# UNDERSTANDING YOUR MARKET THROUGH A HEALTH EQUITY LENSE



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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 data 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 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

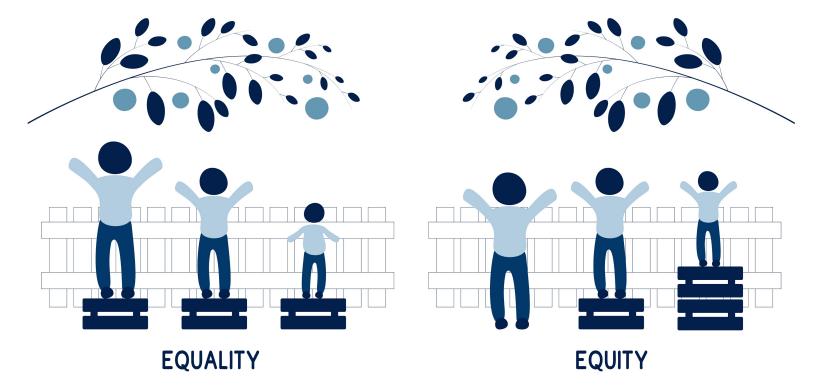
Healthcare organizations often underestimate the magnitude of disparities in their own patient populations, and they may be unaware of barriers patients face

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: <u>https://www.chcs.org/resource/using-data-to-reduce-disparities-and-improve-quality-a-guide-for-health-care-organization</u> 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





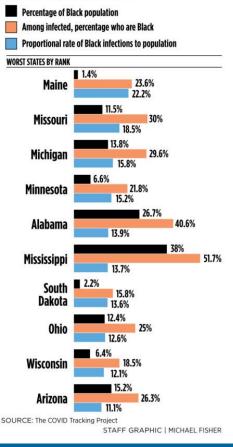
Source: <u>https://www.ruralhealthinfo.org/topics/social-determinants-of-health#rural-difference</u> https://www.ahip.org/the-impact-of-social-determinants-of-health-on-health-equity-and-their-root-causes/

### Health Disparities Today in Rural America

- A Native American child is twice as likely as a white child to die in infancy
- Lack of health care and healthy food make Black and Indigenous children in the nation's most disadvantaged counties five times as likely to die as children in other areas of the country
- The share of uninsured Hispanic Americans is 2.5 times higher than the share of uninsured white Americans, and Black Americans' lifespans, on average, are six years shorter than white Americans
- Asian Americans are 50% more likely to develop end-stage renal disease than non-Hispanic whites
- In June 2021, Maine reported the nation's largest racial disparity in coronavirus cases, with statistics showing that members of the state's small but growing Black communities are contracting COVID-19 at a rate more than 20 times that of white residents
- Black residents accounted for at least 713 of the 2,578 COVID-19 cases in Maine where the race of the individual is known a staggering 27.7 percent of cases even though Black residents represent just 1.4 percent of the state's population

#### COVID-19: The racial disparity

Black Mainers account for 1.4 percent of the state's population but make up 23.6 percent of its COVID-19 cases, the highest racial disparity in the nation.





https://www.axios.com/hard-truths-deep-dive-health-care-race-0f9a1f9e-f280-45dd-84e3-1c6cc04dc4f8.html?deepdive=1; https://www.pressherald.com/2020/06/21/maine-has-nations-worst-covid-19-racial-disparity/; https://familiesusa.org/resources/asian-americanpacific-islander-health-disparities-compared-to-non-hispanic-whites/

# What Are the 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



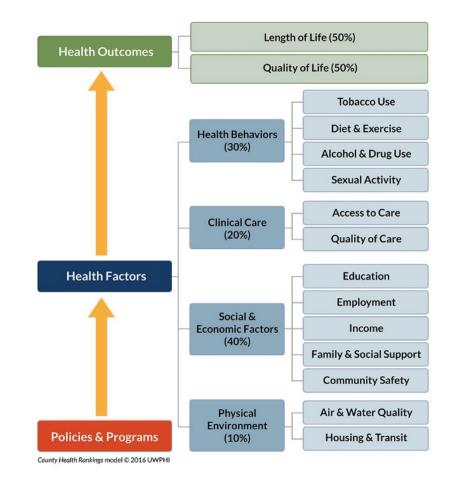
Social determinants of health (SDOH) are, according to <u>Healthy People 2030</u>, "the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks"



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

# **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
- As we know, much of what influences our health happens outside of the doctor's office—in our schools, workplaces, and neighborhoods
- For some the elements for the greatest health outcomes are readily available; for others, the opportunities for healthy choices are significantly limited.
  - These limitations are directly related to the imbalance of policies, programs, and resource allocation.
- > Where do your state's counties rank?

