

Wright Memorial Hospital Community Health Needs Assessment

2021

◆ Wright Memorial Hospital



TABLE OF CONTENTS

TABLE OF CONTENTS.....	1
EXECUTIVE SUMMARY.....	4
Introduction.....	4
Community Assessed.....	4
Significant Community Health Needs.....	5
Significant Community Health Needs: Discussion.....	6
Access to Care and Health Insurance.....	6
COVID-19 Pandemic and Effects.....	6
Mental Health, Suicide, and Access to Mental Health Services.....	7
Obesity, Physical Inactivity, and Chronic Conditions.....	8
Poverty.....	8
Smoking and Tobacco Use.....	9
Substance Use Disorder and Overdoses.....	9
Transportation.....	9
DATA AND ANALYSIS.....	11
Community Definition.....	11
Secondary Data Summary.....	12
Demographics.....	12
Socioeconomic Indicators.....	13
Other Local Health Status and Access Indicators.....	13
Ambulatory Care Sensitive Conditions.....	16
Food Deserts.....	16
Medically Underserved Areas and Populations.....	16
Health Professional Shortage Areas.....	17
CDC COVID-19 Prevalence and Mortality Findings.....	17
Findings of Other CHNAs.....	17
Primary Data Summary.....	19
Key Stakeholder Interviews.....	19
Community and Internal Hospital Meetings.....	21
OTHER FACILITIES AND RESOURCES IN THE COMMUNITY.....	22
Hospitals.....	22
Federally Qualified Health Centers.....	22

Other Community Resources	22
APPENDIX A – OBJECTIVES AND METHODOLOGY	24
Regulatory Requirements	24
Methodology	24
Collaborating Organizations.....	25
Data Sources.....	25
Consultant Qualifications.....	26
APPENDIX B – SECONDARY DATA ASSESSMENT	27
Demographics.....	27
Socioeconomic indicators.....	33
People in Poverty	33
Unemployment.....	36
Health Insurance Status.....	37
Crime Rates	38
Housing Affordability.....	39
Dignity Health Community Need Index™.....	41
Centers for Disease Control and Prevention Social Vulnerability Index (SVI).....	43
Other Health Status and Access Indicators	48
County Health Rankings	48
Community Health Status Indicators	53
COVID-19 Incidence and Mortality	56
Mortality Rates.....	57
Communicable Diseases	61
Maternal and Child Health	62
America’s Health Rankings	64
Centers for Disease Control and Prevention PLACES.....	66
Ambulatory Care Sensitive Conditions.....	68
Food Deserts.....	70
Medically Underserved Areas and Populations.....	71
Health Professional Shortage Areas.....	72
Findings of Other Assessments.....	75
CDC COVID-19 Prevalence and Mortality Findings.....	75
Missouri Health Improvement Plan, 2013 – 2018, Revised 2017	76
Mercer County Health Needs Survey 2017	77

Rural Action Plan – US Department of Health and Human Services, 2020.....	77
APPENDIX C – COMMUNITY INPUT PARTICIPANTS	79
APPENDIX D – CHSI PEER COUNTIES.....	80
APPENDIX E – IMPACT EVALUATION.....	81

EXECUTIVE SUMMARY

Introduction

This Community Health Needs Assessment (“CHNA”) was conducted by Wright Memorial Hospital (“WMH” or “the hospital”) to identify significant community health needs and to inform development of an Implementation Strategy to address current needs.

Wright Memorial Hospital is a critical access hospital located in Trenton, Missouri. Founded in 1903, WMH opened a new, state-of-the-art facility in 2011. The 25-bed acute care hospital offers comprehensive care, including a 24-hour emergency department staffed by board-certified physicians, inpatient and outpatient diagnostic testing, 3-D mammography, inpatient and outpatient surgery, inpatient and outpatient rehabilitation services, a specialty clinic, and primary care offices adjoining the facility. Visitors to WMH’s Emergency Department benefit from lifesaving heart and stroke protocols developed by the world-renowned Saint Luke’s Mid America Heart Institute and Saint Luke’s Marion Bloch Neuroscience Institute. Additional information about WMH is available at: <https://www.saintlukeskc.org/locations/wright-memorial-hospital>.

Saint Luke’s Health System (“SLHS”) is a faith-based, not-for-profit health system committed to the highest levels of excellence in providing health care and health-related services in a caring environment. The system is dedicated to enhancing the physical, mental, and spiritual health of the diverse communities it serves. Saint Luke’s Health System operates 18 hospitals and campuses across the Kansas City region, home care and hospice services, behavioral health care, dozens of physician practices, a life care senior living community, and additional facilities and services. Additional information regarding SLHS is available at: <https://www.saintlukeskc.org/about-saint-lukes>.

This CHNA was conducted using widely accepted methodologies to identify the significant health needs of the community served by WMH. The assessment also was conducted to comply with federal laws and regulations.

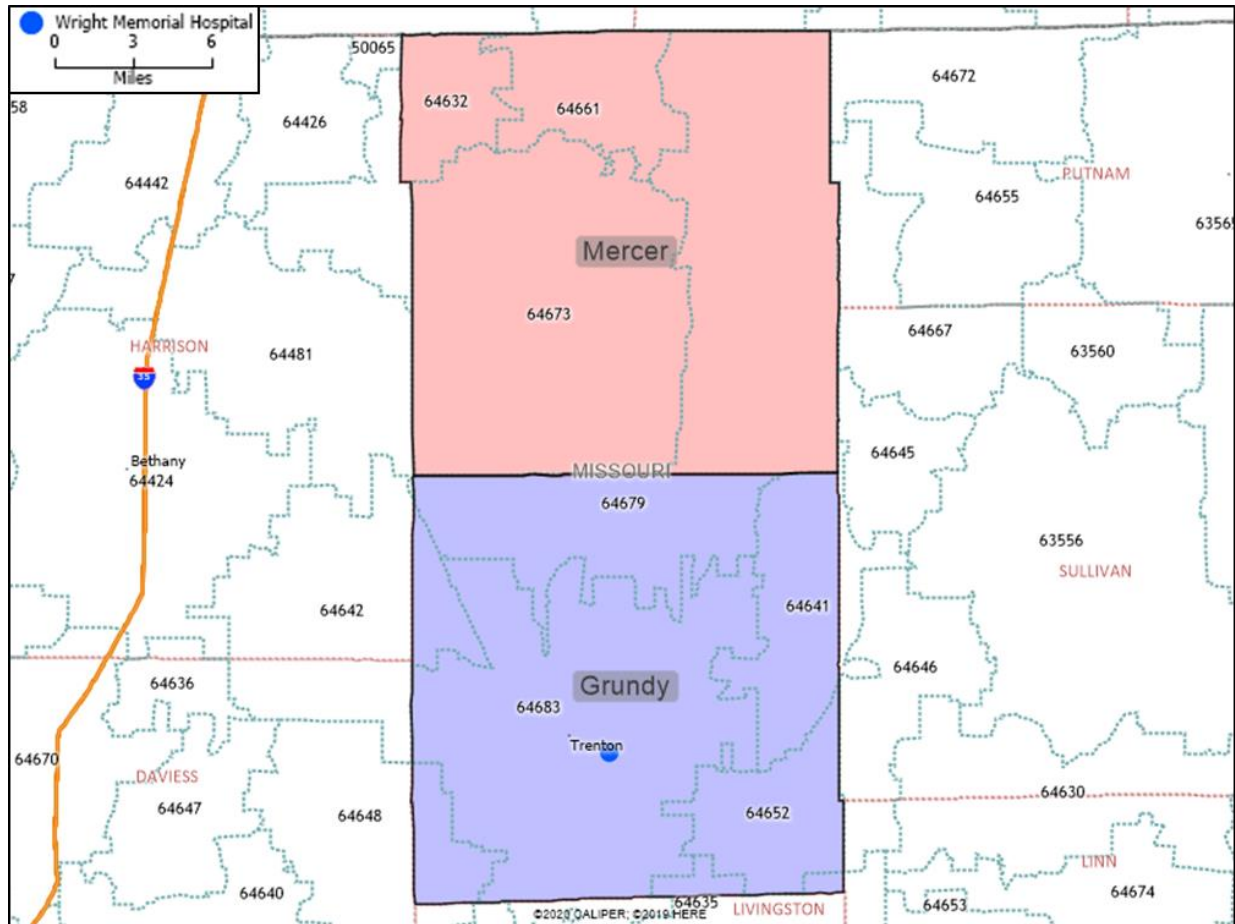
Community Assessed

For purposes of this CHNA, WMH’s community is defined as Grundy County, MO, and Mercer County, MO. The community was defined by considering the geographic origins of the hospital’s inpatient discharges and emergency room visits in calendar year 2020. Grundy and Mercer counties accounted for approximately 81 percent of the hospital’s 2020 inpatient discharges and emergency room cases.

The total population of the WMH community in 2019 was 13,636.

The following map portrays the community assessed by WMH and the hospital’s location within Grundy County.

EXECUTIVE SUMMARY



Source: Caliper Maptitude, 2020.

Significant Community Health Needs

As determined by analyses of quantitative and qualitative data, the significant health needs in the community served by Wright Memorial Hospital are:

- Access to Care and Health Insurance
- COVID-19 Pandemic and Effects
- Mental Health, Suicide, and Access to Mental Health Services
- Obesity, Physical Inactivity, and Chronic Conditions
- Poverty
- Smoking and Tobacco Use
- Substance Use Disorder and Overdoses
- Transportation

EXECUTIVE SUMMARY

Significant Community Health Needs: Discussion

Access to Care and Health Insurance

Accessing health care services is challenging for some members of the community, particularly for those who are low-income, uninsured, underinsured, and with limited transportation options.

The per-capita supply of primary care physicians is significantly lower compared to state and national averages in Grundy and Mercer counties, and both counties have been designated as Medically Underserved Areas (“MUAs”). The supply of dentists and mental health providers also is low in both counties. The federal government has designated Mercer County and the low-income population of Grundy County as Health Professional Shortage Areas (“HPSAs”) for primary care physicians and dentists, and both counties also have been designated as HPSAs for mental health professionals.

Accessing prenatal care is also an issue. Grundy and Mercer counties compared significantly worse to the Missouri rate for inadequate prenatal care, and both counties had lower rates of prenatal care beginning in the first trimester.

Community representatives who provided input into this CHNA (“community informants”) confirmed that providers are in short supply. Access to many types of care – including primary, mental health, and specialty care – requires travel to more populated areas, creating transportation barriers. A lack of providers for all care types is leading to long wait times.

Community informants cited numerous, additional reasons why health care services are difficult to access, including poverty (which makes affording health care services difficult because resources are needed for other basic needs such as food and rent), prevalence of uninsured people, transportation problems, poor health literacy, and a lack of culture around healthy living throughout the region. Elderly residents also experience disproportionate access barriers.

Rates of health insurance coverage are significantly lower in Grundy and Mercer counties compared to peer county, state, and national averages. Community informants identified health insurance as a significant barrier and among the most significant community needs, with few options for the uninsured, large gaps in Medicaid coverage, and providers not accepting certain insurance plans. Recent spikes in unemployment due to the COVID-19 pandemic are contributing to the number of community members who are uninsured.

Other community health needs assessments also have identified improving health insurance coverage as a significant issue. A lack of providers is also an issue due to difficulties in physician recruitment and retainment in rural areas.

COVID-19 Pandemic and Effects

The Centers for Disease Control and Prevention (“CDC”) provides information, data, and guidance regarding the COVID-19 pandemic. The pandemic represents a public health emergency for the state, nation, and the world. In addition to contributing to severe illness and

EXECUTIVE SUMMARY

death, the pandemic also has exposed the significance of problems associated with long-standing community health issues, including racial health inequities, chronic disease, access to health services, mental health, and related issues.

Part of the CDC's work has included identifying certain populations that are most at risk for severe illness and death due to the pandemic. Based on that work, many at-risk people live in the community served by WMH. Populations most at risk include older adults, people with certain underlying conditions, pregnant women, and members of racial and ethnic minority groups. According to the CDC, "long-standing systemic health and social inequities have put some members of racial and ethnic minority groups at increased risk of getting COVID-19 or experiencing severe illness, regardless of age." Men also are more likely to die from COVID-19 than women.

Community informants indicated that COVID-19 was a significant issue in the WMH community, with recent spikes in cases in nearby areas making national news. A variety of health and mental health problems have worsened due to the pandemic. Mental health status has deteriorated due to increased social isolation, particularly for elderly people. Elective procedures and routine health care services have been delayed, making it difficult for people to manage chronic conditions and to receive needed screening services. Community compliance with health and safety measures has also been difficult due to changing guidelines leading to frustration and politicization of public health.

The pandemic also is having serious economic impacts. In 2020, the number of people unemployed in the WMH community and in the U.S. increased substantially. The rise in unemployment has reduced access to employer-based health insurance and has increased housing and food insecurity. Social services agencies are experiencing unprecedented demand.

Mental Health, Suicide, and Access to Mental Health Services

Grundy and Mercer counties compare unfavorably to peer county, Missouri, and U.S. averages for the prevalence of mentally unhealthy days (adults). Suicide mortality rates in both counties are above the statewide average, with the rate in Mercer County nearly double.

Poor mental health status (including depression and anxiety) were identified by most community informants as a significant concern. Contributing factors include an under-supply of providers and facilities, stress from work and school, and isolation, which has worsened due to the COVID-19 pandemic.

In community meetings, mental health, suicide, and access to mental health services were the most frequently identified significant health problems. Both counties have a problematic undersupply of mental health services, comparing poorly to state and national averages and receiving mental health professional Health Professional Shortage Area (HPSA) designations. This is contributing to long wait times for those seeking services.

EXECUTIVE SUMMARY

Obesity, Physical Inactivity, and Chronic Conditions

Obesity and its contributing factors – including physical inactivity, access to healthy food, and a lack of nutrition knowledge – are significant concerns.

Grundy County compares unfavorably to Missouri and U.S. averages for the prevalence of adult obesity, and both counties compare unfavorably to national averages for rates of physical inactivity and access to exercise opportunities. Mortality rates for chronic conditions that have been associated with obesity also are above average, including the diabetes mortality rate in Mercer County being double the statewide rate.

A lack of access to healthy, affordable foods is contributing to obesity and chronic conditions. Mercer County ranked last among Missouri counties (115th) for food environment index, and Grundy County also ranked in the bottom quartile. Food deserts are located in Grundy County in Trenton.

Community members also identified obesity, physical inactivity, and chronic conditions as significant issues. They cited a lack of culture around healthy lifestyles and preventive health as contributing. While some resources for healthy living exist, residents often chose not to pursue healthy living activities.

The most recently published Missouri Health Improvement Plan identified obesity as a priority, and a rural health assessment identified multiple chronic diseases as prevalent.

Poverty

People living in low-income households generally are less healthy than those living in more prosperous areas.

In 2015-2019, 17.3 percent of Grundy County residents lived in poverty – above Missouri and U.S. averages. Poverty rates for Black and Hispanic (or Latino) residents have been higher than rates for White residents across the community and Missouri. Grundy and Mercer counties compare unfavorably to Missouri and national averages for children in poverty.

Several census tracts in Grundy and Mercer counties have been identified as “low income” and as having an unfavorable Social Vulnerability Index, including for socioeconomic vulnerability (published by the Centers for Disease Control). Most of these tracts are around Trenton in Grundy County. People in several census tracts also are affected by a lack of access to affordable housing and transportation.

Community informants identified poverty among the most significant needs in the WMH community, as well as housing and transportation issues that are greatly impacted by poverty. Interviewees stressed that poverty can be generational, and that the amount of children in poverty is high. There are limited job opportunities within community counties, perpetuating poverty. Poverty was especially thought to impact access to health services. Both counties were designated as medically underserved, and the low-income population of Grundy County and all

EXECUTIVE SUMMARY

of Mercer County were identified as primary care and dental care Health Professional Shortage Areas HPSAs.

The Missouri Health Improvement Plan identified access issues related to poverty as significant, including health insurance and health service costs.

Smoking and Tobacco Use

Above average tobacco use and smoking rates have been persistent problems in the county. Compared to peer county and national averages, Grundy and Mercer counties both had higher adult smoking rates.

Mortality rates related to smoking were higher compared to Missouri rates, including for chronic lower respiratory diseases in Grundy County and lung cancer in Mercer County. The percent of mothers who smoked during pregnancy in Grundy County was significantly above the Missouri average.

Smoking and tobacco use were identified by community informants as persistent issues despite many years of education around the issue. A culture around tobacco usage remains among the region's population. Decreasing smoking was a priority in the recent Missouri Health Improvement Plan, and the national rural health assessment identified chronic diseases related to smoking as priorities, including cancer and chronic lower respiratory disease.

Substance Use Disorder and Overdoses

Substance use disorders are significant, growing in severity in the WMH community. Disorders associated with opioids and methamphetamines were identified as particularly problematic.

Between 2013 and 2018, drug poisoning deaths in Grundy County increased 30 percent, and in Mercer County increased 28 percent. Mortality issues also exist due to alcohol abuse, as a significantly higher proportion of driving deaths involved alcohol compared to state and national averages.

Community informants confirmed that substance use disorders are significant needs, and community meeting participants selected the issue among the most significant needs. The Missouri Health Improvement plan identified misuse of alcohol and drugs as a significant issue, and participants in the Mercer County health needs survey selected illegal drug use as the most significant need for the county.

Transportation

The lack of transportation was identified as a significant need. Transportation is needed to access health services, especially specialty and mental health care, and a variety of other basic needs (such as food and employment).

EXECUTIVE SUMMARY

Census tracts in Mercer County and near Trenton in Grundy County are ranked in the bottom quartile nationally for transportation vulnerability. Both counties compare unfavorably to national rates for the percentage of population that drives alone to work, and for driving alone with a long commute.

All interviewees identified transportation as a significant issue, and a barrier to accessing health care services. Community informants cited a lack of public options and the need to travel far for health services as problematic. Elderly residents and low-income populations are particularly affected.

An assessment of rural health found transportation to be a significant barrier to accessing health services across the United States.

DATA AND ANALYSIS

Community Definition

This section identifies the community that was assessed by WMH. The community was defined by considering the geographic origins of the hospital’s discharges and emergency room visits in calendar year 2020.

On that basis, WMH’s community was defined as Grundy County, MO, and Mercer County, MO. The two counties accounted for over 81 percent of the hospital’s 2020 inpatient volumes and over 80 percent of its emergency room visits (**Exhibit 1**).

Exhibit 1: WMH Discharges and Emergency Room Visits, 2020

County	State	Inpatient Discharges	Percent Discharges	ER Visits	Percent ER Visits
Grundy	MO	278	64.7%	3,642	69.7%
Mercer	MO	72	16.7%	566	10.8%
From Community		350	81.4%	4,208	80.5%
Other Areas		80	18.6%	1,021	19.5%
Hospital Total		430	100.0%	5,229	100.0%

Source: Analysis of Saint Luke’s utilization data, 2021.

The total population of the WMH community in 2019 was approximately 13,600 persons (**Exhibit 2**).

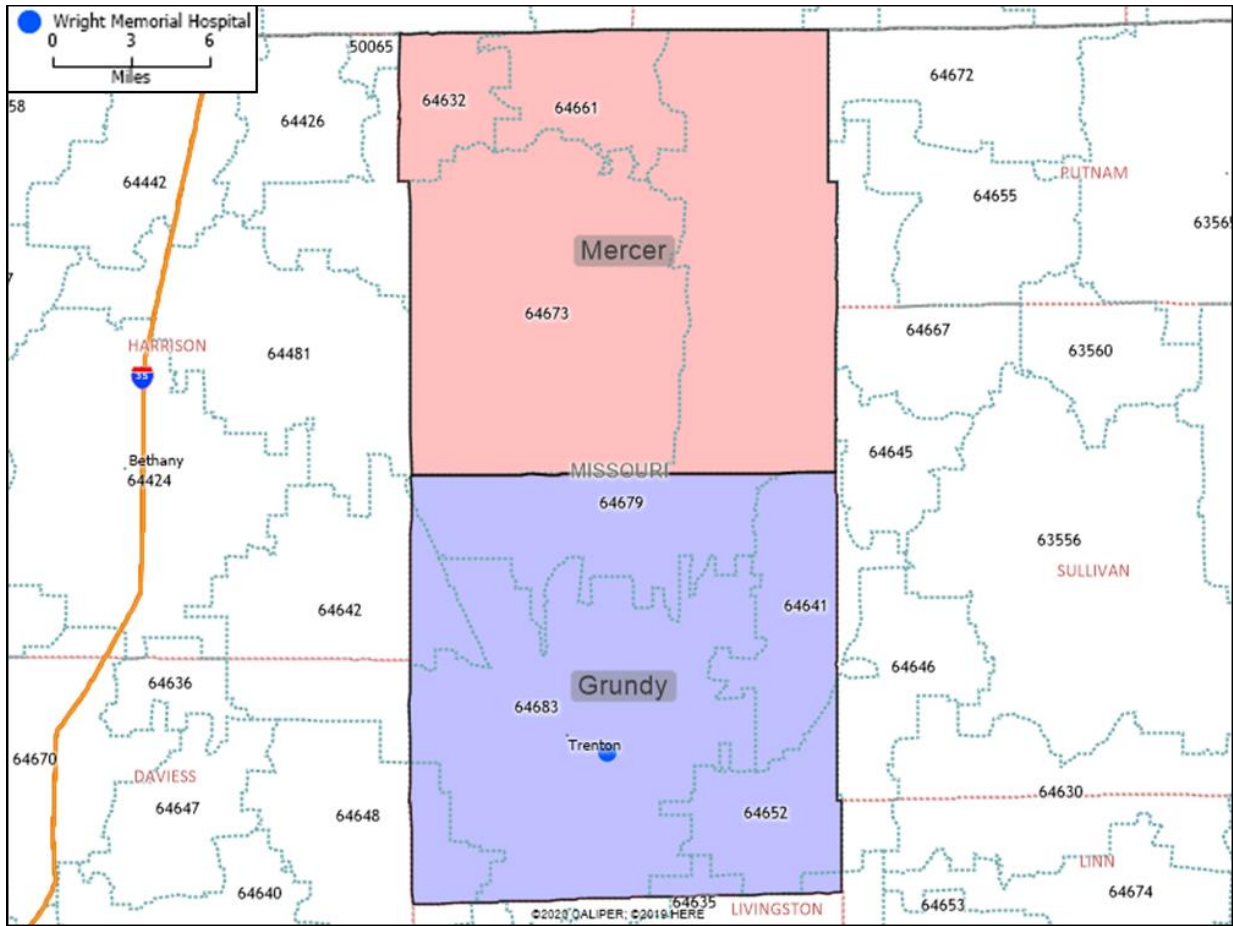
Exhibit 2: Community Population by County, 2019

County	State	Total Population 2019	Percent of Total Population 2019
Grundy	MO	9,992	73.3%
Mercer	MO	3,644	26.7%
Community Total		13,636	100.0%

Source: US Census, ACS 5-Year Estimates (2015-2019), 2020.

