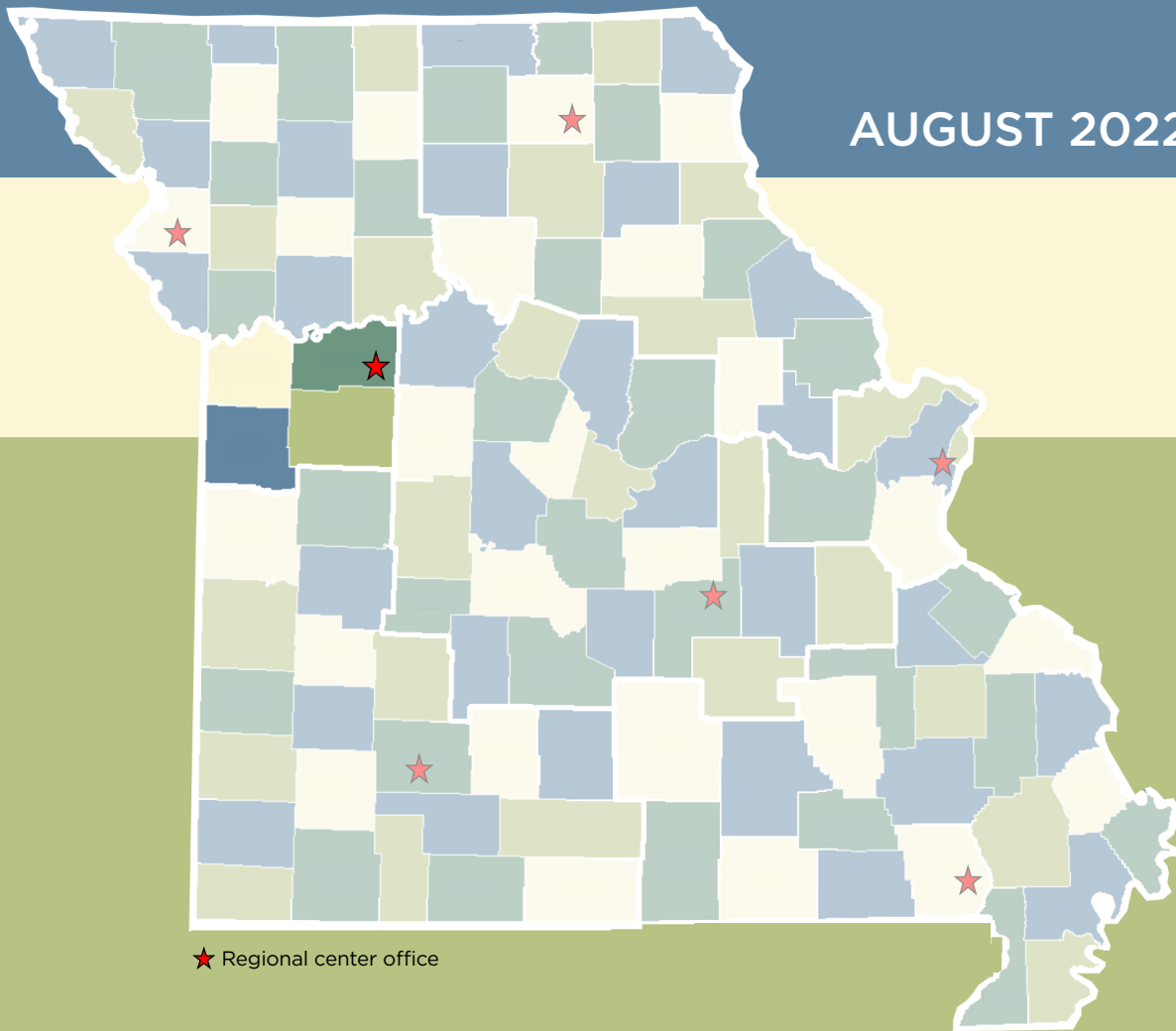


West Central Missouri Area Health Education Center Needs Assessment & Gap Analysis

AUGUST 2022



By the University of Missouri Center for Health Policy and Missouri AHEC Program Office
at A.T. Still University-Kirksville College of Osteopathic Medicine



University of Missouri



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By the University of Missouri Center for Health Policy^a, and
Missouri AHEC Program Office at A.T. Still University Kirksville College of Osteopathic Medicine^b

*Jill Lucht, MS^a; LaRita Emanuel, MBA^a; Morgan Self, MA^a; Parvina Yakubova, MS^a;
Jeremy Milarsky, MPA^a; Glenn Rice, MA^a; Eric McDavid, BS^a; Tracy Greever-Rice, PhD^a;
Hong Chartrand, DrPH^b; Kerrin Smith, MS^b*

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Introduction

During Fall 2020, the Missouri Area Health Education Centers (MAHEC) began meeting with the University of Missouri Center for Health Policy (CHP) to develop a statewide needs assessment and gap analysis. The needs assessment scanned Missouri's health care landscape, focusing on population health needs as well as health care workforce and infrastructure. The resulting report provided an analysis of Missouri's health care system, identifying gaps between health needs and health services available in the state, as well as MAHEC's efforts to address these gaps.¹

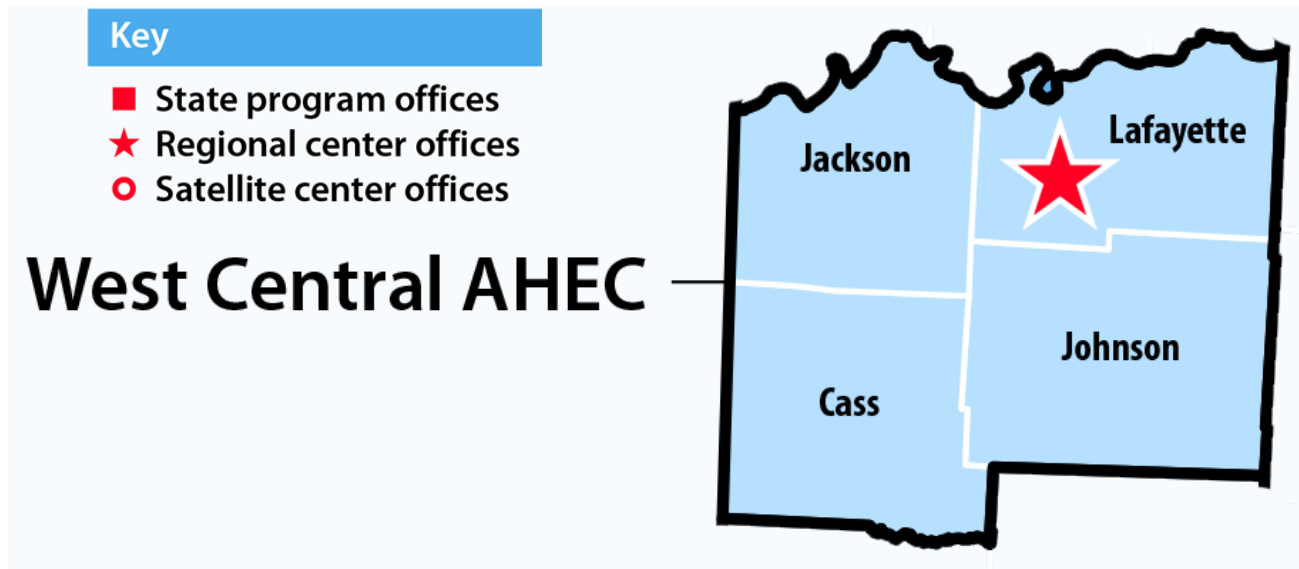
Upon completion of the statewide analysis, MAHEC continued working with CHP to produce a needs assessment and gap analysis for each region, including the West Central Missouri Area Health Education Center (WCMO AHEC) region. The analysis of population health in the region focuses on the social determinants of health. Demographic factors play an important role in the WCMO AHEC region, where the population is more diverse and younger than Missouri's population.

Analysis of the health care workforce is provided by the MU Center for Health Policy's Missouri Health Care Workforce Project (MHCWP). In-depth information on the WCMO AHEC region's health care workforce, health facilities, health status and community or social determinants of health are available and continually updated on the MHCWP website and indicator dashboards at <https://mohealthcareworkforce.org/>. This report focuses on primary care, dental health, and mental and behavioral health care availability as well as professions such as nursing, pharmacy, physical therapy, and community health workers. Generally, the WCMO AHEC region has a distribution of health care workers that is similar to Missouri as a whole. The report also provides an overview of health care infrastructure, including Federally Qualified Health Centers (FQHCs), Rural Health Clinics (RHCs), hospitals, and long-term care facilities, as well as telehealth and broadband access in the region.

Any analysis of health care needs and workforce in 2022 would be remiss to ignore the impact of the ongoing COVID-19 pandemic. While data sources always lag real-time conditions in health care, the impacts of the lag are more apparent during a pandemic. Health care needs and workforce are changing quickly in unexpected ways. This report uses the most recent data available, but many sources, including the 2015-2019 ACS 5-year population estimates, predate the start of the pandemic. One exception are data from MHCWP, which utilize Missouri Division of Professional Registration data from December 2021.

¹ Center for Health Policy. (2022). Missouri Area Health Education Centers Needs Assessment and Gap Analysis. Columbia, MO: Center for Health Policy. Retrieved from <https://mohealthcareworkforce.org/publication/missouri-area-health-education-centers-needs-assessment-and-gap-analysis/>.

Figure 1. West Central Area Health Education Center (WCMO AHEC) Region



Population Health in the Region

The WCMO AHEC region covers 4 counties in the West Central corner of the state (Figure 1). The region has a population of 886,092 and covers a land area of 2,759 square miles. Most of the region's population (91.9%) live in urban areas, while 8.1% live in rural areas by HRSA definition² (Table 1). The residents of the region face socioeconomic and cultural obstacles that result in health disparities. Mindful of this, the region may need to expand its health care workforce to fit the needs of the population for improved access and comprehensive, coordinated care.

Population Demographics, Including Regional Challenges/Barriers

Tables 1 (WCMO AHEC region) and 2 (State of Missouri) show demographics and social determinants of health, utilizing 2015-2019 American Community Survey (ACS) population estimates to account for small populations within some categories. Note that the font in Tables 1 and 2 reflects relative margins of error through a system developed by the Missouri Census Data Center (<https://mcdc.missouri.edu/>): **bold values** have a margin of error <15%, regular font has a margin of error between 15-35%, and margins of error 35% or greater are shaded light grey. Analysis on this regional report is focused on estimates in bold font; their lower relative margins of error enable a higher degree of confidence in the accuracy of the estimate.³

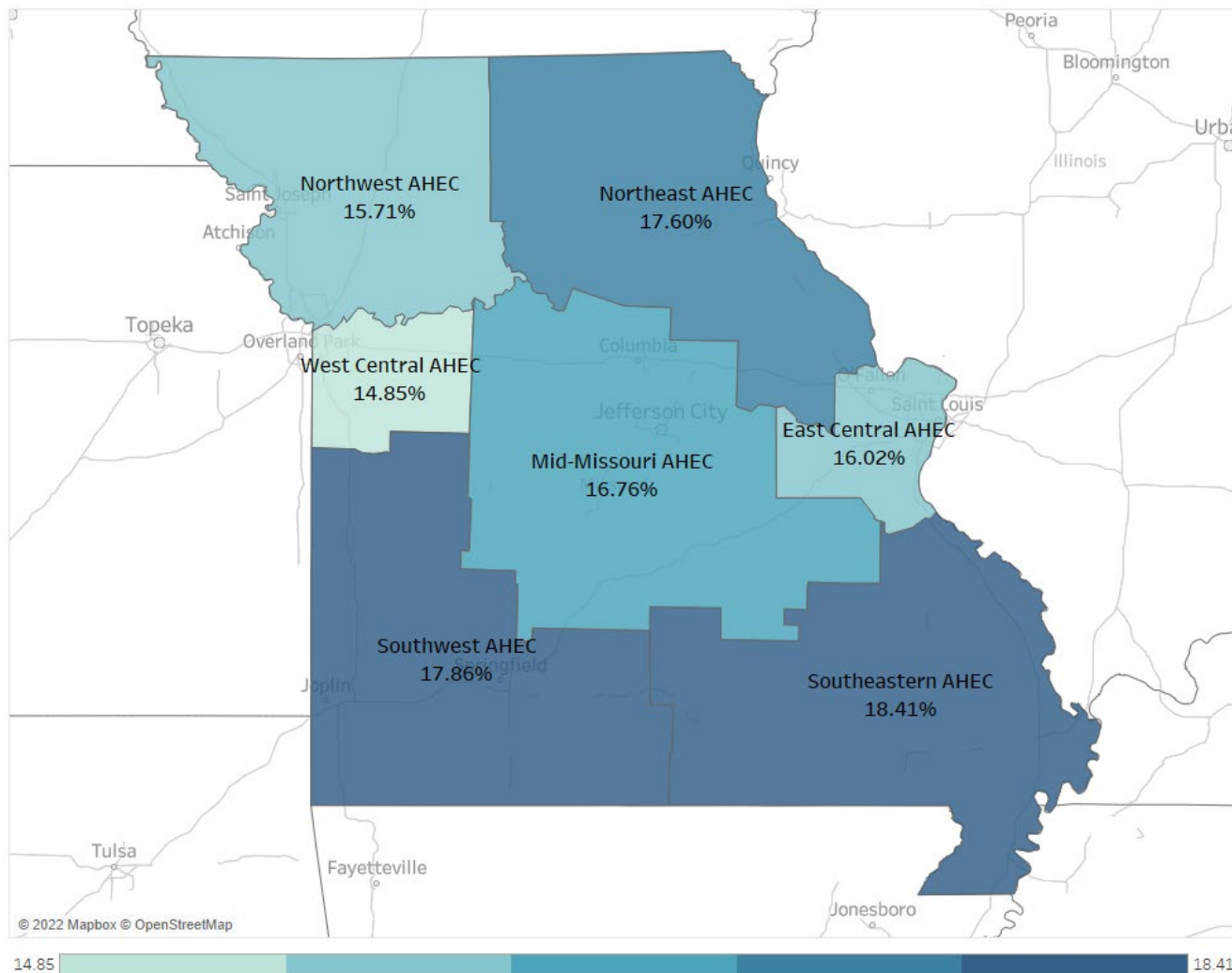
The WCMO AHEC region is more diverse than other parts of Missouri: 72.1% of residents are white compared to 82.2% of the state's population. Almost one in five residents (19.1%) are Black/African American, higher than the state rate of 11.5%. Percentages of Multi-racial (3.2%), and Other (3.2%) are also higher in the region compared to the state rates of 2.6%, and 1.2%, respectively. The region has a higher proportion of Hispanic/Latino residents than the state as well:

² Health Resources and Services Administration. (n.d.) *Defining Rural Population*. Retrieved from <https://www.hrsa.gov/rural-health/about-us/definition/index.html>.

³ Qualtrics. (2022). Your guide to margin of error. Retrieved from <https://www.qualtrics.com/experience-management/research/margin-of-error/>.