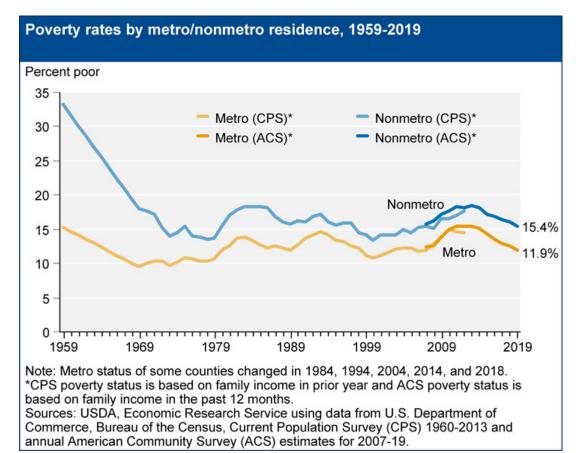




Source: County Health Rankings UWPHI

## **SDOH in Rural America**

- Rural residents are more likely to experience some of the contributing social factors that impact health, such as poverty
- The impact of these challenges can be compounded by the barriers already present in rural areas, such as limited public transportation options and fewer choices to acquire healthy food





# **SDOH in Rural America and Access to Healthcare**

#### Social determinants that impact access to healthcare include:

- Poverty, income, and employment status, all of which contribute to whether an individual has:
  - Health insurance coverage, whether through an employer, a public program, or their own purchase
  - The ability to pay out-of-pocket costs such as co-pays and prescription drug costs
  - Access to dental care, either through dental insurance or the ability to pay for treatment
  - Time off work to go to an appointment
  - A means of transportation to visit a healthcare provider
  - Resources to afford retirement and pay for healthcare and health-related expenses in retirement, including costs related to aging in place
- The skills to effectively communicate with healthcare providers and self-manage their care
- An expectation that they will receive quality care, whatever their race/ethnicity or income level

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

# Using Health Data to Understand Community Health

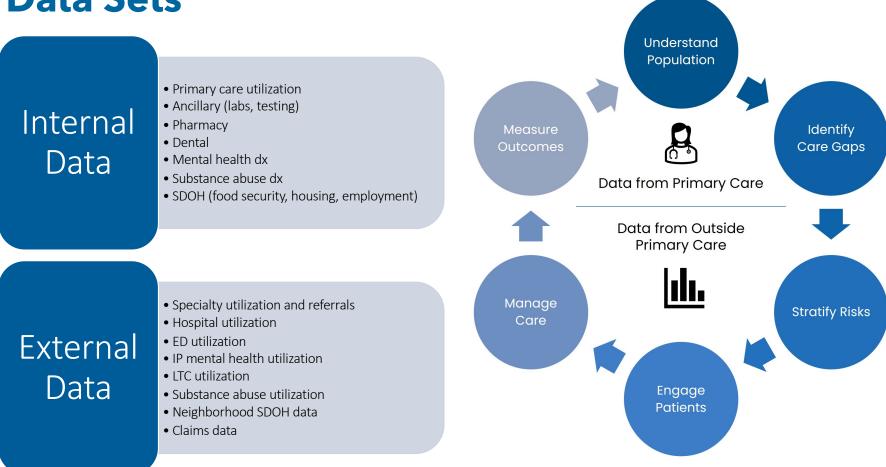


# **Importance of Health Data**

- > 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 health care 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







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

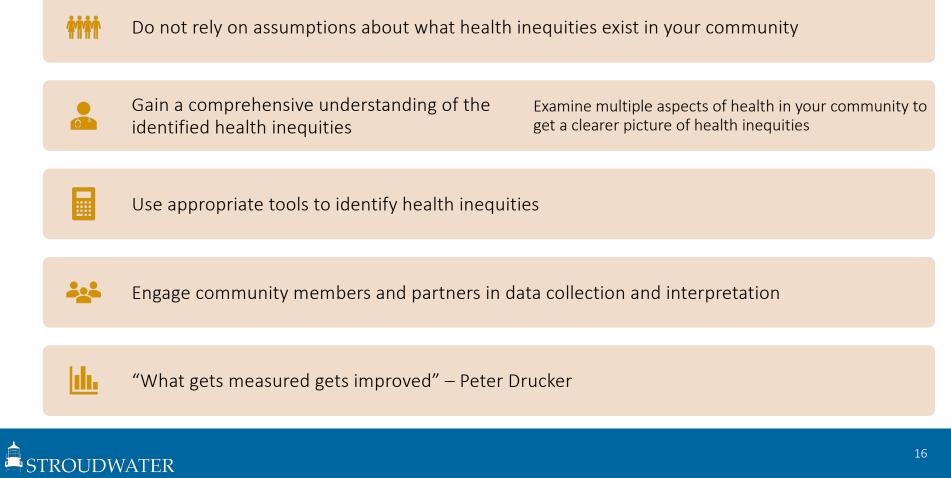
# **Using ICD-10 Data to Identify Community Needs**