The hospital is located in Trenton, MO (Grundy County, ZIP Code 64683). **Exhibit 3** portrays WMH’s community and ZIP code boundaries.

Exhibit 3: Wright Memorial Hospital Community



Source: Caliper Maptitude, 2020.

Secondary Data Summary

The following section summarizes principal observations from the secondary data analysis. See Appendix B for more detailed information.

Demographics

Demographic characteristics and trends directly influence community health needs. The total population in the WMH community is expected to decline 2.4 percent from 2019 to 2025 (approximately 328 persons). The population in Grundy County is expected to decrease by 2.7 percent during the time period, while the population in Mercer County is expected to decrease by approximately 1.5 percent. All age cohorts are expected to decrease in population, with the population aged 20-44 expected to decline the most at 5.7 percent.

The WMH community has substantial variation in demographic characteristics (e.g., age, race/ethnicity, income levels). Over 29 percent of residents in two Mercer County ZIP codes (64661 and 64632) were age 65 or older in 2019, while this proportion was below 16 percent in ZIP code 64679. All WMH community ZIP codes had a proportion of Black residents below 0.8

DATA AND ANALYSIS

percent. Grundy County ZIP Code 64641 had the highest proportion of Hispanic (or Latino) residents at 7.4 percent. All other ZIP codes were below 3.0 percent.

A lower percentage of Grundy and Mercer County adults had a high school diploma compared to the Missouri average. Proportionately more people were disabled in both counties compared to the United States. Compared to Missouri, a higher proportion of Grundy County adults are linguistically isolated.

Socioeconomic Indicators

People living in low-income households generally are less healthy than those living in more prosperous areas. In 2015-2019, approximately 17.3 percent of Grundy County residents lived in poverty – above Missouri and U.S. averages (13.7 percent and 13.4 percent respectively). The proportion in Mercer County was 10.1 percent. Poverty rates for Black and Hispanic (or Latino) residents have, in general, been higher than rates for White residents in community counties, Missouri, and the United States.

Low-income census tracts can be found in Grundy County, particularly in areas near the hospital in Trenton. These areas also are categorized as “higher need” by the Dignity Health Community Need Index™ and are in the bottom half and quartile nationally for “social vulnerability” according to the Centers for Disease Control Social Vulnerability Index.

Between 2016 and early 2020, unemployment rates in Grundy and Mercer counties, Missouri, and the United States fell significantly. However, due to the COVID-19 pandemic, unemployment rose substantially in 2020 in all areas. The rise in unemployment is likely to affect numerous health-related factors, such as access to employer-based health insurance, housing and food insecurity, and access to health services. Unemployment rates in community counties were at or below the United States rates for all years.

Overall crime rates in Grundy and Mercer counties have been below Missouri averages.

The percentage of people with health insurance coverage is significantly lower in Grundy and Mercer counties than in Missouri and the U.S.

Missouri recently voted to expand Medicaid, and after legal challenges is currently working through administrative hurdles to begin enrolling the expanded population. In 2018, the average uninsured rate in states that expanded Medicaid was 7.7 percent; the average rate in states that did not expand Medicaid was 14.6 percent.

Other Local Health Status and Access Indicators

In the 2020 *County Health Rankings* and for overall health outcomes, Grundy County ranked 88th and Mercer County ranked 59th (out of 115 counties and cities in Missouri).

Grundy County ranked in the bottom 50th percentile among Missouri counties and cities for 14 of the 41 indicators assessed. Of those, six were in the bottom quartile, including health

DATA AND ANALYSIS

outcomes, length of life, food environment index, income inequality, injury deaths, and severe housing problems.

Mercer County ranked in the bottom 50th percentile among Missouri counties and cities for 18 of the 41 indicators assessed. Of those, eight were in the bottom quartile, including food environment index, access to exercise opportunities, alcohol-impaired driving deaths, uninsured, dentists, mental health providers, mammography screening, and flu vaccinations.

Community Health Status Indicators (“CHSI”) compares indicators for each county with those for peer counties across the United States. Each county is compared to 30 to 35 of its peers, which are selected based on socioeconomic characteristics such as population size, population density, percent elderly, per-capita income, and poverty rates.

In CHSI, Grundy County benchmarked poorly for several indicators, including:

- Years of potential life lost before age 75;
- Teen births;
- Ratio of population to primary care physicians; and
- Injury deaths.

In Mercer County, the following indicators compared particularly unfavorably:

- Percent with access to exercise opportunities;
- Uninsured;
- Ratio of population to primary care physicians;
- Ratio of population to dentists; and
- Ratio of population to mental health providers.

Other secondary data from the Missouri Department of Health and Senior Services, the Centers for Disease Control and Prevention, America’s Health Rankings, the Health Resources and Services Administration, and the United States Department of Agriculture have been assessed. Based on an assessment of available secondary data, the indicators presented in **Exhibit 4** appear to be most significant in the WMH community.

An indicator is considered *significant* if it was found to vary materially from a benchmark statistic (e.g., an average value for Missouri, for peer counties, or for the United States). For example, 33.8 percent of Grundy County’s adults are obese; the average for the United States is 29.0 percent. The last column of the exhibit identifies where more information regarding the data sources can be found in this report.

DATA AND ANALYSIS

Exhibit 4: Significant Indicators

Indicator	Area	Value	Benchmark		Exhibit
			Value	Area	
Poverty rate, 2015-2019	Grundy County	17.3%	13.4%	United States	13
Poverty rate, Black, 2015-2019	Grundy County	100.0%	16.8%	Grundy County, White	14
	Mercer County	66.7%	10.2%	Mercer County, White	14
Percent children in poverty	Grundy County	25.8%	18.3%	Missouri	28
Percent adults any post-secondary education	Grundy County	53.8%	66.7%	Missouri	28
	Mercer County	52.7%	66.7%	Missouri	28
Average number of mentally unhealthy days	Grundy County	4.5	4.1	Peer counties	29
	Mercer County	4.6	4.1	Peer counties	29
Suicide mortality per 100,000 population	Grundy County	20.4	18.7	Missouri	31
	Mercer County	36.2	18.7	Missouri	31
Obesity (Percent adults BMI >=30)	Grundy County	33.8%	29.0%	United States	28
Food environment index score - 0 (worst) to 10 (best)	Grundy County	6.8	7.6	United States	28
	Mercer County	4.2	7.6	United States	28
Percent adults with access to exercise opportunities	Grundy County	59.3%	84.0%	United States	28
	Mercer County	26.4%	84.0%	United States	28
Diabetes mortality per 100,000 population	Mercer County	42.9	20.9	Missouri	31
Percent uninsured	Grundy County	17.8%	8.8%	United States	17
	Mercer County	16.0%	8.8%	United States	17
Ratio of population to primary care physicians	Grundy County	3,316:1	1,330:1	United States	28
	Mercer County	3,678:1	1,330:1	United States	
Ratio of population to dentists	Mercer County	3,641:1	1,450:1	United States	28
Ratio of population to mental health providers	Mercer County	3,641:1	400:1	United States	28
Percent female Medicare enrollees mammography screening	Mercer County	32.0%	46.0%	United States	28
Years of potential life lost before age 75 per 100,000	Grundy County	10,612	6,900	United States	28
Injury deaths per 100,000	Grundy County	111.3	70.0	United States	28
Drug poisoning mortality rate, 2018	Grundy County	20.2	14.2	Grundy County, 2013	33
	Mercer County	17.8	12.8	Mercer County, 2013	33
Smoking percentage among adults	Grundy County	19.9%	17.0%	Peer counties	29
	Mercer County	20.1%	17.0%	Peer counties	29
Lung cancer (trachea, bronchus) mortality per 100,000 population	Mercer County	71.3	47.5	Missouri	32
Percent mothers who smoked while pregnant	Grundy County	19.8%	12.8%	Missouri	35
Percent mothers with inadequate prenatal care	Grundy County	35.1%	21.1%	Missouri	35
	Mercer County	39.1%	21.1%	Missouri	35
Infant deaths per 1,000 births	Grundy County	11.1	6.4	Missouri	35
	Mercer County	10.0	6.4	Missouri	35
Infant deaths per 1,000 births, Black	Missouri	12.0	5.3	Missouri, White	36
Teen birth rate per 1,000 female pop. ages 15-19	Grundy County	38.4	23.0	United States	28
	Mercer County	27.1	23.0	United States	28
COVID-19 mortality per 100,000 population	Grundy County	413.6	170.3	Missouri	30

Source: Verité Analysis.

DATA AND ANALYSIS

When Missouri health data are arrayed by race and ethnicity, significant differences are observed, in particular for:

- Infant mortality,
- Low birthweight births,
- Teen births,
- Cancer,
- Children in poverty,
- Diabetes,
- Obesity,
- High school graduation,
- Mental distress,
- Depression,
- Crowded housing, and
- Severe housing problems.

These differences indicate the presence of racial and ethnic health inequities and disparities.

Ambulatory Care Sensitive Conditions

Ambulatory Care Sensitive Conditions (ACSCs) include thirteen health conditions (also referred to as Prevention Quality Indicators (PQIs)) “for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.”¹ Among these conditions are: diabetes, perforated appendixes, chronic obstructive pulmonary disease (COPD), hypertension, congestive heart failure, dehydration, bacterial pneumonia, urinary tract infection, and asthma.

Analyses conducted for this CHNA indicate that discharges for ACSCs are comparatively high in the WMH community.

Food Deserts

The U.S. Department of Agriculture’s Economic Research Service identifies census tracts that are considered “food deserts” because they include lower-income persons without supermarkets or large grocery stores nearby. Federally-designated food deserts are located in Grundy County, in Trenton.

Medically Underserved Areas and Populations

Medically Underserved Areas and Populations (MUA/Ps) are designated by the Health Resources and Services Administration based on an “Index of Medical Underservice.” All of Grundy and Mercer counties have been designated as Medically Underserved Areas.

¹Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators.

DATA AND ANALYSIS

Health Professional Shortage Areas

A geographic area can receive a federal Health Professional Shortage Area (HPSA) designation if a shortage of primary medical care, dental care, or mental health care professionals is present. In Grundy County, the low-income population has been designated as primary care and dental health care HPSAs, and the entire county is a mental health care HPSA. In Mercer County, the entire county has been designated primary care, dental health care, and mental health care HPSAs.

CDC COVID-19 Prevalence and Mortality Findings

The Centers for Disease Control and Prevention (CDC) provides information, data, and guidance regarding the COVID-19 pandemic. The pandemic represents a public health emergency for the WMH community, Missouri, and the United States. The pandemic also has exposed the significance of problems associated with long-standing community health issues, including racial health inequities, chronic disease, access to health services, mental health, and related issues.

Part of the CDC's work has included identifying certain populations that are most at risk for severe illness and death due to the pandemic. Based on that work, many at-risk people live in the community served by WMH. Populations most at risk include:

- Older adults;
- People with certain underlying medical conditions, including cancer, chronic kidney disease, COPD, obesity, serious heart conditions, diabetes, sickle cell disease, asthma, hypertension, immunocompromised state, and liver disease;
- People who are obese and who smoke;
- Pregnant women; and,
- Black, Hispanic (or Latino), and American Indian or Alaska Native persons.

According to the CDC, “long-standing systemic health and social inequities have put some members of racial and ethnic minority groups at increased risk of getting COVID-19 or experiencing severe illness, regardless of age.”

Findings of Other CHNAs

The State of Missouri, local health departments, and national organizations that specialize in rural health recently released community needs assessments or updates to previous health improvement plans. This CHNA has integrated the findings of that work.

The issues most frequently identified as *significant* in these other assessments are (presented in alphabetical order):

- Access to health care services and specialty care;
- Child abuse and safety;
- Health insurance coverage;
- Immunizations;

DATA AND ANALYSIS

- Maternal and infant health, and prenatal care;
- Obesity and chronic disease;
- Public health infrastructure;
- Smoking and tobacco use;
- Substance use disorder, including alcohol; and
- Transportation.

DATA AND ANALYSIS

Primary Data Summary

Primary data were gathered through key stakeholder interviews and online meetings. Two community meetings relevant to WMH were conducted, including one focused on community stakeholders and another meeting with WMH staff members. Interviews were conducted by phone or online video conferences, and meetings were conducted by online video conferences.

See Appendix C for information regarding those who participated in the community input process.

Key Stakeholder Interviews

Six (6) interviews were conducted to learn about community health issues in the WMH community. Participants included individuals representing public health departments, social service organizations, community health centers, and similar organizations.

Questions focused first on identifying and discussing health issues in the community before the COVID-19 pandemic began. Interviews then focused on the pandemic's impacts and on what has been learned about the community's health given those impacts. Stakeholders also were asked to describe the types of initiatives, programs, and investments that should be implemented to address the community's health issues and to be better prepared for future risks.

Stakeholders most frequently identified the following issues as significant before the COVID-19 pandemic began.

- **Transportation** was identified by all interviewees as a significant concern, limiting the ability of residents to access basic needs and medical services (particularly specialty providers in larger metro areas) due to limited public options. Elderly and low-income populations are most affected by transportation issues.
- **Poverty** is a significant issue, often systemic and generational throughout the area. Many job opportunities offer low wages or limited opportunities for career advancement. The amount of children in poverty and on free and reduced lunch is significant. **Low-income populations** have limited access to a variety of services, including primary care, specialty care, and healthy living resources.
- **Obesity** is widespread, and associated **chronic conditions** including diabetes and heart disease are widespread. **Physical inactivity** is common and contributing to obesity and chronic disease. While areas to exercise are available, residents choose not to partake largely due to cultural reasons, as many do not value healthy living practices.
- Associated with obesity and diabetes, it is difficult for residents to **access healthy foods** due to the higher cost of healthy food and widespread availability of cheaper, unhealthy options. **Nutrition** is lacking for many due to personal choices and a lack of incentives around healthy eating.

DATA AND ANALYSIS

- **Accessing health services** is difficult for residents, particularly for **mental health services** and **specialty providers**. Due to the low supply of physicians, residents must travel far for care. There are few low-cost options, and many utilize emergency departments for primary care. Elderly populations and low-income residents have increased difficulties accessing care due to transportation barriers and others.
- The **needs of elderly populations** are significant as the population ages. Elderly populations are particularly vulnerable due to transportation issues, difficulties aging in place, and technology barriers, made worse if the resident is on a fixed or low income.
- **Mental Health** is a significant issue, with problems with depression and anxiety, often due to stress from work, school, and general life. **Access to mental health services** is also limited due to a lack of providers (particularly for psychiatrists and providers who focus on elderly mental health) leading to long wait times. Insurance often limits access to mental health care.
- **Health insurance** limits access to care for residents, with few options for uninsured populations. Gaps in Medicaid coverage make access difficult, and a number of providers do not accept certain insurance plans. Older adults and younger families are particularly vulnerable due to not qualifying for federal and other insurance programs.
- Issues with **substance use disorder** are significant, with the use of methamphetamines and opioids both cited as significant concerns.
- **Smoking and tobacco use** are still common, and chronic lung conditions are a concern. A culture around tobacco usage remains among elderly and younger populations, and a low tobacco tax in Missouri worsens the issue.

Interviewees were also asked to discuss the impacts of the COVID-19 pandemic, both on the community and also on their own organizations. From this discussion, the following impacts were discussed most often:

- Providers and decision makers found it difficult navigating changing health guidelines and had **difficulty with regulation compliance**. Some residents also did not want to adhere to changing guidelines. **Politicization** of the pandemic also contributed to difficulties with health measures.
- **Isolation** was widespread and impacted the **mental health** of many residents, particularly among **elderly** populations. Many residents were fearful of the virus, adding additional stress.
- Many residents **delayed medical care** and preventive health services due to not wanting to be exposed to the virus in a medical setting. This delay led to a worsening in severity of chronic conditions and unnoticed health issues.

DATA AND ANALYSIS

Community and Internal Hospital Meetings

From June 17 through July 1, 2021, eight online meetings were conducted across the Saint Luke's Critical Access region to obtain community input. Four meetings were comprised of external community stakeholders in community counties², and four meetings were comprised of staff from WMH and other Saint Luke's Health System critical access hospital facilities.

Twenty-one (21) stakeholders participated in the two community meetings relevant to WMH. These individuals represented organizations such as local health departments, non-profit organizations, local businesses, health care providers, and local policymakers.

Each meeting began with a presentation that discussed the goals and status of the CHNA process and the purpose of the community meetings. Then, secondary data were presented, along with a summary of the most unfavorable community health indicators.

Meeting participants then were asked to discuss whether the identified, unfavorable indicators accurately identified the most significant community health issues and were encouraged to add issues that they believed were significant.

After discussing the needs identified through secondary data and adding others to the list, participants in each meeting were asked through an online survey process to identify "three to five" they consider to be most significant. From this process, participants identified the following needs as most significant for the WMH Community:

- Mental health conditions, suicide, and access to mental health services
- Poverty and its impacts on accessing resources
- COVID-19 pandemic and its effects
- Substance use disorder
- Severe housing problems
- Health insurance
- Transportation

² These counties include Allen County, KS; Anderson County, KS; Grundy County, MO; Linn County, MO; Livingston County, MO; and Mercer County, MO.

OTHER FACILITIES AND RESOURCES IN THE COMMUNITY

This section identifies other facilities, clinics, and resources available in the WMH community that are available to address community health needs.

Hospitals

Exhibit 5 presents information on hospital facilities located in Grundy and Mercer counties.

Exhibit 5: Hospitals Located in Community, 2021

Organization	Address	City	County	ZIP
Wright Memorial Hospital	191 Iowa Boulevard	Trenton	Grundy	64683

Source: Missouri Department of Health and Senior Services, 2021.

Federally Qualified Health Centers

Federally Qualified Health Centers (FQHCs) are established to promote access to ambulatory care in areas designated as “medically underserved.” These clinics provide primary care, mental health, and dental services for lower-income members of the community. FQHCs receive enhanced reimbursement for Medicaid and Medicare services and most also receive federal grant funds under Section 330 of the Public Health Service Act. There currently are two FQHC sites operating in the community (**Exhibit 6**).

Exhibit 6: Federally Qualified Health Centers Located in Community, 2021

Name	Address	City	County	ZIP Code
Princeton Office	606 W Main St	Princeton	Mercer	64673
North Mercer School	400 Main St	Mercer	Mercer	64661

Source: HRSA, 2021.

According to 2018 data published by HRSA, FQHCs in the WMH community served 31 percent of uninsured persons and 13 percent of Medicaid recipients. Nationally, FQHCs served 22 percent of uninsured patients and 19 percent of the nation’s Medicaid recipients.³

Other Community Resources

Many social services and resources are available throughout Missouri to assist residents. The United Way of the Greater St. Louis maintains the Missouri 2-1-1 database of available resources throughout the state. The Missouri 2-1-1 is available 24-hours a day, seven days a week, and has resources in the following categories:

- COVID-19 Resources
- Food

³ See: <http://www.nachc.org/research-and-data/research-fact-sheets-and-infographics/chartbook-2020-final/> and <https://www.udsmapper.org/>.

OTHER FACILITIES AND RESOURCES IN THE COMMUNITY

- Housing and utilities
- Clothing and household items
- Transportation
- Legal and public safety
- Education
- Health, wellness, and dental
- Employment
- Income support
- Individual and family support
- Mental health and addictions
- Environment, arts, and recreation
- Disaster services
- Consumer, information, and municipal services

Additional information about these resources and participating providers can be found at:
<https://mo211.myresourcedirectory.com/>.

