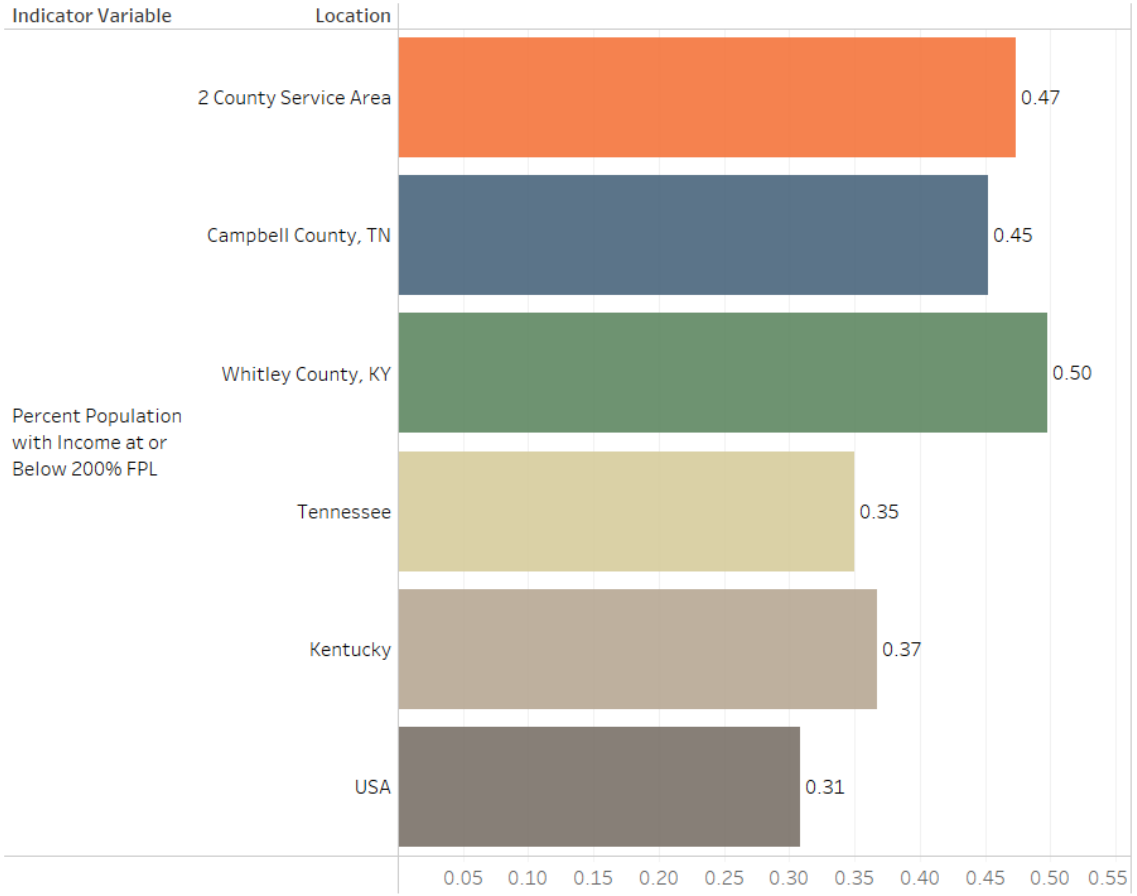
Indicator Variable
All

Healthcare access comparison to state and national averages spotlight disparities

INCOME AND ECONOMICS

Income and Economics

Poverty - Population Below 200% FPL



Note: This indicator is compared to the lowest state average. Data Source: US Census Bureau, American Community Survey. 2015-19. Source geography: Tract