- 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



# **Identify and Understand Health Inequities**



# **Using Data To Identify Inequities: Query Examples**

### PROCESS query examples (treatment, procedure, encounter)

- 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

### OUTCOME query examples

- 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-Englishspeaking

# 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

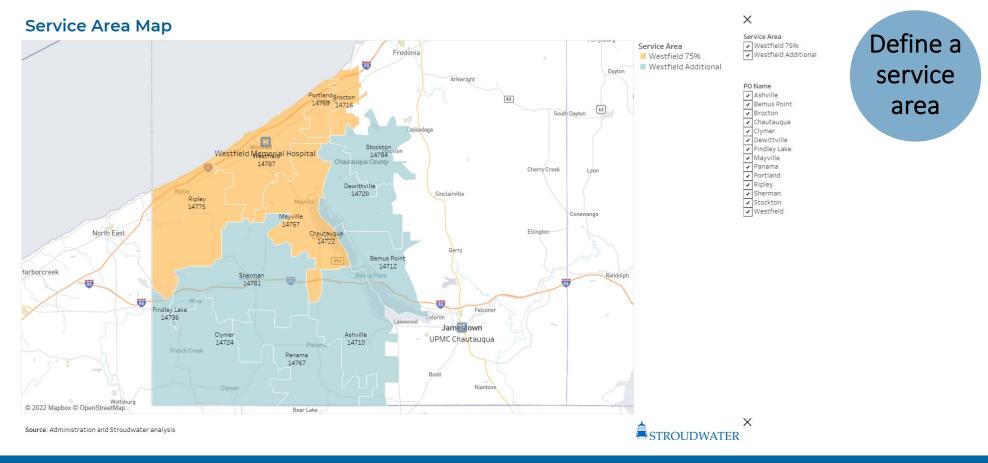
The dashboard includes data for the aggregate custom report area, the county or counties related to the custom geography, the state benchmarks, and national benchmarks

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.