In addition to United Way 2-1-1, Saint Luke's Health System maintains a Community Resource Hub to connect community members to reduced-cost and free services in their neighborhoods. The Saint Luke's Community Resource Hub contains resources for a variety of categories, including:

- Food
- Housing
- Goods
- Transit
- Health
- Money
- Care
- Education
- Work
- Legal

Additional information about these resources and participating providers can be found at:
<https://saintlukesresources.org/>.

APPENDIX A – OBJECTIVES AND METHODOLOGY

Regulatory Requirements

Federal law requires that tax-exempt hospital facilities conduct a CHNA every three years and adopt an Implementation Strategy that addresses significant community health needs.⁴ In conducting a CHNA, each tax-exempt hospital facility must:

- Define the community it serves;
- Assess the health needs of that community;
- Solicit and take into account input from persons who represent the broad interests of that community, including those with special knowledge of or expertise in public health;
- Document the CHNA in a written report that is adopted for the hospital facility by an authorized body of the facility; and,
- Make the CHNA report widely available to the public.

The CHNA report must include certain information including, but not limited to:

- A description of the community and how it was defined,
- A description of the methodology used to determine the health needs of the community, and
- A prioritized list of the community’s health needs.

Methodology

CHNAs seek to identify significant health needs for particular geographic areas and populations by focusing on the following questions:

- **Who** in the community is most vulnerable in terms of health status or access to care?
- **What** are the unique health status and/or access needs for these populations?
- **Where** do these people live in the community?
- **Why** are these problems present?

The focus on **who** is most vulnerable and **where** they live is important to identifying groups experiencing health inequities and disparities. Understanding **why** these issues are present is challenging but is important to designing effective community health improvement initiatives. The question of **how** each hospital can address significant community health needs is the subject of the separate Implementation Strategy.

Federal regulations allow hospital facilities to define the community they serve based on “all of the relevant facts and circumstances,” including the “geographic location” served by the hospital facility, “target populations served” (e.g., children, women, or the aged), and/or the hospital

⁴ Internal Revenue Code, Section 501(r).

APPENDIX A – OBJECTIVES AND METHODOLOGY

facility’s principal functions (e.g., focus on a particular specialty area or targeted disease).”⁵ Accordingly, the community definition considered the geographic origins of the hospital’s patients and also the hospital’s mission, target populations, principal functions, and strategies.

Data from multiple sources were gathered and assessed, including secondary data⁶ published by others and primary data obtained through community input. Input from the community was received through key stakeholder interviews and online community meetings (including a meeting conducted with internal hospital staff). Stakeholders and community meeting participants represented the broad interests of the community and included individuals with special knowledge of or expertise in public health. *See Appendix C.* Considering a wide array of information is important when assessing community health needs to ensure the assessment captures a wide range of facts and perspectives and to increase confidence that significant community health needs have been identified accurately and objectively.

Certain community health needs were determined to be “significant” if they were identified as problematic in at least two of the following three data sources: (1) the most recently available secondary data regarding the community’s health, (2) recent assessments developed by the state and local organizations, and (3) input from community stakeholders who participated in the community meeting and/or interview process.

In addition, data were gathered to evaluate the impact of various services and programs identified in Saint Luke’s previous CHNA process. *See Appendix E.*

Collaborating Organizations

For this community health assessment, Wright Memorial Hospital collaborated with the following Saint Luke’s Critical Access hospitals: Allen County Regional Hospital (Iola, KS), Anderson County Hospital (Garnett, KS), and Hedrick Medical Center (Chillicothe, MO). These facilities collaborated through gathering and assessing secondary data together, conducting community meetings and key stakeholder interviews, and relying on shared methodologies, report formats, and staff to manage the CHNA process.

Data Sources

Community health needs were identified by collecting and analyzing data from multiple sources. Statistics for numerous community health status, health care access, and related indicators were analyzed, including data provided by local, state, and federal government agencies, local community service organizations, and Saint Luke’s Health System. Comparisons to benchmarks were made where possible. Findings from recent assessments of the community’s health needs conducted by other organizations (e.g., local health departments) were reviewed as well.

⁵ 501(r) Final Rule, 2014.

⁶ “Secondary data” refers to data published by others, for example the U.S. Census and the Missouri Department of Health and Social Services. “Primary data” refers to data observed or collected from first-hand experience, for example by conducting interviews.

APPENDIX A – OBJECTIVES AND METHODOLOGY

Input from persons representing the broad interests of the community was taken into account through key informant interviews (6 participants) and community meetings (21 participants). Stakeholders included: individuals with special knowledge of or expertise in public health; local public health departments; hospital staff and providers; representatives of social service organizations; and leaders, representatives, and members of medically underserved, low-income, and minority populations.

Saint Luke's Health System posts CHNA reports and Implementation Plans online at <https://www.saintlukeskc.org/community-health-needs-assessments-implementation-plans>.

Consultant Qualifications

Verité Healthcare Consulting, LLC (Verité) was founded in May 2006 and is located in Arlington, Virginia. The firm serves clients throughout the United States as a resource that helps hospitals conduct Community Health Needs Assessments and develop Implementation Strategies to address significant health needs. Verité has conducted more than 100 needs assessments for hospitals, health systems, and community partnerships nationally since 2012.

The firm also helps hospitals, hospital associations, and policy makers with community benefit reporting, program infrastructure, compliance, and community benefit-related policy and guidelines development. Verité is a recognized national thought leader in hospital community benefits, 501(r) compliance, and Community Health Needs Assessments.

APPENDIX B – SECONDARY DATA ASSESSMENT

This section presents an assessment of secondary data regarding health needs in the Wright Memorial Hospital (WMH) community. The WMH community is defined as Grundy County, MO, and Mercer County, MO.

Demographics

Exhibit 7: Change in Community Population by County, 2019 to 2025

County	State	Total Population 2019	Projected Population 2025	Percent Change 2019-2024
Grundy	MO	9,992	9,719	-2.7%
Mercer	MO	3,644	3,588	-1.5%
Community Total		13,636	13,308	-2.4%

Source: US Census, ACS 5-Year Estimates (2015-2019), 2020.

Description

Exhibit 7 portrays the estimated population by county in 2019 and projected to 2025.

Observations

- Between 2019 and 2025, the WMH community is expected to decline by 328 people (2.4 percent). Grundy and Mercer counties both are expected to lose population.

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 8: Change in Community Population by Age Cohort, 2019 to 2025

Age Cohort	Total Population 2019	Projected Population 2025	Percent Change 2019 - 2025
Age 0-19	3,704	3,689	-0.4%
Age 20-44	3,531	3,331	-5.7%
Age 45-64	3,459	3,426	-1.0%
Age 65+	2,942	2,926	-0.5%
Community Total	13,636	13,373	-1.9%

Source: US Census, ACS 5-Year Estimates (2015-2019), 2020.

Note: US Census projections by age cohort use a different methodology than the projections for the total population (Exhibit 7).

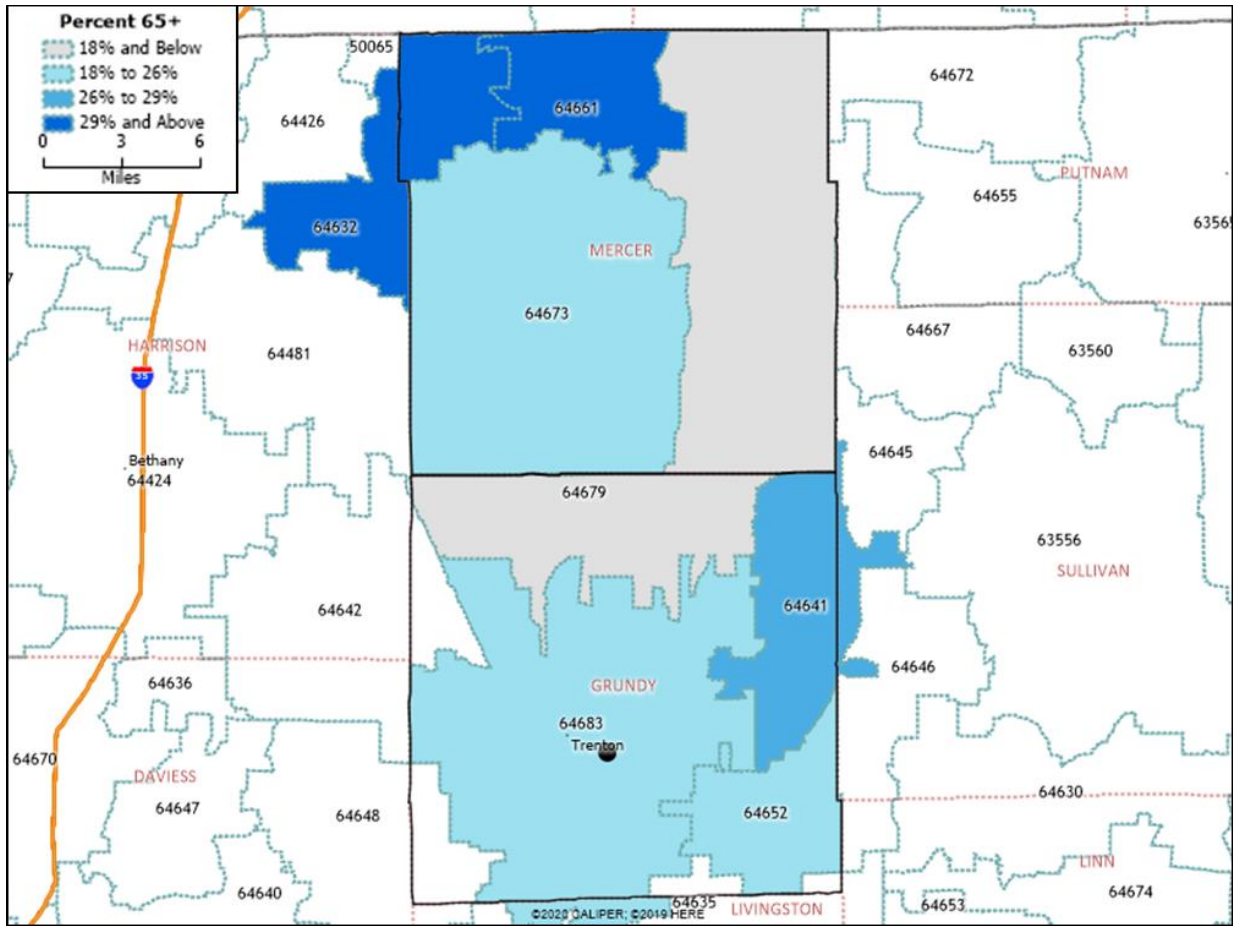
Description

Exhibit 8 shows the WMH community population for certain age cohorts in 2019, with projections to 2025.

Observations

- All age cohorts are expected to decrease between 2019 and 2025.
- The population aged 20-44 is expected to decline the most at 5.7 percent.

Exhibit 9: Percent of Population – Aged 65+, 2019



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, and Caliper Maptitude.

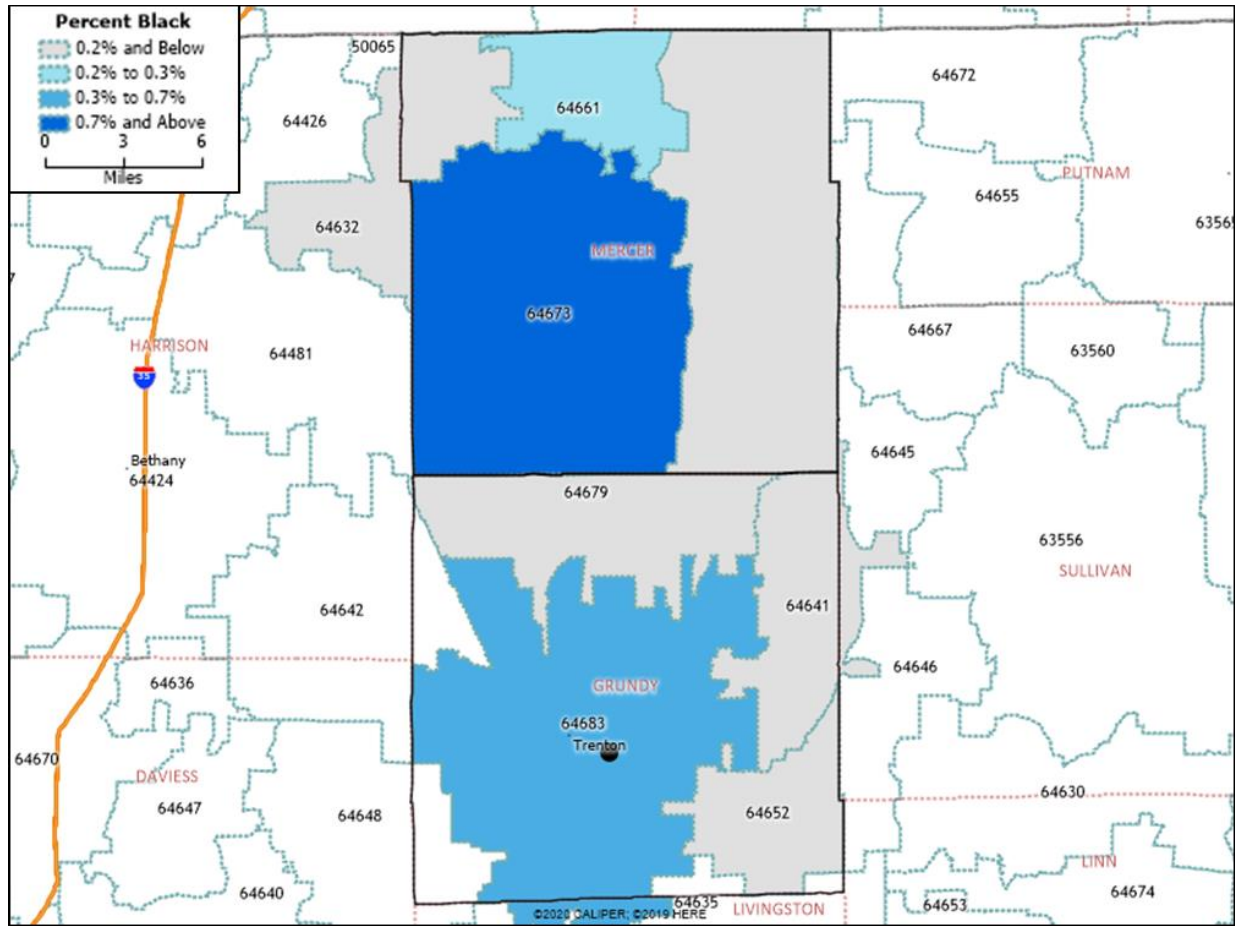
Description

Exhibit 9 portrays the percent of the population 65 years of age and older by ZIP code.

Observations

- Mercer County ZIP codes 64661 and 64632 had the highest proportion, each above 29 percent.
- At 15.4 percent, ZIP code 64679 had the lowest proportion.

Exhibit 10: Percent of Population – Black, 2019



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, and Caliper Maptitude.

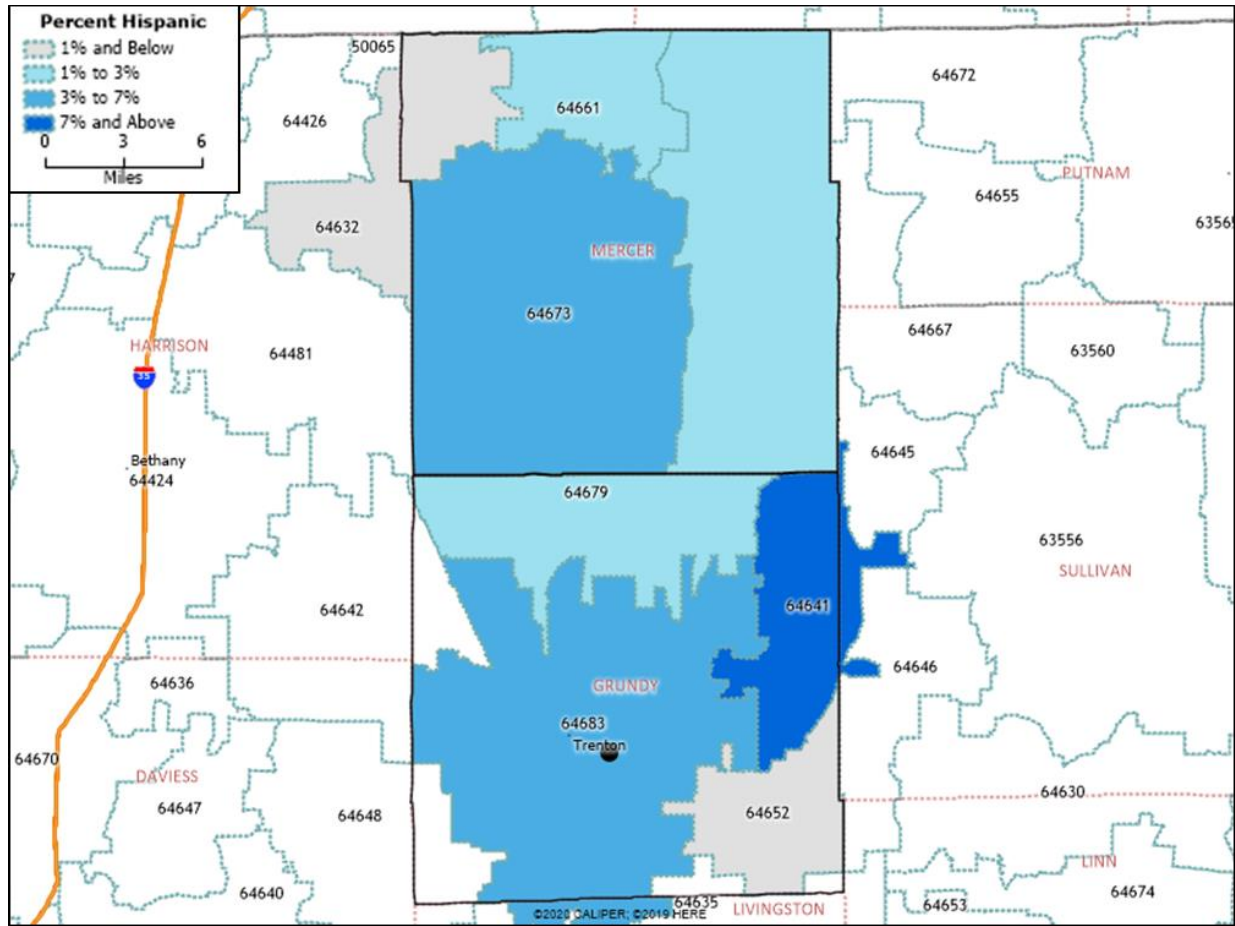
Description

Exhibit 10 portrays the percent of the population – Black by ZIP code.

Observations

- No WMH community ZIP code had a proportion of Black residents above 1.0 percent.
- Mercer County ZIP code 64673 had the highest proportion of Black residents at 0.7 percent.

Exhibit 11: Percent of Population – Hispanic (or Latino), 2019



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, and Caliper Maptitude.

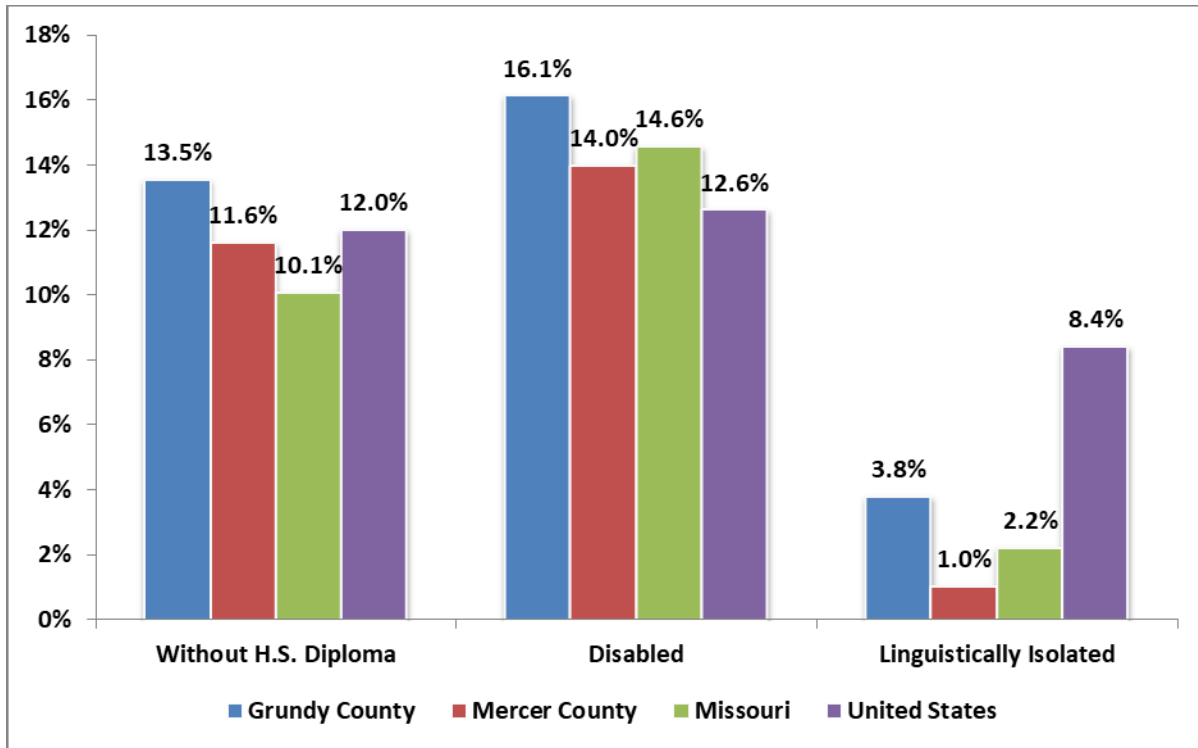
Description

Exhibit 11 portrays the percent of the population – Hispanic (or Latino) by ZIP code.