Category
Income and Economics

Data Indicator
- Commuter Travel Patterns - Driving Alone to Work
- Commuter Travel Patterns - Long Commute
- Commuter Travel Patterns - Overview
- Commuter Travel Patterns - Overview 2
- Commuter Travel Patterns - Public Transportation
- Commuter Travel Patterns - Walking or Biking
- Employment - Business Creation
- Employment - Employment Change
- Employment - Labor Force Participation Rate
- Employment - Unemployment Rate
- Gross Domestic Product (GDP)
- Income - Families Earning Over $75,000
- Income - Income and AMI
- Income - Inequality (Atkinson Index)
- Income - Inequality (GINI Index)
- Income - Median Family Income
- Income - Median Household Income
- Income - Net Income of Farming Operations
- Income - Proprietor Employment and Income
- Income - Public Assistance Income
- Income - Transfer Payments
- Poverty - Children Below 100% FPL
- Poverty - Children Below 200% FPL

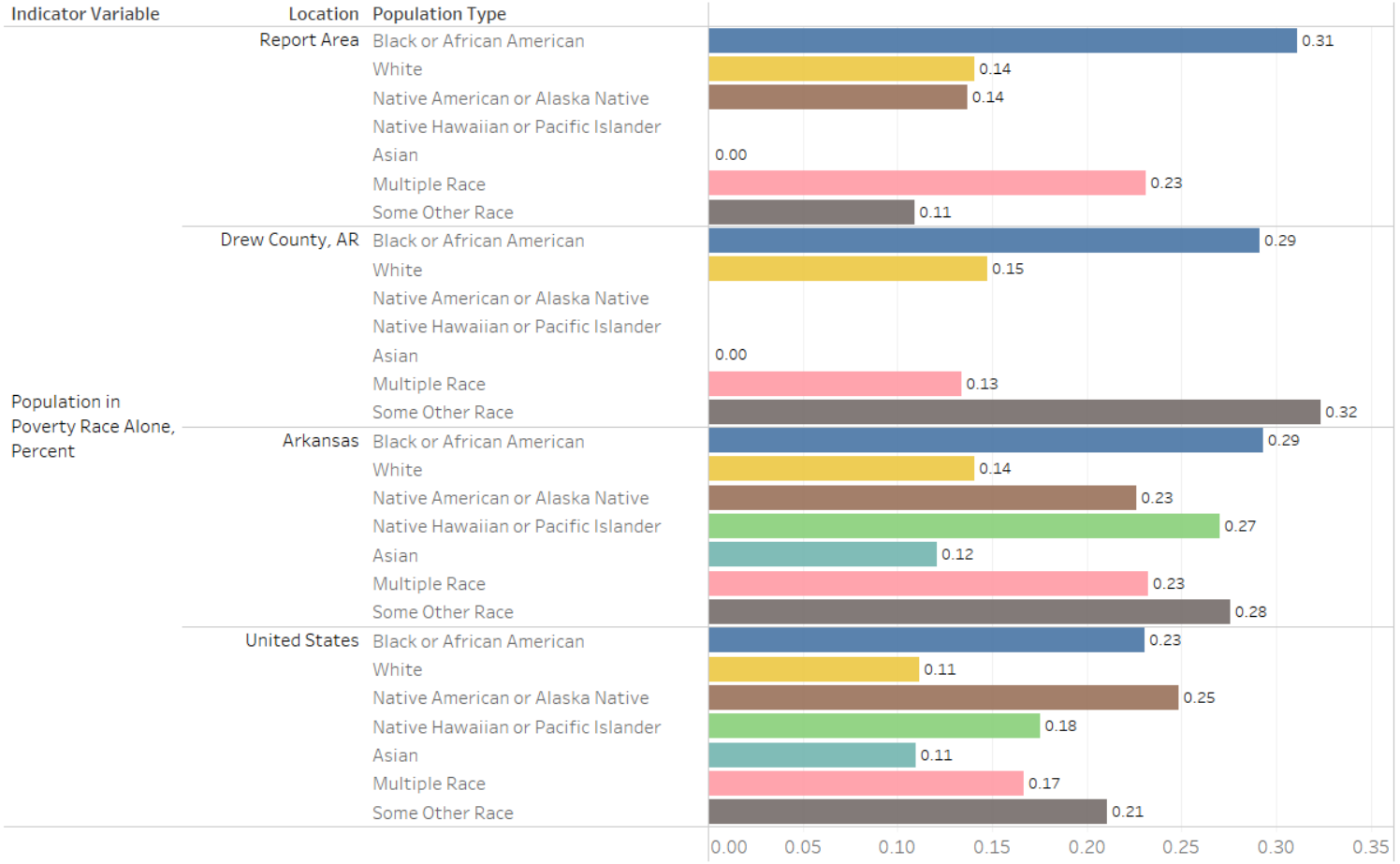
Indicator Variable
All

Poverty and other income indicators show the special economic obstacles a sizable portion of the population may be facing