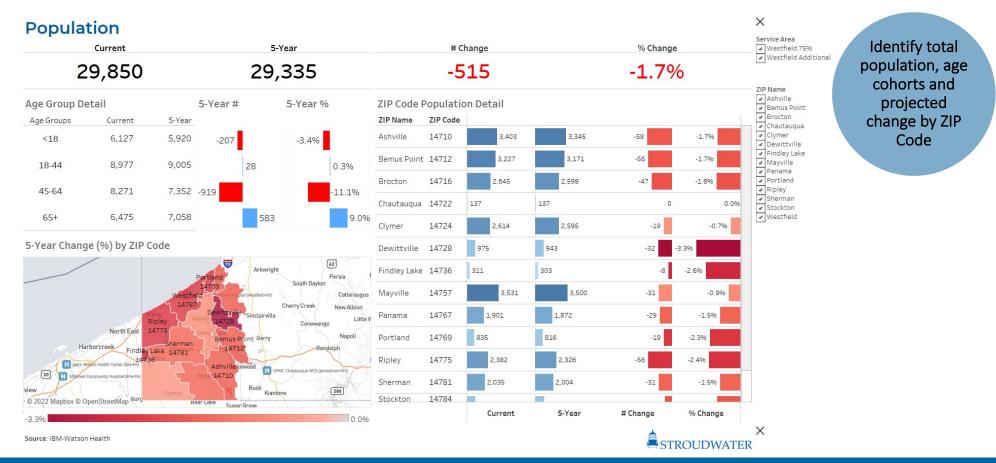


### **Service Area**



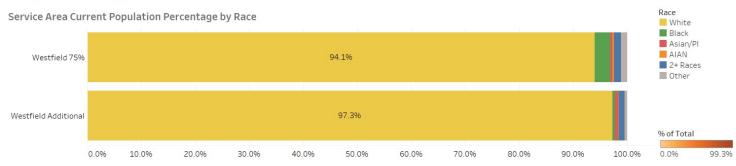


# **Population**



# **Population by Race**

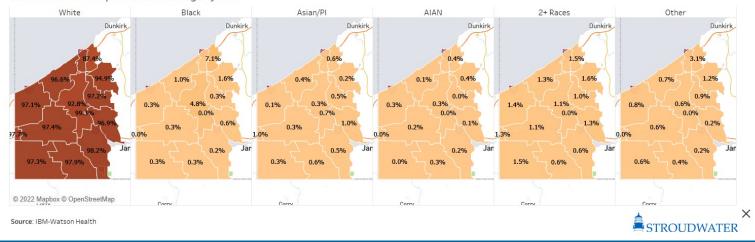
#### **Population by Race**





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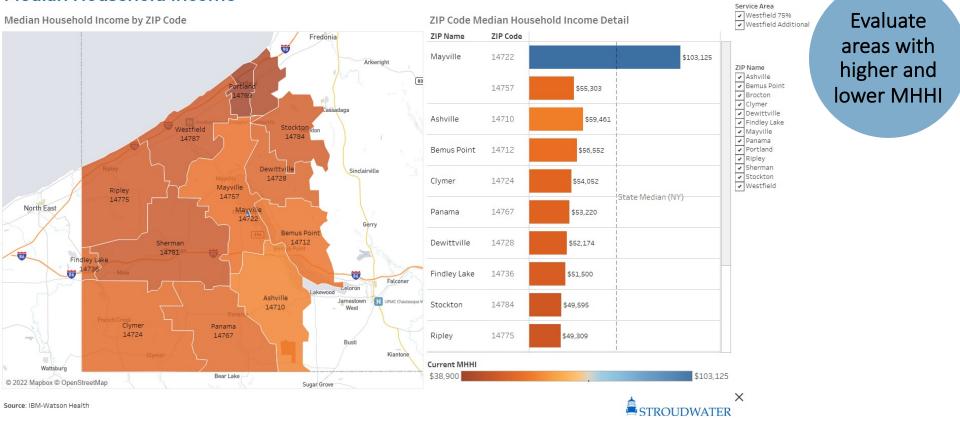
#### ZIP Code Current Population Percentage by Race





### **Median Household Income**

#### Median Household Income

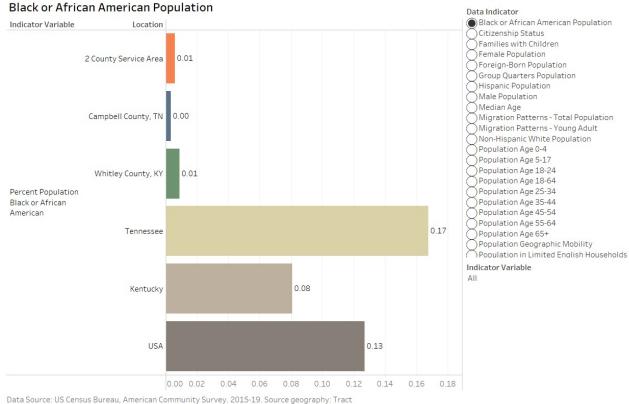


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### **Demographics**

#### **Demographics**



Category

Demographics

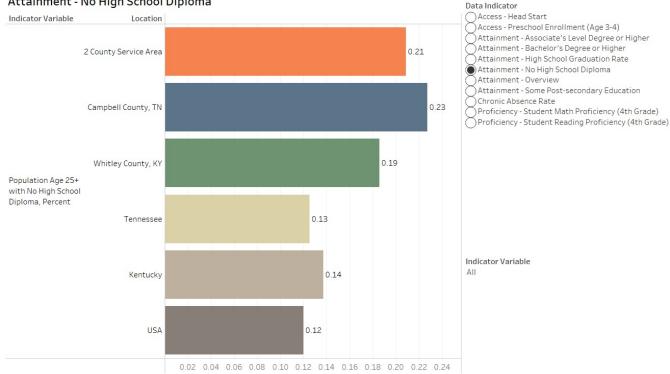
Multiple demographic categories are included



### **Education**

#### Education

#### Attainment - No High School Diploma



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



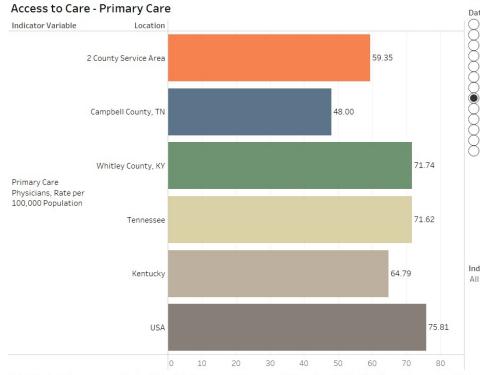
#### Category Education

Indicators highlight differences in educational attainment and proficiencies among the population