Observations

- Grundy County ZIP Code 64641 had the highest proportion of Hispanic (or Latino) residents at 7.4 percent. All other ZIP codes were below 3.0 percent.

Exhibit 12: Selected Socioeconomic Indicators, 2015-2019



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020.

Description

Exhibit 12 portrays the percent of the population (aged 25 years and above) without a high school diploma, with a disability, and linguistically isolated for community counties, Missouri, and the United States. Linguistic isolation is defined as residents who speak a language other than English and speak English less than “very well.”

Observations

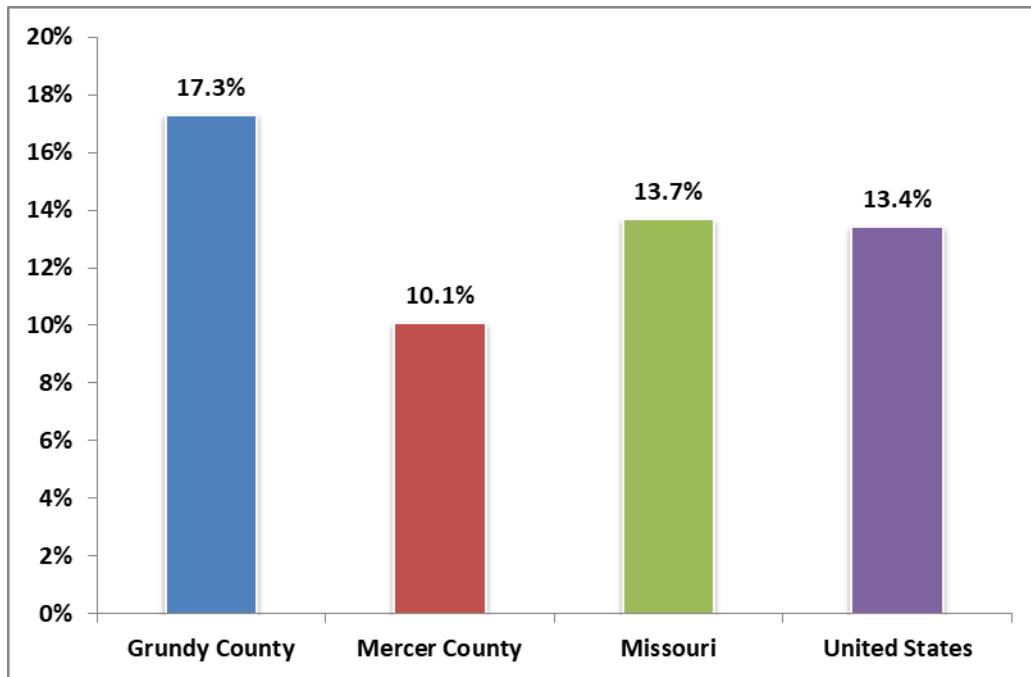
- In 2015-2019, a lower percentage of Grundy and Mercer county adults had a high school diploma compared to the Missouri average.
- Proportionately more people were disabled in both counties compared to the United States.
- Compared to the United States, proportionately fewer people in both counties and in Missouri are linguistically isolated. The proportion in Grundy County exceeds the state average.

Socioeconomic indicators

This section includes indicators for poverty, unemployment, health insurance status, crime, housing affordability, and “social vulnerability.” All have been associated with health status.

People in Poverty

Exhibit 13: Percent of People in Poverty, 2015-2019



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020.

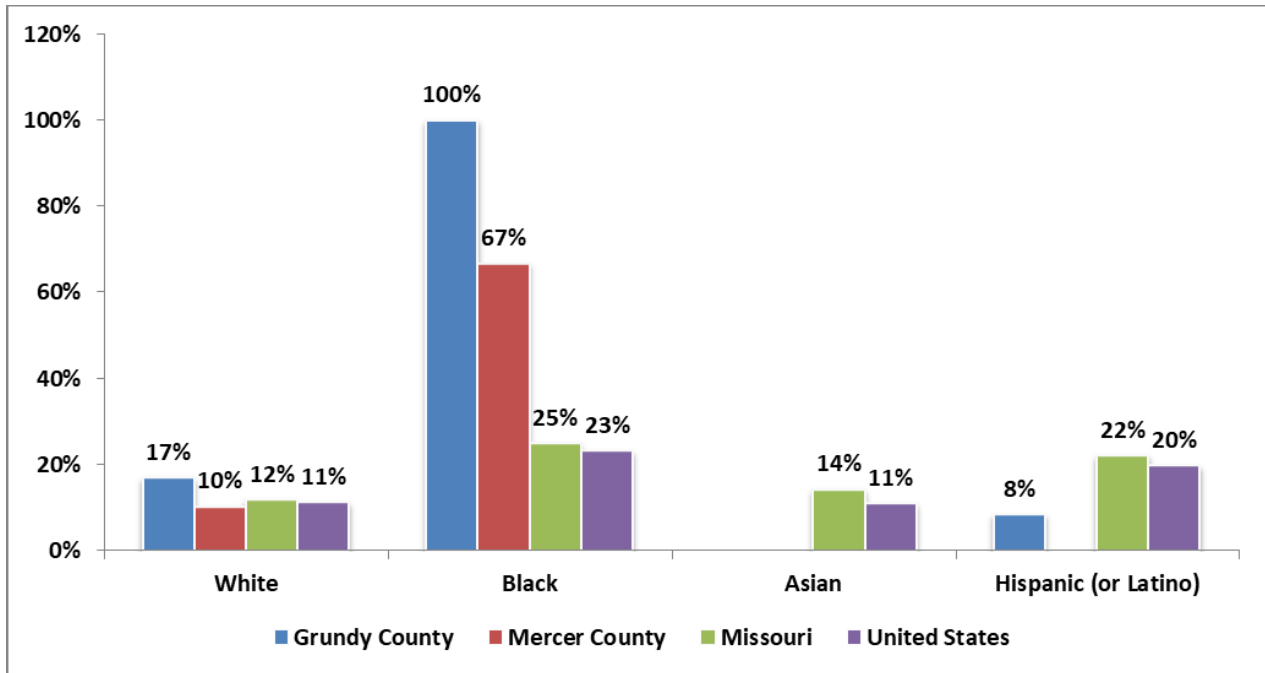
Description

Exhibit 13 portrays poverty rates in community counties, Missouri, and the United States.

Observations

- In 2015-2019, the overall poverty rate in Grundy County was above the Missouri and United States averages. The rate in Mercer County was below state and national averages.

Exhibit 14: Poverty Rates by Race and Ethnicity, 2015-2019



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020.

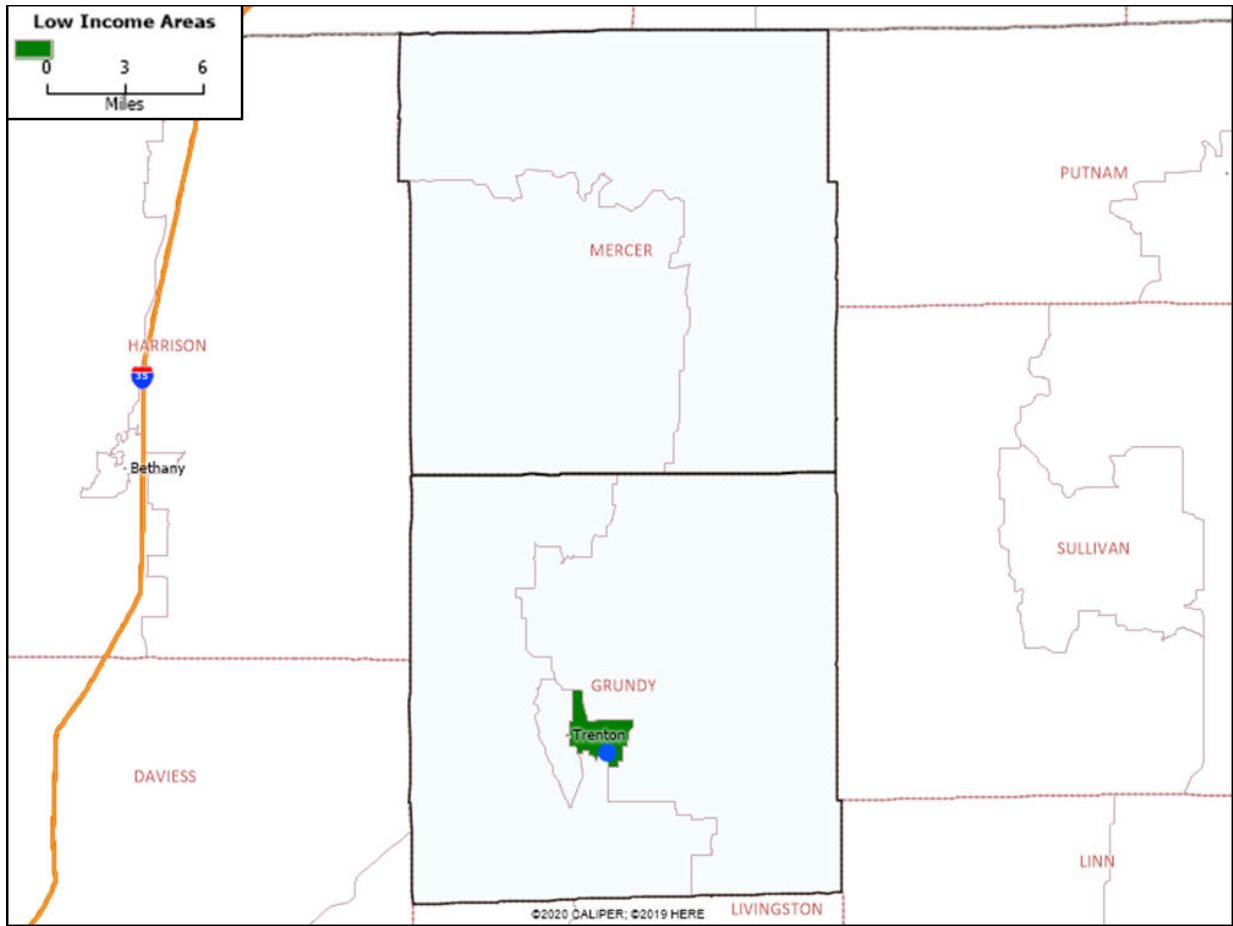
Description

Exhibit 14 portrays poverty rates by race and ethnicity.

Observations

- Poverty rates were generally higher for Black and Hispanic (or Latino) populations than for White populations throughout all areas.

Exhibit 15: Low Income Census Tracts, 2019



Source: US Department of Agriculture Economic Research Service, ESRI, 2021.

Description

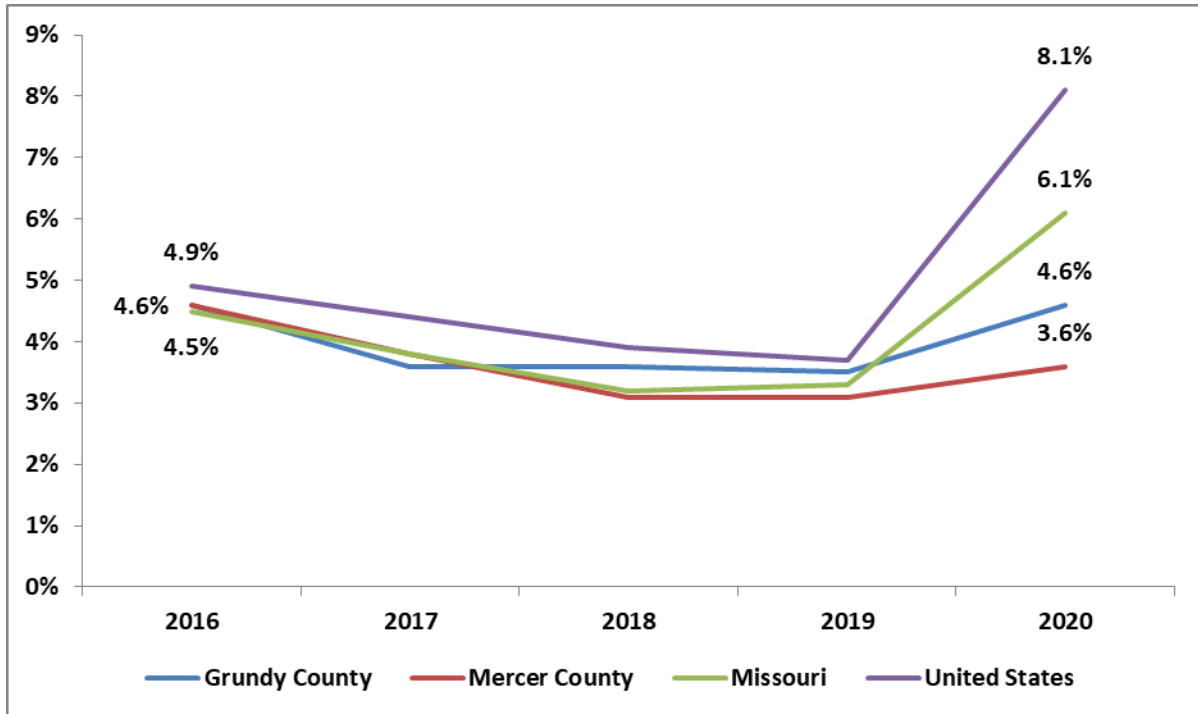
Exhibit 15 portrays the location of federally designated low-income census tracts.

Observations

- In 2019, low income census tracts were concentrated in areas around the hospital in Trenton.

Unemployment

Exhibit 16: Annual Unemployment Rates, 2016 to 2020



Source: Bureau of Labor Statistics, 2021.

Description

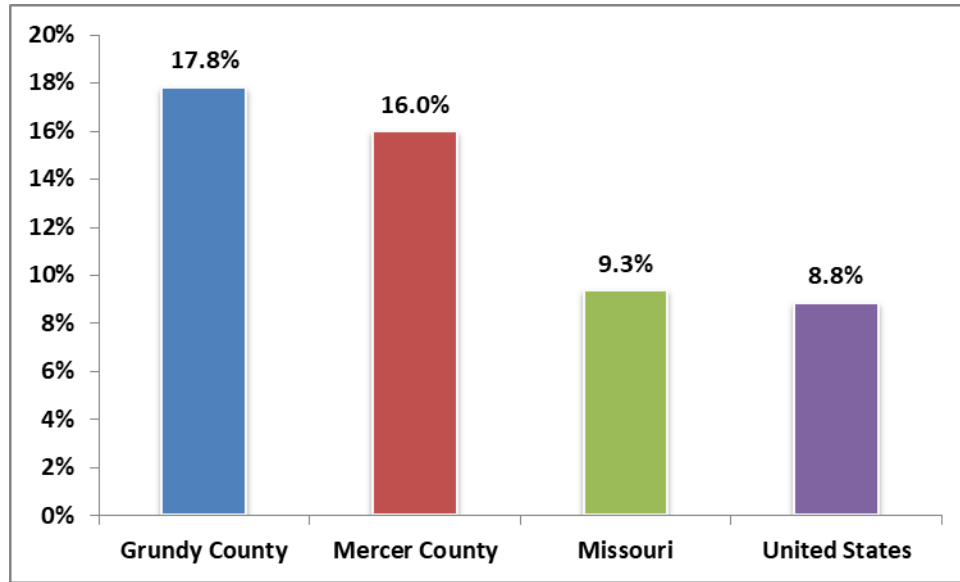
Exhibit 16 shows annual unemployment rates compared to Missouri and the United States for 2016 through 2020.

Observations

- Unemployment rates declined steadily from 2015 through 2019. Due to fallout from the COVID-19 pandemic, unemployment rates rose substantially in 2020.
- The rise in unemployment is likely to affect numerous health-related factors, such as access to employer-based health insurance, housing and food insecurity, and access to health services.
- Rates in Grundy and Mercer counties were below the national average for all years.

Health Insurance Status

Exhibit 17: Percent of Population without Health Insurance, 2015-2019



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020.

Description

Exhibit 17 presents the estimated percent of population without health insurance.

Observations

- Grundy and Mercer counties had significantly higher percentages of the population without health insurance than Missouri and the United States.
- Missouri recently voted to expand Medicaid, and after legal challenges is currently working through administrative hurdles to begin enrolling the expanded population.
- According to a second analysis prepared by the Kaiser Family Foundation, the average uninsured rate in 2018 in states that expanded Medicaid was 7.7 percent. The average rate in states that did not expand Medicaid was 14.6 percent.⁷
- Recent spikes in unemployment likely are leading to more uninsured community members.

⁷ <https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/>

APPENDIX B – SECONDARY DATA ASSESSMENT

Crime Rates

Exhibit 18: Crime Rates by Type, Per 1,000, 2019

Offense Type	Grundy County	Mercer County	Missouri
Violent Crime Offenses	20.0	-	497.6
Murder	-	-	9.3
Rape	-	-	47.8
Robbery	-	-	81.2
Aggravated Assault	20.0	-	359.3
Property Crime Offenses	150.1	54.9	2,652.7
Burglary	70.1	27.4	432.7
Larceny	70.1	27.4	1,874.9
Motor Vehicle Theft	10.0	-	345.2

Source: Federal Bureau of Investigation, 2020.

Description

Exhibit 18 provides crime statistics and rates per 100,000 population. Light grey shading indicates rates above the Missouri average; dark grey shading indicates rates more than 50 percent above the average.

Observations

- 2019 crime rates for Grundy and Mercer counties were below the Missouri rates for all crime types.

APPENDIX B – SECONDARY DATA ASSESSMENT

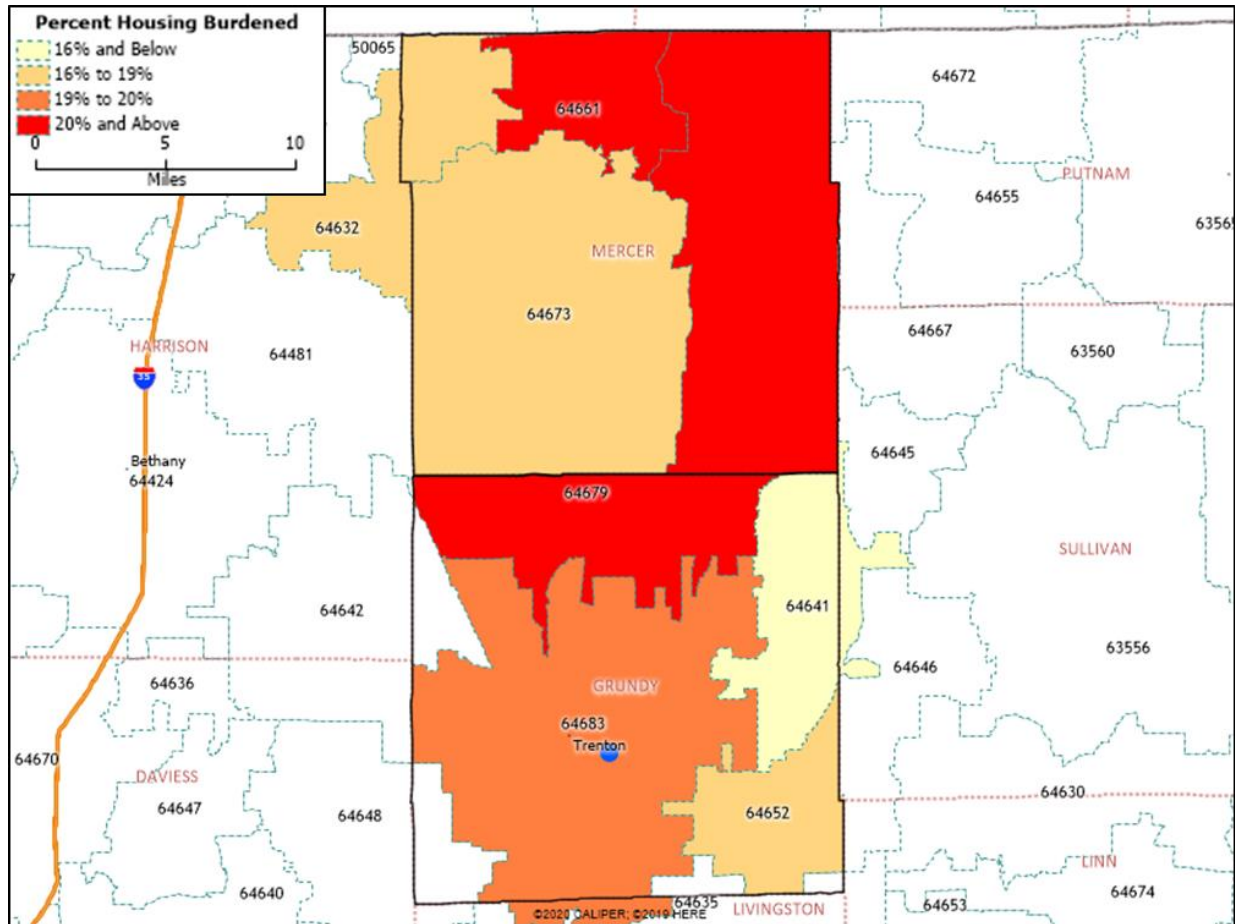
Housing Affordability

Exhibit 19: Percent of Households – Housing Burdened, 2015-2019

Area	Occupied Housing Units	Excessive Housing Costs (30%+ of Income)	Percent Housing Burdened
Grundy County	3,936	737	18.7%
Mercer County	1,271	237	18.6%
Total Community	5,207	974	18.7%
Missouri	2,414,521	616,342	25.5%
United States	120,756,048	37,249,895	30.8%

Source: US Census, ACS 5-Year Estimates (2015-2019), 2020.