7.9% in the region compared to 4.2% in the state. The percentage of adults aged 65 and older in the region (14.9%) is less than the state rate of 16.5% of the total population). See Figure 2 for a map of the population age 65 and older.

Figure 2. Percent Population Age 65 and Older



Note: Dynamic, interactive maps of community indicators, including population age 65 and older, are available for all AHEC regions at <https://mohealthcareworkforce.org/indicator-dashboards/community/>.

The percentage of children under the age of 18 in the region is 23.6%, slightly higher than the state rate of 22.6%. Most residents of the region have earned at least a high school diploma or its equivalent (90.9%), slightly higher than the state rate of 89.9%. Further, 30.4% of residents in the region have earned a least a bachelor's degree, compared to the state rate of 29.2%.

Social determinants of health (SDOH) (conditions in which people are born, live, learn, work, play, worship, and age, that affect a wide range of health, functioning, and quality-of-life outcomes and risks⁴) play a fundamental role in population health. Health care access barriers that exist in the region are tied to socioeconomic challenges including poverty, housing and food insecurity, as well as a lack of transportation and health insurance. In the WCMO AHEC region, 13.9% of the population, more than 120,000 persons, live in poverty, similar to the state rate of 13.7%. Moreover, 20.4% of residents in the age group under the age of 18 live in poverty in the region, compared to the state rate of 18.7%.

In the WCMO AHEC region, more than one in four households (28.8%) are housing cost burdened, with rent or mortgage and utilities accounting for more than 30% of the household income, slightly more than the state rate of 26.4%. More than ten percent (12.1%) of residents in the WCMO AHEC region lack health insurance, which impedes the ability of low-income individuals to access primary and preventive care. In comparison, Table 2 reports that 10.9% of Missourians lack health insurance. Further, 9.3% of residents in the WCMO AHEC region live with a disability, lower than the state rate of 10.2%.

While margins of error for the region are too large to reliably report on the socioeconomic challenge of food insecurity at the regional level, the estimates for Missouri offer a useful comparison. Missouri has the 17th highest food insecurity rate in the nation,⁵ and rates are higher among Missouri's residents of color.⁶ Food insecure families are at a higher risk for weight gain and chronic disease, e.g., diabetes, hypertension.⁷ Food insecurity is also associated with psychological distress, anxiety, and depression among low-income women and children, and these physical and mental health effects are especially detrimental when there is the lack of access to proper medical care.⁸ Transportation is another key social determinant of health with nearly seven percent of Missouri households and nearly eight percent of households in the WCMO AHEC region lacking a vehicle.

⁴ Social Determinants of Health. (n.d.) *Healthy People 2020*. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>.

⁵ US Department of Agriculture Economic Research Service. (n.d.) *Key Statistics and Graphics*. Retrieved from <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics.aspx>.

⁶ Calender, C. Barker, R. (editor). (December 2015). *Health Equity Series: Food Insecurity*. Missouri Foundation for Health. Retrieved from <http://mffh.org/wp-content/uploads/2016/04/Health-Equity-Series-Food-Insecurity.pdf>.

⁷ Liu Y., Njai R., Greenlund K., Chapman D., Croft J. Relationships Between Housing and Food Insecurity, Frequent Mental Distress, and Insufficient Sleep Among Adults in 12 US States, 2009. (nd.) *Preventing Chronic Disease*. 2014. Retrieved from <http://doi:10.5888/pcd11.130334>.

⁸ Calender, C. Barker, R. (editor). (December 2015). *Health Equity Series: Food Insecurity*. Missouri Foundation for Health. Retrieved from <http://mffh.org/wp-content/uploads/2016/04/Health-Equity-Series-Food-Insecurity.pdf>.

Table 1. Summary of Demographics in West Central AHEC Region⁹

| Criterion | West Central Region | | MOE¹⁰ | Rural | % of WCMO | MOE | Urban | % of WCMO | MOE |
|---------------------------------------|----------------------------|----------|-------------------------|---------------|-------------------|--------------|----------------|-------------------|-------------|
| Estimated 2015-2019 Population | 886,092 | | 1.7% | 71,442 | 8.1% | 20.7% | 814,650 | 91.9% | 1.8% |
| Land Area (mi ²) | 2,759 | | | 1,257 | 45.6% | | 1,502 | 54.4% | |
| Population Density/mi ² | 321 | | | 57 | | | 542 | | |
| Counties ¹¹ | 4 | | | 3 | | | 3 | | |
| Racial/Ethnic | West Central Region | % | MOE | Rural | % of Rural | MOE | Urban | % of Urban | MOE |
| White | 638,989 | 72.1% | 2.2% | 64,192 | 89.9% | 21.5% | 574,797 | 70.6% | 2.4% |
| Black/Afr. American | 169,663 | 19.1% | 4.8% | 2,870 | 4.0% | 285.2% | 166,793 | 20.5% | 4.9% |
| Native American | 3,368 | 0.4% | 45.0% | 280 | 0.4% | 541.0% | 3,088 | 0.4% | 49.1% |
| Asian | 14,708 | 1.7% | 24.5% | 1,009 | 1.4% | 357.5% | 13,699 | 1.7% | 26.3% |
| Pacific Islander | 2,622 | 0.3% | 45.6% | 161 | 0.2% | 742.1% | 2,461 | 0.3% | 48.5% |
| Other | 28,757 | 3.2% | 12.8% | 525 | 0.7% | 703.0% | 28,232 | 3.5% | 13.1% |
| Multi-Racial | 27,985 | 3.2% | 14.9% | 2,405 | 3.4% | 173.2% | 25,580 | 3.1% | 16.3% |
| Hispanic/Latino ¹² | 70,353 | 7.9% | 8.0% | 2,985 | 4.2% | 189.2% | 67,368 | 8.3% | 8.4% |
| Age Cohorts | West Central Region | % | MOE | Rural | % of Rural | MOE | Urban | % of Urban | MOE |
| <18 | 209,317 | 23.6% | 4.0% | 15,846 | 22.2% | 52.4% | 193,471 | 23.7% | 4.3% |
| 65+ | 131,612 | 14.9% | 3.6% | 10,124 | 14.2% | 46.7% | 121,488 | 14.9% | 3.9% |
| Social Determinants of Health | West Central Region | % | MOE | Rural | % of Rural | MOE | Urban | % of Urban | MOE |
| Persons in poverty ¹³ | 120,647 | 13.9% | 8.7% | 9,360 | 14.1% | 111.5% | 111,287 | 13.9% | 9.4% |
| <18 in poverty | 41,866 | 20.4% | 10.4% | 2,053 | 13.3% | 211.3% | 31,450 | 16.6% | 10.9% |
| HS Graduate + | 543,723 | 90.9% | 2.4% | 40,292 | 91.8% | 32.5% | 503,431 | 90.9% | 2.6% |
| Bachelor's Degree + | 182,008 | 30.4% | 4.0% | 11,863 | 27.0% | 61.4% | 170,145 | 30.7% | 4.3% |
| No Health Insurance (<65) | 91,236 | 12.1% | 7.3% | 6,060 | 9.9% | 109.4% | 85,176 | 12.3% | 7.8% |
| Disability (<65) | 70,259 | 9.3% | 8.0% | 5,368 | 8.8% | 110.3% | 64,891 | 9.4% | 8.6% |
| Housing Cost Burdened | 100,664 | 28.8% | 5.6% | 6,579 | 25.0% | 85.1% | 72,323 | 22.4% | 6.0% |
| Households without a vehicle | 28,394 | 7.9% | 9.8% | 1,408 | 5.2% | 197.6% | 17,195 | 5.2% | 10.3% |

⁹ Missouri Census Data Center. (2021). ACS Profiles [dataset application]. Retrieved from <https://mcdc.missouri.edu/applications/acs/profiles/>.

¹⁰ MOE: Relative margin of error.

¹¹ Two counties contain both urban and rural census tracts, therefore the number of urban and the number of rural counties in this row total more than 4.

¹² Includes Hispanic or Latinx of any race.

¹³ Denominator includes persons for whom poverty status is determined, which is lower than total population.

Table 2. Summary of Demographics by State, Urban, and Rural Counties¹⁴

| Criterion | Missouri | | MOE ¹⁵ | Rural | % of MO | MOE | Urban | % of MO | MOE |
|------------------------------------|-----------|-------|-------------------|-----------|------------|-------|-----------|------------|-------|
| Estimated 2015-2019 Population | 6,104,910 | | 0.2% | 2,055,390 | 33.7% | 0.7% | 4,049,520 | 66.3% | 0.4% |
| Land Area (mi ²) | 68,742 | | | 59,591 | 86.7% | | 9,150 | 13.3% | |
| Population Density/mi ² | 89 | | | 34 | | | 443 | | |
| Counties ¹⁶ | 115 | | | 102 | | | 19 | | |
| Racial/Ethnic | Missouri | % | MOE | Rural | % of Rural | MOE | Urban | % of Urban | MOE |
| White | 5,015,904 | 82.2% | 0.3% | 1,906,204 | 92.7% | 0.7% | 3,109,700 | 76.8% | 0.4% |
| Black/Afr. American | 701,334 | 11.5% | 1.2% | 60,716 | 3.0% | 13.5% | 640,618 | 15.8% | 1.3% |
| Native American | 27,084 | 0.4% | 5.6% | 13,020 | 0.6% | 11.6% | 14,064 | 0.3% | 10.8% |
| Asian | 120,654 | 2.0% | 3.0% | 13,664 | 0.7% | 26.4% | 106,990 | 2.6% | 3.4% |
| Pacific Islander | 8,231 | 0.1% | 14.5% | 2,507 | 0.1% | 47.7% | 5,724 | 0.1% | 20.9% |
| Other | 71,335 | 1.2% | 5.2% | 14,884 | 0.7% | 24.8% | 56,451 | 1.4% | 6.5% |
| Multi-Racial | 160,368 | 2.6% | 2.6% | 44,395 | 2.2% | 9.4% | 115,973 | 2.9% | 3.6% |
| Hispanic/Latino ¹⁷ | 254,791 | 4.2% | 2.2% | 71,321 | 3.5% | 7.9% | 183,470 | 4.5% | 3.1% |
| Age Cohorts | Missouri | % | MOE | Rural | % of Rural | MOE | Urban | % of Urban | MOE |
| <18 | 1,381,612 | 22.6% | 0.6% | 466,198 | 22.7% | 1.8% | 915,414 | 22.6% | 0.9% |
| 65+ | 1,006,725 | 16.5% | 0.5% | 382,257 | 18.6% | 1.2% | 624,468 | 15.4% | 0.8% |
| Social Determinants of Health | Missouri | % | MOE | Rural | % of Rural | MOE | Urban | % of Urban | MOE |
| Persons in poverty ¹⁸ | 810,045 | 13.7% | 1.3% | 330,838 | 16.8% | 3.2% | 479,207 | 12.1% | 2.2% |
| <18 in poverty | 252,071 | 18.7% | 1.7% | 105,296 | 23.2% | 4.1% | 146,775 | 16.4% | 3.0% |
| HS Graduate + | 3,731,783 | 89.9% | 0.4% | 1,201,893 | 85.9% | 1.1% | 2,529,890 | 92.0% | 0.5% |
| Bachelor's Degree + | 1,212,562 | 29.2% | 0.6% | 243,674 | 17.4% | 3.0% | 968,888 | 35.2% | 0.8% |
| No Health Insurance (<65) | 555,130 | 10.9% | 1.2% | 230,380 | 13.8% | 2.9% | 324,750 | 9.5% | 2.0% |
| Disability (<65) | 518,371 | 10.2% | 0.7% | 210,870 | 12.6% | 1.8% | 307,501 | 9.0% | 1.3% |
| Housing Cost Burdened | 616,342 | 26.4% | 0.9% | 181,285 | 24.1% | 3.1% | 435,057 | 27.4% | 1.3% |
| Households w/o a vehicle | 165,906 | 6.9% | 1.7% | 47,735 | 6.1% | 5.8% | 118,171 | 7.3% | 2.4% |

¹⁴ Missouri Census Data Center. (2021). ACS Profiles [dataset application]. Retrieved from <https://mcdc.missouri.edu/applications/acs/profiles/>.

¹⁵ MOE: Relative margin of error.

¹⁶ Six Missouri counties contain both urban and rural census tracts, therefore the number of urban and the number of rural counties in this row total more than 115.

¹⁷ Includes Hispanic or Latinx of any race.

¹⁸ Denominator includes persons for whom poverty status is determined, which is lower than total population.

Demand for Culturally Competent and Diverse Workforce

More than one-quarter of residents in the region (27.9%) identify as a race other than white; nearly eight percent identify their ethnicity as Hispanic or Latino, making the region more diverse in race and ethnicity than state averages.¹⁹ Culturally competent and trauma informed health care professionals are needed to meet the needs of the underrepresented among the WCMO AHEC region's population, and inclusivity, diversity and equity (IDE) training may be important for health care providers in the region.

The lesbian, gay, bisexual, transgender, and queer (LGBTQ+) community faces stigma, systematic discrimination, and differential access to health insurance, which combined with a lack of culturally competent care results in poor health outcomes. The physical and mental health of LGBTQ+ individuals is compromised when economic and social influences lead to social isolation, psychological distress, anxiety, depression, low self-esteem, and the ailments tied to poor mental health status.²⁰ Many LGBTQ+ individuals do not receive the care they require—an issue that is particularly difficult for transgender people, especially given that the majority of health insurers, including Medicaid, Medicare, and Veteran plans do not cover transgender-specific care. Data on the LGBTQ+ community are emerging. The Census Bureau began collecting information on sexual orientation and gender identity through their Household Pulse Survey in July 2021. While regional data are not available, the LGBT population in Missouri is estimated to be 6.9% (+/- 0.9%).²¹

The region's underrepresented racial and ethnic populations and LGBTQ+ health disparities must be addressed by a workforce that reflects the population, a training focus in cultural proficiency for all health care providers, and the addition of minority-specific services as a part of practice transformation.

Medicaid Expansion

Starting July 1, 2021, all Missourians aged 19 to 64 earning up to 138% of the federal poverty level became eligible for Medicaid.²² Missouri began processing applications on October 1, 2021.²³ Prior to expansion, just over one million Missourians (n=1,029,000)

¹⁹ Missouri Census Data Center. (2021). ACS Profiles [dataset application]. Retrieved from <https://mcdc.missouri.edu/applications/acs/profiles/>.

²⁰ United States Department of Health and Human Services. (n.d.) *Lesbian, Gay, Bisexual, and Transgender Health. Healthy People 2020*. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/lesbian-gay-bisexual-and-transgender-health>.

²¹ Anderson, L., File, T., Marshall, J., McElrath, K., Scherer, Z. (2021). New Household Pulse Survey Data Reveals Differences between LGBT and Non-LGBT Respondents During COVID-19 Pandemic. Retrieved from <https://www.census.gov/library/stories/2021/11/census-bureau-survey-explores-sexual-orientation-and-gender-identity.html><https://www.census.gov/library/stories/2021/11/census-bureau-survey-explores-sexual-orientation-and-gender-identity.html>.