26

### **Healthcare Access**

#### Healthcare Workforce



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

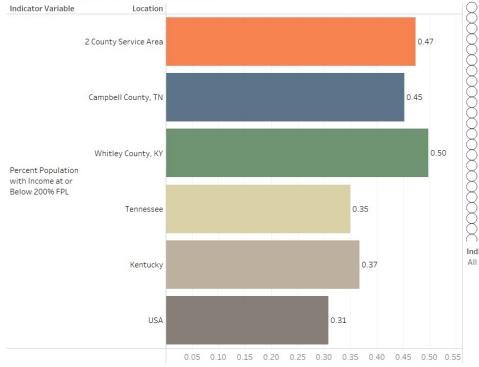
Access to Care - Addiction/Substance Abuse Providers Access to Care - Buprenorphine Providers Access to Care - Dental Health Access to Care - Dental Health Providers Access to Care - Mental Health Access to Care - Mental Health Access to Care - Nurse Practitioners Access to Care - Primary Care Access 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 Healthcare access comparison to state and national averages spotlight disparities

Indicator Variable

### **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



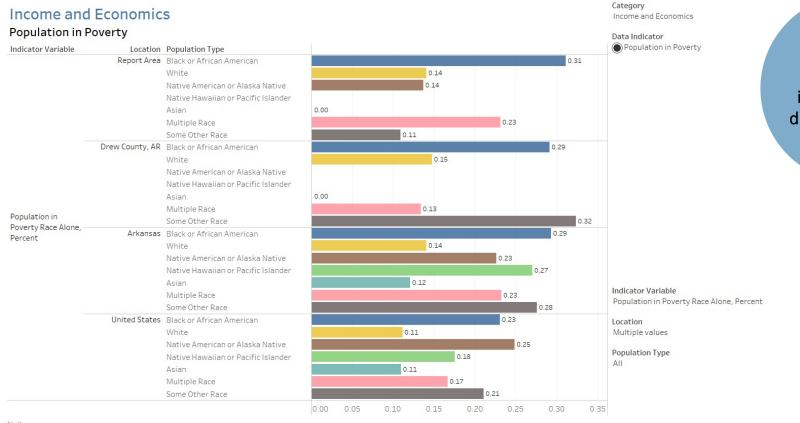
#### Category Income and Economics

#### Data Indicator

O 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 OIncome - Inequality (Atkinson Index) ()Income - Inequality (GINI Index) OIncome - Median Family Income Income - Median Household Income OIncome - 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

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

# **Race and Ethnicity**



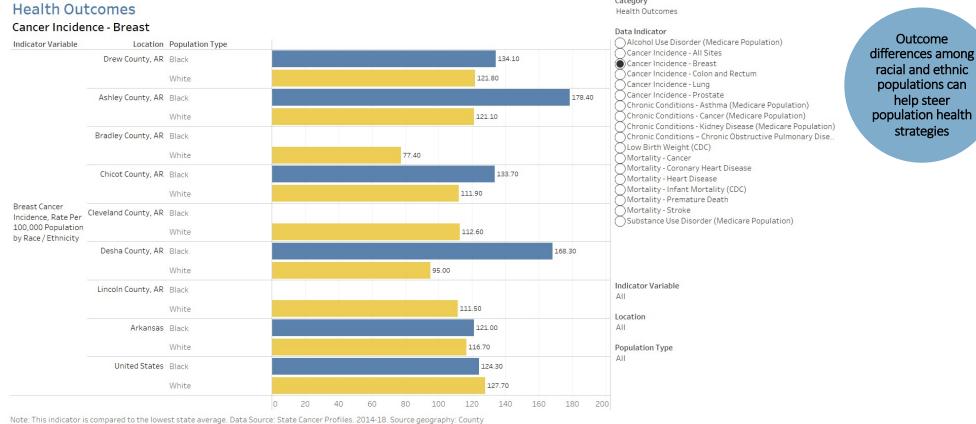
Detailed racial and ethnic economic indicators show disparities among the population

