

MISSISSIPPI

Rural Health Plan

2022



MISSISSIPPI STATE DEPARTMENT OF HEALTH

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2022



MISSISSIPPI STATE DEPARTMENT OF HEALTH



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Mississippi
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LIST OF ACRONYMS

- APRN** – Advanced Practice Registered Nurse
- CAH** – Critical Access Hospital
- CHCAM** – Community Health Center Association of Mississippi
- CMS** – Centers for Medicare and Medicaid Services
- CNA** – Certified Nursing Assistant
- EMS** – Emergency Medical Services
- EMT** – Emergency Medical Technician
- FLEX** – Medicare Rural Hospital Flexibility Program
- FORHP** – Federal Office of Rural Health Policy
- FQHC** – Federally Qualified Health Center
- IDD** – Intellectual/Developmental Disabilities
- HCAPHPS** – Hospital Consumer Assessment of Healthcare Providers and Systems
- HP 2030** – Healthy People 2030
- HPSA** – Health Professional Shortage Area
- HRSA** – Health Resources and Services Administration
- LPN** – Licensed Practical Nurse
- MCES** – Mississippi Center for Emergency Services
- MDMH** – Mississippi Department of Mental Health
- MNA** – Mississippi Nursing Association
- MQHC** – Mississippi Qualified Health Center
- MS** – Mississippi
- MSHA** – Mississippi State Hospital Association
- MSPHI** – Mississippi Public Health Institute
- MORHPC** – Mississippi Office of Rural Health and Primary Care
- MSDH** – Mississippi State Department of Health
- NHSC** – National Health Service Corps
- RHC** – Rural Health Clinic
- RWJF** – Robert Wood Johnson Foundation
- SDOH** – Social Determinants of Health
- SHIP** – Small Rural Hospital Improvement Program
- SORH** – State Office of Rural Health
- SRHP** – State Rural Health Plan
- TA** – Technical Assistance
- TS** – Technical Support

Executive Summary and Rural Health Improvement Strategies



EXECUTIVE SUMMARY

Background

The legislative authority for the Mississippi State Office of Rural Health (SORH) is contained in the Mississippi statute, Section 41-3-15, which specifies that the SORH operates under the Mississippi State Department of Health (MSDH). MSDH has organized the SORH to be administered by the Mississippi Office of Rural Health and Primary Care (MORHPC). As such, MORHPC is responsible for developing the Mississippi State Rural Health Plan (SRHP), which must satisfy SORH's legislative duty to develop and implement a SRHP plan, and to define rural areas and facilities in the state.

This 2022 SRHP update retains the format of the 2015 Plan, which also followed the Public Health § 41-3-15 functions, duties, and authority of the State Board of Health and SORH. As further mandated by the state code, this plan was prepared in consultation with the State Rural Health Plan Steering Committee. MORHPC invited state officials and members of the private healthcare community to be members of the SRHP Steering Committee in order to provide input on the plan update. A list of Steering Committee members is included as Appendix A.

Purpose and Objectives

The purpose of the SRHP is to document the status of health and healthcare services in rural Mississippi including health status outcomes, access to healthcare services, workforce needs and development, and healthcare systems. The following planning strategies have been identified and prioritized by the MORHPC staff and SRHP Steering Committee:

1. Update the 2015 data in order to identify trends in rural health outcomes.
2. Document the capacity of the rural health workforce and healthcare facilities, including rural hospitals and state and federally operated or supported outpatient clinics.
3. Increase our understanding of the rural healthcare system and identify challenges faced by rural health officials, administrators, and providers to develop systems and resources to improve the health status of Mississippi's rural residents.
4. Highlight MORHPC's programs and resources available to rural health providers and agencies.
5. Identify action items that are within the scope and role of MORHPC to improve rural health outcomes.

Planning Process

MORHPC contracted with the Mississippi State Public Health Institute (MSPHI) to assist with compiling and authoring the plan. MSPHI completed the following activities in support of SRHP:

1. 2015 SRHP data update: The 2020-2021 data was reformatted in tables alongside the 2015 data to illustrate changes and trends.
2. SRHP Steering Committee member recruitment: The Steering Committee included representation from state health officials; private nonprofits in the healthcare arena specializing in hospital, clinic, and health workforce areas; and individuals with expertise in healthcare strategic planning and finance.
3. Stakeholder Survey: Using Survey Monkey, MSPHI developed a survey, based on baseline data from 2015 SRHP and 2020 data updates, that was fielded to the Steering Committee to provide input on Mississippi's emerging rural health care challenges and priorities; and, to provide strategies to advance rural healthcare facilities and workforce and to improve the health status of rural residents.

4. Working Groups (MOHCs): MSPHI utilized the stakeholder survey findings and data updates to prepare a preliminary plan draft that was then distributed to the Steering Committee for feedback during five working group sessions. Working group sessions were organized by topics and expertise. The topics included:
 - a. Mississippi Qualified Health Centers, also known as Federally Qualified Health Centers (FQHCs)
 - b. Rural healthcare infrastructure, systems, and rural health networks
 - c. Rural health needs, emergency services, and long-term care services
 - d. Rural health disparities, social determinants of health, and strategies to achieve rural health equity
 - e. Rural health workforce and workforce training

2022 Rural Health Priorities

The following list of 2022 rural health priorities were identified from feedback from the Steering Committee and the MORHPC staff.

1. High transmission of infectious disease, including COVID-19.
2. High poverty and low educational levels
3. Lack of infrastructure to facilitate access to health services, including transportation and broadband to support expansion of telehealth services and educational programs in rural areas
4. High morbidity and mortality from chronic diseases
5. High prevalence of mental illness
6. Lack of access to adequate health insurance or no health insurance
7. Rural health disparities
8. Poor access to healthcare services including primary care, emergency care, and trauma care
9. Underutilization of rural healthcare networks as a systems-improvement strategy



STATE RURAL HEALTH PLAN IMPROVEMENT STRATEGIES

Introduction

MORHPC selected the following strategies based on Steering Committee feedback. The action items are primarily categorized by rural health systems; health workforce, enhanced mental health services for the elderly, health innovations through telehealth technologies, rural health equity, and rural hospitals.

Rural Health Systems

Emergency Services

- Identify federal funding designed to enhance emergency medical systems, workforce, and training.
- Increase awareness of emergency service needs in rural areas.
- Assist hospitals with the development of comprehensive community needs assessments, ensuring the incorporation of strategies to promote equitable emergency services.

Rural Healthcare Networks

- Provide and promote rural healthcare network development by hosting events to promote new partnerships and provide training on rural network development.
- Identify both geographical and conceptual gaps in access to care that could be augmented by rural health networks.
- Engage a consortium of key providers to utilize a data-driven decision-making process to identify gaps in services.

Health Workforce

Physician Shortage

- Assist overburdened rural providers through facilitating locum tenens arrangements with workforce programs.

Nursing Shortage

- Conduct regional workshops that support recently trained Certified Nursing Assistants (CNAs) with completing their certification process.

Mental Health Provider Shortage

- Partner with Mississippi Qualified Health Centers (MQHCs) and the Mississippi Department of Mental Health to recruit and place mental health counselors in community settings including long-term care facilities.
- Host convenings and training opportunities to encourage tele-mental health expansion.

Enhanced Mental Health Services for the Elderly

- Collaborate with the Nursing Corps, National Health Service Corp, local MQHCs, and other programs to increase the number of mental health professionals placed in mental health professional shortage areas.
- Encourage partnerships between the above agencies to recruit and place mental health therapists in rural longterm care facilities located in rural areas.

Health Innovations through Telehealth Technologies

- Support the expansion of broadband to remote rural areas to lay a foundation for innovative health systems expansion through telehealth.
- Incorporate telehealth solutions into local planning activities.
- Host convenings and webinars to promote telehealth solutions in care delivery and medical education.
- Work with local health providers and infrastructure officials to develop and expand telehealth services, especially in the areas of emergency and mental healthcare.
- Increase awareness of telehealth costs by facilitating a financial analysis of investment and ongoing maintenance of telehealth technology.

Promoting Rural Health Equity through Planning and Systems Development

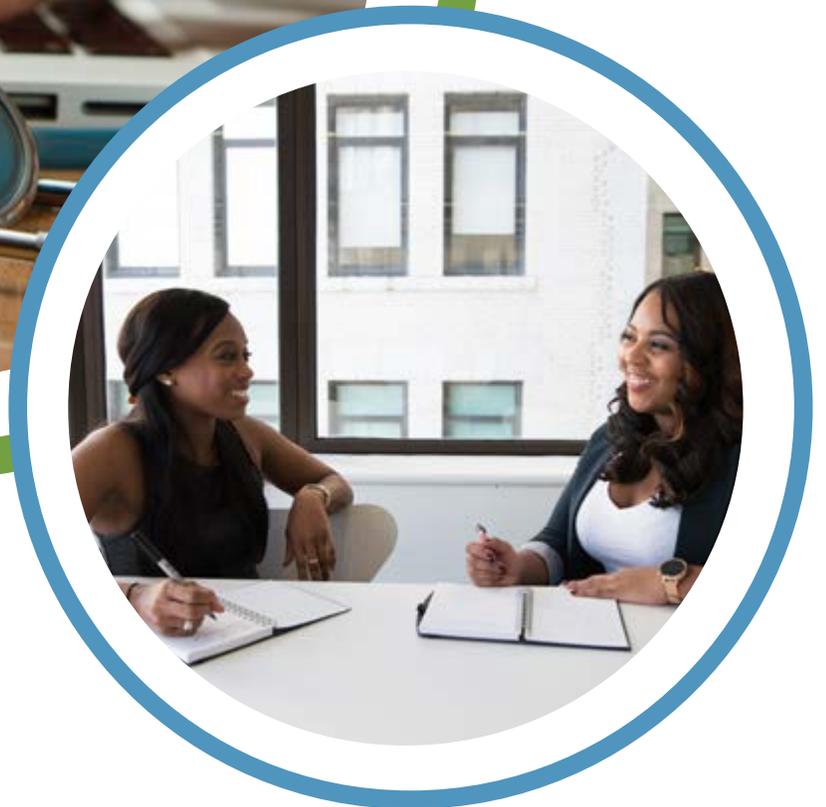
- Identify existing gaps in service delivery and share this information with rural leaders and planners.
- Engage existing private and public rural health providers in collaborative efforts to develop and enhance the community health system to address the needs of all community members, focusing on eliminating health disparities in vulnerable populations.
- Utilizing the Robert Wood Johnson Foundation (RWJF) County Health Rankings to establish baseline scores and the Healthy People 2030 health objectives to establish goals, assist county health officials, administrators, and residents with establishing community-specific plans to address and reduce health disparities in rural counties.
- Conduct a planning session to devise a targeted strategy or strategies to address the negative health effects of occupational hazards on poor and vulnerable workers including African Americans, Latinos, and Vietnamese.
- Coordinate with Medicare Rural Hospital Flexibility Program (FLEX) hospitals to conduct community health needs assessments to ensure that these assessments specifically address reducing health disparities.