²² HHS Press Office. (2021). *Missouri Medicaid Expansion Brings Quality Essential Health Coverage to More than 275,000 Missourians*. Retrieved from <https://www.hhs.gov/about/news/2021/10/04/missouri-medicaid-expansion-brings-quality-essential-health-coverage.html>.

²³ Norris, L. (2021). *Missouri and the ACA's Medicaid Expansion*. Retrieved from <https://www.healthinsurance.org/medicaid/missouri/>.

were enrolled in the MO HealthNet program; new Medicaid expansion enrollees in the region will likely be disproportionately non-Hispanic/Latinx white and rural.²⁴ Washington University Center for Health Economics and Policy (CHEP) estimates 275,000 Missourians are eligible to enroll through Medicaid expansion, including 38,818 in the WCMO AHEC region, which is 4.3% of the area’s population. Estimates may shift due to pandemic impacts on employment and income.

Table 3. Medicaid Expansion Estimates by AHEC Region

| AHEC Region | Percent of Region’s Population to Enroll (%) | Regional Enrollee Estimate (#) | Regional Population Estimate (#) |
|---------------------|---|---------------------------------------|---|
| East Central | 2.9% | 58,829 | 2,025,851 |
| Mid-Missouri | 4.8% | 37,340 | 783,453 |
| West Central | 4.4% | 14,403 | 328,749 |
| Northwest | 3.3% | 20,276 | 618,639 |
| Southeastern | 5.1% | 26,989 | 525,060 |
| Southwest | 5.3% | 51,343 | 960,115 |
| West Central | 4.3% | 38,818 | 895,561 |
| Total | 4.0% | 247,498 | 6,137,428 |

Note: Estimates provided by the Center for Health Economics and Policy at Washington University in St. Louis based on an analysis of the 2019 American Community Survey and 2018 Small Area Health Insurance Estimates files, with slightly different population estimates than the 2015-2019 ACS 5-year estimates used elsewhere in this report. Funding support provided by Missouri Foundation for Health.

Medically Underserved Areas/Populations (MUA/Ps)

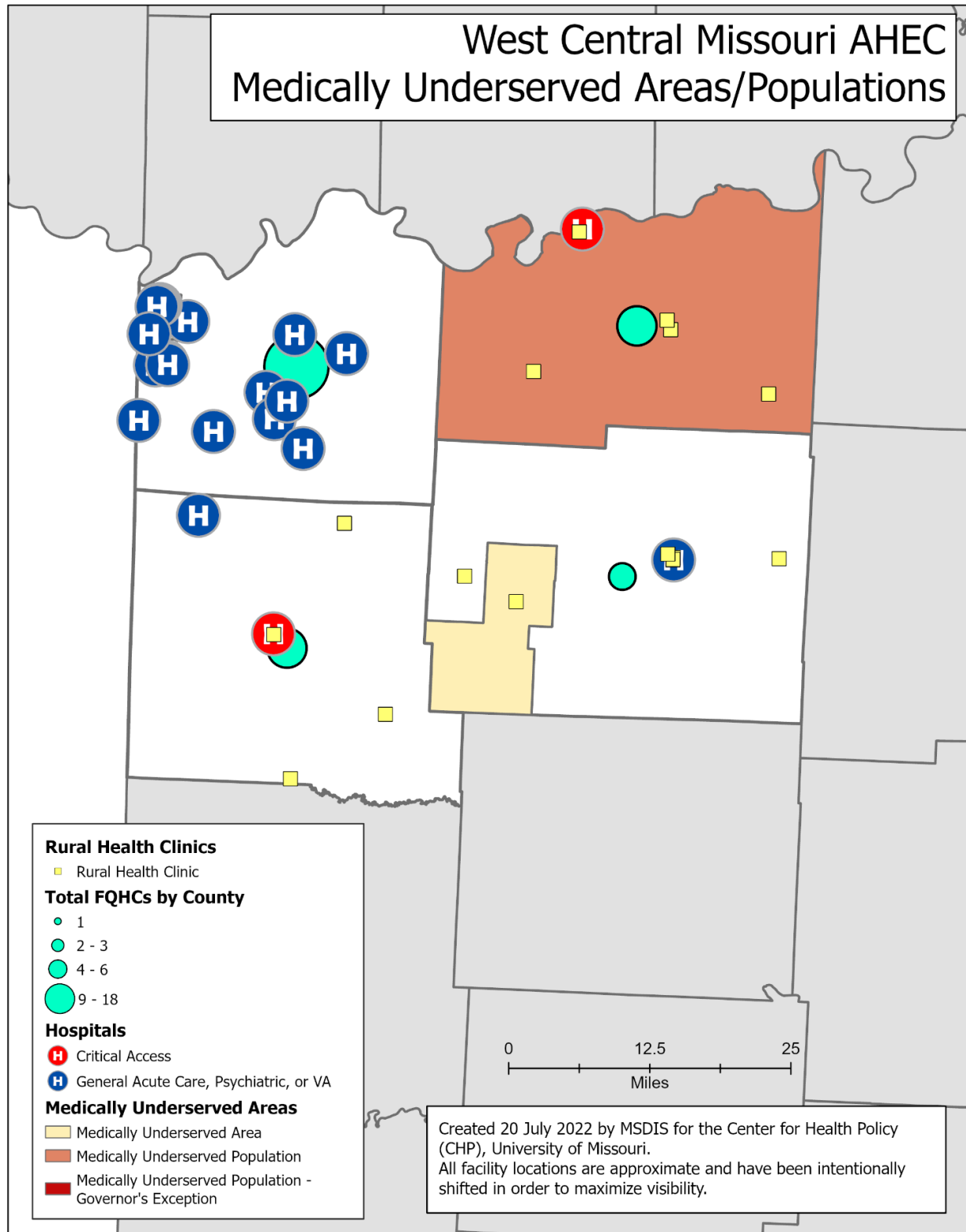
The WCMO AHEC region’s population health needs are addressed through a number of federal health care and health care workforce initiatives. Medically Underserved Areas/Populations (MUA/Ps) are areas or populations which HRSA designates as having a shortage of primary care providers, high incidence of infant mortality, high poverty or a concentration of older adult residents.²⁵ Programs like the Health Center Program and CMS Rural Health Clinic Program utilize MUA/Ps to allocate federal resources to areas of greatest need.

All of Lafayette County is designated as a Medically Underserved Population and portions of Johnson County are designated as a Medically Underserved Area. See Figure 3 for more information on MUA/Ps in the WCMO AHEC region.

²⁴ Missouri Foundation for Health. (2021). *Medicaid expansion enrollment and eligibility update: Characteristics of expansion enrollees*. Retrieved from https://cpb-us-w2.wpmucdn.com/sites.wustl.edu/dist/1/2391/files/2020/04/FactSheet_NewEnrolleeDemographics_final.pdf.

²⁵ Health Resources and Services Administration. (2021). *What is a shortage designation?* Retrieved from <https://bh.w.hrsa.gov/workforce-shortage-areas/shortage-designation>.

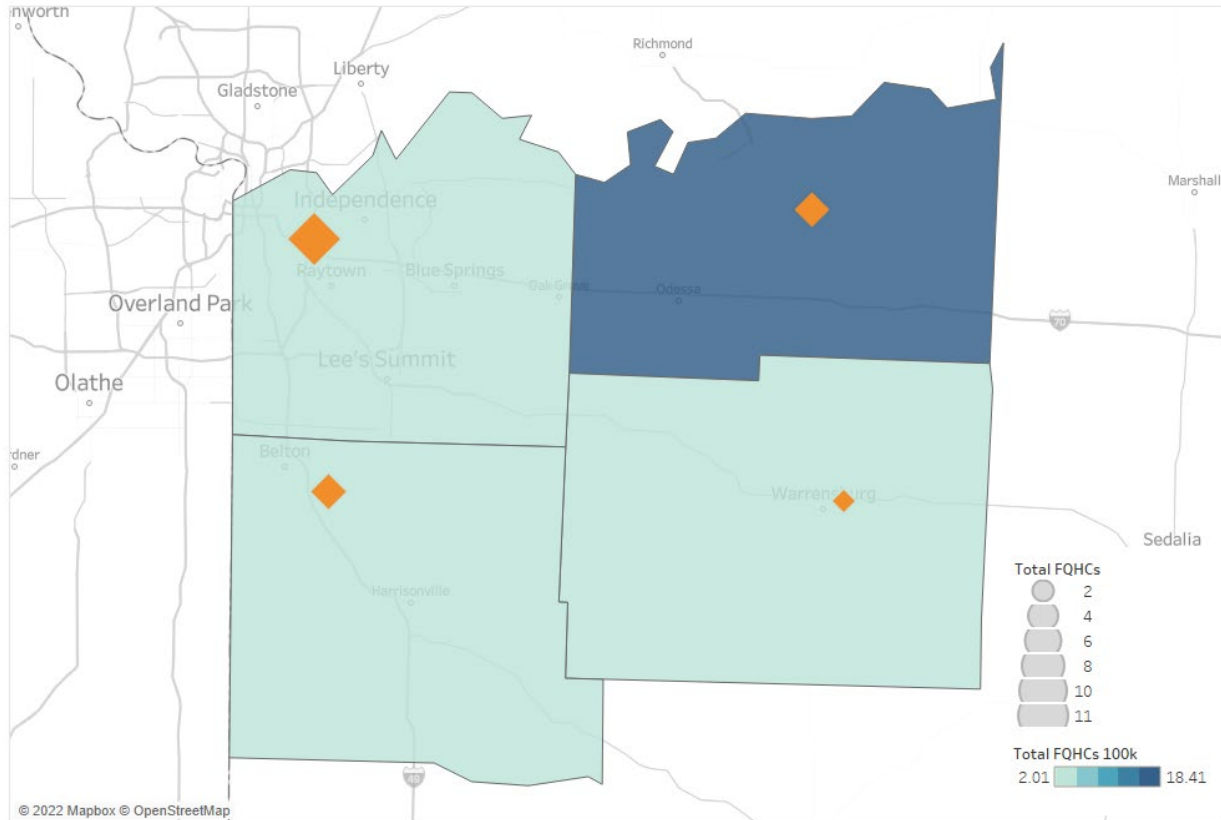
Figure 3. Medically Underserved Areas/Populations (MUA/Ps)



Note: Dynamic, interactive maps of MUA/Ps and medical facilities in all AHEC regions are available under Indicator Dashboards at <https://mohealthcareworkforce.org/>.

Federally Qualified Health Centers (FQHCs) are important safety net providers for primary care, dental, and mental and behavioral health. See Figure 4 for information on FQHCs in the region.

Figure 4. Federally Qualified Health Centers (FQHCs) per 100,000 Residents

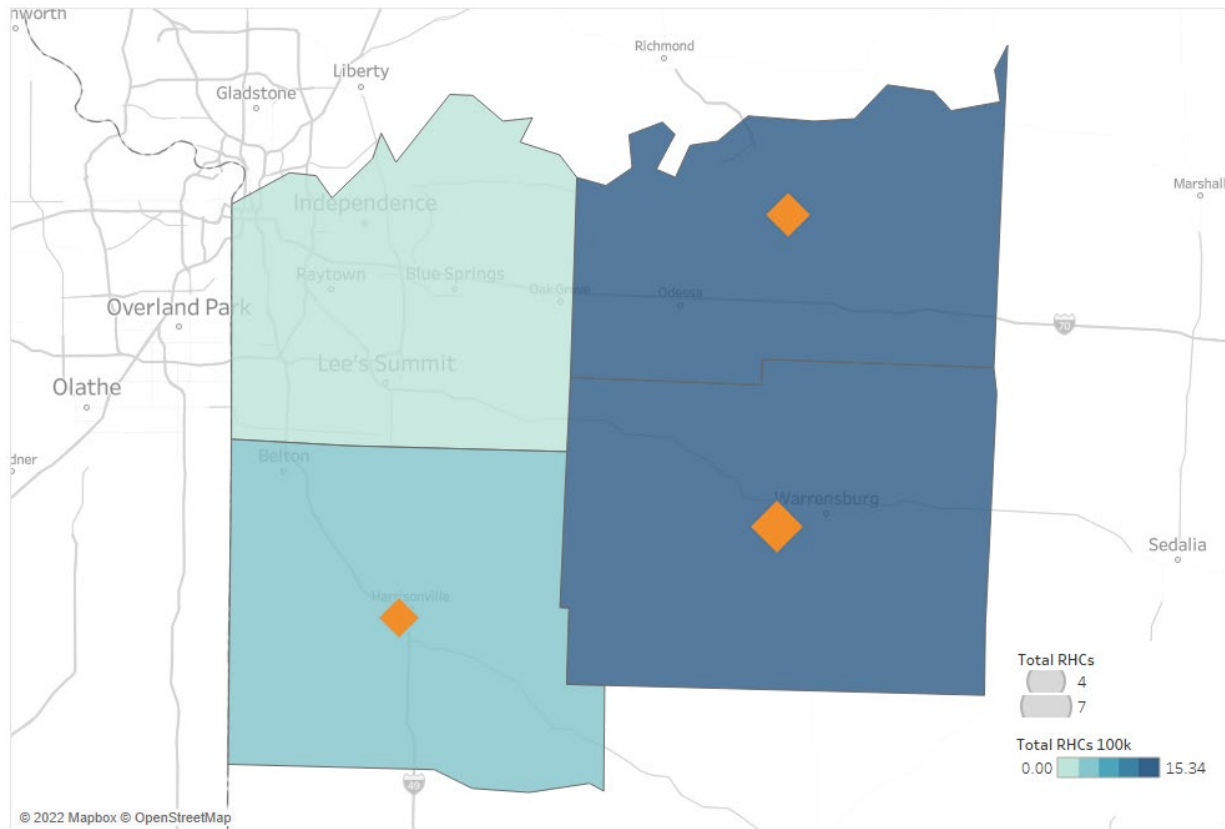


Source: American Community Survey (2015-2019 5 year estimates), MO Department of Health and Senior Services via Missouri Spatial Data Information Service (2022)

Note: Dynamic, interactive maps of medical facilities in all AHEC regions are available at <https://mohealthcareworkforce.org/indicator-dashboards/medical-facilities/>.

Figure 5 displays Rural Health Clinics (RHCs) and rates of clinics per 100,000 residents in the region. While Jackson County does not have any RHCs, all other counties in the region do. RHCs fill important gaps in health care services in rural areas.

Figure 5. Rural Health Clinics (RHCs) per 100,000 Residents



Source: American Community Survey (2015-2019 5 year estimates), MO Department of Health and Senior Services via Missouri Spatial Data Information Service (2022)

Note: Dynamic, interactive maps of medical facilities in all AHEC regions are available at <https://mohealthcareworkforce.org/indicator-dashboards/medical-facilities/>. Rural Health Clinic locations are reported by the Missouri Department of Health and Senior Services through Missouri Spatial Data Information Service (<https://data-msdis.opendata.arcgis.com/>). The “RHC Finder” on the Missouri Association of Rural Health Clinics website may include additional RHCs (<https://www.marhc.org/rhcfinder>) not shown in Figure 5.