Null

# **Clinical Care and Prevention**

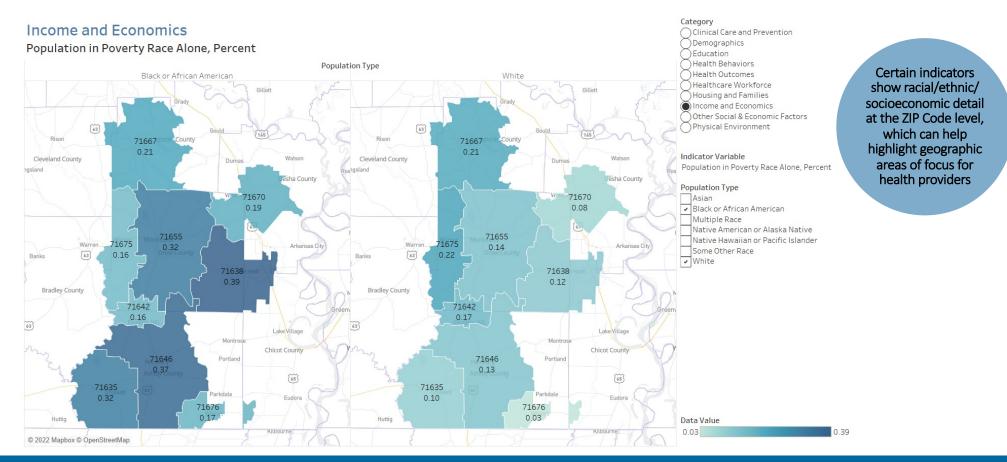
#### Category **Clinical Care and Prevention** Clinical Care and Prevention Prevention - High Blood Pressure Management Data Indicator Clinical care Hospitalizations - Preventable Conditions Indicator Variable Location Population Type prevention detail ) Prevention - Annual Wellness Exam (Medicare) 34.80 Drew County, AR Black or African American Prevention - High Blood Pressure Management Prevention - Recent Primary Care Visit (Medicare) shows gaps in 28.20 Non-Hispanic White racial and ethnic 34.00 Ashley County, AR Black or African American populations 27.60 Non-Hispanic White Bradley County, AR Black or African American 34.30 Non-Hispanic White 27.50 Chicot County, AR Black or African American 33.90 Non-Hispanic White 27.10 Blood Pressure Cleveland County, AR Black or African American Medication Nonadherence by Non-Hispanic White 27.40 Race/Ethnicity Desha County, AR Black or African American 36.40 Non-Hispanic White 30.10 Indicator Variable 33.50 Lincoln County, AR Black or African American AII 29.70 Non-Hispanic White Location 33.30 All Arkansas Black or African American 24.80 Non-Hispanic White Population Type All United States Black or African American 29.80 Non-Hispanic White 20.30 0 5 10 15 20 25 30 35 40