Rural Hospitals

- Conduct focus groups to determine reasons why critical access hospitals are not fully participating in the FLEX program.
- Conduct trainings and with hospital partners to promote broader participation in FLEX.



Introduction, Purpose and State Health Profile



ABOUT MORHPC

The Mississippi State Office of Rural Health and Primary Care (MORHPC) provides technical assistance (TA) to different audiences to strengthen the rural health care delivery system, increase access to care and improve health outcomes in rural communities. MORHPC accomplishes this by collecting and disseminating health-related information, coordinating state rural health resources and activities; providing TA to rural health providers, communities, and officials; encouraging the recruitment and retention of health professionals to rural communities; and strengthening state, local, and federal partnerships. The COVID crisis resulted in an increase in technical support to providers and communities (See Table 3).

Table 1. Information Dissemination Methods

We Disseminate Information Through:			
	2018-2019	2019-2020	2020-2021
Listserv	103	103	6,168
Newsletter	10,000	8,000	2,678
Website hits	1,048	1,417	1,130

Table 2. Technical Assistance Mediums for MORHPC

We Provide Technical Assistance (TA) Via...					
	2016-2017	2017-2018	2018-2019	2019-2020	2021-2022
Face to Face	31	20	14	25	356
Telephone/Email	54	65	68	50	73
Webinars	3	7	6	4	31
Other	61	43	28	2	174
Total	149	135	116	81	634

Table 3. Entities receiving technical assistance from MORHPC

TA is Provided to These Types of Partners & Stakeholders					
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Hospitals	12	12	16	57	20
Clinics	14	17	10	5	65
Gov. Officials	2	28	5	20	7
Agencies	56	20	5	5	4
Associations	26	21	11	11	5
Providers	4	8	4	5	55
Networks	1	1	5	7	57
Communities	0	0	0	0	140
Acad. Insts.	11	11	14	14	22
Emergency Ser.	1	0	0	0	22
Other	15	17	10	15	15
Total:	142	135	80	139	412

During 2020/21
TA spiked **93%**
due to COVID

Table 4. Topics for MORHPC TA

Requested TA Topics for MORHPC
• Behavioral Health
• Community Development
• COVID - 19
• Grant Writing
• Needs Assessment
• Older Adult Services
• Opioid Information and Resources
• Population Health
• Rural Health Network
• Telehealth
• Workforce Issues

Source for Tables 1-4: Internal SORH Report, Available on Request

MORHPC FUNDING

During 2021, MORHPC received \$16,966,016 for SHIP hospitals for COVID-related mitigation and services.

Figure 1.

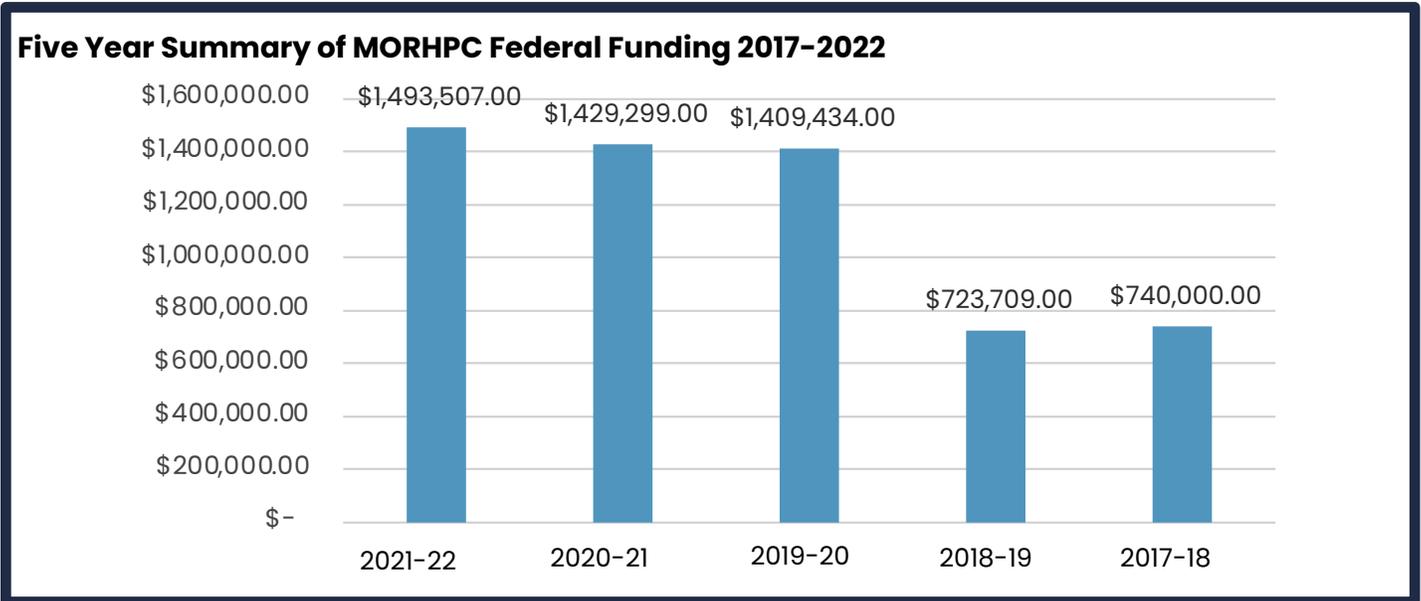
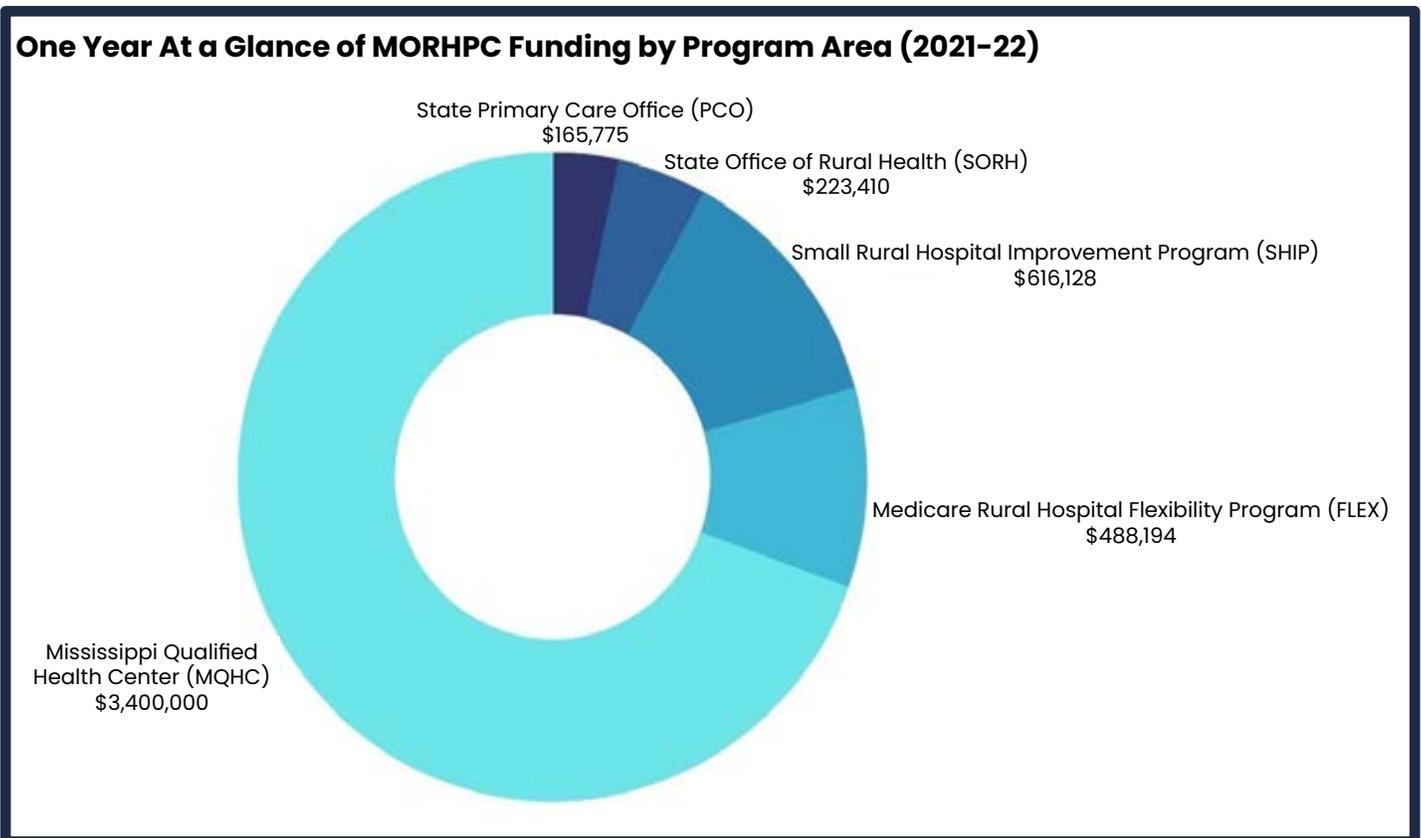


Figure 2.