Exhibit 20: Map of Percent of Housing Burdened Households, 2015-2019



Source: US Census, ACS 5-Year Estimates (2015-2019), 2020, and Caliper Maptitude.

APPENDIX B – SECONDARY DATA ASSESSMENT

Description

The U.S. Department of Health and Human Services (“HHS”) identifies “housing burdened” as those spending more than 30 percent of income on housing and as a contributor to poor health outcomes.⁸ Exhibits 19 and 20 portray the percent of household spending on housing in the community.

Observations

As stated by the Federal Reserve, “households that have little income left after paying rent may not be able to afford other necessities, such as food, clothes, health care, and transportation.”⁹

- In the WMH community, 18.7 percent of households have been designated as “housing burdened,” a level below the Missouri and national averages.
- The percentage of occupied households cost burdened was highest in ZIP codes 64661 (21.5 percent) and 64679 (20.0 percent).
- Housing insecurity is known to have become more problematic due to the COVID-19 pandemic.

⁸ <https://health.gov/healthypeople/objectives-and-data/browse-objectives/housing-and-homes/reduce-proportion-families-spend-more-30-percent-income-housing-sdoh-04>

⁹ *Ibid.*

APPENDIX B – SECONDARY DATA ASSESSMENT

Dignity Health Community Need Index™

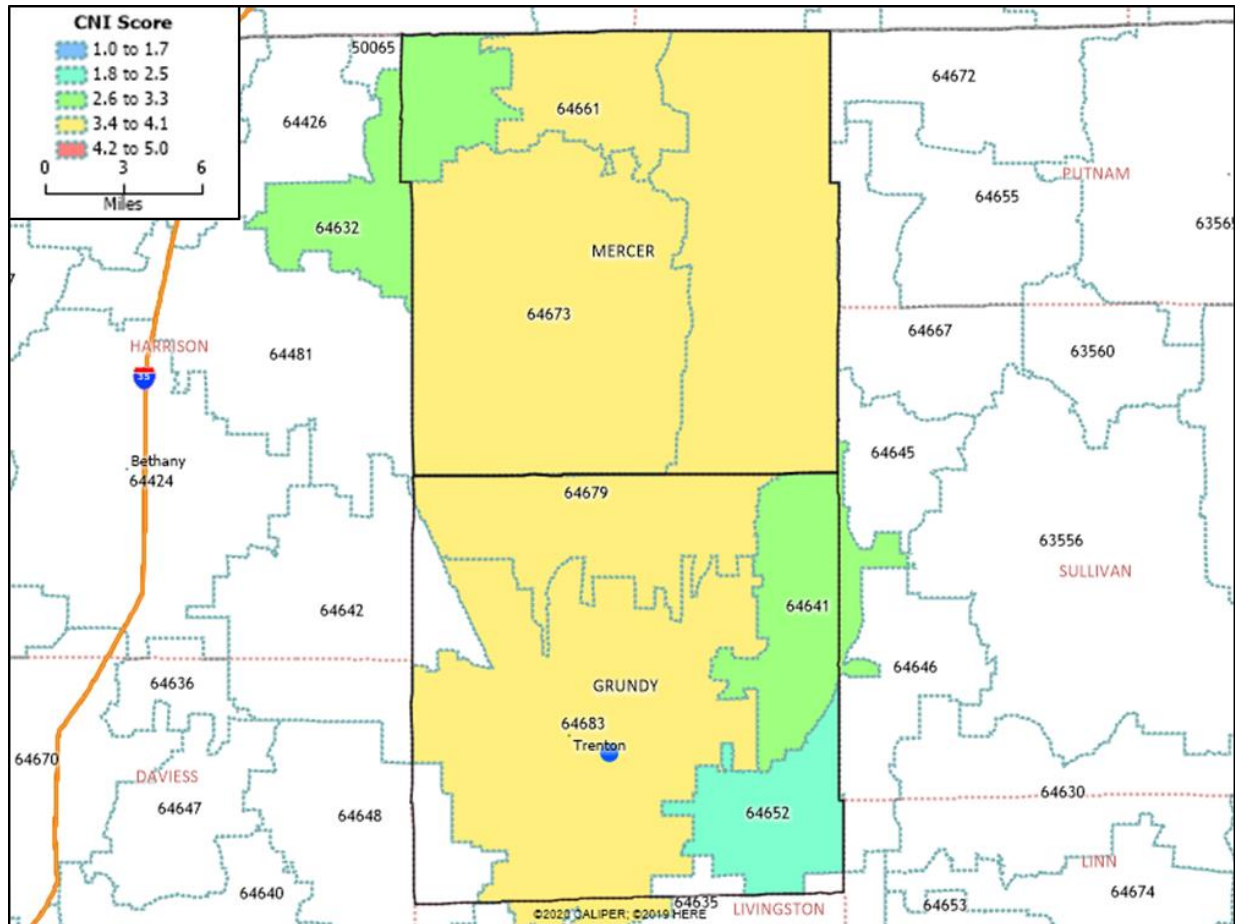
Exhibit 21: Weighted Average Community Need Index™ Score by County, 2021

Area	CNI Score
Grundy County	3.6
Mercer County	3.6
United States	3.0

Source: CommonSpirit Health, 2021.

Note: CNI scores weighted by the number of people living within each region.

Exhibit 22: Community Need Index, 2021



Source: CommonSpirit Health, 2021, and Caliper Maptitude.

Description

Exhibits 21 and 22 present *Community Need Index™* (CNI) scores. Higher scores (e.g., 4.2 to 5.0) indicate the highest levels of community need. The index is calibrated such that 3.0 represents a U.S.-wide median score.

APPENDIX B – SECONDARY DATA ASSESSMENT

CommonSpirit Health (formerly Dignity Health) developed the CNI as a way to assess barriers to health care access. The index, available for every ZIP code in the United States, consists of five social and economic indicators:

- The percentage of elders, children, and single parents living in poverty;
- The percentage of adults over the age of 25 with limited English proficiency, and the percentage of the population that is non-White;
- The percentage of the population without a high school diploma;
- The percentage of uninsured and unemployed residents; and
- The percentage of the population renting houses.

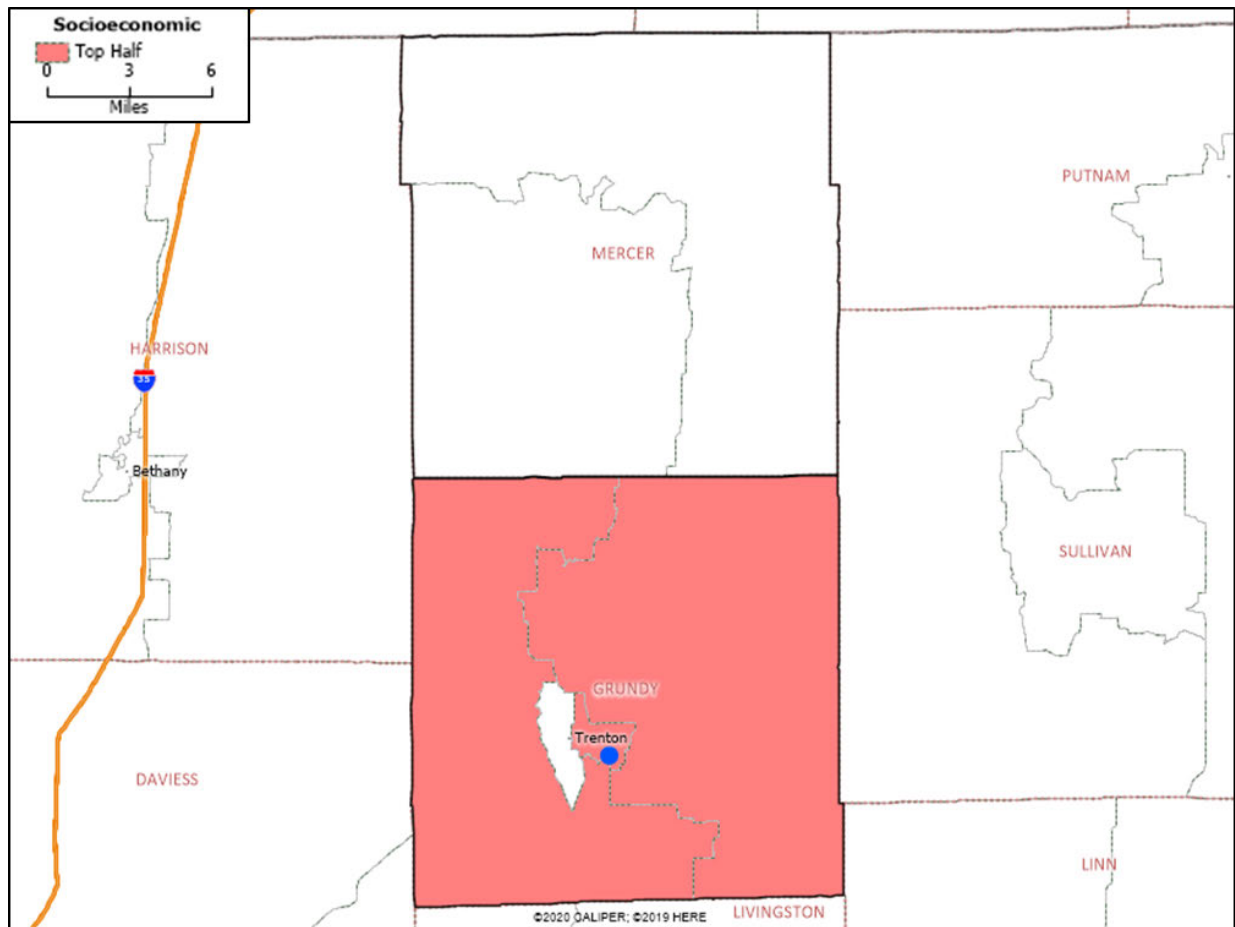
CNI scores are grouped into “Lowest Need” (1.0-1.7) to “Highest Need” (4.2-5.0) categories.

Observations

- At 3.6, the weighted average CNI scores for Grundy and Mercer counties are higher than the U.S. median.
- The hospital’s ZIP code 64683 received a score of 3.8, the highest in the community.

Centers for Disease Control and Prevention Social Vulnerability Index (SVI)

Exhibit 23: Socioeconomic Index – Top Half/Quartile Census Tracts



Source: Centers for Disease Control and Prevention, 2020, and Caliper Maptitude.

Description

Exhibits 23 through 26 are maps that show the Center for Disease Control and Prevention’s *Social Vulnerability Index* (SVI) scores for census tracts throughout the community. Highlighted census tracts are in the top half or quartile nationally for indicators on which the SVI is based.

The SVI is based on 15 variables derived from U.S. census data. Variables are grouped into four themes, including:

- Socioeconomic status;
- Household composition;
- Race, Ethnicity, and Language; and
- Housing and transportation.

Exhibits 23 through 26 highlight SVI scores for each of these themes.

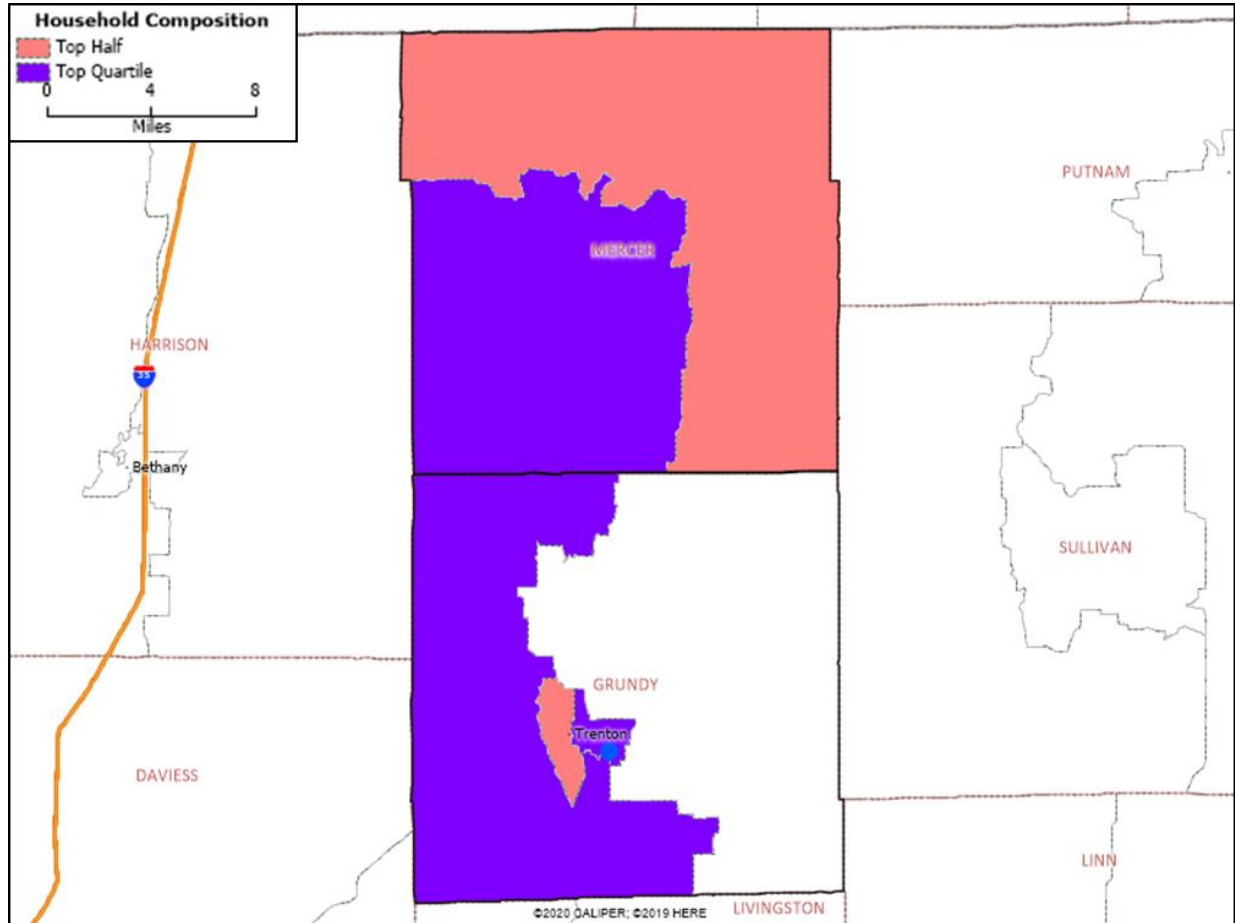
APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 23 identifies census tracts in the top half or quartile nationally for socioeconomic vulnerability.

Observations

- Census tracts with the highest levels of socioeconomic vulnerability are located in Grundy County, including in areas proximate to the hospital.

Exhibit 24: Household Composition and Disability Index – Top Half/Quartile Census Tracts



Source: Centers for Disease Control and Prevention, 2020, and Caliper Maptitude.

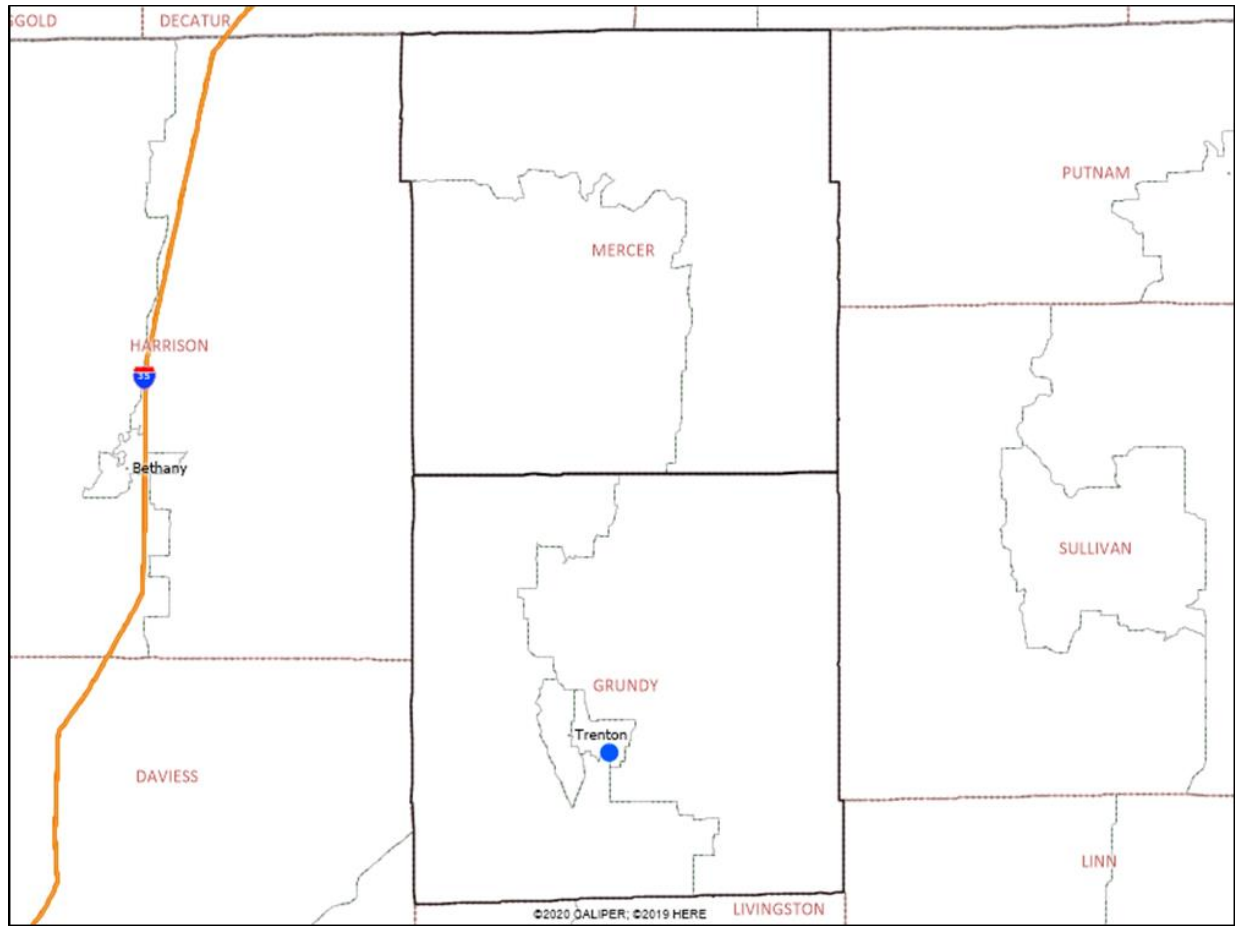
Description

Exhibit 24 identifies census tracts in the top half or quartile nationally for household composition and disability vulnerability.

Observations

- Census tracts with the highest levels of household composition and disability vulnerability are located near Trenton in Grundy County and in southwestern Mercer County.

Exhibit 25: Minority Status and Language Index – Top Half/Quartile Census Tracts



Source: Centers for Disease Control and Prevention, 2018, and Caliper Maptitude.