# **Health Outcomes**

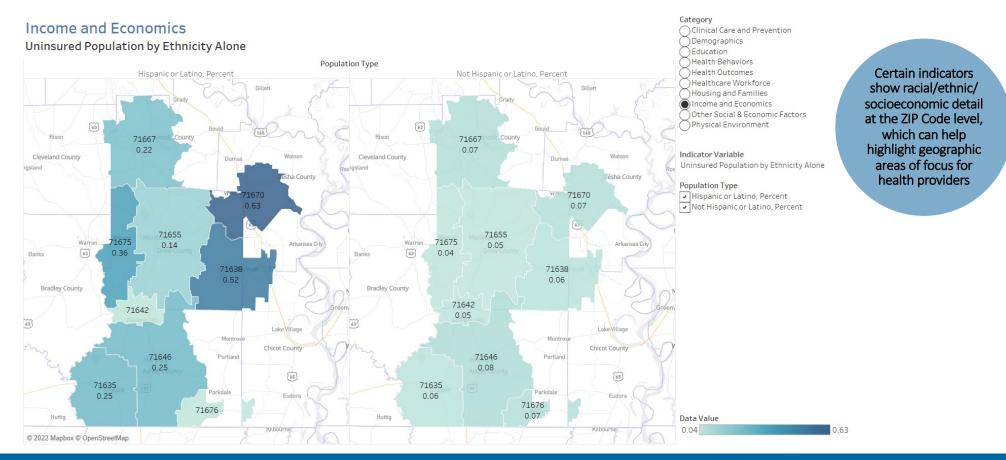




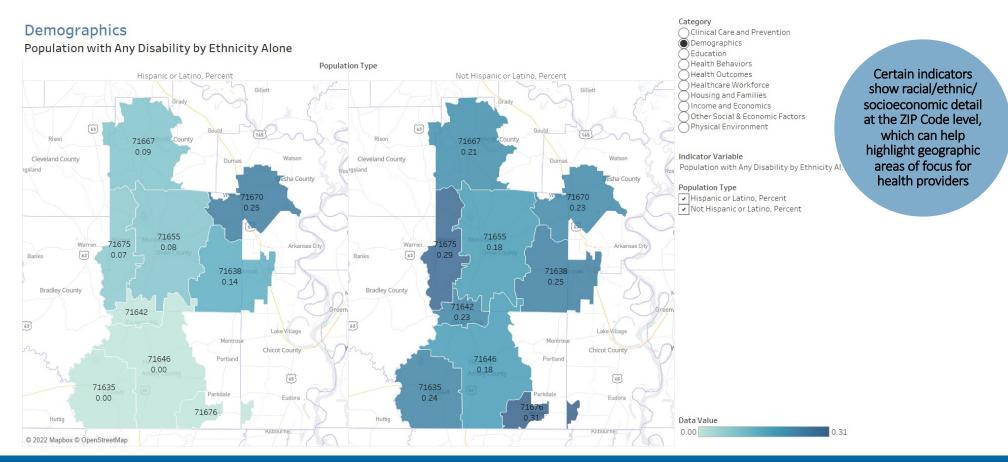
### **ZIP Code Level Data**



## **ZIP Code Level Data**



# **ZIP Code Level Data**



# **Other Social and Economic Factors**

Healthcare organization's service area performs below State and National averages for the following factors:

Report Area	Total Population	Socioeconomic Theme Score	Household Composition Theme Score	Minority Status Theme Score	Housing & Transportation Theme Score	Social Vulnerability Index Score	
Golden Valley	47,397	0.67	0.78	0.10	0.61	0.59	The exh
Bates County, MO	16,374	0.40	0.88	0.08	0.40	0.39	inc per
Benton County, MO	18,989	0.77	0.55	0.11	0.51	0.55	crc tha
Camden County, MO	45,096	0.54	0.39	0.21	0.29	0.34	pre fina
Cass County, MO	102,678	0.15	0.40	0.40	0.07	0.12	dis coi
Henry County, MO	21,765	0.69	0.81	0.19	0.54	0.60	Th
Hickory County, MO	9,368	0.77	0.52	0.35	0.12	0.47	me vul
Johnson County, MO	53,689	0.45	0.05	0.32	0.80	0.35	nei Sta
Pettis County, MO	42,371	0.71	0.88	0.67	0.64	0.80	ind
St. Clair County, MO	9,383	0.64	0.79	0.05	0.47	0.50	
Missouri	6,090,062	0.39	0.40	0.50	0.46	0.41	
United States	322,903,030	0.30	0.32	0.76	0.62	0.40	

The degree to which a community exhibits certain social conditions, including high poverty, low percentage of vehicle access, or crowded households, may affect that community's ability to prevent human suffering and financial loss in the event of disaster. These factors describe a community's social vulnerability.

The social vulnerability index is a measure of the degree of social vulnerability in counties and neighborhoods across the United States, where a higher score indicates higher vulnerability.



Source: CDC PLACES 2021, CMS State/County Level Chronic Conditions Table, Stroudwater analysis

# **Chronic Disease Populations and Cost Estimates**

- > The CDC's PLACES: Local Data for Better Health, ZCTA Data 2021 estimates the incidence of 4 chronic diseaserelated health risk behaviors at the local geographic level
- > The incidence rates, applied to the total population, give an estimate of the total number of people in the service area with the chronic condition
- > Incidence rates and population are shown at the ZIP Code Tabulation Area (ZCTA) level
- Multiplied by the average Medicare per capita cost for each chronic condition, an estimated total cost to treat
  a population within a service area is calculated

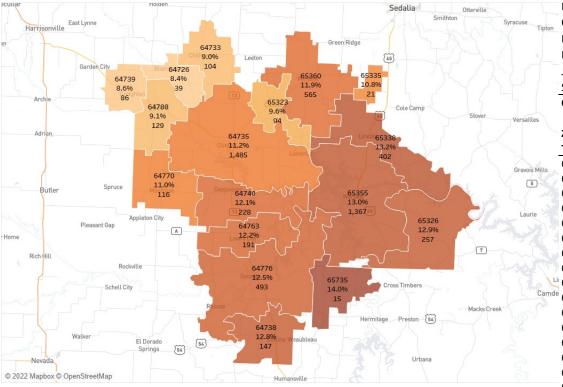


Source: CDC PLACES 2021, CMS State/County Level Chronic Conditions Table, Stroudwater analysis