Source for Figures 1 & 2: MORHPC Office. Figure 1 totals do not include funding for the MS Qualified Health Center Grant Program.

SUBCHAPTER 1. INTRODUCTION AND PURPOSE

Rule 1.1.1.

Authorization of State Office of Rural Health Program

In 1990, the Mississippi State Legislature authorized MSDH to direct the State Office of Rural Health (SORH), under the auspices of the MS Office of Rural Health and Primary Care (MORHPC). The SORH was then tasked to develop and implement a state rural health plan (SRHP), including an operational definition of MS rural areas and facilities. The specific legislative authority for the SORH is contained in the Mississippi statute, Section 41-3-15. Additionally, the Federal Office of Rural Health Policy (FORHP) at the Health Resources and Services Administration (HRSA) periodically requires states to review and update its SRHP to guide program activities when seeking Medicare Rural Hospital Flexibility Program (FLEX) Program funding for assisting critical access hospitals (CAHs).



Rule 1.1.2.

State Rural Health Plan Steering Committee

The 2022 Mississippi SRHP follows the format of the 2015 Plan, with updates provided for the 2014 baseline statistics and new data added as appropriate. The plan was developed in partnership with the SRHP Steering Committee. The 2022 Steering Committee included representation from the Community Health Center Association of Mississippi (CHCAM), Mississippi State Department of Health (MSDH) Mississippi Hospital and Nursing Associations, and the Mississippi Public Health Institute (MSPHI). Steering Committee members provided subject matter expertise on Critical Access Hospitals (CAHs), the FLEX Program, Mississippi Qualified Health Centers (MQHC), and rural health clinics, infrastructure (eg. broadband, transportation, rural network development), and rural health workforce needs.

SUBCHAPTER 2. STATE PROFILE

Rule 1.2.1.

State Historic Information and Geographic Description

Mississippi is named for the Mississippi River that forms its western boundary and empties into the Gulf of Mexico. The name is roughly translated from Native American folklore meaning “Father of Waters.” Mississippi was organized as a territory in 1798 and was admitted as the 20th state to join the Union on December 10, 1817. David Holmes was chosen as the first governor of the state (Miss. Code Ann. § 41-3-15)

Rule 1.2.2.

Geographic Boundaries and Topography

Mississippi is bounded on the north by Tennessee, on the east by Alabama, on the west by Arkansas and Louisiana, and on the south by the Gulf of Mexico. Mississippi contains 47,715 square miles of area, mostly rural farmland. In the north, the large, fertile alluvial Delta was mostly swampland until the mid-1850s when, by the sweat of men and mules, some 300 miles of levees claimed this broad region. At the Delta’s eastern edge, the land suddenly changes from table flat to the rising bluff hills, stretching north into Tennessee and south into Louisiana. From Mississippi’s northeast hills southward, the land changes into rolling farmland, hardwood highlands, then red clay hills to fertile pasture lands, on to piney forest, eventually giving way to the man-made white sand beaches of the Gulf Coast.



Rule 1.2.3

Population Distribution and Demographics

Mississippi is a predominately rural state with an estimated population of 2,949,965 (US Census Bureau 2020). There are approximately 60 residents per square mile and 21.58% of the population resides in three counties: Hinds (237,085), Harrison (206,650), and DeSoto (182,001). Only one city in the state has a population exceeding 100,000, and that is the capital city, Jackson, MS. Only two additional cities have a population of at least 50,000: Gulfport (Harrison) and Southaven (DeSoto). Approximately 25% of the MS population is under 18 years old and 16.4% are age 65 or older; 56.4% of MS's population is non-Hispanic white and 37.8% is African American.

Rule 1.2.4

Poverty in Mississippi

The poverty rate of Mississippi is considerably higher than the national poverty rate with a median household income greater than 25% below the national average. Nearly 20% of Mississippians are living in poverty. Poverty is racialized in MS, with 46% of African American MS children in poverty compared to 15% white.

Rule 1.2.5 and Rule 1.2.6

Economic and Employment Trends

MS has the lowest ranking of any state on the Human Development Index (HDI), a numerical measure of health, education, and income (United Nations Development Program). MS's current HDI score of 0.866 lags behind that of the United States in the late 1980s. MS has the lowest life expectancy of any state; the highest rate of adults 25 or older who have not completed high school or earned a high school equivalency degree; and is among the lowest in average per capita income (\$23,121 in 2017 vs. \$32,397 for the U.S.).

Table 5. Mississippi Population and Demographic Information

	Mississippi 2020	US 2020	Mississippi 2008-2012 (Five Yr. Estimate)
Total Population	2,949,965 (.6%)	--	2,967,620
Percent Rural	51.2%	17.2%	--
Poverty Rate	18.7%	11.4%	22.3%
Median Age	37.7	38.1	36.0
Residents >65	16.4%	16.9%	12.9%
Males	48.5%	49.2%	48.5%
Females	51.5%	50.8%	51.5%
White (non-Hispanic)	56.4%	57.8%	--
Black (non-Hispanic)	37.8%	12.8%	--
Native American	0.6%	2.0%	--
Hispanic	3.4%	18.4%	--

Source: 2021 data from U.S. Census Bureau, Quick Facts; 2008-2012 data from the American Community Survey

Table 6. Mississippi Economic and Employment Data

Percent	MS 2020	US 2000	MS 2014
High School Graduation	88.4%* (2017-2018)*	88.6%	81.0%**
White H.S. Graduation	87.7% (2022)*	89.0%* (2019)	82.0%** (2011)
Hispanic H.S. Graduation	--	82.0%** (2019)	79.0%** (2011)
Black H.S. Graduation	79.7%** (2022)	80.0%** (2019)	69.0%** (2011)
Bachelor's Degree	22.8%	37.9%	-
Unemployment	6.4%*** (2022)	8.31%***	10.6%
Uninsured Rate	14.5%**** (2018)	--	17.5%***

*Graduation Rates, Mississippi Department of Education

** National Center for Education Statistics

***Unemployment Rates: U.S. Department of Labor, Bureau of Labor Statistics

****MS Unemployment Rate, W.K. Kellogg Foundation

SUBCHAPTER 2. STATE PROFILE



Figure 3. RWJF State Health Outcome Rankings by County

The Robert Wood Johnson Foundation’s (RWJF) County Health Outcome Rankings factor in selective measures impacting length of life (e.g. COVID-19, age-adjusted mortality, life expectancy, premature mortality, etc.) and quality of life indicators (physical and mental health measures; prevalence of chronic conditions). Light shades indicate better health outcomes. Source: 2022 State Report, Mississippi, County Health Rankings.

Rule 1.2.7 Key Health Measures as Indicators of Health Status

Mississippi is a medically underserved state with statistics that indicate poor overall health status statewide. Compared to national health data, Mississippi ranks highest in chronic disease rates and related factors.

Historically, health problems have often been attributed to individual-level, high-risk behaviors. While these behaviors (e.g. smoking, lack of physical activity, and poor nutrition) hold true, it is now well-established that contextual factors are just as, if not more, important in determining one’s health behaviors. Environmental factors, such as food deserts, exposure to air and soil toxins, exposure to occupational toxins, climate change resulting in natural disasters, and targeted messaging that promotes unhealthy and risky behaviors, can hinder good health.

Social determinants of health (SDOH) are the negative or positive conditions in which people are born, grow, live, work, and age. These factors can negatively influence health status and include a person’s access to health insurance and medical care, access to nutritious foods, a livable wage, quality education, a sanitary environment and reliable transportation.

SDOH have exacerbated health disparities among racial groups and in poor, underserved areas. They contribute to higher morbidity and mortality rates for cardiovascular disease, diabetes, obesity, infectious disease, teenage pregnancy, premature births, low birthweight, and infant mortality among these groups. These factors disproportionately influence rural populations of color. Table 7 includes key health indicators that result from these conditions. These same health indicators are prioritized by the Health Resources and Services Administration (HRSA) to determine health status.

Rule 1.2.8.

Rural Health Priorities

Health priority data from the 2015 SRHP is included in the two columns to the right of Table 7. Updated data for 2017–2019 is provided in the four columns to the left. The updated data highlight health disparities for non-Hispanic Blacks. This data points to the need for more targeted initiatives to address the needs of this population.

Rule 1.2.9

Mental Health Needs

The prevalence of mental illness, although difficult to assess, serves as a proxy for a need indicator for mental health services in a given population.

The Mississippi Department of Mental Health (MDMH) State Fiscal Year 2013 Annual Report estimated that 165,000 Mississippians would need mental health services. The 2022 World Population Review, indicated that 4.4% of adults in Mississippi had serious mental illness, compared to Wisconsin with less than 1% and Virginia with 5.5%.