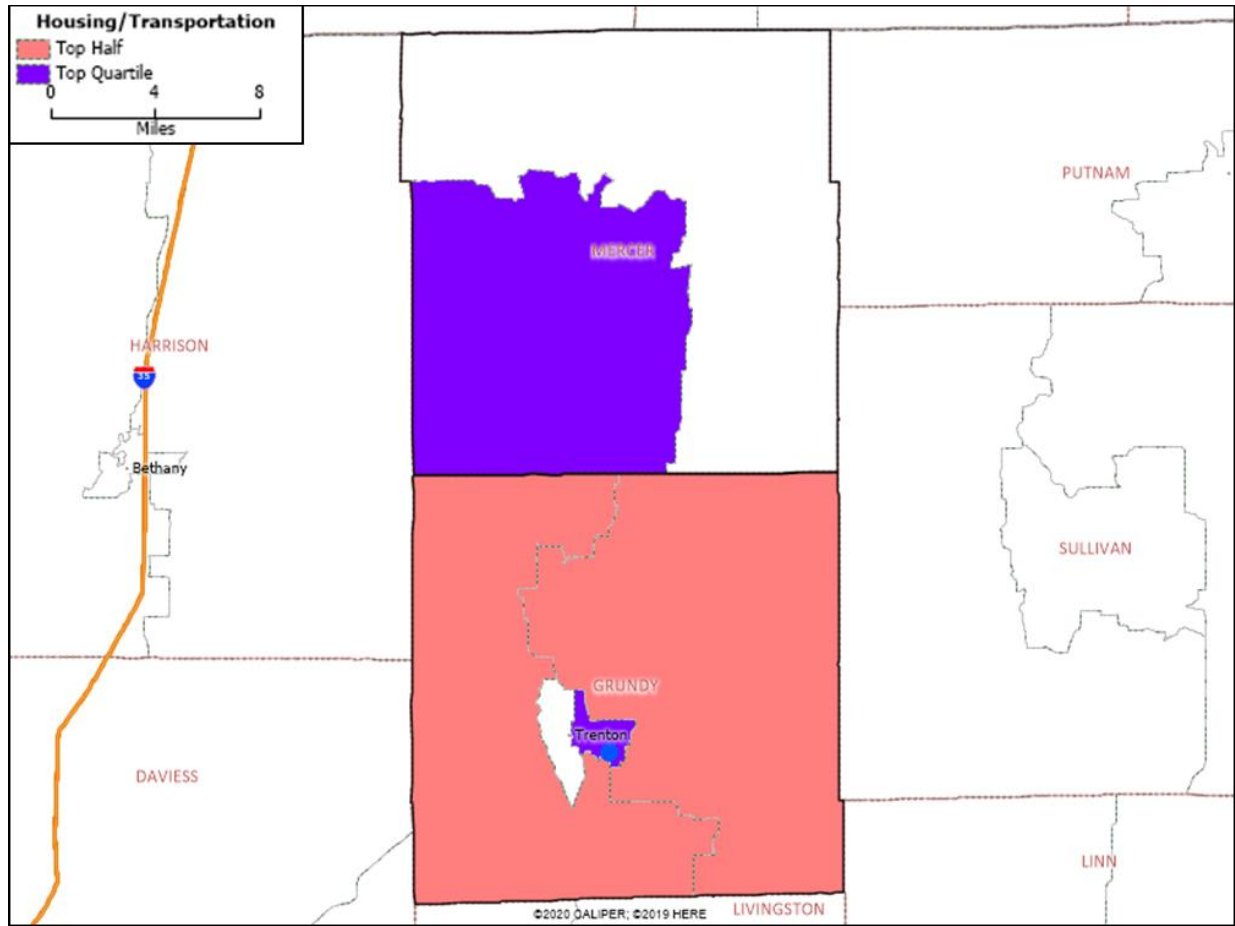
Description

Exhibit 25 identifies census tracts in the top half or quartile nationally for minority status and language vulnerability.

Observations

- No census tracts in the WMH community are in the top half for minority status and language vulnerability.

Exhibit 26: Housing Type and Transportation Index – Top Half/Quartile Census Tracts



Source: Centers for Disease Control and Prevention, 2018, and Caliper Maptitude.

Description

Exhibit 26 identifies census tracts in the top half or quartile nationally for housing type and transportation vulnerability.

Observations

- Census tracts considered the most vulnerable for housing and transportation issues are in Trenton in Grundy County and in southwestern Mercer County.

Other Health Status and Access Indicators

County Health Rankings

Exhibit 27: County Health Rankings, 2020

Measure	Grundy County	Mercer County
Health Outcomes	88	59
Health Factors	50	38
Length of Life	97	59
Quality of Life	55	48
Poor or fair health	51	60
Poor physical health days	50	61
Poor mental health days	47	69
Low birthweight	68	30
Health Behaviors	56	33
Adult smoking	44	51
Adult obesity	64	3
Food environment index	91	115
Physical inactivity	54	26
Access to exercise opportunities	53	105
Excessive drinking	50	31
Alcohol-impaired driving deaths	40	107
Sexually transmitted infections	81	3
Teen births	81	42
Clinical Care	44	86
Uninsured	71	98
Primary care physicians	70	76
Dentists	24	111
Mental health providers	21	96
Preventable hospital stays	42	5
Mammography screening	46	106
Flu Vaccinations	29	87
Social & Economic Factors	57	28
High school graduation	30	39
Some college	53	60
Unemployment	77	56
Children in poverty	83	35
Income inequality	87	78
Children in single-parent households	32	17
Social associations	4	35
Violent crime	10	4
Injury deaths	102	21
Physical Environment	24	5
Air pollution - particulate matter	10	2
Severe housing problems	105	32
Driving alone to work	26	16
Long commute - driving alone	10	64

Source: County Health Rankings, 2020.

APPENDIX B – SECONDARY DATA ASSESSMENT

Description

Exhibit 27 presents *County Health Rankings*, a University of Wisconsin Population Health Institute initiative funded by the Robert Wood Johnson Foundation that incorporates a variety of health status indicators into a system that ranks each county/city within each state in terms of “health factors” and “health outcomes.” The health factors and outcomes are composite measures based on several variables grouped into the following categories: health behaviors, clinical care,¹⁰ social and economic factors, and physical environment.¹¹ *County Health Rankings* is updated annually. *County Health Rankings 2020* relies on data from 2012 to 2018. Most data are from 2015 to 2019.

The exhibit presents 2020 rankings for each available indicator category. Rankings indicate how the county ranked in relation to all 114 counties (and one independent city) in Missouri. The lowest numbers indicate the most favorable rankings. Light grey shading indicates rankings in the bottom half of Missouri’s counties; dark grey shading indicates rankings in bottom quartile.

Observations

- In 2020, Grundy County ranked in the bottom 50th percentile among Missouri counties and cities for 14 of the 41 indicators assessed. Of those, six were in the bottom quartile, including health outcomes, length of life, food environment index, income inequality, injury deaths, and severe housing problems.
- Mercer County ranked in the bottom 50th percentile among Missouri counties and cities for 18 of the 41 indicators assessed. Of those, eight were in the bottom quartile, including food environment index, access to exercise opportunities, alcohol-impaired driving deaths, uninsured, dentists, mental health providers, mammography screening, and flu vaccinations.

¹⁰A composite measure of Access to Care, which examines the percent of the population without health insurance and ratio of population to primary care physicians, and Quality of Care, which examines the hospitalization rate for ambulatory care sensitive conditions, whether diabetic Medicare patients are receiving HbA1C screening, and percent of chronically ill Medicare enrollees in hospice care in the last 8 months of life.

¹¹A composite measure that examines Environmental Quality, which measures the number of air pollution-particulate matter days and air pollution-ozone days, and Built Environment, which measures access to healthy foods and recreational facilities and the percent of restaurants that are fast food.

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 28: County Health Rankings Data Compared to State and U.S. Averages, 2020

Indicator Category	Data	Grundy County	Mercer County	Missouri	United States
Health Outcomes					
Length of Life	Years of potential life lost before age 75 per 100,000 population	10,612	-	8,374	6,900
Quality of Life	Percent of adults reporting fair or poor health	19.4%	19.8%	18.0%	17.0%
	Average number of physically unhealthy days reported in past 30 days	4.6	4.6	4.2	3.8
	Average number of mentally unhealthy days reported in past 30 days	4.5	4.6	4.4	4.0
	Percent of live births with low birthweight (<2500 grams)	8.1%	6.9%	8.3%	8.0%
Health Factors					
Health Behaviors					
Adult Smoking	Percent of adults that report smoking >= 100 cigarettes and currently smoking	19.9%	20.1%	20.8%	17.0%
Adult Obesity	Percent of adults that report a BMI >= 30	33.8%	24.1%	32.2%	29.0%
Food Environment Index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	6.8	4.2	6.8	7.6
Physical Inactivity	Percent of adults aged 20 and over reporting no leisure-time physical activity	28.7%	26.3%	25.8%	23.0%
Access to Exercise Opportunities	Percent of population with adequate access to locations for physical activity	59.3%	26.4%	76.7%	84.0%
Excessive Drinking	Binge plus heavy drinking	16.9%	16.4%	19.8%	19.0%
Alcohol-Impaired Driving Deaths	Percent of driving deaths with alcohol involvement	22.2%	40.0%	27.4%	28.0%
STDs	Chlamydia rate per 100,000 population	361.8	108.8	534.6	524.6
Teen Births	Teen birth rate per 1,000 female population, ages 15-19	38.4	27.1	26.0	23.0
Clinical Care					
Uninsured	Percent of population under age 65 without health insurance	13.6%	15.5%	10.9%	10.0%
Primary Care Physicians	Ratio of population to primary care physicians	3,316:1	3,678:1	1,430:1	1,330:1
Dentists	Ratio of population to dentists	1,983:1	3,641:0	1,721:1	1,450:1
Mental Health Providers	Ratio of population to mental health providers	551:1	3,641:1	515:1	400:1
Preventable Hospital Stays	Hospitalization rate for ambulatory-care sensitive conditions per 100,000 Medicare enrollees	4,203	3,039	4,800	4,535
Mammography Screening	Percent of female Medicare enrollees, ages 67-69, that receive mammography screening	41.0%	31.0%	43.0%	42.0%
Flu Vaccinations	Percent of Medicare enrollees who receive an influenza vaccination	45.0%	32.0%	45.0%	46.0%

Source: County Health Rankings, 2020.

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 28: County Health Rankings Data Compared to State and U.S. Averages, 2020 (continued)

Indicator Category	Data	Grundy County	Mercer County	Missouri	United States
Health Factors					
Social & Economic Factors					
High School Graduation	Percent of ninth-grade cohort that graduates in four years	95.7%	95.2%	91.3%	85.0%
Some College	Percent of adults aged 25-44 years with some post-secondary education	53.8%	52.7%	66.7%	66.0%
Unemployment	Percent of population age 16+ unemployed but seeking work	3.6%	3.1%	3.2%	3.9%
Children in Poverty	Percent of children under age 18 in poverty	25.8%	19.6%	18.3%	18.0%
Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.6	4.4	4.6	4.9
Children in Single-Parent Households	Percent of children that live in a household headed by single parent	26.9%	23.2%	33.3%	33.0%
Social Associations	Number of associations per 10,000 population	19.1	13.6	11.8	9.3
Violent Crime	Number of reported violent crime offenses per 100,000 population	78.3	40.8	481.2	386.0
Injury Deaths	Injury mortality per 100,000	111.3	70.5	87.7	70.0
Physical Environment					
Air Pollution	The average daily measure of fine particulate matter in micrograms per cubic meter (PM2.5) in a county	9.3	9.1	9.7	8.6
Severe Housing Problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities	16.2%	10.9%	13.8%	18.0%
Driving Alone to Work	Percent of the workforce that drives alone to work	77.2%	74.9%	81.9%	76.0%
Long Commute – Drive Alone	Among workers who commute in their car alone, the percent that commute more than 30 minutes	17.2%	33.4%	31.8%	36.0%

Source: County Health Rankings, 2020.

APPENDIX B – SECONDARY DATA ASSESSMENT

Description

Exhibit 28 provides data that underlie the County Health Rankings and compares indicators to statewide and national averages.¹² Light grey shading highlights indicators found to be worse than the national average; dark grey shading highlights indicators more than 50 percent worse.

Note that higher values generally indicate that health outcomes, health behaviors, and other factors are worse in the county than in the United States. However, for several indicators, lower values are more problematic, including:

- Food environment index,
- Percent with access to exercise opportunities,
- Percent receiving mammography screening,
- Percent receiving flu vaccination,
- High school graduation rate, and
- Percent with some college.

Observations

- Missouri-wide indicators are worse than U.S. averages for most indicators, including all indicators for health outcomes.
- In Grundy County, the following indicators compared particularly unfavorably:
 - Years of potential life lost before age 75;
 - Teen births;
 - Ratio of population to primary care physicians; and
 - Injury deaths.
- In Mercer County, the following indicators compared particularly unfavorably:
 - Percent with access to exercise opportunities;
 - Uninsured;
 - Ratio of population to primary care physicians;
 - Ratio of population to dentists; and
 - Ratio of population to mental health providers.

¹² County Health Rankings provides details about what each indicator measures, how it is defined, and data sources at http://www.countyhealthrankings.org/sites/default/files/resources/2013Measures_datasources_years.pdf

APPENDIX B – SECONDARY DATA ASSESSMENT

Community Health Status Indicators

Exhibit 29: Community Health Status Indicators, 2020
 (Light Grey Shading Denotes Bottom Half of Peer Counties; Dark Grey Denotes Bottom Quartile)

Category	Indicator	Grundy County	Peer Counties	Mercer County	Peer Counties
Length of Life	Years of Potential Life Lost Rate		10,612	9,179	9,179
Quality of Life	% Fair/Poor Health		19.4%	17.2%	17.2%
	Physically Unhealthy Days		4.6	4.0	4.0
	Mentally Unhealthy Days		4.5	4.1	4.1
	% Births - Low Birth Weight		8.1%	6.8%	6.8%
Health Behaviors	% Smokers		19.9%	17.5%	17.5%
	% Obese (BMI >30)		33.8%	33.3%	33.3%
	Food Environment Index		6.8	7.1	7.1
	% Physically Inactive		28.7%	29.6%	29.6%
	% With Access to Exercise Opportunities		59.3%	54.5%	54.5%
	% Excessive Drinking		16.9%	16.9%	16.9%
	% Driving Deaths Alcohol-Impaired		22.2%	25.1%	25.1%
	Chlamydia (per 100,000 population)		361.8	246.0	246.0
Clinical Care	Teen Births (per 1,000 females ages 15-19)		38.4	29.7	29.7
	% Uninsured		13.6%	11.8%	11.8%
	Per-capita supply of primary care physicians		30.2	48.0	48.0
	Per-capita supply of dentists		50.4	41.2	41.2
	Per-capita supply of mental health providers		181.6	131.2	131.2
	Preventable Hospitalizations (per 100,000 Medicare Enrollees)		4,203	4,428	4,428
	% Mammography Screening		41.0%	39.9%	39.9%
	% Flu Vaccination		45.0%	34.4%	34.4%
Social & Economic Factors	% High School Graduation		95.7%	92.1%	92.1%
	% Some College		53.8%	58.5%	58.5%
	% Unemployed		3.6%	3.4%	3.4%
	% Children in Poverty		25.8%	22.2%	22.2%
	Income Ratio		4.6	4.3	4.3
	% Children in Single-Parent Households		26.9%	32.2%	32.2%
	Social Association (per 10,000 population)		19.1	19.1	19.1
	Violent Crime (per 100,000 population)		78.3	204.5	204.5
Physical Environment	Injury Deaths (per 100,000 population)		111.3	93.9	93.9
	Average Daily PM2.5		9.3	8.6	8.6
	% Severe Housing Problems		16.2%	10.8%	10.8%
	% Drive Alone to Work		77.2%	78.6%	78.6%
	% Long Commute - Drives Alone		17.2%	25.9%	25.9%

Source: County Health Rankings and Verité Analysis, 2019.

Description

County Health Rankings has assembled community health data for all 3,143 counties in the United States. Following a methodology developed by the Centers for Disease Control’s *Community Health Status Indicators* Project (CHSI), County Health Rankings also publishes lists of “peer counties” so comparisons with peer counties in other states can be made. Each county in the U.S. is assigned 30 to 35 peer counties based on 19 variables including population size, population growth, population density, household income, unemployment, percent children, percent elderly, and poverty rates.

APPENDIX B – SECONDARY DATA ASSESSMENT

CHSI formerly was available from the CDC. Because comparisons with peer counties (rather than only counties in the same state) are meaningful, Verité Healthcare Consulting rebuilt the CHSI comparisons for this and other CHNAs.

Exhibit 29 compares Grundy and Mercer counties to their respective peer counties and highlights community health issues found to rank in the bottom half and bottom quartile of the counties included in the analysis. Light grey shading indicates rankings in the bottom half of peer counties; dark grey shading indicates rankings in the bottom quartile of peer counties. Underlying statistics also are provided.

See Appendix D for a list of peer counties for Grundy and Mercer counties.

Note that higher values generally indicate that health outcomes, health behaviors, and other factors are worse in the county than in its peer counties. However, for several indicators, lower values are more problematic, including:

- Food environment index,
- Percent with access to exercise opportunities,
- Percent receiving mammography screening,
- Percent receiving flu vaccination,
- High school graduation rate, and
- Percent with some college.

Observations

- Grundy County ranks in the bottom half of peer counties for 21 of the 34 benchmark indicators. Of those, 11 are in the bottom quartile:
 - Physically unhealthy days;
 - Low birthweight births;
 - Smoking;
 - Chlamydia rate;
 - Teen births;
 - Supply of primary care physicians;
 - Children in poverty;
 - Income ratio;
 - Injury deaths;
 - Severe housing problems; and
 - Long commute driving alone.
- Mercer County ranks in the bottom half of peer counties for 19 of the 34 benchmark indicators. Of those, 12 are in the bottom quartile:
 - Percent fair or poor health;
 - Physically unhealthy days;
 - Mentally unhealthy days;

APPENDIX B – SECONDARY DATA ASSESSMENT

- Smoking;
- Food environment index;
- Access to exercise opportunities;
- Alcohol-impaired driving deaths;
- Uninsured;
- Supply of primary care physicians;
- Supply of dentists;
- Mammography screening; and
- Social associations.

APPENDIX B – SECONDARY DATA ASSESSMENT

COVID-19 Incidence and Mortality

Exhibit 30: COVID-19 Incidence, Mortality, and Vaccination (As of September 6, 2021)

Indicator	Grundy County	Mercer County	Missouri	United States
Total Confirmed Cases	1,421	385	720,116	39,335,607
Confirmed Cases (per 100,000 Population)	14,333	10,574	11,754	12,056
Total Deaths	41	2	10,436	629,763
Deaths (per 100,000 Population)	413.6	54.9	170.3	193.0
Percent of Adults Fully Vaccinated	37.3%	35.4%	50.6%	59.4%
Estimated Percent of Adults Hesitant About Receiving COVID-19 Vaccination	14.8%	14.8%	12.6%	10.0%
Vaccine Coverage Index	0.87	0.76	0.49	0.39

Source: Sparkmap, 2021.

Description

Exhibit 30 presents data regarding COVID-19 incidence and mortality. Light grey shading highlights indicators found to be worse than the national average; dark grey shading highlights indicators more than 50 percent worse.

Observations

- COVID-19 deaths per 100,000 in Grundy County were significantly above the state and national rates, and cases per 100,000 were above average.
- The percent of adults fully vaccinated and the percent hesitant about receiving the vaccine in Grundy and Mercer counties were both unfavorable compared to state and national averages.

APPENDIX B – SECONDARY DATA ASSESSMENT

Mortality Rates

Exhibit 31: Causes of Death (Age-Adjusted, Per 100,000), 2017-2019

Cause of Death	Grundy County	Mercer County	Missouri
Heart disease	171.4	163.5	188.5
Cancer	130.1	182.2	163.9
Other diseases/conditions	90.9	36.0	86.7
Accidents (unintentional injuries)	66.2	22.0	60.4
Chronic lower respiratory diseases	55.1	33.5	49.1
Stroke (cerebrovascular diseases)	29.6	41.4	39.0
Alzheimer's disease	31.5	24.8	33.1
Diabetes	7.7	42.9	20.9
Kidney disease(nephritis nephrotic syndrome and nephrosis)	16.0	5.1	19.0
Other digestive diseases	11.3	36.8	18.8
Suicide	20.4	36.2	18.7
Influenza and pneumonia	15.5	15.0	16.1
Other respiratory diseases	22.0	12.5	15.6
Septicemia	19.6	24.8	11.2
Homicide	0.0	0.0	11.2
Chronic liver disease & cirrhosis	6.3	0.0	9.7
Parkinson's disease	6.4	5.5	8.9
Pneumonitis due to solids and liquids	7.5	0.0	7.5
Essential hypertension	7.7	5.1	7.5
Other Infections-Parasites	4.1	5.5	5.2
Benign/in situ neoplasms and neoplasms of uncertain behavior	4.4	5.8	4.3
Other major cardiovascular diseases	7.0	0.0	4.0
Conditions originating in the perinatal period	12.8	28.4	3.8
Congenital anomalies	8.5	0.0	3.4

Source: Missouri Department of Health and Senior Services, 2020.

Description

Exhibit 31 provides age-adjusted mortality rates (2017 through 2019) for a variety of causes in community counties and Missouri. Light grey shading highlights indicators found to be worse than the state average; dark grey shading highlights indicators more than 50 percent worse.

Observations

- Grundy County compared particularly unfavorably for deaths related to septicemia, other major cardiovascular disease, conditions originating in the perinatal period, and congenital abnormalities.

APPENDIX B – SECONDARY DATA ASSESSMENT

- Mercer County compared particularly unfavorably for deaths related to diabetes, other digestive diseases, suicide, septicemia, and conditions originating in the perinatal period.