Health Care Workforce Landscape in the Region

The analysis of the WCMO AHEC region focuses on primary care, dental health, and mental and behavioral health, as well as additional professions such as nursing, pharmacy, physical therapy, community health workers and the public health workforce. For the purposes of this regional analysis, primary care includes these specialties: family medicine, general practice, internal medicine, obstetrics and gynecology (OB/GYN) and pediatrics. Dental health includes dentists, dental hygienists and dental assistants. Mental and behavioral health includes licensed professional counselors, psychologists, licensed social workers, marital and family therapists, psychiatrists, child psychiatrists, behavior analysts and assistant behavior analysts.

Primary Care

A high-quality primary care workforce providing sufficient regional coverage is key to healthy individuals, families and communities. Primary care providers are on the front lines as the first source of non-emergency care. Through education to manage daily health, treatment for sickness, and linkages to specialized care, primary care providers help people live healthier lives and incur fewer medical costs over time.²⁶

Primary Care Physicians

The ratio of primary care physicians (PCP) to the region’s population is one PCP for every 488 residents (Table 4). This ratio is more favorable than the state’s ratio of one PCP per 621 residents.

Table 4. Primary Care Physicians by WCMO AHEC region and State

| West Central AHEC Region Provider Type | Region State | Rural # (%) | Partially Rural # (%) | Urban # (%) | Total Provider Type | Total Population of AHEC Region | Ratio Provider Type to AHEC Region Population |
|--|--------------|-------------|-----------------------|-------------|---------------------|---------------------------------|---|
| Primary Care Physicians | Region | 23 (1%) | 10 (1%) | 1,782 (98%) | 1,815 | 886,092 | 1 to 488 |
| | State | 1,224 (12%) | 847 (9%) | 7,753 (79%) | 9,824 | 6,104,910 | 1 to 621 |

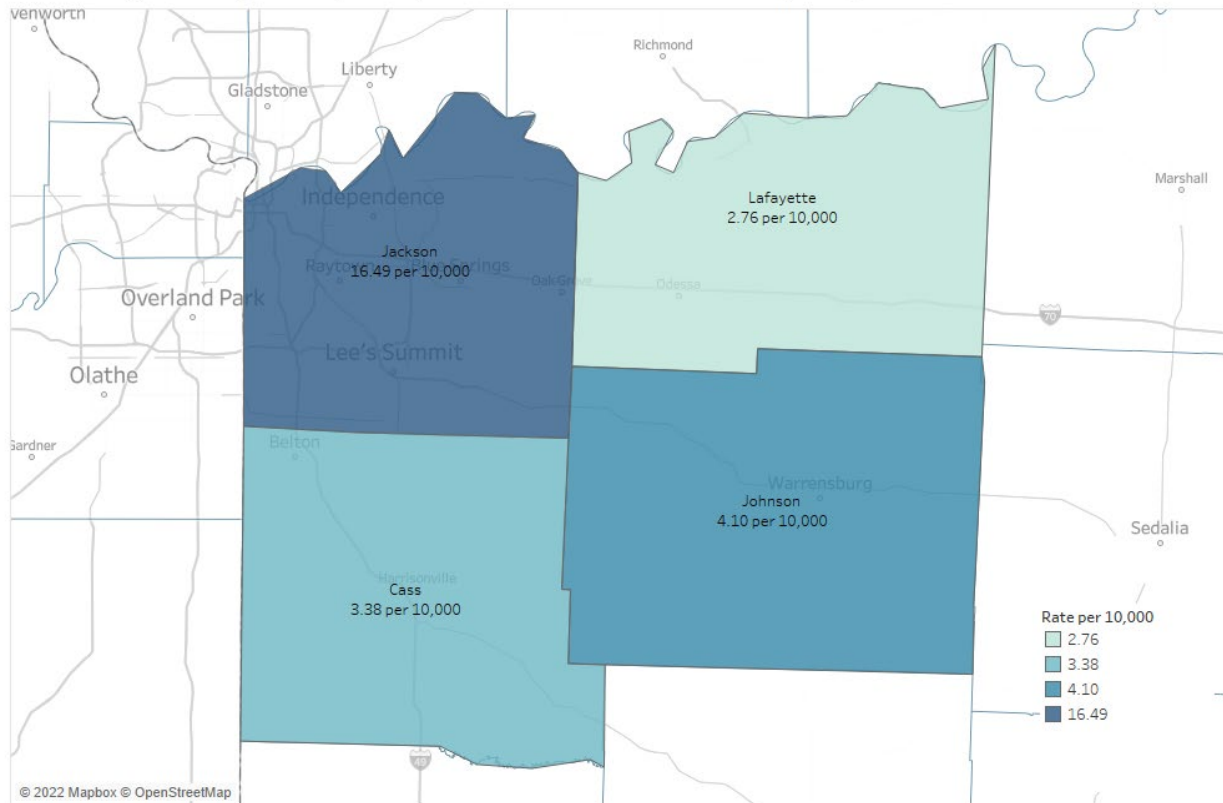
Note: Primary care physicians include the specialties of Family Medicine, General Practice, Internal Medicine, Obstetrics and Gynecology (OB/GYN) and Pediatrics.

Data on primary care physicians in the region are from the Missouri Division of Professional Registration public release file.²⁷ As can be expected, Jackson County has the highest rate of primary care physicians in the region at 16.49 PCPs per 10,000 residents (Figure 6).

²⁶ Cleveland Clinic. (2021). *The importance of having a primary care doctor*. Retrieved from <https://my.clevelandclinic.org/health/articles/16507-the-importance-of-having-a-primary-care-doctor>.

²⁷ The Missouri Division of Professional Registration allows licensees to opt out of inclusion in their public release files. As such, some practicing primary care physicians are not included in this dataset.

Figure 6. Geographic Distribution of Primary Care Physicians per 10,000 Residents (2022)

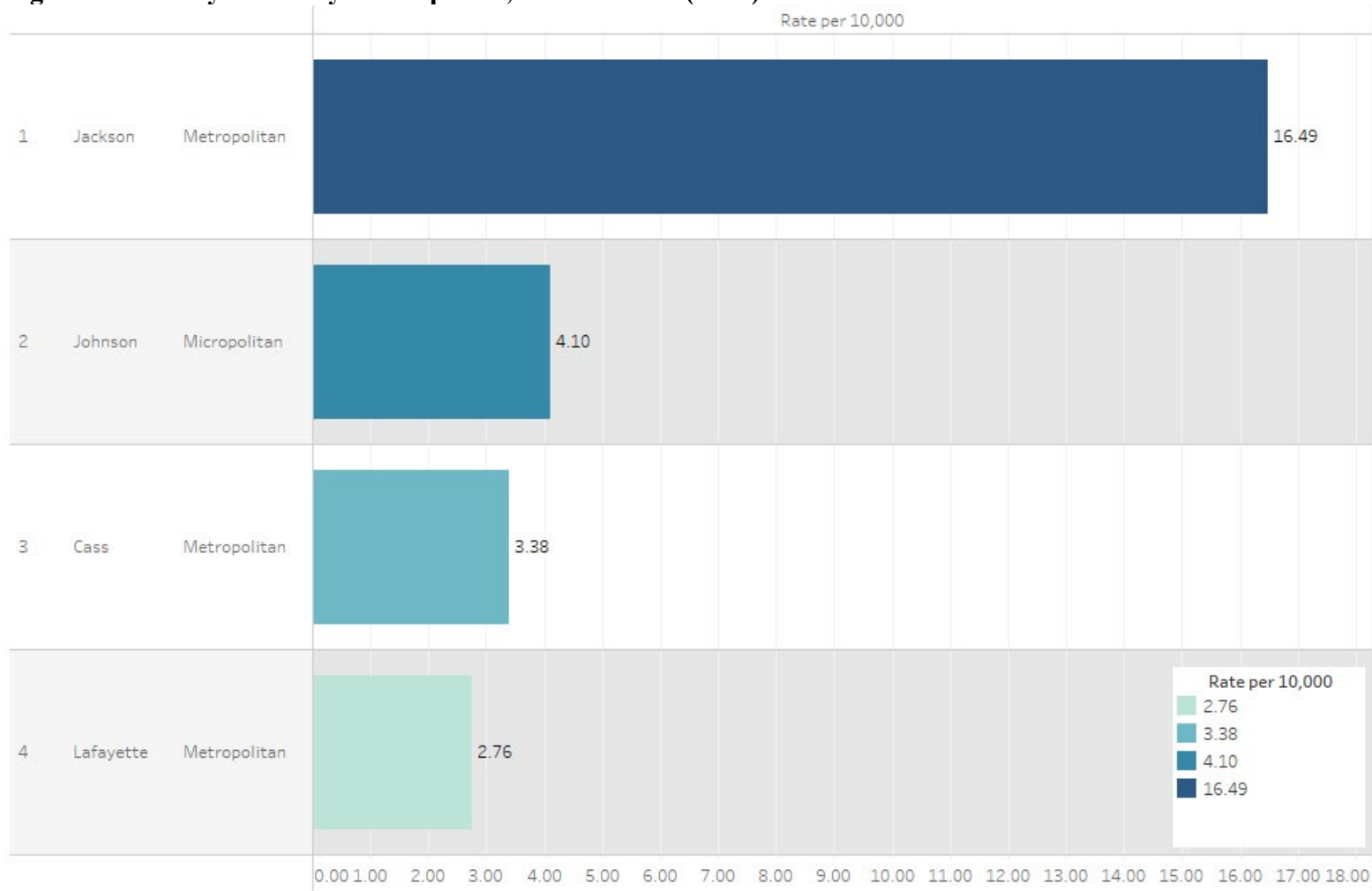


Source: Missouri Division of Professional Registration (2022)
Primary Care includes Family Medicine/General Practice, Internal Medicine, Obstetrics and Gynecology and Pediatrics.

Note: Dynamic, interactive maps of primary care physicians and other providers in all AHEC regions are available at <https://mohealthcareworkforce.org/indicator-dashboards/workforce/>.

The remaining three counties in the region have lower rates of PCPs. Lafayette County has the fewest at 2.76 per 10,000 residents. Cass has 3.38 PCPs and Johnson County has 4.10 per 10,000 residents. See Figure 7 for a comparison of the four counties in the region.

Figure 7. Primary Care Physicians per 10,000 Residents (2022)



Source: Missouri Division of Professional Registration (2022)
 Primary Care includes Family Medicine/General Practice, Internal Medicine, Obstetrics and Gynecology and Pediatrics.

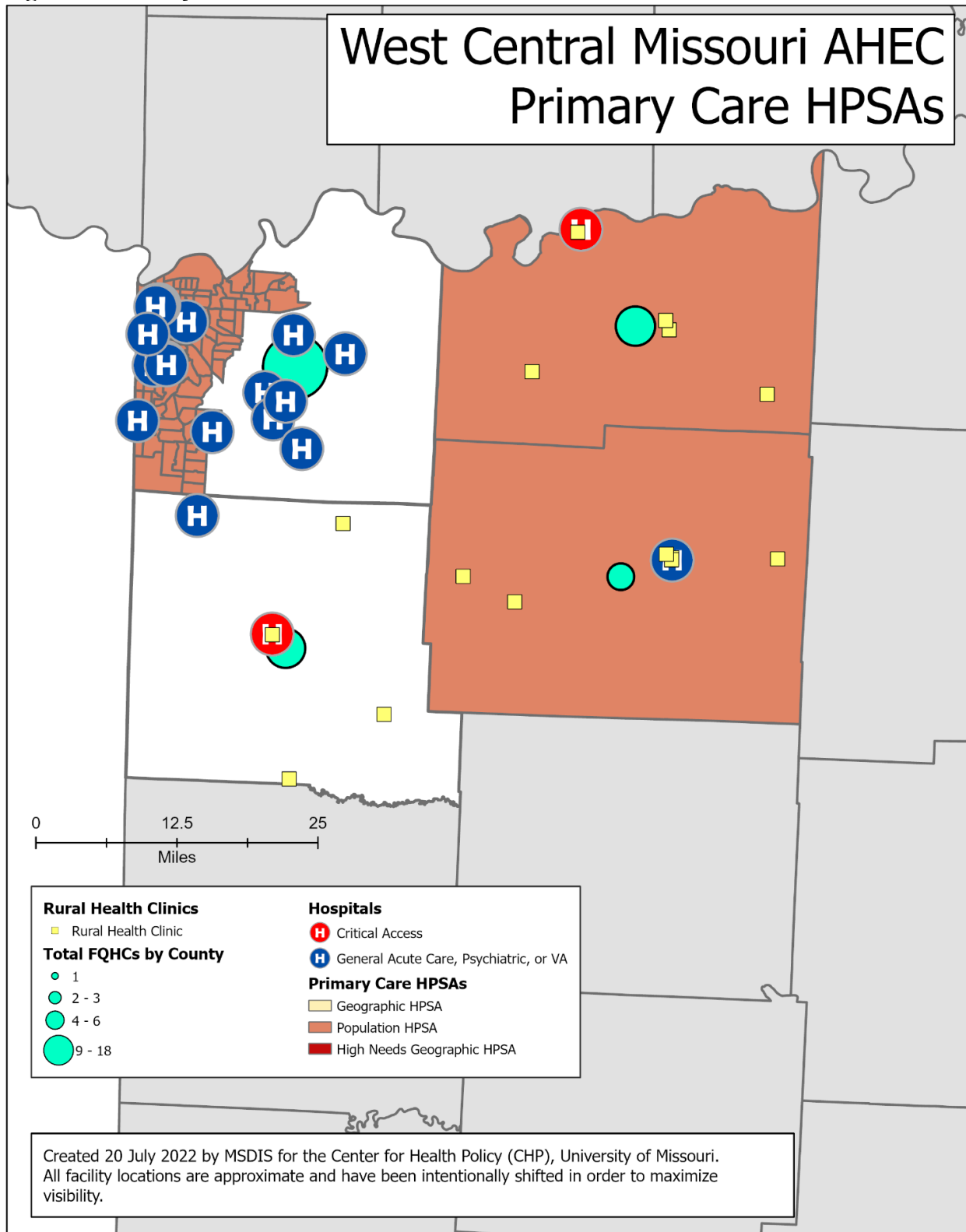
Primary Care Health Professional Shortage Areas (HPSAs)

A **Primary Care Health Professional Shortage Area (HPSA)** is an area, population, or facility designated by HRSA as having an insufficient number of primary care providers. HPSAs are utilized by federal programs such as National Health Service Corps, Nurse Corps, Indian Health Service (IHS) Loan Repayment Program, and Rural Health Clinic Program to allocate resources to designated areas of shortage.²⁸

A **Population HPSA** represents a specific group of people within a defined geographic area like a county or a state who are experiencing a shortage of health care providers. Specific groups may include low-income persons, migrant workers, Medicaid eligible persons, and others. All of Johnson and Lafayette counties and part of Jackson County are designated as Population HPSAs (Figure 8).