Table 7: Mississippi Core Health Indicators

	2017–2019 Data				2014 Data	
	MS Rates	US Rates	Non-Hispanic White, MS	Non-Hispanic Black, MS	MS Rates	US Rates
Diabetes Prevalence, Adults 18+, Age-Adjusted	12.9 %	9.1%	11.1%	16.6%	12.1%	8.7%
<i>Source: United States Diabetes Surveillance System (cdc.gov), 2018</i>						
<i>Source: Chronic Disease Indicators (cdc.gov)</i>						
Mortality Rates from Heart Disease per 100,000	231.6	168.5	230.5	264.9	292.1	223.3
<i>Source: Stats of the State of Mississippi (cdc.gov), 2017</i>			<i>Source: Annual Mississippi Health Disparities and Inequities Report, 2015</i>		<i>Source: WONDER Database (wonder.cdc.gov)</i>	
Women Age 50+ (No Mammogram in Past 2 Years)	28.0%	22.0%	N/A	N/A	28.9%	23.0%
<i>Source: Breast Cancer Facts & Figures 2019-2020</i>					<i>Source: SMART: BRFSS City and County Data and Documentation (cdc.gov)</i>	
Adults Who Are Current Smokers	20.4%	14.2%	24%	18.8%	24%	19.6%
<i>Source: Map of Cigarette Use Among Adults, STATE System, CDC, 2019</i>			<i>Source: Adult Cigarette Smoking in Mississippi, 2018</i>			
Infant Mortality Rate/1000	8.71	5.8	5.9	11.6	10.5	6.8
<i>Source: Stats of the States – Infant Mortality (cdc.gov), 2019</i>			<i>Source: Stats of the State of Mississippi (cdc.gov), 2017 data</i>		<i>Source: WONDER Database (wonder.cdc.gov)</i>	
	MS Rate 2020	US Rate 2020	Non-Hispanic White, MS	Non-Hispanic Black, MS	MS 2014	US 2014 (other)
Children With Obese Weight Status Based on Body Mass Index for Age	22.3%	16.2%	16.5%	28.1%	21.9%	16.4%
<i>Source: Childhood Obesity, Aged 10-17, 2019-2020, (www.childhealthdata.org)</i>						
<i>National Survey of Children's Health (childhealthdata.org), 2017</i>						
Suicide Rate (Crude Rate per 100,000)	14.9	14.5	20.8	6.1	13.1	12.4
<i>Source: Americas Health Rankings Annual Report (www.americashealthrankings.org), 2019</i>					<i>WONDER Database (wonder.cdc.gov)</i>	
Percentage of Adults With a Visit to Dentist or Dental Clinic	57.7%	66.7%	59.7%	54.6.7%	56.8%	65.3%
<i>Source: Americas Health Rankings Annual Report (www.americashealthrankings.org)</i>						

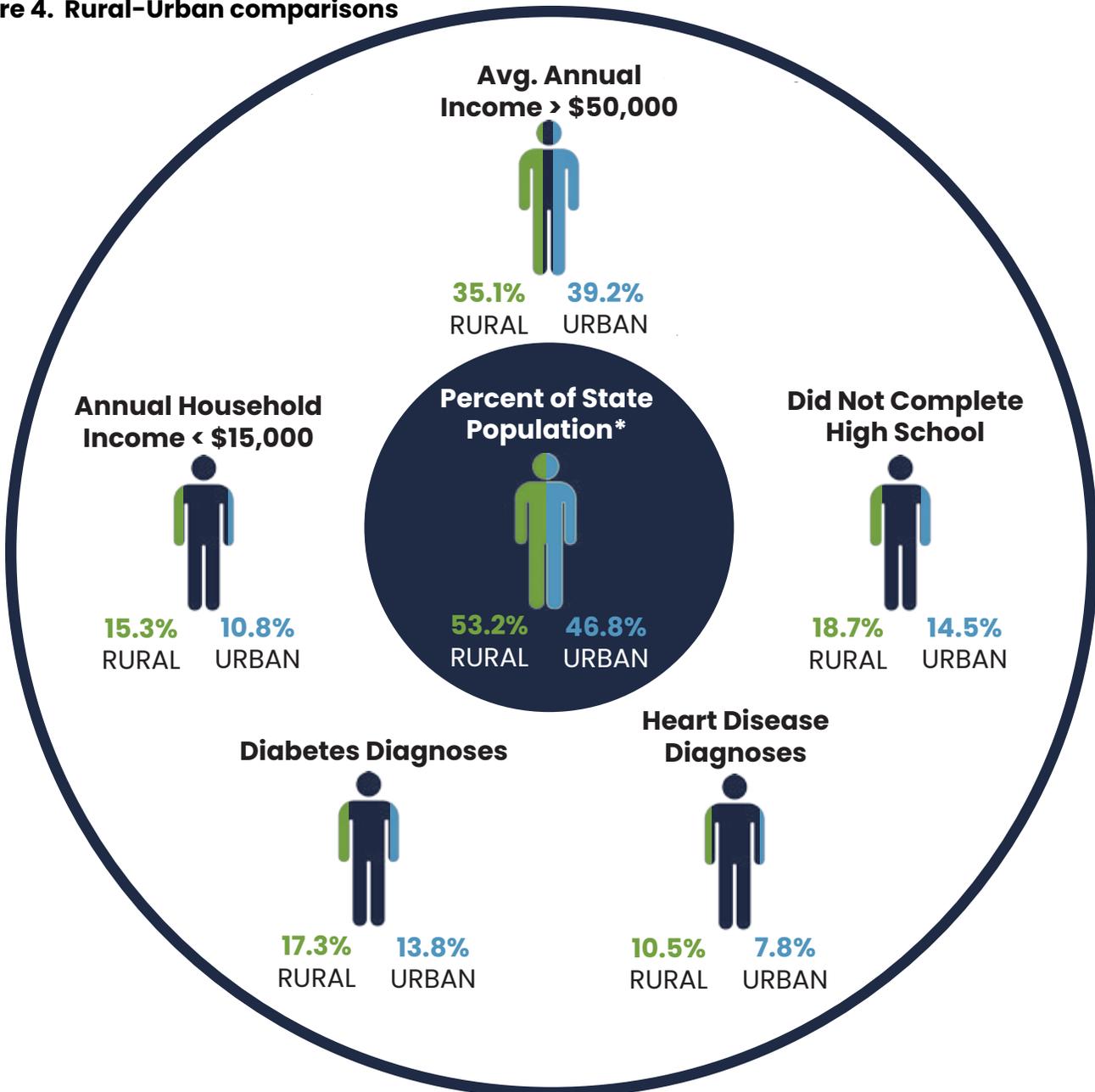
SUBCHAPTER 3. STATE RURAL AREA DEFINITION

Rule 1.3.1.

State Rural Definition. The state defines a rural area as: 1) a Mississippi county that has a population less than 50,000 individuals; 2) an area that is less than 500 individuals per square mile; or 3) a municipality of less than 15,000 individuals. Rural Mississippians bear a larger burden of higher poverty, lower income, lower education, and a higher disease burden.

There is also an uneven distribution of health providers that impairs rural access to healthcare services and negatively impacts health status.

Figure 4. Rural-Urban comparisons



Sources: Behavioral Risk Factor Surveillance System (2020 Survey). See Appendix E for more rural/urban differences.
* Health Resources Services Administration

Healthcare Systems



SUBCHAPTER 4. HEALTHCARE SYSTEMS IN MISSISSIPPI

Rule 1.4.1

Rural Health Facilities

Mississippi Office of Rural Health and Primary Care is committed to assisting communities in determining the best action plan to develop rural healthcare systems, including plans that improve access to healthcare services, reduce duplication of services, and develop and support rural healthcare networks. The Mississippi Public Health System is led by the Mississippi State Department of Health (MSDH).

Figure 5 illustrates the location of the main types of public rural healthcare facilities in Mississippi that comprise the rural healthcare infrastructure.

Rule 1.4.2

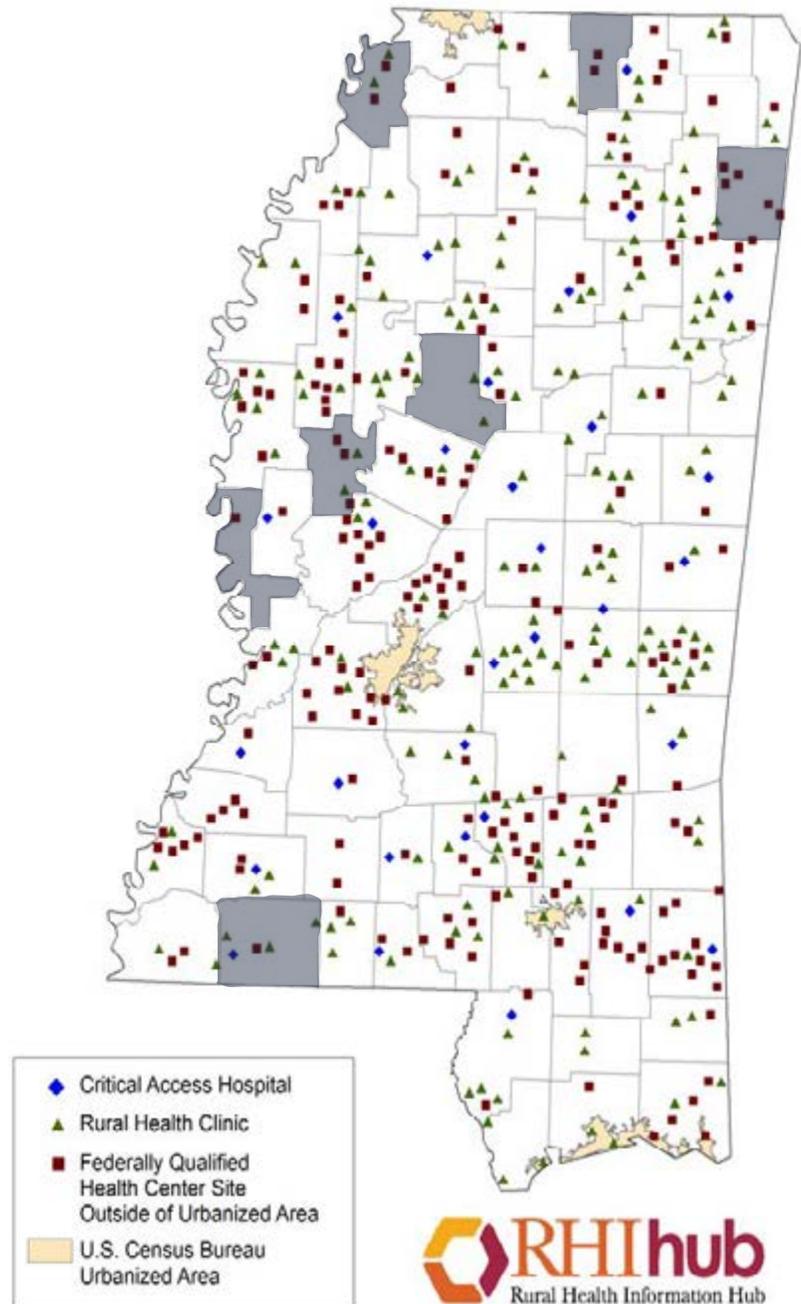
Hospitals

Mississippi has 111 hospitals, of which there are ninety-five (95) acute care, four (4) psychiatric, one (1) rehabilitation, one (1) ObGyn and ten (10) long-term acute care facilities (2015 State Rural Health Plan). Seven counties in the state, shaded in gray, do not have a hospital: Amite, Benton, Carroll, Humphreys, Issaquena, Itawamba, and Tunica.