RACE AND ETHNICITY

Income and Economics

Population in Poverty



Category
Income and Economics

Data Indicator
Population in Poverty

Indicator Variable
Population in Poverty Race Alone, Percent

Location
Multiple values

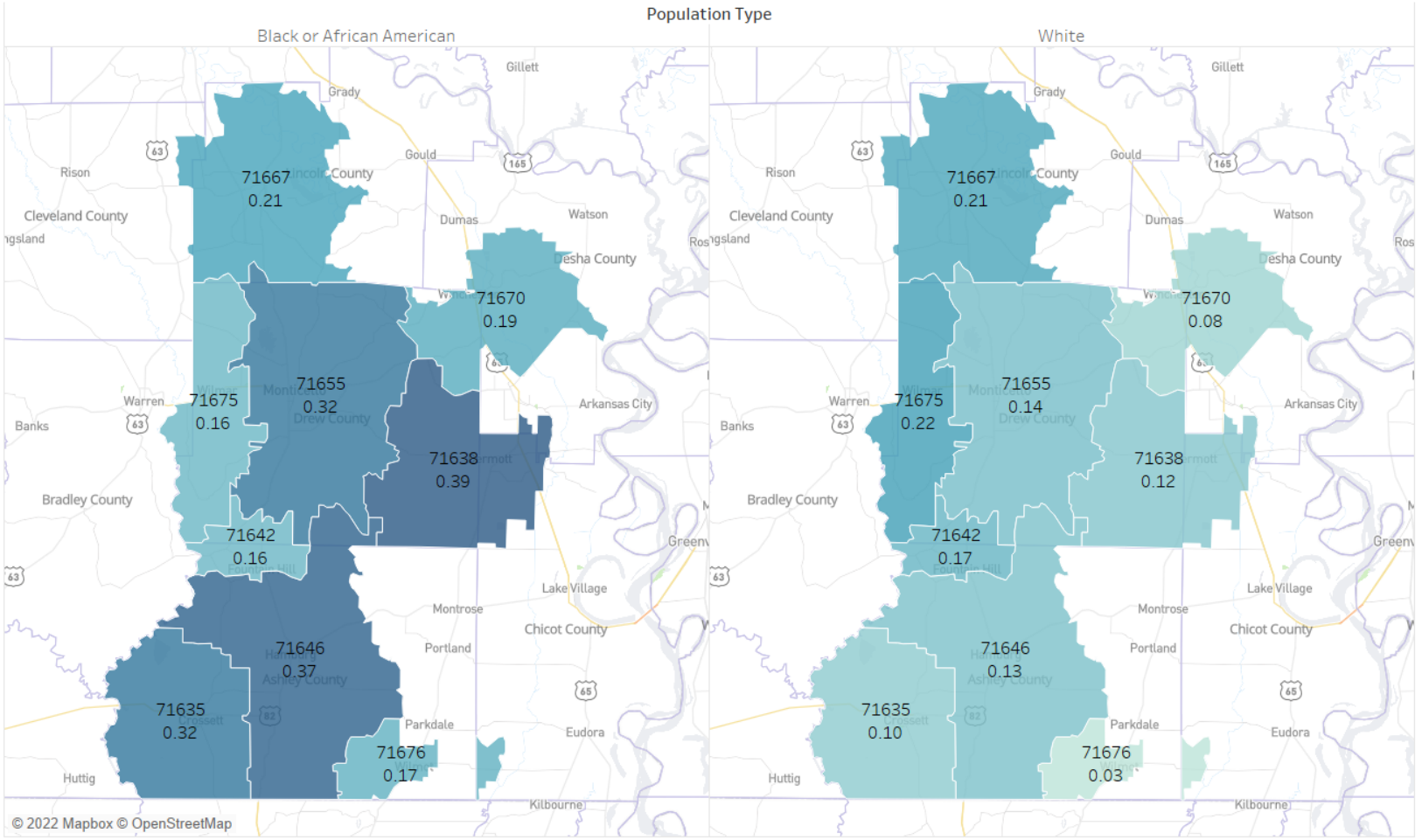
Population Type
All

Detailed racial and ethnic economic indicators show disparities among the population

ZIP CODE LEVEL DATA

Income and Economics

Population in Poverty Race Alone, Percent



Category
- Clinical Care and Prevention
- Demographics
- Education
- Health Behaviors
- Health Outcomes
- Healthcare Workforce
- Housing and Families
- Income and Economics
- Other Social & Economic Factors
- Physical Environment

Indicator Variable
Population in Poverty Race Alone, Percent

Population Type
- [ ] Asian
- [x] Black or African American
- [ ] Multiple Race
- [ ] Native American or Alaska Native
- [ ] Native Hawaiian or Pacific Islander
- [ ] Some Other Race
- [x] White