²⁸ Health Resources and Services Administration. (2021). *What is a shortage designation?* Retrieved from <https://bhwh.hrsa.gov/workforce-shortage-areas/shortage-designation>.

Figure 8. Primary Care HPSAs



Note: Dynamic, interactive maps of HPSAs and medical facilities in all AHEC regions are available under Indicator Dashboards at <https://mohealthcareworkforce.org/>.

Dental Health

Dental health is foundational to overall health and well-being. Dental health is linked to the overall health of the body, including susceptibility to oral cancer, lung disease, pregnancy and birth complications, pneumonia, stroke, heart attack and diabetes.²⁹ Access to quality dental education, prevention, treatment of disease, replacement and repair is crucial for all.

Dental Health Providers

Dental health providers include dentists, dental hygienists, and dental assistants. The 2021 data on these providers are from Missouri Division of Professional Registration public release licensure data, and do not include providers who opt out of the public release file. Table 5 shows the number and ratios of dental care providers in the WCMO AHEC region. The region has more availability of dentists (1:1,711) than the state (1:1,902), but less availability of dental hygienists and dental assistants.

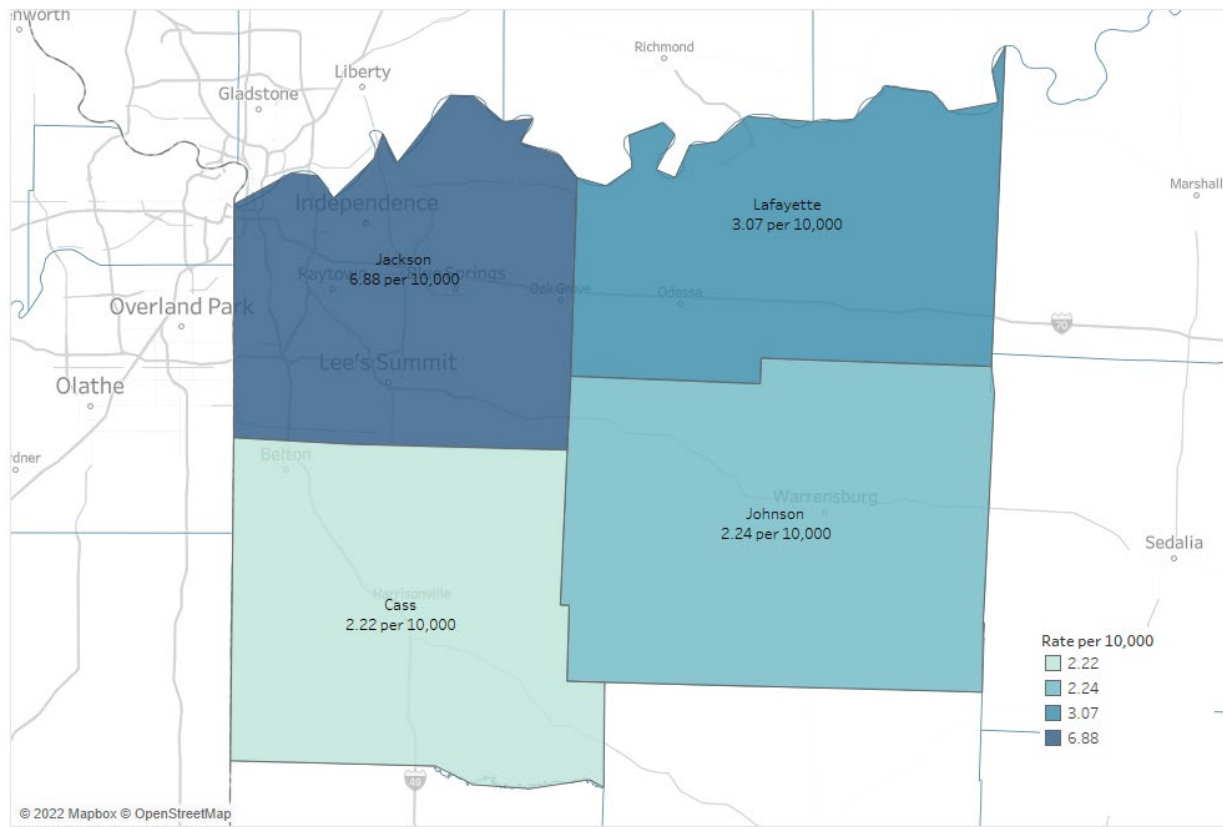
Table 5. Dental Health Providers by WCMO AHEC region and State

| West Central AHEC Region Provider Type | Region State | Rural # (%) | Partially Rural # (%) | Urban # (%) | Total Provider Type | Total Population of AHEC Region | Ratio Provider Type to AHEC Region Population |
|--|--------------|-------------|-----------------------|-------------|---------------------|---------------------------------|---|
| Dentists | Region | 12 (2%) | 10 (2%) | 496 (96%) | 518 | 886,092 | 1 to 1,711 |
| | State | 537 (17%) | 222 (7%) | 2,452 (76%) | 3,211 | 6,104,910 | 1 to 1,902 |
| Dental Hygienists | Region | 20 (4%) | 20 (4%) | 440 (92%) | 480 | 886,092 | 1 to 1,846 |
| | State | 893 (25%) | 311 (9%) | 2,424 (67%) | 3,628 | 6,104,910 | 1 to 1,683 |
| Dental Assistants | Region | 33 (5%) | 40 (7%) | 534 (88%) | 607 | 886,092 | 1 to 1,459 |
| | State | 2,198 (35%) | 507 (8%) | 3,512 (56%) | 6,217 | 6,104,910 | 1 to 981 |

The geographic distribution of all dental health provider types (Figure 9) is skewed toward Jackson County where Kansas City is located. Other counties in the region have fewer dentists available per population.

²⁹ Mayo Clinic. (2021). *Oral health: A window to your overall health*. Retrieved from <https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/dental/art-20047475>.

Figure 9. Geographic Distribution of Dentists per 10,000 Residents (2022)

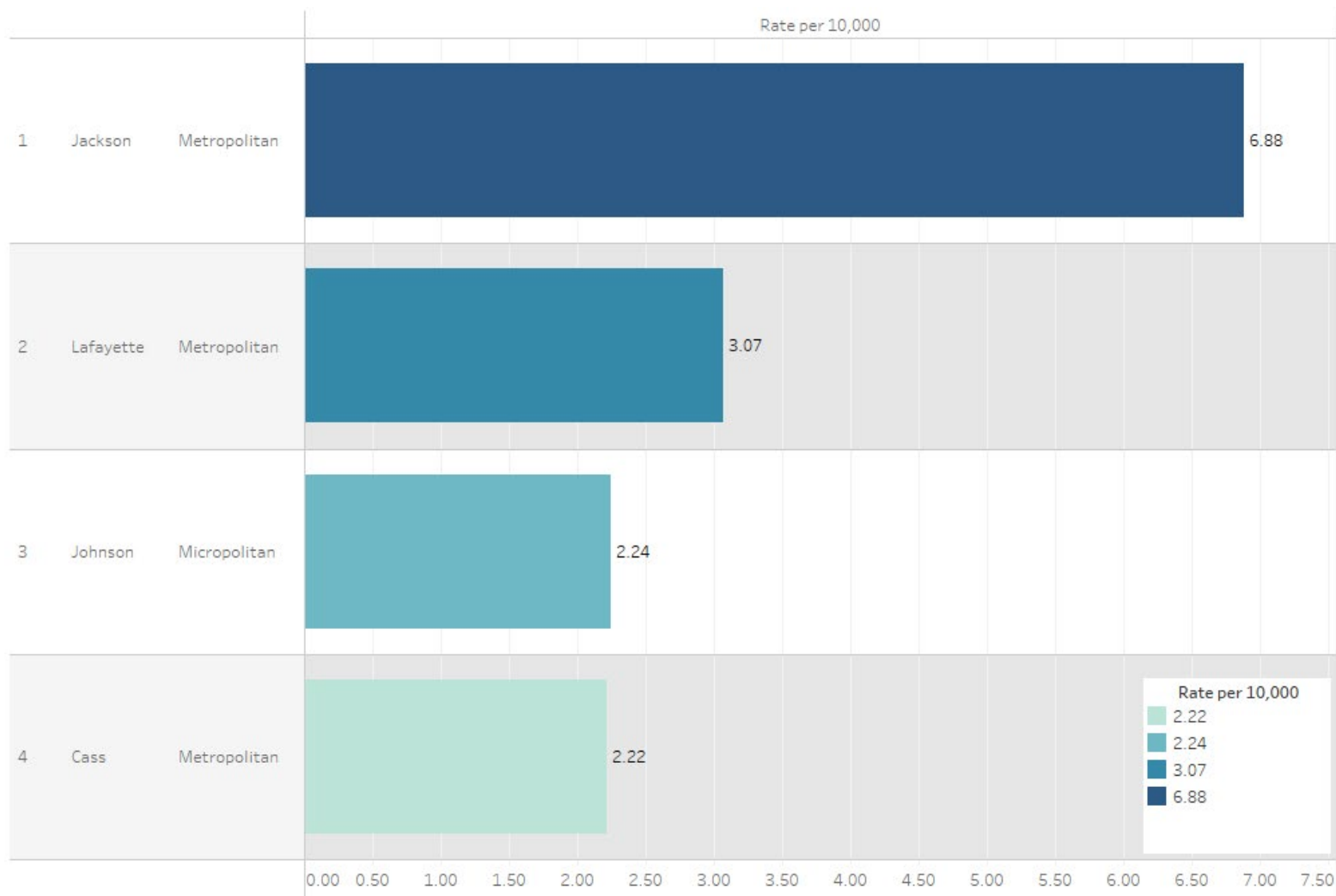


Source: Missouri Division of Professional Registration (2022)

Note: Dynamic, interactive maps of dentists and other providers in all AHEC regions are available at <https://mohealthcareworkforce.org/indicator-dashboards/workforce/>.

While Jackson County has 6.88 dentists per 10,000 residents, Figure 10 shows that the other three counties in the region have rates of less than half as many dentists per 10,000 residents: Lafayette (3.07), Johnson (2.24), and Cass (2.22) according to the Missouri Division of Professional Registration public release file.

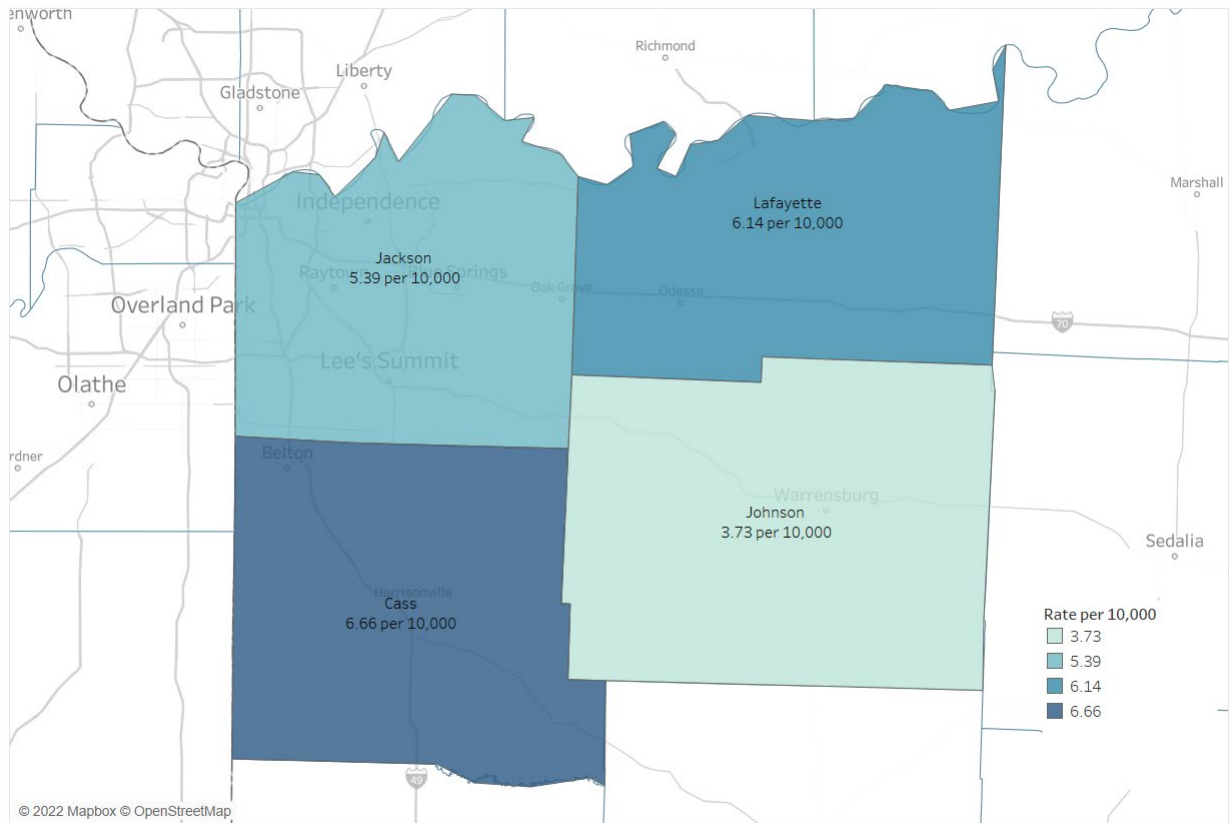
Figure 10. Dentists per 10,000 Residents (2022)



Source: Missouri Division of Professional Registration (2022)

Dental hygienists have a different distribution than dentists in the region (Figure 11). Cass (1:6.66) and Lafayette (1:6.14) counties have the highest rate of dental hygienists per 10,000 residents, while Johnson County has the lowest rate at 3.73 per 10,000 residents. Figure 12 provides a bar chart for comparison purposes.