Rule 1.4.3

Mississippi now has thirty-one (31) Critical Access Hospitals (CAHs) and 50 SHIP-eligible hospitals. The Small Rural Hospital Improvement Program (SHIP) is a federal grant program to support the viability of small rural hospitals.

Figure 5. Selected Rural Healthcare Facilities in Mississippi



Source(s): data.HRSA.gov, U.S. Department of Health and Human Services, April 2021

Table 8. Numbers of Mississippi Critical Access Hospitals and SHIP Eligible-Hospitals

	2022	2014
Critical Access Hospitals (Rule 1.4.3)	31	32
SHIP-Eligible Hospitals	50*	51

*Sites located outside of urbanized areas

Table 9. Numbers of Mississippi Local Health Departments, Rural Health Clinics and Mississippi Qualified Health Centers (MQHCs)

	2022	2014
Local Health Departments	86	80
Rural Health Clinics	186	159
Mississippi Qualified Health Center Sites	208	207

Table 10. 2015 vs. 2020 Rural Utilization of Mississippi Qualified Health Centers

	2020 MQHCs	2015 MQHCs
Unduplicated Counts	126,136	116,957
Non-Hispanic Blacks	76,029 65.0%	71,924 61.5%
Non-Hispanic Whites	41,570 33.0 %	39,106 33.4%
Hispanics	5,004 4.0%	3,876 3.3%
Medicaid Insured	26,081 20.7%	35,531 30.4%
Private Insurance	38,205 30.3%	28,978 24.8%
No Insurance	39,313 31.2%	35,224 30.1%

Rule 1.4.4

Local Health Departments

MSDH operates eighty (80) local health departments, one in every county except in Benton and Issaquena counties. Issaquena is combined with Sharkey county to create the Sharkey-Issaquena County Health Department. Over 100 clinics are operated through these local health departments.

County health departments provide immunizations, family planning, Special Supplemental Food Program for Women, Infants and Children (WIC), tuberculosis treatment and prevention services, sexually transmitted infection disease services (including for HIV/AIDS), and other communicable disease follow-up. Child health and maternity services are available according to county need. The number and type of staff vary according to the need and resources available; however, every county provides all general public health services.

Rule 1.4.5

Rural Health Clinics (RHCs)

RHCs provide care in areas designated by the U.S. Department of Health and Human Services (DHSS) as medically underserved. RHCs can be staffed by physicians or mid-level providers including physician assistants (PAs) or advanced nurse practitioners (ANPs). RHCs that are staffed by mid-levels must be overseen by a physician located within 15 miles. RHCs may be free-standing and owned by physicians, clinic corporations or hospitals.

Rule 1.4.6

Mississippi Qualified Health Centers (MQHCs)

MQHCs, also known as Federally Qualified Health Centers (FQHCs), were formerly called Community Health Centers. MQHCs are federally subsidized, nonprofit corporations that serve medically underserved populations designated by DHSS. FQHCs provide medical, dental, radiology, pharmacy, nutrition, health education, and transportation services.

SUBCHAPTER 4. HEALTHCARE SYSTEMS IN MISSISSIPPI

Rules 1.4.7.

Long-Term Care

Mississippi's long-term care (nursing home and home health) facilities and programs primarily serve those with disabilities and the elderly population. Current projections for the state place the number of people in this age group at approximately 642,506 by 2025, with more than 186,327 disabled in at least one essential activity of daily living.

Rule 1.4.8

Disability

The risk of becoming frail, disabled, and dependent dramatically increases with age. While the average length of life has increased, people are often living longer with disabling and incurable chronic conditions that compromise the quality of life. Aged individuals may become dependent upon professional care for years prior to death.

Rule 1.4.9

Nursing Home Capacity

The number of nursing homes in Mississippi has increased by one since 2014. Conversely, there has been a decrease in number of home health agencies, but an increase in the number of branches, suggesting consolidations and mergers. The forecasted increase in the elderly population by 2025 in need for elder care suggests the need for investment in creative solutions.

Table 11. Capacity of Mississippi Nursing Homes and Home Health Agencies

	2022	2014
Nursing Home Facilities	211	210
Home Health Agencies	49	61



Approximately
642,506
PEOPLE
in need
of long
term care by
2025

The University of Mississippi Medical Center, Center for Emergency Services, has been engaged in disaster planning and improved emergency response communications and coordination during large-scale and small scale-events. The Center also provides education and training for personnel and health professionals; critical care support; and research to improve clinical treatment of patients.

Table 12. Hospitals Participating in the Mississippi Trauma Care System

	May 2020	August 2013
Level I Trauma Centers	4	4
Level II Trauma Centers	3	4
Level III Trauma Centers	16	15
Level IV Trauma Centers	62	60
Burn Centers	2	1
Ground EMS Providers	N/A	58
Air EMS Providers	N/A	17
Total	87	84

Source: Mississippi (MS) Trauma Care System Foundation, Inc.

Note: Level I Trauma Centers serving MS are located in Jackson (1), Memphis (2) and Mobile (1)

Mississippi’s rural nature accentuates the need for an integrated, statewide trauma system to ensure that rural emergency patients are transported in the least amount of time to a hospital with the capabilities to care for the patient’s injuries.

Rule 1.4.10

Emergency Medical Services (EMS)

Quick access to emergency healthcare in rural areas is problematic. The Federal Emergency Services Act of 1973 and the Mississippi EMS Act of 1974, along with subsequent amendments, authorized MSDH to create an Office of Emergency Medical Services (EMS). EMS licenses all ambulance services; requires specific equipment and standards; and provides training, certification and technical assistance for emergency medical technicians (EMTs) and other medical first responders. They also provide critical emergency response data that informs the state in both improved response efforts and strategic funding requests.

Rule 1.4.11

Training of Emergency Medical Personnel

Mississippi requires all ambulance drivers to complete an approved driver certification (EMS-D), which is inclusive of academic, clinical, and practical training. All EMTs, both advanced and basic levels, must complete a National Highway Safety and Traffic Administration training program. Upon completion, students must pass the National Registry for Emergency Medical Technicians test and receive their national certification before applying for Mississippi certification.

Rule 1.4.12

With the passage of legislation during the 1991 Mississippi Legislative Session, the MSDH was designated as the lead agency to a develop trauma care plan for the state. The primary goals of the Mississippi Trauma Care Program is to provide the architecture for a trauma system which will decrease morbidity and mortality from traumatic injury.

Rule 1.4.13

Mississippi Trauma System of Care

The 1991 Mississippi Legislative Session authorized MSDH to develop the Mississippi Trauma System Care Program to decrease morbidity and mortality from traumatic injury.

Rule 1.4.14

Using a multi-disciplinary approach following the patient from pre-hospital to rehabilitation, trauma centers provide care regardless of the patient’s financial status.

SUBCHAPTER 4. HEALTHCARE SYSTEMS IN MISSISSIPPI

Rule 1.1.15

Mental Health

The Mississippi Department of Mental Health (MDMH) administers programs for mental illness, substance use disorders, and intellectual/developmental disabilities (IDD). Programs have not changed appreciably from 2015 to present.

MDMH provides a network of services through three major components: state-operated programs, regional community mental health/mental retardation centers, and nonprofit service agencies/organizations. The state-operated programs include four state comprehensive behavioral health programs, six IDD regional programs, a mental health community living program, and two specialized programs for adolescents.

These programs serve designated counties or service areas and provide inpatient psychiatric, chemical dependence, forensic, limited medical/surgical hospital services, and intermediate care program services for persons with intellectual and developmental disabilities. Nursing facility services are provided on the grounds of two of the state's comprehensive psychiatric facilities. The MDMH certifies, monitors, assists and contracts with community agencies to provide a range of services for persons with developmental disabilities.

Table 13. Mississippi State and Regional Mental/Behavioral Health Programs FY 2021

	2022	2015
Comprehensive Behavioral Health State Programs	4	4
Intellectual Developmental Disability Regional Programs	6	5
Specialized Programs for Adolescents	2	2
Regional centers with county governing authorities	13	15

Tele-Mental Health Services

Telehealth technology has provided a break through in mental health service delivery. The privacy provided by this treatment modality has reduced the stigma associated with treating mental illness; and tele-health has increased access in rural areas without sacrificing quality. The overall result has been an increase in compliance and better outcomes.

Rural Health Networks

Rural health networks or partnerships have developed over the past several decades as a strategy for linking complementary services, such as hospitals and clinics, to enhance service delivery and reduce costs. These partnerships can smooth the referral process, enhance continuity of care, reduce duplication of services, provide cost-shaving opportunities through sharing health promotions and marketing costs, improve interagency communications and data sharing, and overall enhance the effectiveness of services.

Rural networks that include regional or out-of-state healthcare members can retain patients and dollars in the community. An example is primary care clinics utilizing a regional or out-of-state imaging center.

Federal funds are available for network development, and recent funding goes further to address social determinants of health through integrating non-health partners including housing, transportation, and education sectors.

RURAL HEALTH SYSTEMS FINDINGS

Three priorities emerged from the SRHP's discussion on rural health systems in the areas of trauma and emergency medical services, rural health networks, and mental health services.

Trauma and Emergency Medical Services

A. Issues, Challenges, and Opportunities

A shortage of emergency personnel, including emergency medical technicians and equipment (e.g. ambulances) is resulting in increased wait times for responses to rural medical emergencies. The impact of the personnel shortage is exacerbated by the need for better communications between the EMS personnel and trauma centers. Another unrelated issue that burdens emergency services is that community residents who are not connected to a regular provider or who may be uninsured frequently utilize emergency rooms as a primary care provider.