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 32: Cancer Mortality Rates per 100,000 Population, 2014-2019

Cancer Site	Grundy County	Mercer County	Missouri
All cancers	154.5	189.8	168.0
Trachea/bronchus/lung	36.2	71.3	47.5
Other and unspecified malignant neoplasms	18.6	13.8	19.9
Colon/rectum/anus	15.0	21.8	14.5
Pancreas	15.2	20.6	11.5
Breast	12.0	4.4	11.4
Prostate	8.5	15.3	7.3
Leukemia	2.5	5.8	6.7
Liver / intrahepatic bile ducts	5.6	2.8	6.4
Non-Hodgkin's lymphoma	7.7	-	5.4
Esophagus	2.1	2.8	4.6
Meninges, brain and other CNS	4.2	2.9	4.4
Bladder	5.3	2.8	4.3
Kidney and renal pelvis	4.3	2.6	4.3
Ovary	3.2	2.8	3.4
Multiple myeloma and immunoproliferative neoplasms	1.8	2.8	3.4
Lip/mouth/pharynx	1.0	5.1	2.8
Uterus	5.9	-	2.7
Malignant melanoma of skin	-	1.9	2.6
Stomach	2.1	-	2.4
Cervix uteri	-	-	1.3
Larynx	-	7.9	1.1
Hodgkin's disease	3.0	2.8	0.3

Source: Centers for Disease Control and Prevention, 2020.
 *Note: Due to low incidence, rates considered unstable.

Description

Exhibit 32 provides age-adjusted mortality rates for selected forms of cancer in 2015-2019.

Observations

- Overall cancer mortality rates in Mercer County were above the state average.
- Both counties compared unfavorably for several cancer types, including colon/rectum/anus, pancreas, prostate, and Hodgkin’s disease.

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 33: Drug Poisoning Mortality per 100,000, 2013 and 2018

Area	2013	2018	Percent Change 2013 - 2018
Grundy County	14.2	20.2	29.5%
Mercer County	12.8	17.8	28.3%
Missouri	17.0	26.3	35.5%
United States	13.9	20.6	32.4%

Source: Centers for Disease Control and Prevention, 2020.

Description

Exhibit 33 provides mortality rates for drug poisoning for 2013 and 2018. Light grey shading highlights indicators found to be worse than the national average; dark grey shading highlights indicators more than 50 percent worse.

Observations

- Drug poisoning mortality rates in Grundy County were at or above national averages in both 2013 and 2018, but below Missouri averages.
- Between 2013 and 2018, drug poisoning mortality rate increased 30 percent in Grundy County and 28 percent in Mercer County. Rates increased more than 30 percent in Missouri and the United States.

APPENDIX B – SECONDARY DATA ASSESSMENT

Communicable Diseases

Exhibit 34: Communicable Disease Incidence Rates per 100,000 Population, 2018-2019

Measure	Grundy County	Mercer County	Missouri
HIV Diagnoses	0.0	0.0	9.5
HIV Prevalence	N/A	N/A	248.3
Chlamydia	301.5	81.6	568.1
Congenital Syphilis	0.0	0.0	22.8
Early Latent Syphilis	10.1	27.2	8.9
Gonorrhea	30.2	27.2	246.8
Primary and Secondary Syphilis	0.0	0.0	13.2

Source: Centers for Disease Control and Prevention, 2020.

Description

Exhibit 34 presents incidence rates for certain communicable diseases in community counties and Missouri.

Observations

- Rates of communicable disease were below Missouri averages for all indicators, except for early latent syphilis.

APPENDIX B – SECONDARY DATA ASSESSMENT

Maternal and Child Health

Exhibit 35: Maternal and Child Health Indicators, 2015-2019

Indicator	Grundy County	Mercer County	Missouri
Care Began First Trimester	63.7%	63.6%	71.2%
Inadequate Prenatal Care - Missouri Index	35.1%	39.1%	21.1%
Mother Smoked During Pregnancy	19.8%	2.2%	12.8%
Preterm Births (less than 37 Weeks Gestation)	10.8%	11.5%	10.5%
Low Birth Weight	9.0%	5.4%	8.7%
Very Low Birth Weight	2.1%	1.7%	1.5%
Breastfeeding Initiation in Hospital	85.2%	80.0%	79.5%
Neonatal Deaths per 1,000	6.8	10.0	4.1
Perinatal Deaths per 1,000	11.8	16.1	9.7
Postneonatal Deaths per 1,000	4.3	0.0	2.4
Infant Deaths per 1,000	11.1	10.0	6.4
Sudden Infant Death Syndrome (SIDS) per 1,000	1.9	0.0	0.3

Source: Missouri Department of Health and Senior Services, 2020.

Description

Exhibit 35 compares various maternal and child health indicators for community counties with Missouri averages.

Observations

- Grundy and Mercer counties compared unfavorably for nearly all maternal and infant health indicators.
- Both counties were significantly unfavorable for inadequate prenatal care, neonatal deaths, and infant deaths. Rates were also unfavorable for prenatal care in the first trimester, preterm births, very low birthweight births, and perinatal deaths.

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 36: Maternal and Child Health Indicators by Race, 2019

Indicator	White	Black or African-American	Missouri Total
Morbidity (2015-2019)			
Preterm Births (less than 37 Weeks Gestation)	9.7%	14.7%	10.5%
Low Birth Weight	7.4%	15.1%	8.7%
Low Birth Weight and Term	2.2%	4.9%	2.7%
Very Low Birth Weight	1.2%	3.1%	1.5%
Small for Gestational Age	7.2%	16.0%	8.7%
NICU Admission	9.0%	13.4%	9.7%
Breastfeeding Initiation in Hospital	82.0%	66.5%	79.5%
WIC Infants - Ever Breastfed	74.6%	70.7%	73.5%
Mortality (2009-2019)			
Neonatal Deaths per 1,000	3.4	7.4	4.1
Perinatal Deaths per 1,000	8.2	16.6	9.7
Postneonatal Deaths per 1,000	1.9	4.6	2.4
Infant Deaths per 1,000	5.3	12.0	6.4
Sudden Infant Death Syndrome (SIDS) per 1,000	0.3	0.3	0.3

Source: DHSS-MOPHIMS, 2020.

Description

Exhibit 36 provides maternal and child health data by race and ethnicity for Missouri, compared to the state total.

Observations

- For almost all indicators, Black mothers and infants compared unfavorably to overall averages and rates for White populations, including low birth weight births, NICU admissions, and infant mortality.

APPENDIX B – SECONDARY DATA ASSESSMENT

America’s Health Rankings

Exhibit 37: America’s Health Rankings, Underlying Data by Race/Ethnicity, 2020

Measure Name	Black	Hispanic (or Latino)	White	Missouri Overall
Arthritis	21.5%	12.9%	28.3%	27.1%
Asthma	10.4%	13.4%	9.9%	10.1%
Avoided Care Due to Cost	22.7%	14.5%	12.6%	14.3%
Cancer	5.5%	N/A	8.4%	8.1%
Cardiovascular Diseases	8.5%	N/A	9.9%	9.9%
Children in Poverty	39.1%	26.8%	14.8%	18.3%
Chlamydia	1,859.8	470.8	299.8	568.1
Chronic Kidney Disease	3.3%	N/A	2.9%	3.1%
Chronic Obstructive Pulmonary Disease	7.5%	N/A	8.9%	8.8%
Colorectal Cancer Screening	71.3%	N/A	70.0%	69.7%
Crowded Housing	2.3%	7.5%	1.6%	1.9%
Dedicated Health Care Provider	72.8%	61.5%	80.3%	78.8%
Dental Visit	59.9%	53.2%	64.6%	63.3%
Dependency	37.8%	40.8%	39.7%	39.6%
Depression	18.6%	19.3%	23.2%	22.8%
Diabetes	11.9%	N/A	10.1%	10.3%
Drug Deaths (1-year)	47.2	9.4	25.8	26.8
Education - Less Than High School	12.2%	22.2%	8.4%	9.3%
Excessive Drinking	17.7%	23.0%	18.1%	18.1%
Exercise	20.3%	23.1%	16.3%	17.1%
Flu Vaccination	36.6%	36.4%	47.8%	46.0%
Frequent Mental Distress	16.6%	18.6%	14.1%	14.9%
Frequent Physical Distress	12.0%	13.2%	13.0%	13.3%
Fruit and Vegetable Consumption	6.5%	N/A	5.6%	6.1%
High Blood Pressure	34.2%	16.6%	31.2%	30.9%
High Cholesterol	28.7%	39.8%	35.2%	34.4%
High Health Status	46.8%	49.5%	50.1%	49.2%
High School Graduation	80.0%	84.7%	91.6%	89.2%
High-risk HIV Behaviors	12.2%	N/A	5.9%	6.9%
High-speed Internet	81.2%	89.0%	87.4%	86.9%
Insufficient Sleep	42.4%	20.9%	32.7%	34.0%
Low Birthweight	15.6%	7.3%	7.3%	8.7%
Multiple Chronic Conditions	7.1%	N/A	11.6%	11.2%
Non-medical Drug Use	5.4%	17.6%	9.7%	9.8%
Non-medical Use of Prescription Opioids	4.2%	8.5%	5.1%	5.4%
Obesity	39.9%	39.6%	34.0%	34.8%
Per Capita Income	22,128	19,986	34,105	31,756
Physical Inactivity	33.2%	29.9%	30.1%	30.6%
Premature Death	14,154	4,145	8,788	8,886
Preventable Hospitalizations	7,399	3,831	4,451	4,662
Severe Housing Problems	23.6%	22.0%	11.5%	13.3%
Smoking	22.6%	18.3%	18.8%	19.6%
Suicide	11.2	11.5	22.0	20.1
Teen Births	33.9	33.1	18.8	21.6
Unemployment	6.5%	4.3%	3.4%	3.9%

Source: America’s Health Rankings, 2020.

APPENDIX B – SECONDARY DATA ASSESSMENT

Description

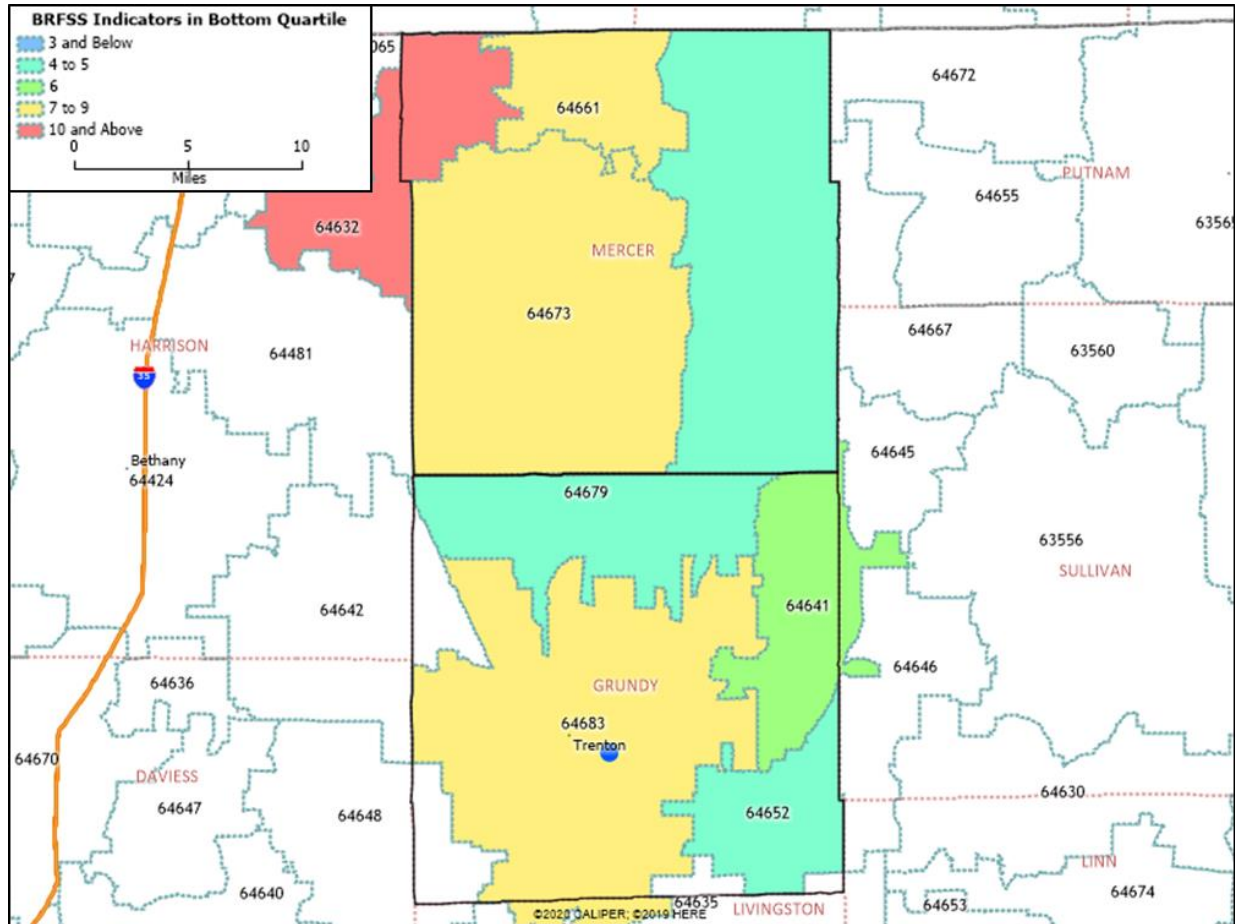
Exhibit 37 presents Missouri data from America’s Health Rankings for racial and ethnic cohorts, with Missouri overall for comparison. America’s Health Rankings provides an analysis of national health on a state-by-state basis by evaluating a historical and comprehensive set of health, environmental, and socioeconomic data to determine national health benchmarks and state rankings. Light grey shading highlights indicators found to be worse than the state average; dark grey shading highlights indicators more than 50 percent worse.

Observations

- Black populations compared worse than state averages for many indicators, with particularly unfavorable rates of avoiding care due to cost, children in poverty, chlamydia, drug deaths, high-risk HIV behaviors, low birthweight births, premature death, preventable hospitalizations, severe housing problems, teen births, and unemployment.
- Hispanic populations compared worse for a variety of indicators, including significantly higher rates of crowded housing, high school diploma, non-medical drug and prescription opioid use, severe housing problems, and teen births.
- White populations compared unfavorably for 11 indicators, including cancer, COPD, depression, exercising, and suicide.

Centers for Disease Control and Prevention PLACES

Exhibit 38: BRFSS Indicators in Bottom Quartile Nationally, 2017-2018



Source: Centers for Disease Control and Prevention, 2020, and Caliper Maptitude.

Description

Exhibit 38 presents CDC PLACES data. PLACES, a collaboration between CDC, the Robert Wood Johnson Foundation, and the CDC Foundation, provides model-based population-level analysis and community estimates to all counties, places (incorporated and census designated places), census tracts, and ZIP Code Tabulation Areas (ZCTAs) across the United States. PLACES is an extension of the original 500 Cities Project that provided city and census tract estimates for chronic disease risk factors, health outcomes, and clinical preventive services use for the 500 largest US cities.

Exhibit 42 identifies how many BRFSS indicators are in the bottom quartile nationally by ZIP code out of 28 indicators.

APPENDIX B – SECONDARY DATA ASSESSMENT

Observations

- Mercer County ZIP code 64632 compared the most unfavorably, with 16 indicators in the bottom quartile nationally. No other ZIP code had more than seven indicators in the bottom quartile.

APPENDIX B – SECONDARY DATA ASSESSMENT

Ambulatory Care Sensitive Conditions

Exhibit 39: Saint Luke’s Health System ACSC (PQI) Discharges by County, 2020

Condition	Grundy County	Linn County	Livingston County	Mercer County
Heart Failure	29	5	44	6
Bacterial Pneumonia	16	3	29	5
Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults	21	2	23	3
Urinary Tract Infection	10	1	16	4
Diabetes Long-Term Complications	9	1	8	2
Diabetes Short-Term Complications	6	1	2	2
Uncontrolled Diabetes	3	-	5	-
Hypertension	-	1	1	-
Lower-Extremity Amputation among Patients with Diabetes Rate	1	-	2	-
Asthma in Younger Adults	-	-	1	-
Total ASCC Discharges	95	14	131	22
Total Adult Discharges	463	116	606	108
Percent	20.5%	12.1%	21.6%	20.4%

Source: Analysis of Saint Luke’s Health System Discharges, 2020.

Exhibit 40: Saint Luke’s Health System ACSC (PQI) Discharges by Hospital, 2020

Condition	Wright Memorial Hospital
Heart Failure	33
Bacterial Pneumonia	20
Urinary Tract Infection	17
Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults	16
Diabetes Long-Term Complications	10
Uncontrolled Diabetes	3
Total ASCC Discharges	99
Total Adult Discharges	430
Percent	23.0%

Source: Analysis of Saint Luke’s Health System Discharges, 2020.

APPENDIX B – SECONDARY DATA ASSESSMENT

Description

Exhibits 39 and 40 provide information based on an analysis of discharges from Saint Luke’s Health System hospitals. The analysis identifies discharges for Ambulatory Care Sensitive Conditions (ACSCs).

ACSCs are health “conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.”¹³ As such, rates of hospitalization for these conditions can “provide insight into the quality of the health care system outside of the hospital,” including the accessibility and utilization of primary care, preventive care, and health education.

These conditions include angina without procedure, diabetes, perforated appendixes, chronic obstructive pulmonary disease (COPD), hypertension, congestive heart failure, dehydration, bacterial pneumonia, urinary tract infection, and asthma.

Disproportionately high rates of discharges for ACSC indicate potential problems with the availability or accessibility of ambulatory care and preventive services and can suggest areas for improvement in the health care system and ways to improve outcomes.

Observations

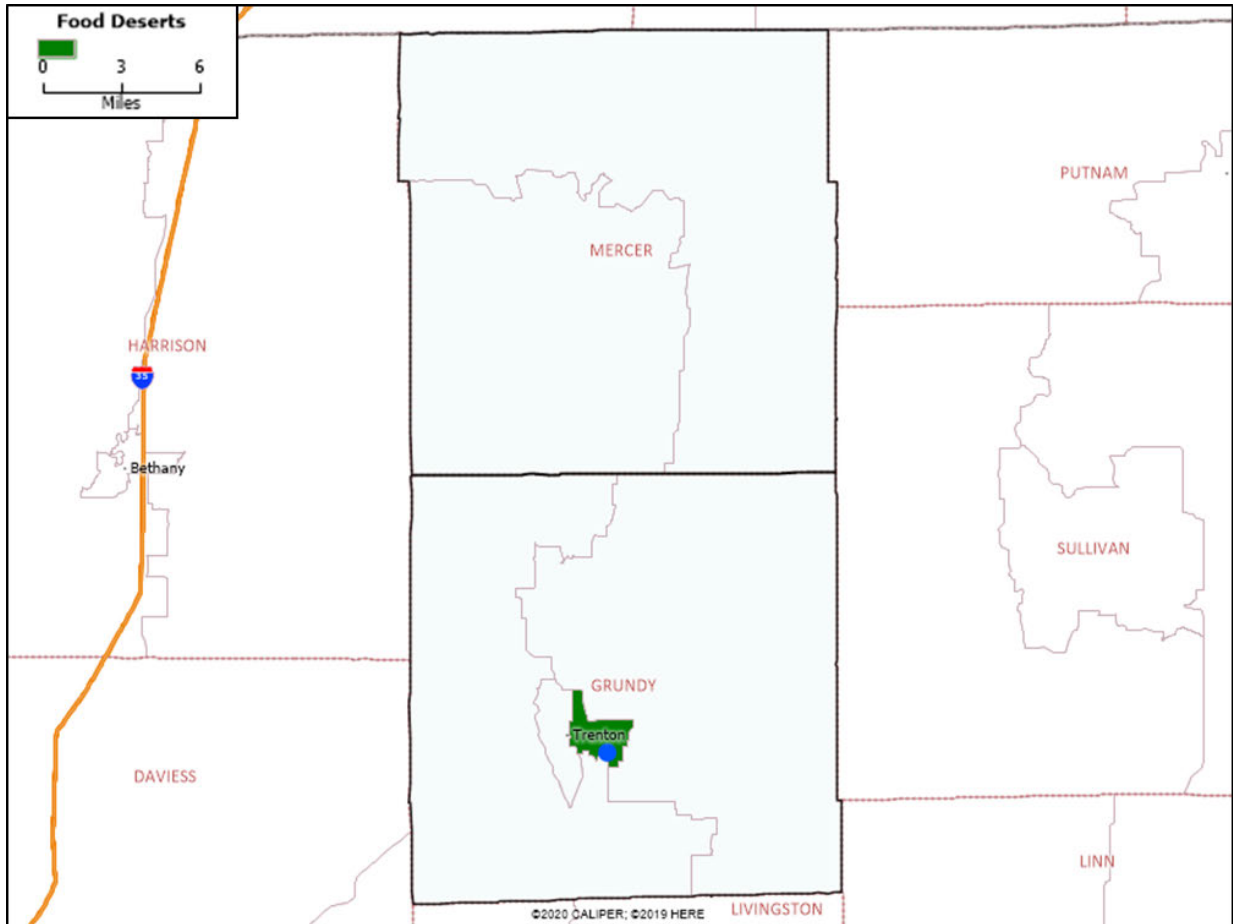
- The ACSC (PQI) analysis was based on discharges from Saint Luke’s Health System hospitals only.
- About 20 percent of Grundy and Mercer counties’ discharges were for ACSC.
- For the hospital, 23 percent of all discharges were for ACSCs, the second highest of the four hospitals assessed.¹⁴

¹³Agency for Health care Research and Quality (AHRQ) Prevention Quality Indicators.

¹⁴Hospitals assessed include four Saint Luke’s Health critical access hospitals in KS and MO: Allen County Regional Hospital, Anderson County Hospital, Hedrick Medical Center, and Wright Memorial Hospital.