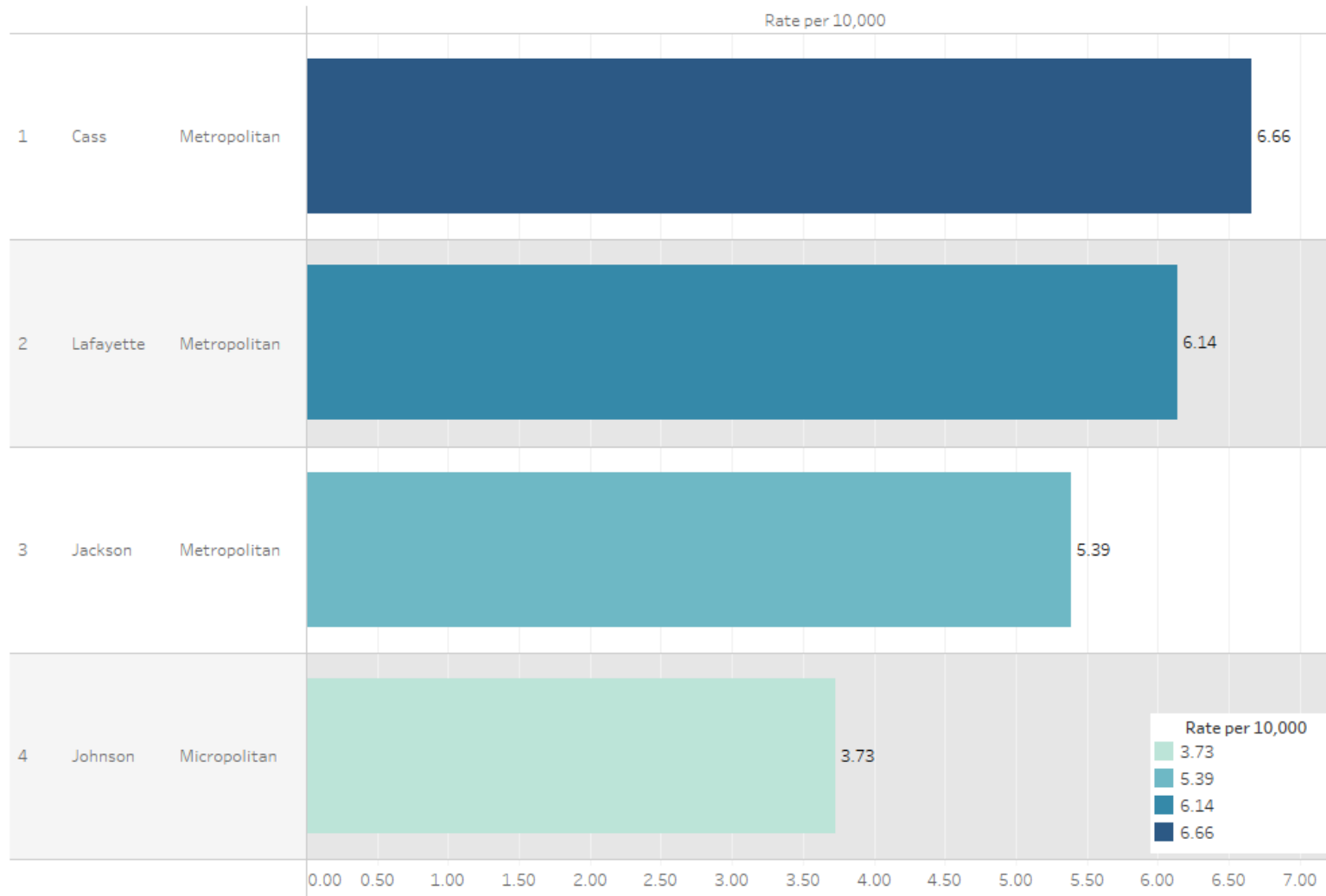
Figure 11. Geographic Distribution of Dental Hygienists per 10,000 Residents (2022)



Source: Missouri Division of Professional Registration (2022)

Note: Dynamic, interactive maps of dental hygienists and other providers in all AHEC regions are available at <https://mohealthcareworkforce.org/indicator-dashboards/workforce/>.

Figure 12. Dental Hygienists per 10,000 Residents (2022)



Source: Missouri Division of Professional Registration (2022)

Dental Care Professional Shortage Areas (HPSAs)

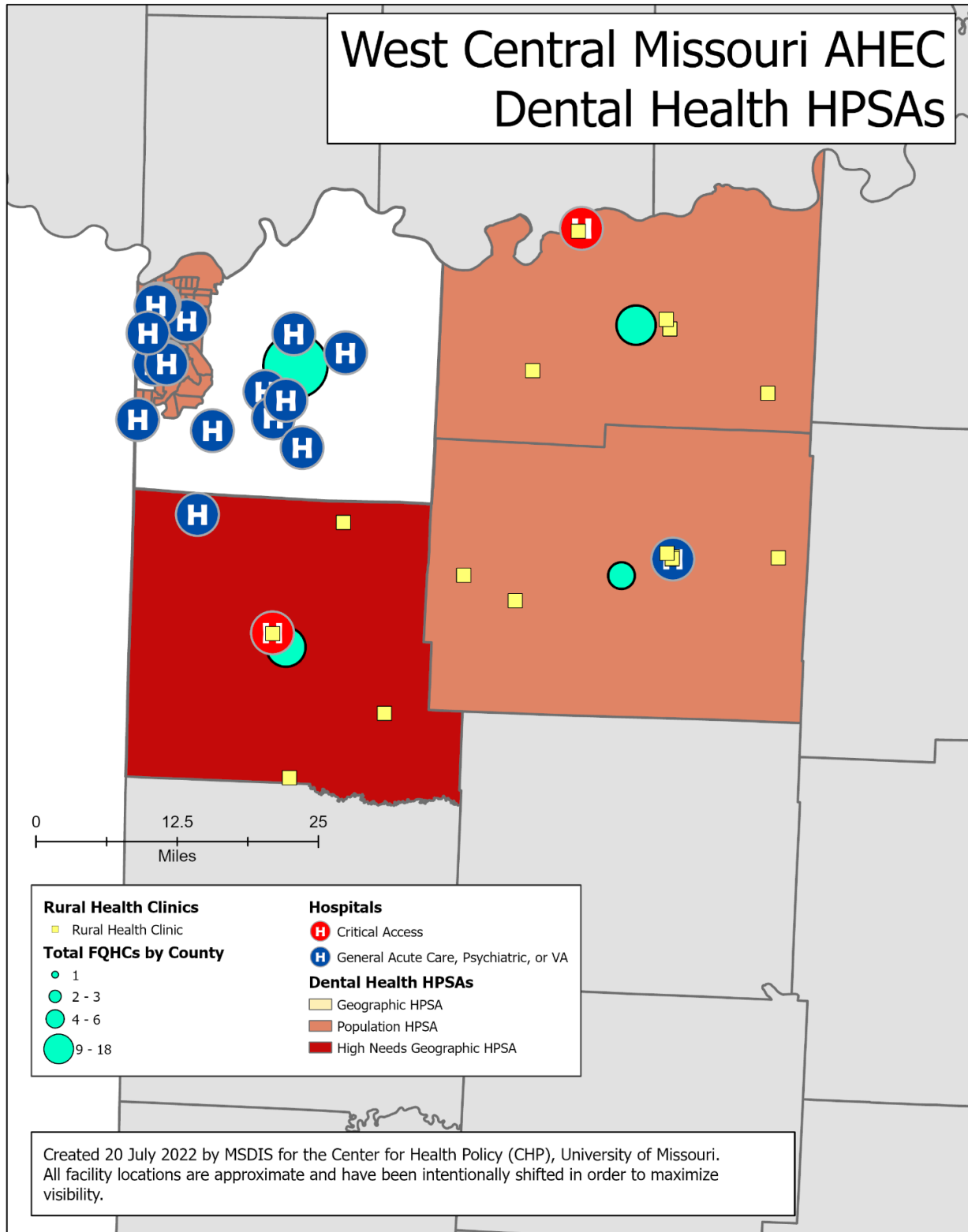
Dental Care HPSAs are designated based on population-to-provider ratio, percent of population below 100% Federal Poverty Level (FPL), water fluoridation status, and travel time to nearest source of care outside the HPSA designation area.³⁰

A **Population HPSA** represents a specific group of people within a defined geographic area like a county or a state who are experiencing a shortage of health care providers. Specific groups may include low-income persons, migrant workers, Medicaid-eligible persons, and others. All of Johnson and Lafayette counties and portions of Jackson County are designated as Population HPSAs.

A **Geographic HPSA** represents an entire population of people from a specific geography such as a county or a state who are experiencing a shortage of health care providers. A Geographic HPSA can be marked as a **High Needs Geographic HPSA** if a large proportion of the population within the boundaries are low-income or meet other criteria. Cass County is designated as a High needs Geographic HPSA.

³⁰ Health Resources and Services Administration. (2022). *Scoring shortage designations*. Retrieved from <https://bhwh.hrsa.gov/workforce-shortage-areas/shortage-designation/scoring>.

Figure 13. Dental Health HPSAs



Note: Dynamic, interactive maps of HPSAs and medical facilities in all AHEC regions are available under Indicator Dashboards at <https://mohealthcareworkforce.org/>.

Mental and Behavioral Health

Mental and behavioral health care helps people identify how behaviors influence their health including how to adopt positive behaviors to replace unhealthy ones. Mental illness and substance use disorders are key factors in disability, mortality, and health care costs. The prevalence of opioid addiction and related deaths is a crisis that continues. Mental and behavioral health professionals focus on wellness and prevention, helping patients manage mental and behavioral issues that allow them to lead happier, healthier, and more productive lives.³¹

Mental and Behavioral Health Workforce

This section includes a summary of counts of the WCMO AHEC region’s mental and behavioral health providers for 2021 provided by the Missouri Division of Professional Registration. Mental and behavioral health providers include licensed professional counselors, psychologists, licensed social workers, marital and family therapists, psychiatrists, child psychiatrists, behavior analysts and assistant behavior analysts. Table 6 is a summary of the 2021 data and shows both the region and state data for comparison. Population data were retrieved from the 2015-2019 ACS 5-year estimates.

The ratio of mental and behavioral health providers in the region (one for every 399 residents in the WCMO AHEC region) is nearly identical to the state ratio (one provider for every 394 Missourians). The ratio of providers to population is important because there may be increased need for mental health services due to trauma and PTSD from pandemic-related issues as well as the ongoing opioid crisis. Increased rates of insurance coverage due to Medicaid expansion and ACA may also increase demand.³² Telehealth services, which are popular sources of mental and behavioral health care, may provide an alternative for residents with adequate broadband service.

Table 6. Mental and Behavioral Health Providers by WCMO AHEC region and State

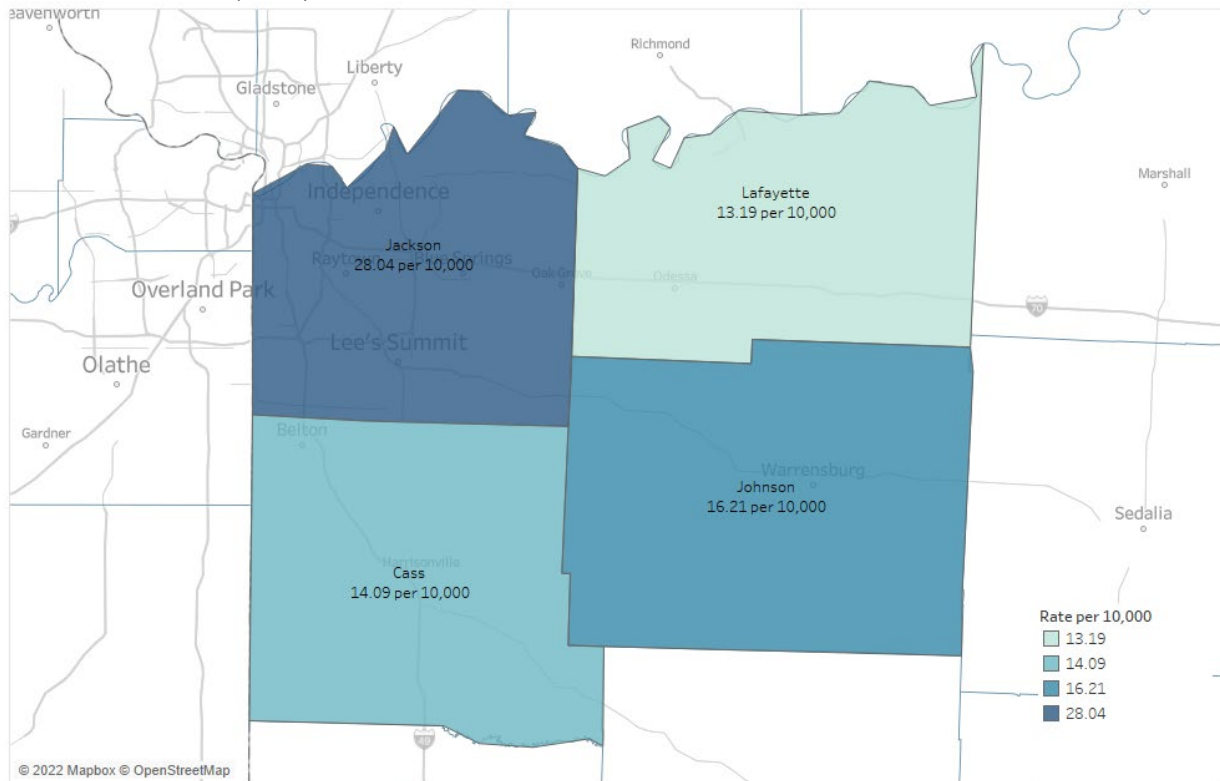
| West Central AHEC Region Provider Type | Region State | Rural # (%) | Partially Rural # (%) | Urban # (%) | Total Provider Type | Total Population of AHEC Region | Ratio Provider Type to AHEC Region Population |
|--|--------------|-------------|-----------------------|--------------|---------------------|---------------------------------|---|
| Mental and Behavioral Health | Region | 87 (4%) | 40 (2%) | 1,921 (94%) | 2,221 | 886,092 | 1 to 399 |
| | State | 2,283 (16%) | 1,184 (8%) | 10,709 (76%) | 15,478 | 6,104,910 | 1 to 394 |

³¹ Medline Plus. (2015). *Mental Health*. Retrieved from <https://medlineplus.gov/mentalhealth.html>.

³² Grimm, Christi A. "Hospitals Reported That the COVID-19 Pandemic Has Significantly Strained Health Care Delivery." (2021). Retrieved from <https://oig.hhs.gov/oei/reports/OEI-09-21-00140.pdf>.

The shortages and maldistributions of mental and behavioral health providers can be seen in Figure 14. Figure 15 shows the variation in mental and behavioral health providers in the region. Rates of mental and behavioral health providers range from 13.19 providers per 10,000 residents in Lafayette County to 28.04 per 10,000 residents in Jackson County, indicating that most of the providers are in the northwestern portion of the region that includes Kansas City.