B. Workgroup Recommendations

- C. Create new staffing models to improve efficiencies, supported by staff training.
- D. Promote the use of rural health clinics and MQHCs as primary care alternatives to emergency rooms as outpatient models.
- E. Update the trauma registry to improve performance and reduce required hospital resource.
- F. Incorporate and expand the emerging role of telehealth in trauma care.
- G. Establish a data-bridge to link EMS and trauma center data.
- H. Improve insurance reimbursement for trauma services.
 - I. Increase the availability of instrument-rated helicopters and ground transport.

C. What Can MORHPC Do?

1. Identify federal funding to increase emergency medical systems, workforce, and/or staff training.
2. Raise awareness of emergency service needs in rural areas.
3. Collaborate with rural hospitals and providers towards the development of comprehensive community needs assessments, providing additional input on the needs of emergency services, especially impacting vulnerable populations.

Rural Healthcare Networks

A. Issues, Challenges, and Opportunities

Analysis provided by The Flex Monitoring Team (see page 35 for detailed analysis) indicates that Mississippi's critical access hospitals belonging to a rural healthcare network are more effective in providing community outreach, health promotion, indigent care, and hospice services. There are clear advantages and benefits associated with existing Mississippi rural healthcare networks, particularly within the hospital sector. For example, by referring patients to local imaging centers and laboratories, rural networks can stimulate the local economy. Conversely, network arrangements which include larger out-of-state medical centers can use telehealth technology to provide access to specialty care for rural patients closer to home.

RURAL HEALTH SYSTEMS FINDINGS

B. Workgroup Recommendations

1. Expand rural health networks in Mississippi.
2. Investigate developing telehealth networks with larger healthcare centers to improve emergency care services.
3. Work with local providers to explore network development, linking rural outpatient providers and hospitals to enhance specialty care such as regional imaging centers.

C. What Can MORHPC Do?

1. Determine both geographical and conceptual gaps in access to care.
2. Provide and promote rural network development by facilitating partnership and training opportunities.

Mental Health

A. Issues, Challenges, and Opportunities

Mental health needs across the state, including in rural communities, have grown exponentially, especially as the COVID epidemic has increased loss and isolation. At the same time, seeking mental health services has become less stigmatizing which is also increasing demand. The result is an explosion in the need for services and a shortage of mental health providers. Mental health needs are more effectively addressed when integrated into all levels of care through screening and assessment, and mental health services are most effective when rendered closest to the homes of residents.

B. Workgroup Recommendations;

1. Train more mental health providers.
2. Cross train primary care providers to effectively screen for mental, behavioral health, and substance use disorders.
3. Continue to develop tele-mental health programs and services. Tele-mental health services have emerged as an effective innovation and promising model for expanding care.

C. What Can MORHPC Do?

1. Prioritize recruitment of behavioral and mental health professionals.
2. Host networking events and trainings to promote tele-mental health expansion.

Health Workforce



SUBCHAPTER 5. HEALTH WORKFORCE

Rural Health Workforce Programs in Rural Mississippi

- **The Appalachian Regional Commission (ARC)** offers the J-1 Visa Waiver Program to physicians who commit to serving for three (3) years in underserved, rural areas of the Appalachian region, waiving the foreign medical residency requirement and allowing them to remain in the United States.
- **The Delta Regional Authority (DRA)** offers a Delta Doctors J-1 Waiver Program in an eight-state region consisting of 252 counties, waiving the foreign medical residency requirement to those who commit to serving three years in a Health Professional Shortage Area (HPSA) or Medically Underserved Area (MUA) and allowing them to remain in the United States, provided they meet the Delta Doctors program requirements.
- **The National Health Service Corps (NHSC)** provides scholarships and student loan repayment to health care professionals in exchange for a service commitment to practice in designated areas across the country where shortages of health care professionals exist. The NHSC is a Bureau of Health Workforce Program.
- **National Rural Recruitment and Retention Network (3RNET)** is the most trusted resource organization for health professionals seeking careers in rural and underserved communities. The 3RNET program connects health care professionals with the right jobs. They work through fifty-four (54) Network Coordinators to create a “hub” for jobs in rural and underserved areas across the country.
- **The Mississippi Conrad State 30 J-1 Visa Waiver Program** offers a J-1 Visa waiver to foreign physicians who commit to serving for three (3) years in an underserved area of Mississippi, waiving the foreign medical residency requirement, and allowing them to remain in the United States.
- **The National Interest Waiver** is an employment-based, second-preference Worker Visa Preference Category (EB-2) program. It allows individuals of exceptional ability and those who are members of professions holding advanced degrees to obtain a green card (United States permanent residence). The Physician National Interest Waiver may be granted by the United States Citizen and Immigration Services to a physician that agrees to work for a period of five (5) years in a designated underserved area.
- **Nurse Corps**, a Bureau of Health Workforce Program, helps address health care needs in underserved communities and supports the development of future nursing workforces in exchange for a commitment to either work at eligible health care facilities with a critical shortage of nurses or serve as nurse faculty in eligible schools of nursing. The Nurse Corps offers RNs and APRNs substantial financial assistance to repay a portion of their qualifying educational loans in exchange for full-time service either at a Critical Shortage Facility (CSF) or an eligible school of nursing.

Rule 1.5.1

Essential health service delivery requires an adequate supply and appropriate distribution of fully qualified physicians, nurses, and other healthcare personnel. High quality healthcare services depend on the availability of competent healthcare personnel in sufficient numbers to meet the population’s needs.

Rule 1.5.2

Health Professional Shortage Areas (HPSAs) Designations

There have been substantial increases in primary care, dental health, and mental health HPSA designations since 2014. In 2014, 74% of primary care and 77% of dental HPSAs were single county designations.

Figure 6. 2021 Mississippi Rural Health Professional Shortage Areas Designation Types, Source: HRSA



SUBCHAPTER 5. HEALTH WORKFORCE

Field Strength Report

Field strength refers to the total number of National Health Service Corps (NHSC) and Nurse Corps practitioners employed at a program-approved site as of September 30th of each fiscal year. This number is pulled at the same time every year given that numbers fluctuate due to changes in employment status, program compliance, and differences in the individual award start and end dates.

The Mississippi Office of Rural Health and Primary Care (MORHPC) and the Nurse Corps have had very active and successful recruitment and placement of providers in rural areas. The Nurse Corps has had a significant increase in placements of advanced nurse practitioners in rural primary care settings. MORHPC has significantly increased placements of licensed clinical social workers and nurse practitioners for mental health.

Table 14. Rural Vs. Urban Field Strength: 2020 Mississippi Placements

Provider Type	Clinical Discipline	2020	2019	2020	2019
		Number Rural Placements		Number Non-Rural Placements	
Dental	Dental	1	2	2	2
	Registered Dental Hygienist	1	1	--	1
Mental Health	Licensed Professional Counselor	24	20	3	3
	Licensed Clinical Social Worker	3	1	3	1
	Nurse Practitioner	--	5	--	--
	SUD Counselor	2	--	--	--
	Marriage and Family Therapist	--	--	--	1
	Health Service Psychologist	1	--	1	2
	Registered Nurse	--	--	--	--
	Physician Assistant	1	--	--	--
	Registered Nurse	1	--	--	--
Nurse Corps	Nursing Faculty	2	1	1	--
	Nurse Practitioner	8	--	--	5
	Registered Nurse	2	2	2	5
	Nurse Anesthetist	1	--	--	--
Primary Care	Nurse Practitioner	49	47	22	18
	Physician	10	10	5	4
	Physician Assistant	2	3	2	1
Total Field Strength		108	92	46	42

Rule 1.5.3.

Primary Care Medical Providers

There was a 3.3% increase in licensed physicians from 2013 to 2021. This increase was only slightly more than the increase in population, which was less than 1 percent. Although there was an 8.8% increase in Internal Medicine physicians, the percent of family practitioners and general practitioners both declined by 1% and 21.6%, respectively. This trend is not supportive of the need for dramatic increases in primary care providers.

Rule 1.5.4.

Dental Providers

There was a 54.0% increase in dentists from 2013 to 2021.

Table 15. Number of Active Mississippi Primary Care Medical and Dental Providers

	2021	2013
Medical Doctors	5,688	5,499
Osteopaths	533	350
Podiatrists	67	67
Primary Care	2,375 (42%)	2,267 (41%)
Family Practitioners	758	765
General Practitioners	69	88
Internal Medicine Physicians	741	681
OB-Gyns	317	327
Pediatricians	490	406
Dentists	1,620 Licensed (1,450 Active)	1,051 Licensed (1,025 Active)

SUBCHAPTER 5. HEALTH WORKFORCE

Table 16. Number, Practice Location, and Types of Nurses in Mississippi

	2020	% Increase from 2012	2012
Total RNs	52,106	20.9%	43,103
Full Time or Part-Time RNs by Practice Location	42,088 (80.8%)	19.3%	35,266 (86.0%)
Hospital-Based	21,606 (41.5%)	5.7%	20,433 (59.0%)
Community, Public, or Home Health	3,781 (7.2%)	5.1%	3,598 (10.0%)
Physician Offices	2,654 (5.1%)	6.2 %	2,499 (7.0%)
Nursing Homes	2,326 (4.5%)	22.7%	1,895 (5.0%)
Diploma	3,945	18.6%	1,378
Associates	20,164	11.4%	18,102
Baccalaureate Non-Nursing	3,996	207.4%	1,300
Baccalaureate Nursing	14,612	46.7%	9,961
Masters Non-Nursing	Not listed	--	684
Masters Nursing	8,313	134.0%	3,549
Doctorate	1,706	482.3%	293

Source: Mississippi Board of Nursing

Rule 1.5.5. Nursing

Updated nursing capacity data was obtained from the Mississippi Board of Nursing for FY 2020. The increase in nursing capacity from 2012 to 2020 is extraordinary, particularly among baccalaureate nursing and master's level programs; however, the percent of nurses by practice location in 2020 closely approximated those from 2012 (See Table 16).