### COPD

#### **Health Outcomes**

Chronic obstructive pulmonary disease among adults aged >=18 years



#### Prevalence (%)

8.4

Source: CDC PLACES 2021, CMS State/County Level Chronic Conditions Table, Stroudwater analysis

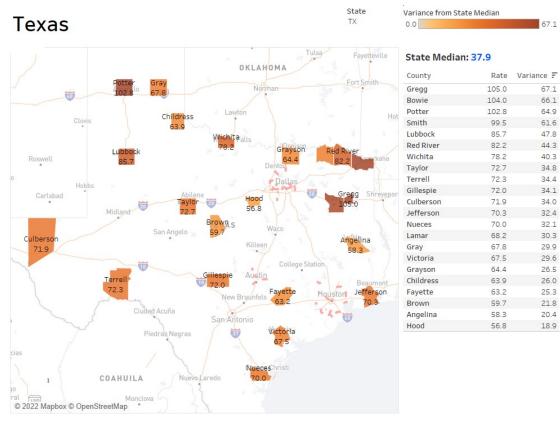
#### COPD \$27,255 National \$23,788 Missouri \$22,172 Benton \$26,000 Cass \$25,684 Henry \$22,918 Hickory \$24,727 Johnson St. Clair \$25,183 County Avg. \$24,447

# According to CDC prevalence estimates by ZCTA, the service area has over **5,700** adults afflicted with **COPD**.

With an average Medicare per capita cost of **\$24,447**(2018) for treating COPD, the estimated total service area spending to treat the disease is over **\$140 million**.

ZIP Code		Est.	Total Population	Est. Population	
<b>Tabluation Area</b>	Name	Prevalence (%)	(Census)	Affected	Est. Total Cost
64726	Blairstown	8.4	467	39	\$959,007
64733	Chilhowee	9.0	1,159	104	\$2,550,067
64735	Clinton	11.2	13,258	1,485	\$36,301,253
64738	Collins	12.8	1,149	147	\$3,595,469
64739	Creighton	8.6	997	86	\$2,096,135
64740	Deepwater	12.1	1,884	228	\$5,573,036
64763	Lowry City	12.2	1,568	191	\$4,676,613
64770	Montrose	11.0	1,056	116	\$2,839,764
4776	Osceola	12.5	3,942	493	\$12,046,259
<sup>de</sup> 64788	Urich	9.1	1,415	129	\$3,147,918
65323	Calhoun	9.6	976	94	\$2,290,586
65326	Edwards	12.9	1,996	257	\$6,294,711
65335	Ionia	10.8	196	21	\$517 <i>,</i> 494
65338	Lincoln	13.2	3,046	402	\$9,829,454
65355	Warsaw	13.0	10,519	1,367	\$33,430,539
65360	Windsor	11.9	4,752	565	\$13,824,485
65735	Quincy	14.0	110	15	\$376 <i>,</i> 484
Grand Total		8.4	48,490	5,741	\$140,349,274

### **County Opioid Prescribing Rates**



Includes the top 20% highest opioid dispensing counties in the United States in 2020. The 2020 U.S. median opioid dispensing rate was 43.3 per 100 persons. Source: CDC U.S. Opioid Dispensing Rates (https://www.cdc.gov/drugoverdose/rxrate-maps/index.html)



•	Texas state median for opioid prescribing rates are 37.9, which
	is below the US median of 43.3 per 100 people

- Counties that exceed the state median are shown. Baily and Lamb counties are below the state median.
- 2018 per capita spending on Drug Abuse and Substance Abuse averaged \$22,470 in the service area counties.

	Drug Abuse/ Substance Abuse
National	\$26,301
Texas	\$27,968
Bailey	\$25,609
Lamb	\$19,332
County Avg.	\$22,470

# 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
<b>↓</b>	
Incorporate	Incorporate health equity and outcomes data into conversations with key stakeholders, medical community, and the Board
<b>↓</b>	
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
<b>—</b>	
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

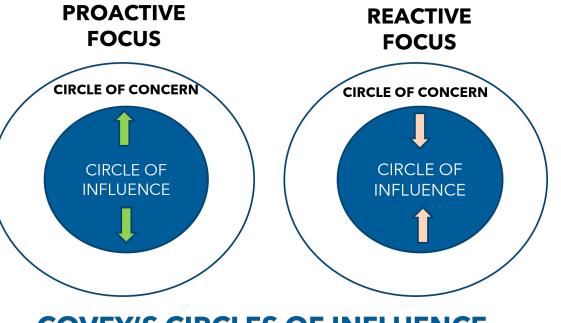
# **Circle of Influence**

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 on 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 those things that 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?**