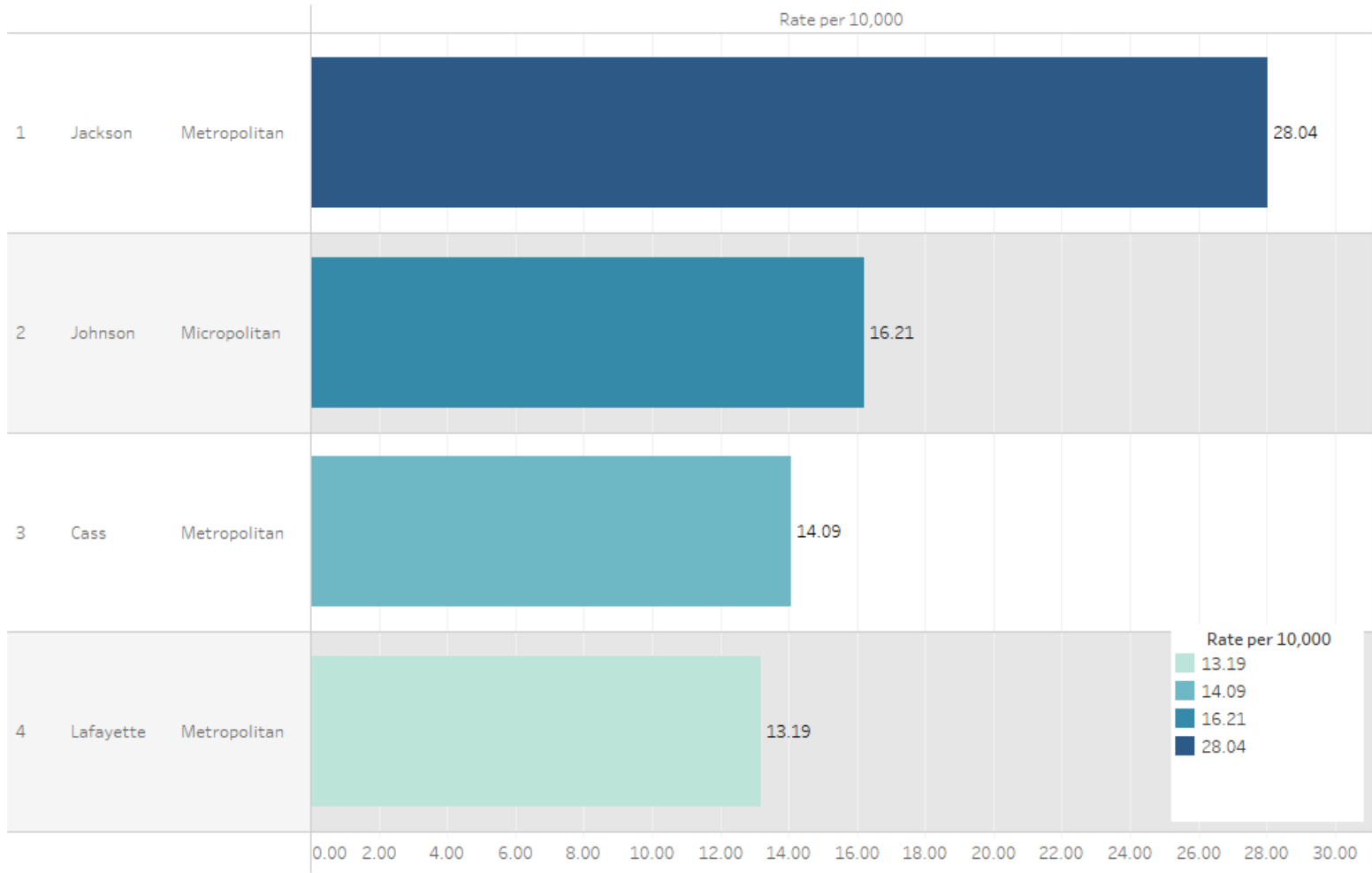
Figure 14. Geographical Distribution of Mental and Behavioral Health Providers per 10,000 Residents (2022)



Source: Missouri Division of Professional Registration (2022)
 Mental & Behavioral Health includes Assistant Behavior Analyst, Behavior Analyst, Child Psychiatry, Licensed Professional Counselor, Licensed Social Worker, Marriage & Family Therapist, Psychiatry and Psychologist.

Note: Dynamic, interactive maps of mental and behavioral health providers and other providers in all AHEC regions are available at <https://mohealthcareworkforce.org/indicator-dashboards/workforce/>.

Figure 15. Mental and Behavioral Health Providers per 10,000 Residents (2022)



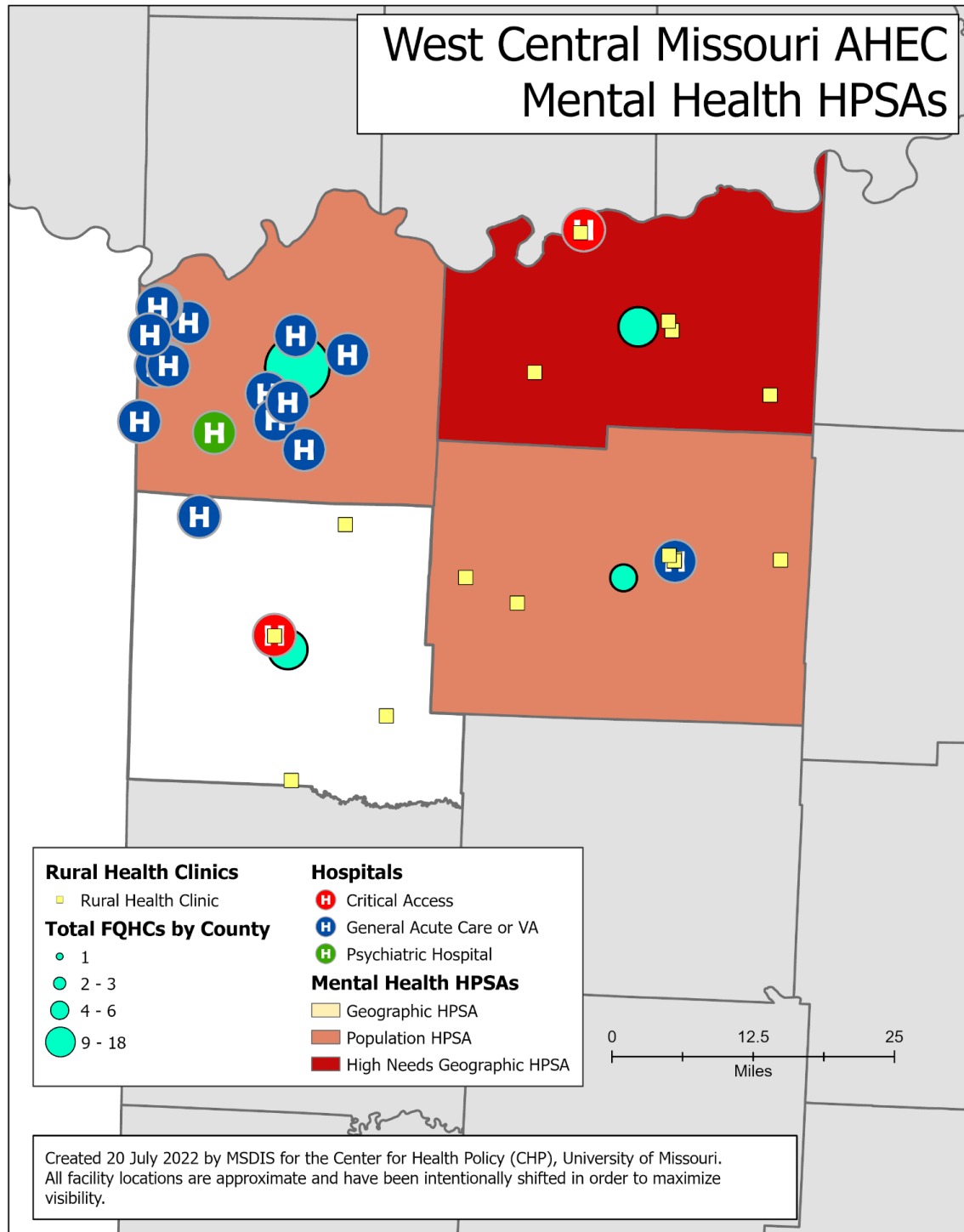
Source: Missouri Division of Professional Registration (2022)

Mental & Behavioral Health includes Assistant Behavior Analyst, Behavior Analyst, Child Psychiatry, Licensed Professional Counselor, Licensed Social Worker, Marriage & Family Therapist, Psychiatry and Psychologist.

Mental Health Professional Shortage Areas (HPSAs)

Three of four counties of the WCMO AHEC region are covered by a Mental Health HPSA including a High Needs Geographic HPSA designated in Lafayette County. Jackson and Johnson County are designated as Population HPSAs. See Figure 16 for more information.

Figure 16. Mental Health Provider HPSAs



Note: Dynamic, interactive maps of HPSAs and medical facilities in all AHEC regions are available under Indicator Dashboards at <https://mohealthcareworkforce.org/>.

Nursing Workforce

The Missouri State Board of Nursing offers two license types: Licensed Practical Nurse (LPN) and Registered Nurse (RN). While Missouri’s Advance Practice Nurses (APRNs) are licensed as RNs, their title reflects completion of a terminal degree, national credentialing, and recognition by the Missouri State Board of Nursing of their advanced practice status. When considering Missouri’s nursing workforce, it is important to note the differences in the scope of practice among LPNs, RNs and APRNs. With their ability to prescribe and supervise LPNs and RNs, APRNs are more comparable to physicians and physician assistants in the workforce. Table 7 presents 2021 nurse counts from Missouri Division of Professional Registration licensure data, as well as population counts from 2015-2019 ACS 5-year estimates.

The WCMO AHEC region follows state patterns in the nursing workforce, with nearly equal ratios of LPNs and RNs for the region and state. The ratio of APRNs in the WCMO AHEC region (1:515) is more favorable than the state (1:672).

Table 7. Nursing Workforce by WCMO AHEC Region and State

| West Central AHEC Region Provider Type | Region State | Rural # (%) | Partially Rural # (%) | Urban # (%) | Total Provider Type | Total Population of AHEC Region | Ratio Provider Type to AHEC Region Population |
|---|--------------|--------------|-----------------------|--------------|---------------------|---------------------------------|---|
| Advanced Practice Registered Nurses (APRNs) | Region | 31 (2%) | 22 (1%) | 1,669 (97%) | 1,722 | 886,092 | 1 to 515 |
| | State | 1,506 (17%) | 697 (8%) | 6,881 (76%) | 9,084 | 6,104,910 | 1 to 672 |
| Registered Nurses (RNs) | Region | 275 (3%) | 126 (1%) | 10,306 (96%) | 10,707 | 886,092 | 1 to 83 |
| | State | 11,594 (17%) | 5,693 (8%) | 52,325 (75%) | 69,612 | 6,104,910 | 1 to 88 |
| Licensed Practical Nurses (LPNs) | Region | 137 (7%) | 125 (6%) | 1,718 (87%) | 1,980 | 886,092 | 1 to 448 |
| | State | 5,813 (38%) | 1,376 (9%) | 8,017 (53%) | 15,206 | 6,104,910 | 1 to 401 |

Selected Allied Health Professions

Table 8 includes 2021 data from Missouri Division of Professional Registration and population numbers from 2015-2019 5-year ACS estimates.

Pharmacy Workforce

The WCMO AHEC region has fewer pharmacists (1:996) and pharmacy technicians (1:388) per population than the state as a whole (1 pharmacist: 859 residents; 1 pharmacy technician: 290 residents). Services such as Express Scripts may increase access to prescription medications for WCMO AHEC residents, though filling prescriptions is just one of the services provided by pharmacists.

Physical Therapy Workforce

Residents of the West Central AHEC region have greater access to physical therapists (PTs) than Missourians overall. The ratio of physical therapist assistants is nearly identical in the region (1:5,092) and the state (1:5,071).

Community Health Worker Workforce

Community Health Workers (CHWs) are a relatively new workforce in the US and Missouri. CHWs provide frontline public health services in their own communities and serve as liaisons between health care and social service providers and the communities they serve. CHWs serve in both formal and informal capacities and can be employees or volunteers.³³ Table 8 presents the most current counts of credentialed CHWs in Missouri. The ratios in the region are more favorable than the state's ratios. Demand for CHWs is anticipated to grow due to expanding health care coverage through Medicaid expansion as well as the growth in Missourians over the age of 65.

³³ National Institute for Healthcare Management Foundation. (April 7, 2021) *Community Health Workers: Their Important Role in Public Health*. Retrieved from <https://nihcm.org/publications/community-health-workers-infographic>.

Table 8. Selected Allied Health Professions by WCMO AHEC Region and State

| West Central AHEC Region Provider Type | Region State | Rural # (%) | Partially Rural # (%) | Urban # (%) | Total Provider Type | Total Population of AHEC Region | Ratio Provider Type to AHEC Region Population |
|--|--------------|-------------|-----------------------|--------------|---------------------|---------------------------------|---|
| Pharmacists | Region | 20 (2%) | 20 (2%) | 850 (96%) | 890 | 886,092 | 1 to 996 |
| | State | 1,350 (19%) | 520 (7%) | 5,238 (74%) | 7,108 | 6,104,910 | 1 to 859 |
| Pharmacy Technicians | Region | 115 (5%) | 95 (4%) | 2,076 (91%) | 2,286 | 886,092 | 1 to 388 |
| | State | 6,204 (29%) | 1,317 (6%) | 13,539 (64%) | 21,060 | 6,104,910 | 1 to 290 |
| Physical Therapists | Region | 17 (3%) | 14 (2%) | 542 (95%) | 573 | 886,092 | 1 to 1,546 |
| | State | 579 (16%) | 296 (8%) | 2,701 (76%) | 3,576 | 6,104,910 | 1 to 1,707 |
| Physical Therapy Assistants | Region | 9 (5%) | 8 (5%) | 157 (90%) | 174 | 886,092 | 1 to 5,092 |
| | State | 395 (33%) | 105 (9%) | 704 (58%) | 1,204 | 6,104,910 | 1 to 5,071 |
| Community Health Workers | Region | 6 (13%) | 0 (0%) | 42 (88%) | 48 | 886,092 | 1 to 18,460 |
| | State | 20 (10%) | 53 (25%) | 135 (65%) | 208 | 6,104,910 | 1 to 29,351 |

Public Health Workforce

Based in a variety of organizations that are part of a diverse and complex system, the public health workforce promotes and protects the health of communities.³⁴ Missouri has a decades-long history of efforts to transform the public health system, including efforts to normalize public health services across the state. For example, grassroots efforts by the #HealthierMO Initiative (HealthierMO, <https://www.healthiermo.org/>), include an analysis of Missouri’s public health system capacity titled *A Summary of Missouri’s Public Health System Capacity to Deliver the Missouri Foundational Public Health Services Model*: https://www.healthiermo.org/files/ugd/9bd019_f678e32c6fa24128958b9280f5f03450.pdf. While the Local Public Health Agency regions analyzed in the report do not fully align with Missouri AHEC regions, the analysis nonetheless provides a useful resource to better understand the region’s public health workforce.

³⁴ American Public Health Association. (2022, February 17). *What Is Public Health*. Retrieved from APHA.org: <https://www.apha.org/What-is-Public-Health>.

MHA Regional Workforce Report Summary

The Missouri Hospital Association (MHA) produces an annual statewide workforce report (<https://web.mhanet.com/media-library/2022-workforce-report/>) as well as regional profiles focused on the vacancy and turnover rates of health care professions working in hospitals. The WCMO AHEC region includes two counties from MHA’s Kansas City Region Profile (https://www.mhanet.com/mhaimages/workforce/2022/KC_Region_2022_WF.pdf) and two counties from MHA’s West Central Region Profile (https://www.mhanet.com/mhaimages/workforce/2022/WC_Region_2022_WF.pdf).