Although total RNs increased by 20.9% from 2012 to 2020, the number has not kept pace with the needs in hospitals and in the long-term care area. (See Figures 7-10).

Nursing homes experienced the largest increase in nurse employees from 2012 to 2020 (22.7%). In comparison, there was a 5-6% increase in nurses working in hospital-based, community-based, and physicians' offices.

Licensed Practical Nurses

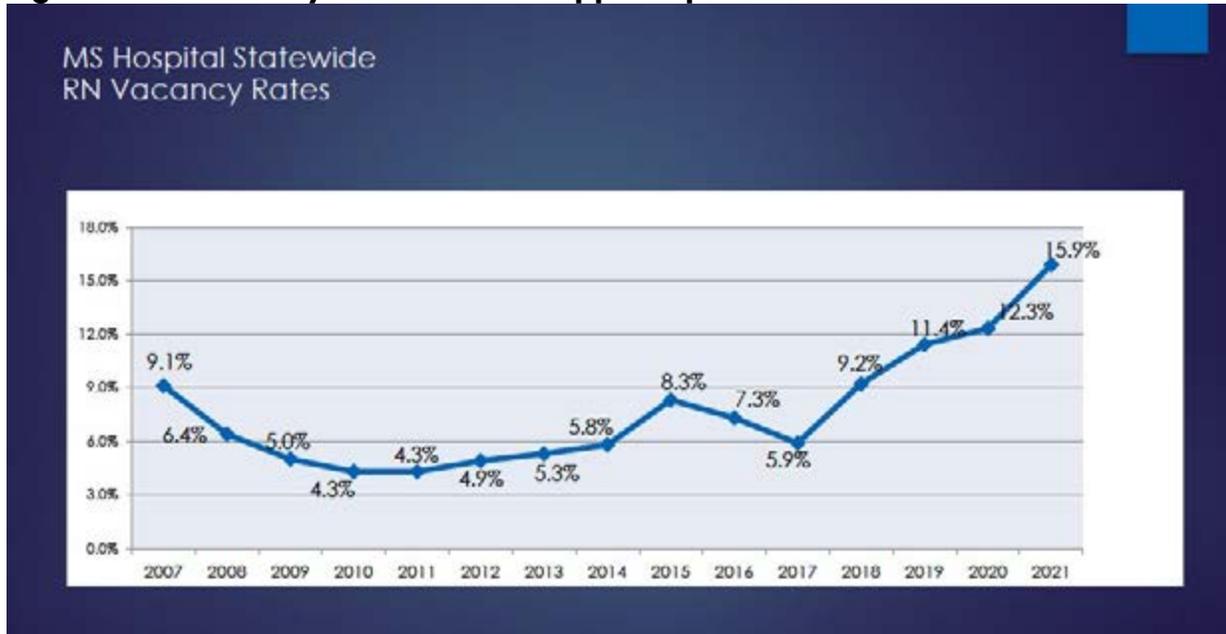
The Board of Nursing reported 12,909 licensed practical nurses (LPNs) in FY 2020, with 10,537 working full or part-time in nursing careers. That includes 3,652 in nursing homes; 1,049 in hospitals; 1,743 in community, public, or home health; and 5,196 in other nursing careers. There were 5,478 LPNs certified for an expanded role in FY 2020, including intravenous therapy; 184 in hemodialysis; and 154 in both expanded roles.

Advanced Practice Registered Nurses

Advanced practice registered nurse (APRN) includes any person licensed to practice nursing in Mississippi and certified by the Board of Nursing to practice in an expanded role as an advanced practice registered nurse. APRNs include nurse midwives and certified registered nurse anesthetists. For FY 2020 there were 6,425 RNs certified as APRNs, with 5,444 family nurse practitioners; 948 certified registered nurse anesthetists; and 33 certified nurse midwives. The APRNs practiced in such specialties as adult and family mental health, gerontology, midwifery, neonatal, pediatric, women's health care, family planning, and anesthesia care.

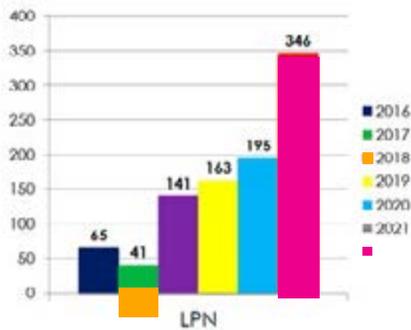
Nursing Shortages in Mississippi

Figure 7. RN Vacancy Rates in Mississippi Hospitals



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Figure 8. Hospital LPN Vacant Positions



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Hospital LPN Vacant Positions Statewide

Despite increased numbers of nurses documented in Table 16, nursing shortages in Mississippi and nationally have reached record highs. This shortage is associated with the aging of the Baby Boomers who are approaching retirement; an increasing need for nursing care among this aging population; and an inability of nursing schools to expand capacity to meet the rising demand.

Figure 9. MS Hospital Travel Nurses

Mississippi Hospital Agency/Travel Workers Employed

	RN	LPN	Nurse Assistant
2021	925	88	155
2020	607	37	87
2019	249	8	129
2018	101	11	72
2017	167	3	11

© Mississippi Hospital Association 2022

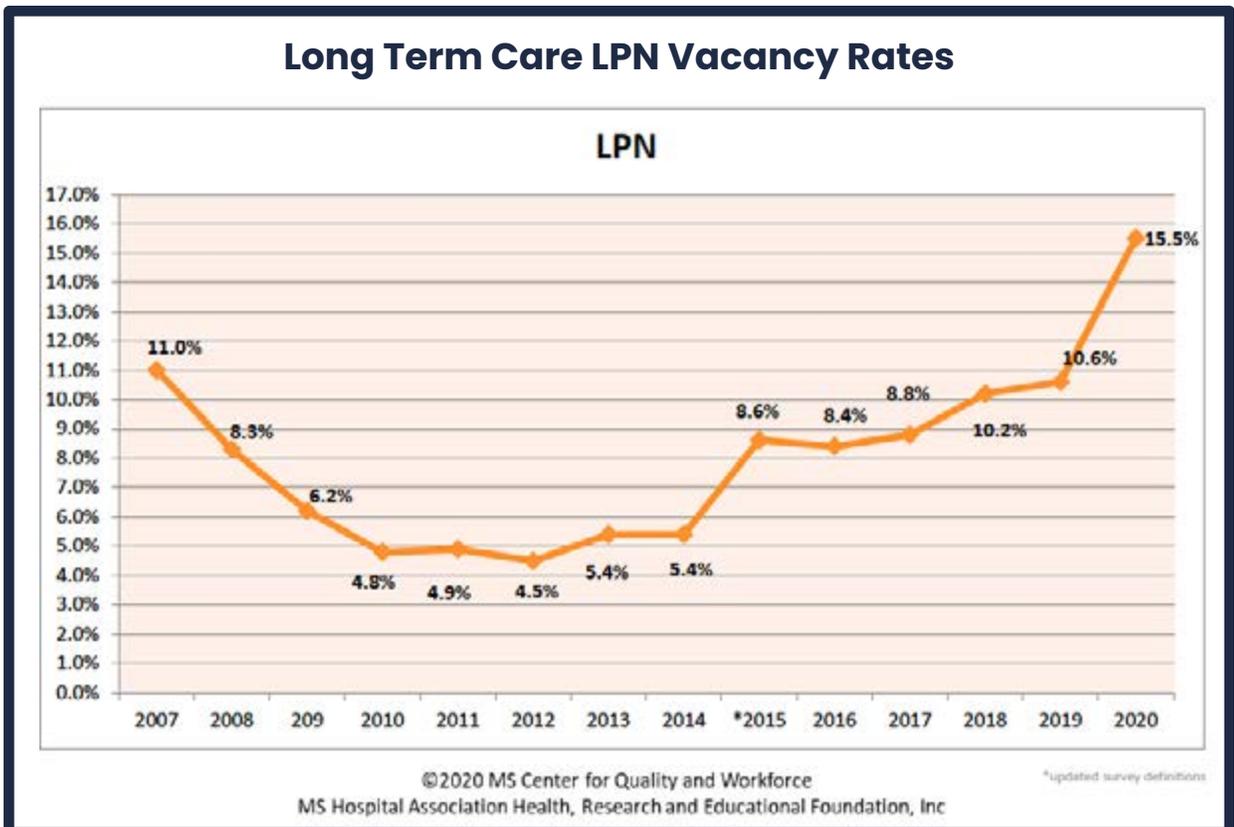
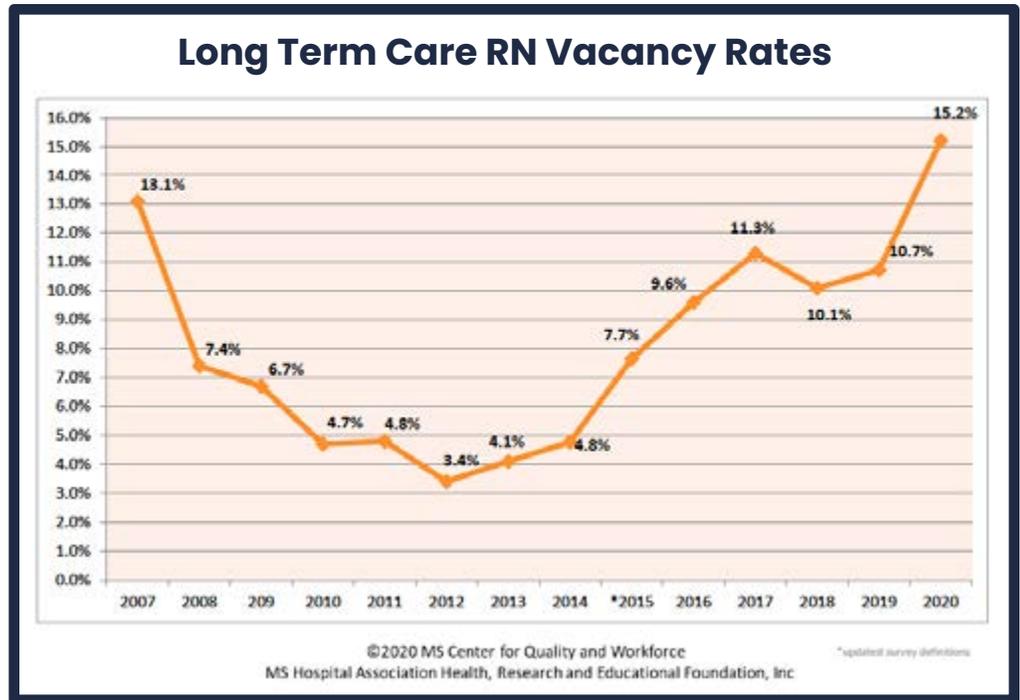
Mississippi hospitals are acutely feeling this shortage, especially due to the COVID pandemic. Rural hospitals are also experiencing difficulties hiring and retaining nurses (See Figure 8). Figure 9 indicates that every year, increasing numbers of Mississippi nurses opt to become employed with agencies that may place them out of state.