Food Deserts

Exhibit 41: Locations of Food Deserts, 2019



Source: Caliper Maptitude and U.S. Department of Agriculture, 2021.

Description

Exhibit 41 identifies where food deserts are present in the community.

The U.S. Department of Agriculture’s Economic Research Service defines urban food deserts as low-income areas more than one mile from a supermarket or large grocery store, and rural food deserts as more than 10 miles from a supermarket or large grocery store. Many government-led initiatives aim to increase the availability of nutritious and affordable foods to people living in these areas.

Observations

- Food deserts are located in Grundy County in Trenton, proximate to the hospital.

Medically Underserved Areas and Populations

Exhibit 42: Medically Underserved Areas and Populations, 2021

Service Area Name	Designation Type	State	County
Grundy County	Medically Underserved Area	Missouri	Grundy County
Mercer County	Medically Underserved Area	Missouri	Mercer County

Source: Caliper Maptitude and Health Resources and Services Administration, 2019.

Description

Exhibit 42 identifies Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs).

Medically Underserved Areas and Populations (MUA/Ps) are designated by HRSA based on an “Index of Medical Underservice.” The index includes the following variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over.¹⁵ Areas with a score of 62 or less are considered “medically underserved.”

Populations receiving MUP designation include groups within a geographic area with economic barriers or cultural and/or linguistic access barriers to receiving primary care. If a population group does not qualify for MUP status based on the IMU score, Public Law 99-280 allows MUP designation if “unusual local conditions which are a barrier to access to or the availability of personal health services exist and are documented, and if such a designation is recommended by the chief executive officer and local officials of the state where the requested population resides.”¹⁶

Observations

- Both Grundy and Mercer counties have been designated as Medically Underserved Areas.

¹⁵ Health Resources and Services Administration. See <http://www.hrsa.gov/shortage/mua/index.html>

¹⁶*Ibid.*

Health Professional Shortage Areas

Exhibit 43: Primary Care Health Professional Shortage Areas, 2021

HPSA Name	Designation Type	State	County
Low Income - Grundy County	Low Income Population HPSA	Missouri	Grundy County
Wright Memorial Physicians Group	Rural Health Clinic	Missouri	Grundy County
Community Health Centers Of Southern Iowa, Inc.	Federally Qualified Health Center	Missouri	Mercer County
Mercer County	Geographic HPSA	Missouri	Mercer County
Saint Luke'S Mercer County Clinic	Rural Health Clinic	Missouri	Mercer County

Source: Health Resources and Services Administration, 2021.

Description

Exhibits 43 through 45 identify the locations of federally designated primary care, dental care, and mental health Health Professional Shortage Areas (HPSAs).

A geographic area can be designated a HPSA if a shortage of primary medical care, dental care, or mental health care professionals is found to be present. In addition to areas and populations that can be designated as HPSAs, a health care facility can receive federal HPSA designation and an additional Medicare payment if it provides primary medical care services to an area or population group identified as having inadequate access to primary care, dental, or mental health services.

HPSAs can be: “(1) An urban or rural area (which need not conform to the geographic boundaries of a political subdivision and which is a rational area for the delivery of health services); (2) a population group; or (3) a public or nonprofit private medical facility.”¹⁷

Exhibit 43 provides a list of federally designated primary care HPSAs.

Observations

- The low income population of Grundy County and the entire population of Mercer County were designated as Primary Care HPSAs.
- Three health clinics were also designated as Primary Care HPSAs.

¹⁷ U.S. Health Resources and Services Administration, Bureau of Health Professionals. (n.d.). *Health Professional Shortage Area Designation Criteria*. Retrieved 2012, from <http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/index.html>

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 44: Dental Care Health Professional Shortage Areas, 2021

HPSA Name	Designation Type	State	County
Low Income - Grundy County	Low Income Population HPSA	Missouri	Grundy County
Wright Memorial Physicians Group	Rural Health Clinic	Missouri	Grundy County
Community Health Centers Of Southern Iowa, Inc.	Federally Qualified Health Center	Missouri	Mercer County
Mercer County	Geographic HPSA	Missouri	Mercer County
Saint Luke'S Mercer County Clinic	Rural Health Clinic	Missouri	Mercer County

Source: Health Resources and Services Administration, 2021.

Description

Exhibit 44 provides a list of federally designated dental care HPSAs.

Observations

- The low income population of Grundy County and the entire population of Mercer County were designated as Dental Care HPSAs.
- Three health clinics were also designated as Dental Care HPSAs.

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 45: Mental Health Care Health Professional Shortage Areas, 2021

HPSA Name	Designation Type	State	County
Grundy County	High Needs Geographic HPSA	Missouri	Grundy County
Wright Memorial Physicians Group	Rural Health Clinic	Missouri	Grundy County
Community Health Centers Of Southern Iowa, Inc.	Federally Qualified Health Center	Missouri	Mercer County
Mercer County	High Needs Geographic HPSA	Missouri	Mercer County
Saint Luke'S Mercer County Clinic	Rural Health Clinic	Missouri	Mercer County

Source: Health Resources and Services Administration, 2021.

Description

Exhibit 45 provides a list of federally designated mental health HPSAs.

Observations

- The entire populations of Grundy and Mercer counties were designated as Mental Health Care HPSAs.
- Three health clinics were also designated as Mental Health Care HPSAs.

Findings of Other Assessments

CDC COVID-19 Prevalence and Mortality Findings

The Centers for Disease Control and Prevention (CDC) provides information, data, and guidance regarding the COVID-19 pandemic. The pandemic also has exposed the significance of problems associated with long-standing community health issues, including racial health inequities, chronic disease, access to health services, mental health, and related issues. Part of the CDC's work has included identifying certain populations that are most at risk for severe illness and death due to the pandemic. To date, the CDC's work has yielded the outlined below.

Underlying medical conditions may contribute. People with certain underlying medical conditions are at increased risk for severe illness and outcomes from COVID-19, including the following:¹⁸

- Cancer;
- Chronic kidney disease;
- Chronic obstructive pulmonary disease (COPD);
- Immunocompromised state from organ transplant;
- Obesity;
- Serious heart conditions, including heart failure, coronary artery disease, or cardiomyopathies;
- Sickle cell disease; and
- Type 2 diabetes mellitus.

Based on what is known at this time, people with other conditions might be at an increased risk for severe illness and outcomes from COVID-19, including:¹⁹

- Asthma (moderate-to-severe);
- Cerebrovascular disease (affects blood vessels and blood supply to the brain);
- Cystic fibrosis;
- Hypertension or high blood pressure;
- Immunocompromised state from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines;
- Neurologic conditions, such as dementia;
- Liver disease;
- Pregnancy;
- Pulmonary fibrosis (having damaged or scarred lung tissues);
- Smoking;
- Thalassemia (a type of blood disorder); and
- Type 1 diabetes mellitus.

¹⁸ <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>

¹⁹ Ibid.

APPENDIX B – SECONDARY DATA ASSESSMENT

Older adults are at-risk. Older adults and the elderly are disproportionately at risk of severe illness and death from COVID-19. Risks increase with age, and those aged 85 and older are at the highest risk. At present time, eight out of 10 COVID-19 deaths have been in adults aged 65 or older.²⁰

Men are at-risk. Data thus far indicate that men are more likely to die from COVID-19 than women. While the reasons for this disparity are unclear, a variety of biological factors, behavioral influences, and psychosocial elements may contribute.²¹

Racial and ethnic minorities are at-risk. According to the CDC, “Long-standing systemic health and social inequities have put some members of racial and ethnic minority groups at increased risk of getting COVID-19 or experiencing severe illness, regardless of age.” Evidence points to higher rates of hospitalization or death among racial and ethnic minority groups, including non-Hispanic Black persons, Hispanics and Latinos, and American Indians or Alaska Natives.²²

- Non-Hispanic American Indian or Alaska Native persons - incidence rate is approximately five times greater than non-Hispanic White persons.
- Non-Hispanic Black persons - incidence rate is approximately five times greater than non-Hispanic White persons.
- Hispanic or Latino persons - incidence rate is approximately four times greater than non-Hispanic White persons.

In explaining these differences of COVID-19 incidence rates, the CDC states: “Health differences between racial and ethnic groups result from inequities in living, working, health, and social conditions that have persisted across generations.”²³

Missouri Health Improvement Plan, 2013 – 2018, Revised 2017

In 2017, the Missouri Department of Health and Senior Services published its revised State Health Improvement Plan (SHIP) that documented its planned response to its 2013 State Health Assessment (SHA), developed with participation of partners and key stakeholders. The key issues strategic issues addressed by the SHIP are as follows.

1. Access to health care –enhancing access by increasing health insurance coverage among residents, reducing cost barriers, increasing the number of providers, and improving quality;
2. Modifiable risk factors – improving health outcomes by decreasing obesity, smoking, and misuse of alcohol and drugs; and

²⁰ <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html>

²¹ https://www.cdc.gov/pcd/issues/2020/20_0247.htm

²² <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html>

²³ *Ibid.*

APPENDIX B – SECONDARY DATA ASSESSMENT

3. Public health infrastructure – strengthening the public health system by mobilizing partnerships, performance management and quality improvement activities, and increasing the number of local public health agencies with workforce development plans.

Mercer County Health Needs Survey 2017

In 2017, the Mercer County Health Department distributed 1,660 needs assessment surveys via mail to the residents of Mercer County. Of those, 447 surveys were identified as complete and usable. Among responses, the following needs were identified as highest priority in Mercer County:

1. Illegal drug use;
2. Child abuse and neglect;
3. Child safety seat use; and
4. Adequate immunizations.

Rural Action Plan – US Department of Health and Human Services, 2020

In September 2020, the US Department of Health and Human Services released their rural action plan and assessment of rural health. Key points from the plan include:

- Rural residents are more likely to die from heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke than their urban counterparts.
- A number of rural hospitals are closing (that is, ceasing to provide inpatient services) or have a high degree of financial risk. Between January 2010 and July 2020, 130 rural hospitals closed. The impacts of these closures vary by community.
- Financial distress is linked to closure risk. However, many rural hospitals lack enough patient volume to be sustainable under traditional health care reimbursement mechanisms. From 2015 to 2017, the average occupancy rate of a hospital that closed was only 22 percent. Factors contributing to reduced rural hospital volumes include, but are not limited to, declining population, market changes, and patient bypass to other facilities.
- Fewer facilities are delivering babies, which may adversely affect access to obstetric (OB) services in rural communities. The percentage of U.S. rural counties that lacked hospital OB services increased from 45 percent in 2004 to 54 percent in 2014, due to hospital and OB unit closures. Rural areas also have higher rates of maternal mortality and higher rates of infant mortality.
- The ability to recruit and retain physicians, nurses, and all other types of providers—long a challenge in rural America—continues to limit access to care. A lack of behavioral health providers is particularly pronounced in rural areas, with 17 percent of nonmetropolitan (non-core) counties lacking behavioral health providers contrasted with three percent in metropolitan counties.
- Specialty care is less accessible due to distance and travel required; people with disabilities and older Americans are disproportionately affected by these and other social determinants of health. According to results from a survey of Rural Health Clinics (RHCs) that was published in December 2019, respondents attributed access challenges

APPENDIX B – SECONDARY DATA ASSESSMENT

to a lack of specialty care providers in rural areas, with limited appointment availability, distance, and transportation being the other top reasons for having difficulty .

APPENDIX C – COMMUNITY INPUT PARTICIPANTS

Exhibit 46: Interviewee Organizational Affiliations

Organization
Community Action Partnership of North Central Missouri
Grundy County Health Department
North Central Missouri College
Saint Luke's Critical Access Region
Wright Memorial Hospital
Wright Memorial Physicians' Group

Exhibit 47: Community Meeting Participants

Organization or Affiliation
Century 21 Realty
Grundy County Health Department
North Central Missouri College
Trenton Chamber of Commerce
Trenton Republican-Times
Wesley United Methodist Church
Wright Memorial Hospital
Wright Memorial Hospital Foundation

APPENDIX D – CHSI PEER COUNTIES

County Health Rankings has assembled community health data for all 3,143 counties in the United States. Following a methodology developed by the Centers for Disease Control’s *Community Health Status Indicators* Project (CHSI), County Health Rankings also publishes lists of “peer counties,” so comparisons with peer counties in other states can be made. Each county in the U.S. is assigned 30 to 35 peer counties based on 19 variables including population size, population growth, population density, household income, unemployment, percent children, percent elderly, and poverty rates. **Exhibit 48** lists peer counties for Grundy and Mercer counties.

Exhibit 48: CHSI Peer Counties – Grundy and Mercer Counties

Grundy and Mercer Counties, MO	
Dallas County, Arkansas	Grundy County, Missouri
Baca County, Colorado	Harrison County, Missouri
Lewis County, Idaho	Holt County, Missouri
Gallatin County, Illinois	Knox County, Missouri
White County, Illinois	Linn County, Missouri
Appanoose County, Iowa	Mercer County, Missouri
Taylor County, Iowa	Shelby County, Missouri
Wright County, Iowa	Brown County, Nebraska
Anderson County, Kansas	Jefferson County, Nebraska
Cloud County, Kansas	Richardson County, Nebraska
Greenwood County, Kansas	Sheridan County, Nebraska
Harper County, Kansas	Webster County, Nebraska
Wilson County, Kansas	Quay County, New Mexico
Woodson County, Kansas	Blaine County, Oklahoma
Pipestone County, Minnesota	Cameron County, Pennsylvania
Atchison County, Missouri	Walworth County, South Dakota
Carroll County, Missouri	Donley County, Texas
Dade County, Missouri	

APPENDIX E – IMPACT EVALUATION

This appendix highlights Wright Memorial Hospital’s initiatives and related impacts in addressing significant community health needs since the facility’s previous Community Health Needs Assessment (CHNA) published in 2018. This is not an inclusive list of all initiatives aligned with the 2018 CHNA. Given that the process for evaluating the impact of various services and programs on health outcomes is longitudinal by nature, significant changes in health outcomes may not manifest for several community health needs assessment cycles. Each Saint Luke’s facility continues to evaluate the cumulative impact.

The 2018 Wright Memorial Hospital CHNA identified the following as significant needs and priority areas:

1. Access to Care
2. Increased Access to Physical Activity and Nutrition
3. Behavioral Health Care
4. Smoking Cessation

Wright Memorial Hospital (WMH)

Priority 1: Access to Care

Goal: Improve affordability of health care services in Grundy County.

- Initiative: WMH will continue to accept Missouri Medicaid and provide assistance in the Medicaid application process when needed.
- Highlighted Impact: WMH continues to serve patients enrolled in Medicaid programs, allowing many residents to receive health care services that may otherwise prove inaccessible or unaffordable.
- Initiative: WMH and SLHS will continue to advocate on key health policy issues at the state and national level involving access to care, especially for the low-income population.
- Highlighted Impact: WMH and SLHS Supported efforts to pass Missouri House Bill 432, which contains language enforcing the Federal Mental Health Parity and Addiction Equity Act. MO HB 432 was signed into law on July 14, 2021.

Goal: Improve availability of health care services in Grundy County.

- Initiative: WMH will continue to promote access within local primary care clinics to ensure patients receive appropriate follow up, including the establishment of future points of care.
- Highlighted Impact: WMH continued to promote access within local primary care clinics and refer patients, as needed.
- Initiative: WMH and SLHS continue analysis and consideration of primary care physician recruitment and extended clinic hours based on patient need.

APPENDIX E – Impact Evaluation

- **Highlighted Impact:** In 2019 and 2020, Clinic Leadership evaluated the clinic hours of operation based on patient needs and staffing levels. Clinic hours at WMH were changed to 08-1700 to align with other critical access hospital clinics, a Saturday clinic was opened 08-12, and a Sunday clinic operated during flu season.

Priority 2: Increased Access to Physical Activity and Nutrition

Goal: Reduce obesity in Grundy County.

- **Initiative:** WMH will offer more healthy options in the hospital cafeteria that is utilized by patients, staff, and the general public.
- **Highlighted Impact:** WMH continues to evaluate its food offerings and works to provide healthy options.
- **Initiative:** WMH will engage stakeholders in wellness efforts aimed at promoting exercise opportunities within the community.
- **Highlighted Impact:** WMH offered a variety of exercise programs. The *Fit-tastic* Program was offered in the local elementary schools in 2019 and early 2020 (before COVID-19 interruptions). Program teaches students important action steps to maintain a healthy lifestyle. Includes both fitness and nutrition related topics. 80 students participated in the program.
- **Initiative:** WMH will continue to offer free sports physicals to high school athletes, eliminating barriers to exercise opportunities for community members.
- **Highlighted Impact:** In 2019, 370 sports physicals were completed. In 2020, 238 sports physicals were completed.

Goal: Reduce food insecurity in Grundy County.

- **Initiative:** WMH staff engages in an annual food drive for community members in need of healthy food.
- **Highlighted Impact:** A food drive is in development for 2021 as a collaboration with Hedrick Medical Center.
- **Initiative:** WMH will screen patients for food insecurity and refer to local food pantries.
- **Highlighted Impact:** WMH screened 954 patients for SDoH (June-Dec 2020), with 319 screening positive for food insecurity. Patients were referred and connected to available food resources.
- **Initiative:** WMH will support the local Meals on Wheels program.
- **Highlighted Impact:** No current Meals on Wheels program exists.
- **Initiative:** WMH will collaborate with community partners to bring more affordable and healthy options to Grundy County.
- **Highlighted Impact:** WMH continues to explore opportunities to collaborate with community partners to bring affordable and healthy options to the community.

APPENDIX E – Impact Evaluation

Priority 3: Behavioral Health Care

Goal: Improve access to behavioral health services in Grundy County.

- Initiative: WMH will continue providing mental health evaluations for patients who present themselves to the ED with psychological concerns or self-inflicted injuries.
- Highlighted Impact: WMH continued to provide mental health evaluations for ED patients with psychological concerns and self-inflicted injuries.
- Initiative: WMH will screen patients for Social Determinants of Health and connecting patients to valuable community resources that are outside the scope of the hospital's capacity.
- Highlighted Impact: SDoH screening is currently focused on access to food, housing, and transportation. 954 WMH patients were screened for SDoH (June-Dec 2020). It is anticipated that SDoH needs are connected to mental health status.
- Initiative: WMH will continue to participate in a county-wide taskforce to evaluate needs and make recommendations to appropriate officials regarding needs in the surrounding communities.
- Highlighted Impact: WMH participated in the Rural Communities Opioid Response Program (RCORP) for Grundy County, attending two meetings per year in 2019 and 2020.
- Initiative: WMH and SLHS will continue recruiting efforts for quality psychiatrists in order to expand access to behavioral health services.
- Highlighted Impact: SLHS continued recruiting efforts for quality psychiatrists and a variety of other providers that directly impact behavioral health.
- Initiative: WMH and SLHS will continue to advocate on key health policy issues at the state and national level involving access to behavioral health services, especially for the low-income population.
- Highlighted Impact: WMH and SLHS Supported efforts to pass Missouri House Bill 432, which contains language enforcing the Federal Mental Health Parity and Addiction Equity Act. MO HB 432 was signed into law on July 14, 2021.

Priority 4: Smoking Cessation

Goal: Decrease the amount of tobacco utilizers in Grundy County.

- Initiative: WMH will partner with a local health department to provide tobacco cessation classes.
- Highlighted Impact: No live on-site classes for non-employees were offered in 2020 due to COVID-19 restrictions.
- Initiative: WMH will continue to educate patients about tobacco cessation options and benefits.
- Highlighted Impact: During routine patient visits, WMH providers educate patients on importance of not smoking and encourage patients to quit.

APPENDIX E – Impact Evaluation

- Initiative: WMH and SLHS will continue to advocate on key health policy issues at the state and national level on issues related to tobacco cessation benefits.
- Highlighted Impact: WMH and SLHS supported efforts to pass Missouri House Bill 432, which contains language enforcing the Federal Mental Health Parity and Addiction Equity Act. MO HB 432 was signed into law on July 14, 2021. Medicaid reform, that is scheduled to take effect in 2021, will provide additional tobacco cessation options.
- Initiative: WMH will support community efforts to increase non-smoking initiatives in public spaces and support Tobacco 21 initiatives in the communities that we serve.
- Highlighted Impact: No initiative around Tobacco21 policies was pursued. WMH continues to explore opportunities for smoking cessation support.

› **Contact us**

Wright Memorial Hospital

191 Iowa Blvd.

Trenton, MO 64683

660-358-5700

saintlukeskc.org/wright



Download the **SaintLukesKC** app



Saint Luke's Health System shall not discriminate on the basis of race, color, national origin, gender, pregnancy status, sexual orientation, age, religion, disability, veteran status, gender identity or expression. *Saint Luke's Health System* cumple con las leyes federales de derechos civiles aplicables y no discrimina por motivos de raza, color, nacionalidad, edad, discapacidad o sexo. *Saint Luke's Health System* tuân thủ luật dân quyền hiện hành của Liên bang và không phân biệt đối xử dựa trên chủng tộc, màu da, nguồn gốc quốc gia, độ tuổi, khuyết tật, hoặc giới tính. *Saint Luke's Health System* 遵守適用的聯邦民權法律規定，不因種族、膚色、民族血統、年齡、殘障或性別而歧視任何人。