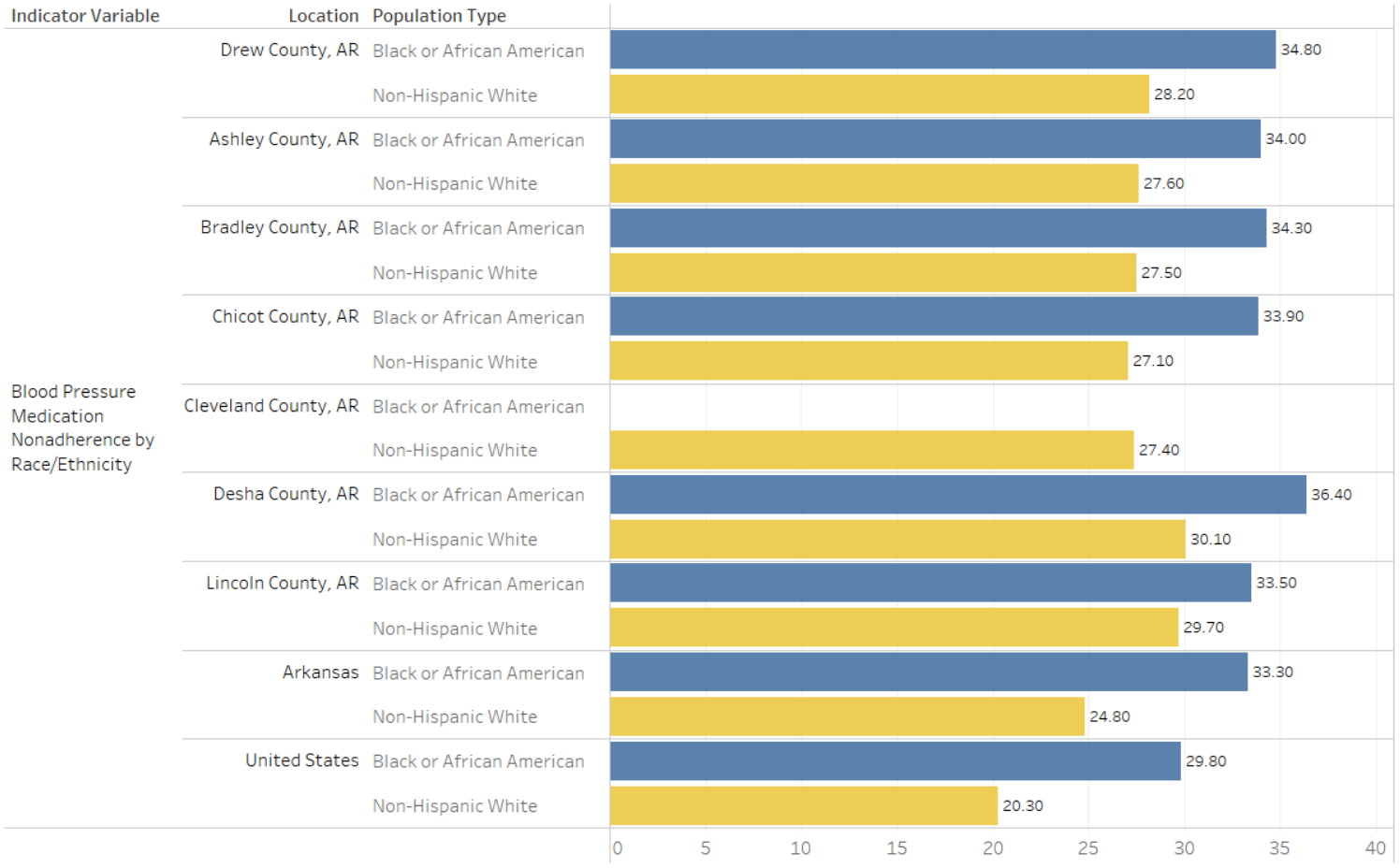
Data Value
0.03 — 0.39

Certain indicators show racial/ethnic/ socioeconomic detail at the ZIP Code level, which can help highlight geographic areas of focus for health providers

CLINICAL CARE AND PREVENTION

Clinical Care and Prevention

Prevention - High Blood Pressure Management



Category
Clinical Care and Prevention

Data Indicator
- Hospitalizations - Preventable Conditions
- Prevention - Annual Wellness Exam (Medicare)
- Prevention - High Blood Pressure Management
- Prevention - Recent Primary Care Visit (Medicare)