The professions with the highest vacancy rates in MHA’s Kansas City region include licensed practical nurse (LPN), sterile processing technician and respiratory therapist – certified. The region’s RN vacancy rate of 24.0% is higher than the state RN vacancy rate of 19.8%. In the West Central MHA region, the highest vacancy rates in hospitals are housekeeper, respiratory therapist – registered, and medical laboratory technician, while the RN vacancy rate (13.2%) is lower than the state.

In the Kansas City MHA region, the hospital professions with the highest turnover rates are occupational therapy assistant – certified, housekeeper and food service worker/dietary aid. Unlike the vacancy rates, the RN turnover rate in the region (19.7%) is lower than the state RN turnover rate (22.1%). The professions with the highest turnover rates are nurse assistants, housekeeper and food service worker/dietary aid. The RN turnover rate (26.4%) is higher than the state rate.

A regionalized analysis can help local and state policymakers determine the most productive strategies to stabilizing and growing the health care workforce. For example, if a region faces a high vacancy rate, investing in recruiting new entrants into the field might be a long-term approach whereas employee turnover challenges might be addressed through retention strategies such as increasing salary and/or enhancing benefits.

Table 9. WCMO AHEC Region compared to Missouri Hospital Association (MHA) Region

| West Central AHEC Region Counties | MHA Region |
|--|-------------------|
| Cass County | Kansas City |
| Jackson County | Kansas City |
| Johnson County | West Central |
| Lafayette County | West Central |

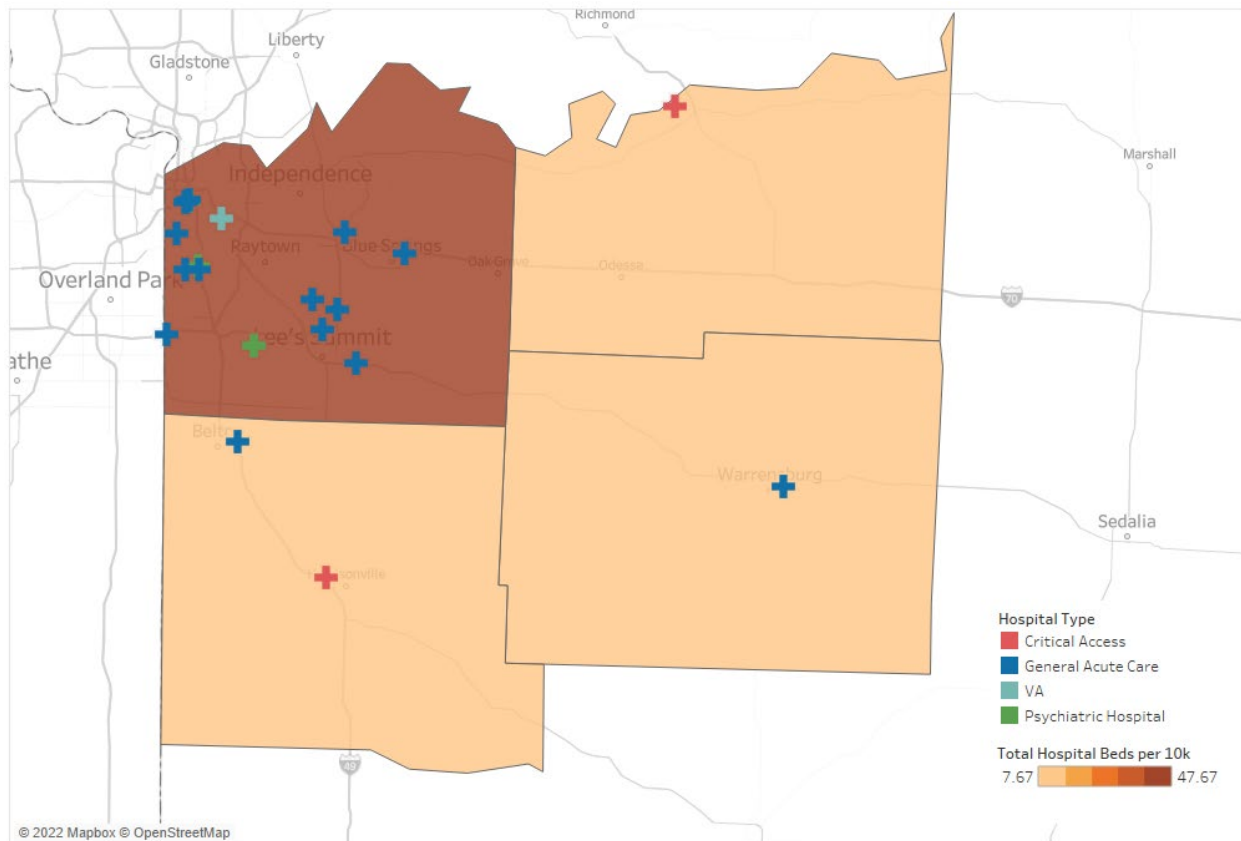
Health Care Infrastructure in the Region

Primary care, dental health care, and mental and behavioral health care, and the workforce needed to deliver services are all important aspects of Missouri’s health care landscape. Infrastructure is another important piece. FQHCs and Rural Health Clinics were mentioned earlier in this document, but it is also important to consider hospitals, long-term care facilities and even broadband access when examining Missouri’s health care infrastructure.

Hospitals

Figure 17 displays the geographic location and distribution of hospitals across the WCMO AHEC region, along with rates of total beds per 10,000 residents. Trauma Level I hospitals serve as comprehensive tertiary care facilities offering the most specialized services for every aspect of injury care. Trauma Level I care is provided by four hospitals in Kansas City (Jackson County). Level II hospitals can provide initial treatment for all injuries though some patients may need to be transferred to a Level I facility. Level II care is also available in Jackson County. Level III Trauma Centers can assess, resuscitate, and stabilize patients before transfer to Level I and II hospitals. Cass and Johnson counties both offer Level III care.

Figure 17. Hospitals and Total Beds Per 10,000 Residents



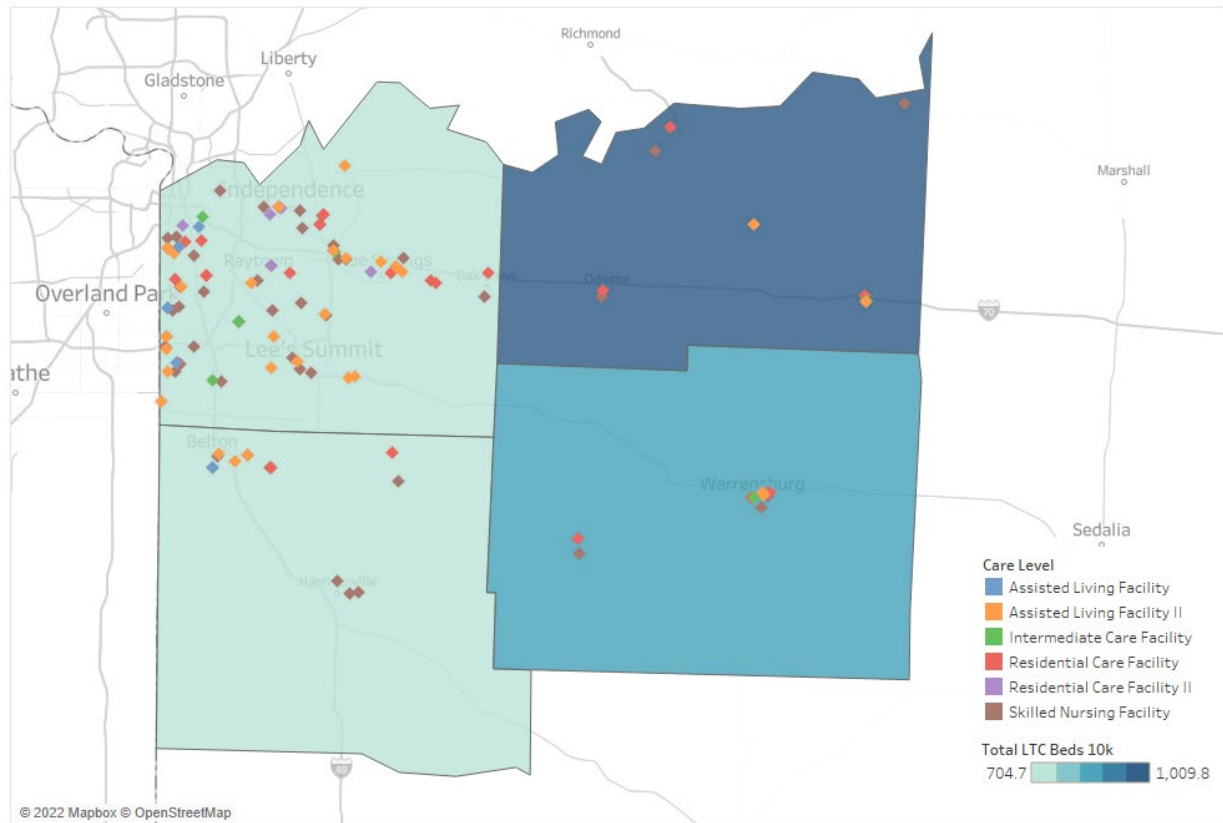
Source: American Community Survey (2015-2019 5 year estimates), MO Department of Health and Senior Services via Missouri Spatial Data Information Service (2022)

Note: Dynamic, interactive maps of medical facilities in all AHEC regions are available at <https://mohealthcareworkforce.org/indicator-dashboards/medical-facilities/>.

Long-Term Care Facilities

Figure 18 provides a visualization of long-term care facilities in the region, based on the rate of long-term care beds per 10,000 population age 65 or older in 2022. The WCMO AHEC region has 709.2 beds per 10,000 population age 65 or older.

Figure 18. Long-Term Care Facilities and Total Beds Per 10,000 Residents Age 65+



Source: American Community Survey (2015-2019 5 year estimates), MO Department of Health and Senior Services via Missouri Spatial Data Information Service (2022)

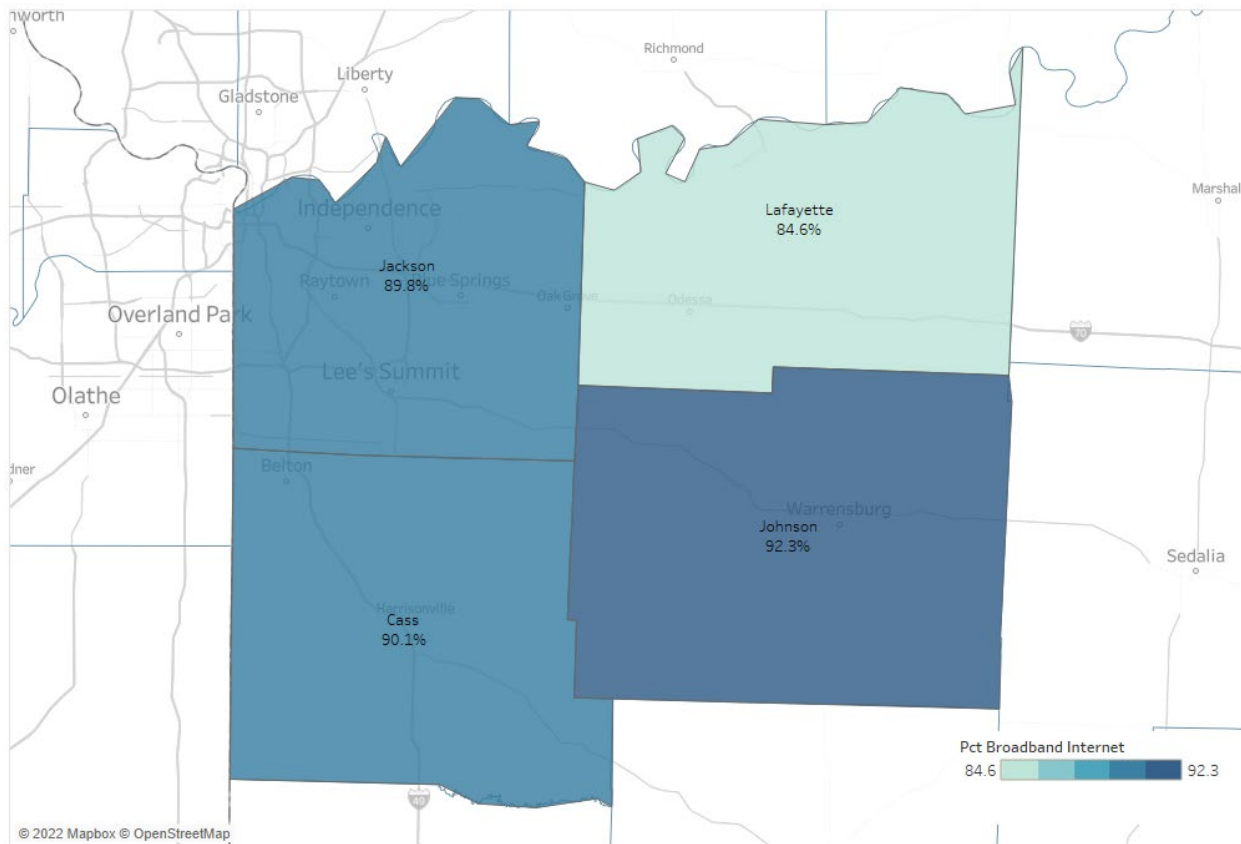
Note: Dynamic, interactive maps of medical facilities in all AHEC regions are available at <https://mohealthcareworkforce.org/indicator-dashboards/medical-facilities/>. Age 65 and older was used as the age category of interest due to Medicare eligibility. Care levels include:

- ALF: Assisted Living Facility
- ALF II: Assisted Living Facility with additional requirements for evacuation assistance
- ICF: Intermediate Care Facility
- RCF: Residential Care Facility
- RCF II: Residential Care Facility requiring a licensed Nursing Home Administrator
- SNF: Skilled Nursing Facility

Broadband Access

Telehealth coverage and utilization was greatly expanded during the COVID-19 pandemic. Many of these policy changes may become permanent to increase health care access.³⁵ Thus, broadband access is an important piece of health care infrastructure. Figure 19 displays the percentage of households with a broadband internet subscription at the county level within the WCMO AHEC region. Lafayette County has the lowest rate at 84.6%. One potential solution is extending the audio-only telehealth options introduced during the pandemic, allowing those without broadband internet to access some care with their phone line.³⁶

Figure 19. Percentage of Households with a Broadband Internet Subscription



Source: American Community Survey (2015-2019 5-year estimates)

³⁵ Koma, W., Cubanski, J., and Neuman, T. (n.d.) *Medicare and Telehealth: Coverage and Use During the COVID-19 Pandemic and Options for the Future*. Retrieved from <https://www.kff.org/medicare/issue-brief/medicare-and-telehealth-coverage-and-use-during-the-covid-19-pandemic-and-options-for-the-future>.

³⁶ Ibid 35.

West Central Missouri Area Health Education Center
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By the University of Missouri Center for Health Policy and Missouri AHEC Program Office
at A.T. Still University-Kirksville College of Osteopathic Medicine

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