Indicator Variable
All

Location
All

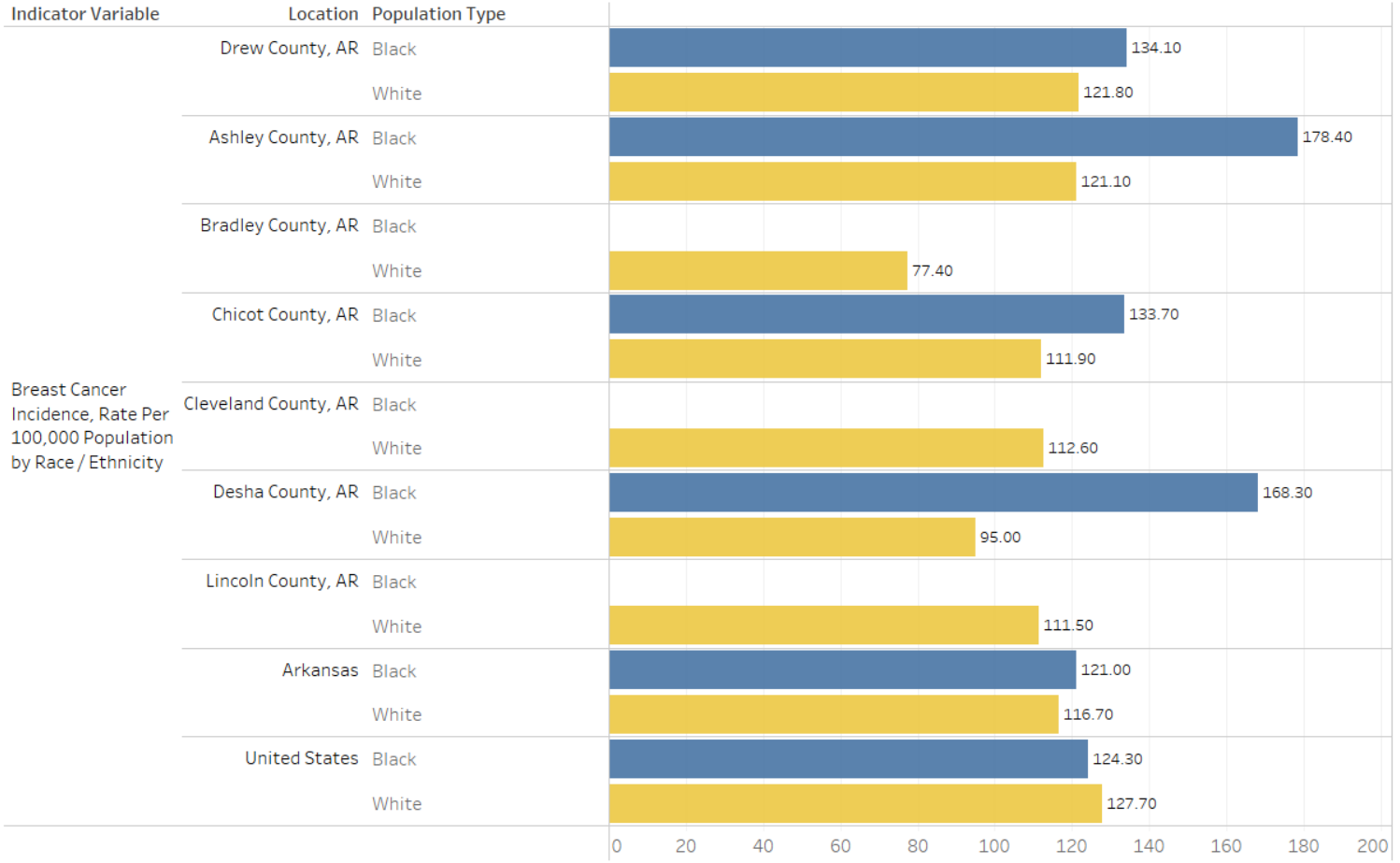
Population Type
All

Clinical care prevention detail shows gaps in racial and ethnic populations

HEALTH OUTCOMES

Health Outcomes

Cancer Incidence - Breast



Note: This indicator is compared to the lowest state average. Data Source: State Cancer Profiles. 2014-18. Source geography: County

Category
Health Outcomes

Data Indicator
- Alcohol Use Disorder (Medicare Population)
- Cancer Incidence - All Sites
- (●) Cancer Incidence - Breast
- Cancer Incidence - Colon and Rectum
- Cancer Incidence - Lung
- Cancer Incidence - Prostate
- Chronic Conditions - Asthma (Medicare Population)
- Chronic Conditions - Cancer (Medicare Population)
- Chronic Conditions - Kidney Disease (Medicare Population)
- Chronic Conditions – Chronic Obstructive Pulmonary Dise..
- Low Birth Weight (CDC)
- Mortality - Cancer
- Mortality - Coronary Heart Disease
- Mortality - Heart Disease
- Mortality - Infant Mortality (CDC)
- Mortality - Premature Death
- Mortality - Stroke
- Substance Use Disorder (Medicare Population)

Indicator Variable
All

Location
All

Population Type
All

Outcome differences among racial and ethnic populations can help steer population health strategies

ADDITIONAL DATA SOURCES

Health research and Statistics

Federal Level: CDC, US Census

State Level: Monitoring Data

Local Level: Public health department

HEALTH EQUITY STRATEGY

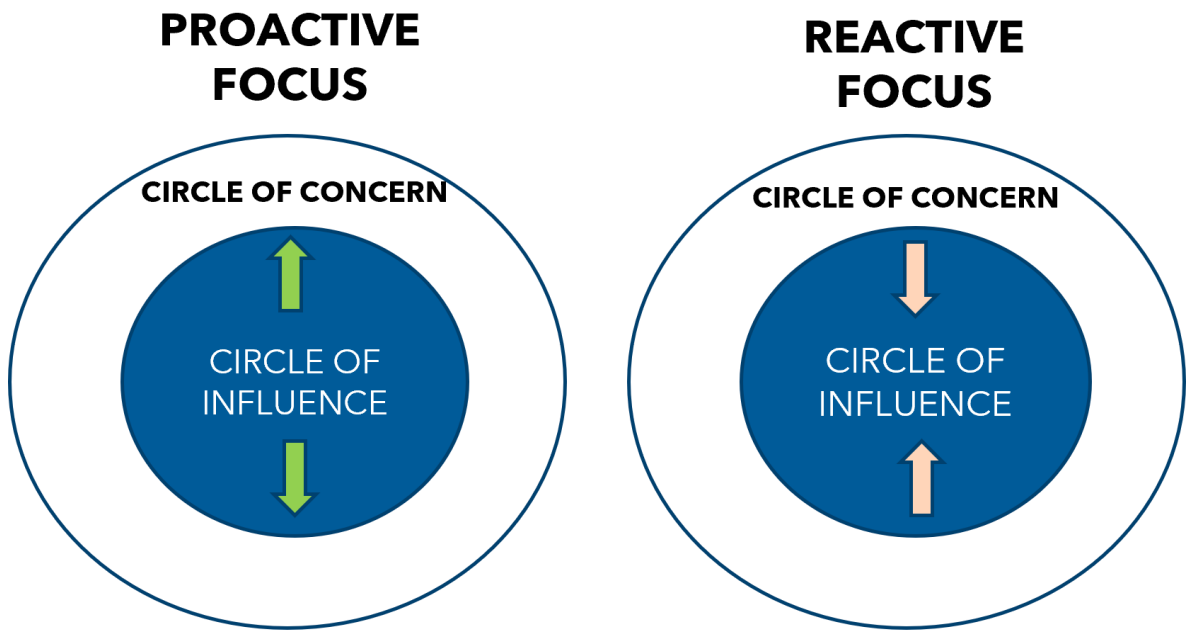
HEALTH EQUITY & SDOH STRATEGY

Expand	Expand data collection opportunities at the point of care
Examine	Examine stratified quality and health outcome data to better understand the magnitude of disparity and consider allocating or reallocating resources accordingly
Incorporate	Incorporate health equity and outcomes data into conversations with key stakeholders, medical community, and the Board
Include	Include data in strategic planning and community health needs assessments
Explore	Explore infrastructure enhancements to support care management i.e., care navigator, health coach to support preventative care screenings
Leverage	Leverage technology / expansion of current EHR system to improve care coordination and capture of clinical and quality data
Share	Share chronic condition prevalence and cost data with commercial health plans to develop care management incentives
Collaborate	Collaborate with community organizations (social services, family resource centers) to address needs of vulnerable populations

Source: https://www.ruralhealthinfo.org/topics/social-determinants-of-health#rural-difference

CIRCLE OF INFLUENCE

- Stephen Covey's book *The 7 Habits of Highly Effective People* (1989) distinguishes between proactive people – who focus on what they can do and can influence – and reactive people who focus their energy on things beyond their control.
- **Circle of concern:** many of these things are outside your influence. Devoting energy to them may be a waste of time.
- **Circle of influence:** includes the things we can do something about. The key is to focus your energy on things you can influence – this will enable you to make effective changes.
- **A team can have a wider circle of influence than an individual**



COVEY'S CIRCLES OF INFLUENCE

Source: https://dplearningzone.the-dp.co.uk/wp-content/uploads/sites/2/2015/06/Covey.pdf

CONCLUSION

COVID-19 raised public awareness of racial and ethnic disparities in health and health care to a new and uncomfortable level. Leading hospitals and health systems to use data to rectify long-standing problems in their communities.

Unless specifically measured, disparities in health and healthcare can go unnoticed even as stakeholders seek to improve healthcare. Closely examining stratified quality and health outcome data is the most reliable way to reveal the type and magnitude of disparity and then allocate or reallocate resources accordingly.

QUESTIONS?