SUBCHAPTER 5. HEALTH WORKFORCE

Although Table 16 indicates an increase in RNs practicing in nursing homes, shortages of nurses for nursing homes remain problematic. Figures 10 and 11 illustrate how the RN and LPN vacancy rates at long term care facilities in Mississippi have been rapidly increasing since 2015.

Advocates attribute this increase in vacancies to a combination of the corona virus pandemic, a general labor shortage, and a looming vaccine mandate at many long-term care facilities. These conditions are making it more difficult to retain the nursing staff.

Figure 10. Nursing RN and LPN Vacancy Rates in Mississippi Long-term Care Facilities



Rule 1.5.6. Emergency Medical Services (EMS)

EMS is a system of health care services delivered under emergency conditions that occur as a result of a patient’s acute condition, natural disasters, vehicular or occupational accidents, or other situations. In Mississippi, EMS is provided by public, private, or nonprofit entities with the authority and the resources to effectively administer services. People with diverse backgrounds contribute to the EMS system in Mississippi, including bystanders, firefighters, law enforcement officers, emergency medical dispatchers, medical first responders, emergency medical technicians (EMTs), nurses, physicians, and volunteers.

Rule 1.5.7 Emergency Medical Responders (EMR)

Beginning July 1, 2004, the Mississippi Legislature authorized the MSDH Office of Emergency Medical Services (EMS) to certify Mississippi’s EMRs.

Rule 1.5.8 Emergency Medical Technician (EMT) Certifications

Beginning July 1, 2004, the Legislature authorized the MSDH EMS to certify Mississippi’s medical first responders.

The certification for emergency medical personnel requires advanced and basic level training for ambulance operators and EMTs. Mississippi requires all ambulance drivers to have EMS driver certification (EMS-D). To qualify, an individual must complete an approved driver training program that involves driving tasks, vehicle dynamics, vehicle preventative maintenance, driver perception, night driving, and information on different driving maneuvers. This training offers both academic and clinical (practical hands-on) experiences for the prospective ambulance driver.

Additionally, all emergency medical technicians – both advanced level and basic level – must complete a National Highway Safety and Traffic Administration training program for the respective level. This training provides extensive academic and clinical hours for prospective students. Upon completion, students must pass the National Registry for Emergency Medical Technicians test and receive their national certification before applying for the Mississippi certification.

Table 17. Certifications Issued by the Mississippi Office of Emergency Medical Services

Five levels of certified EMS Providers:	FY 2020 Certifications	FY 2012 Certifications
1. Medical First Responders	9	2,020
2. Emergency Medical Services – Drivers	1,166	--
3. Emergency Medical Technician – Basic (EMT-Basic)	4,334	1,906
4. Emergency Medical Technicians – Intermediate (EMT Intermediate)	--	24
5. Emergency Medical Technicians – Paramedics (EMT-Paramedics)	1,265	1,599

RURAL HEALTH WORKFORCE FINDINGS

Workforce shortages are most acute in the nursing profession, and especially among Certified Nursing Assistants (CNAs). In addition, an acute shortage of mental health professionals was experienced in rural Mississippi, especially in long-term care facilities.

Nursing Shortages are an Acute Workforce Issue

A. Issues, Challenges, and Opportunities

Although the nursing data indicates an increase in the number of nursing professionals and entry-level nurses trained, Mississippi hospitals and long-term care facilities are experiencing nursing shortages and high turnover. Nursing shortages have grown even more acute across the state since the COVID crisis. Addressing the shortages of Certified Nursing Associates (CNAs) can be seen as an opportunity to impact a small area of this crisis. Although individuals are graduating from CNA courses, in order to be certified, they must also complete a brief practicum under the supervision of a higher-level nurse. The opportunities for completing this practicum have decreased.

B. Workgroup Recommendations

1. Expand nurse training programs.
2. Increase opportunities for CNAs to become certified.

C. What can MORHPC do?

1. Collaborate with stakeholders and partners to support regional workshops to facilitate the CNA certification process.

Long-term care and Services for the Elderly

A. Issues, Challenges and Opportunities

Mississippi's elderly residents' need for mental health services is increasing. Both those who are community-based and institutionalized frequently suffer from depression, dementia, and other conditions that negatively impact their quality of life.

B. Workgroup Recommendations

1. Expand mental health screening by integrating screening into all outpatient visits and conducting regular screenings in long-term settings.
2. Expand mental health treatment options for the elderly in long-term care and community-based settings.

C. What Can MORHPC Do?

1. Collaborate with the Nursing Corps, National Health Service Corps, MQHCs, and other program affiliates to increase the number of mental health professionals placed in mental health professional shortage areas.
2. Facilitate the provision of mental health services in long-term care facilities by encouraging partnerships with MQHCs and MDMH to recruit and place mental health counselors in rural long-term care facilities.

Mississippi Rural Hospitals



Figure 6. Hospitals in Mississippi

8-18-22

Mississippi Hospitals 2022



Rule 1.6.1 Mississippi Rural Hospital Flexibility Program

The Medicare Rural Hospital Flexibility Program (FLEX) is a federal initiative that provides funding to state governments to strengthen rural health. (See Table 18). The purpose of the FLEX program is to help sustain the rural healthcare infrastructure, with critical access hospitals (CAHs) as the hub of an organized system of care. The program includes development of the FLEX State Rural Health Plan, population health management initiatives, quality improvement initiatives, EMS integration, CAH designation, and development of rural health networks. MORPHC administers FLEX and provides related technical assistance.

Rule 1.6.2 Critical Access Hospital Authorization

The 1998 session of the Mississippi Legislature authorized the MSDH to develop regulations for the designation of CAHs.

Rule 1.6.3 Critical Access Hospital Definition

CAHs are acute care facilities that provide outpatient emergency and limited inpatient services and receive cost-based Medicare reimbursement. In 2014, Mississippi had thirty-two (32) CAHS, and now has thirty-one (31).

Table 18: List of Mississippi Critical Access Hospitals

	Name	City	No. Beds
1.	Baptist Medical Hospital, Leake	Carthage	25
2.	Baptist Medical Center, Yazoo	Yazoo City	25
3.	Baptist Medical Center, Attala	Kosciusko	25
4.	Baptist Memorial Hospital, Calhoun	Calhoun City	21
5.	Choctaw Regional Medical Center	Ackerman	25
6.	Claiborne County Hospital	Port Gibson	25
7.	Copiah County Medical Center	Hazelhurst	25
8.	Covington County Hospital	Collins	25
9.	Field Memorial Community Hospital	Centerville	25
10.	Franklin County Memorial Hospital	Meadville	23
11.	Greene County Hospital	Leakesville	3
12.	HC Watkins Memorial Hospital	Quitman	25
13.	Jefferson Davis Community Hospital	Prentiss	25
14.	John C. Stennis Memorial Hospital	DeKalb	25
15.	Laird Hospital	Union	25
16.	Lawrence County Hospital	Monticello	25
17.	Monroe Regional Hospital	Aberdeen	25
18.	North MS Medical Center	Pontotoc	25
19.	North Sunflower Medical Center	Ruleville	25
20.	Noxubee General Hospital	Macon	25
21.	Pearl River County Hospital and Nursing Home	Poplarville	24
22.	Perry County General Hospital	Richton	23
23.	Quitman Community Hospital	Marks	25
24.	S.E. Lackey Memorial Hospital	Forest	25
25.	Scott Regional Hospital	Morton	25
26.	Sharkey Issaquena Community Hospital	Rolling Fork	25
27.	Simpson General Hospital	Mendenhall	25
28.	Tallahatchie General Hospital	Charleston	9
29.	Tippah County Hospital	Ripley	25
30.	Tyler Holmes Memorial Hospital	Winona	25
31.	University of MS Medical Center, Holmes	Lexington	25
32.	Walthall County General Hospital	Tylertown	25

SUBCHAPTER 6. MISSISSIPPI RURAL HOSPITAL

Table 19. Utilization, Staffing, and Ownership Status of Mississippi CAHs in 2013 and 2021.

	2021	2013
County Owned	18 (58%)	65%
Corporate Ownership (not-for-profit)	9 (29%)	24%
City and County Owned	2 (6%)	3%
For Profit	0	8%
Part of Health System	16 (52%)	28%
Full-Time Employees	3,931	3,286
Part-Time Employees	1,492	1,080
Workers on Contract	783	162
RNs	717	825
LPNs	259	345
Ancillary Personnel	297	420
ER Visits	156,150	152,016
Non-RHC Visits	255,640	138,644
Average Daily Census	130.37	160.32
Admissions	8,470	12,732
Inpatient Days	47,343	59,359
Swing-Bed Days	79,755	51,938
RHC Visits	574,793	245,705

Source: MSDH Annual Survey of Hospitals

Rule 1.6.4 Mississippi Critical Access Hospital Performance Information

The data represented in Table 19 for 2013 was presented in the 2015 SRHP and originated from the MSDH Annual Survey of Hospital Reports. Data from 2021 has been included in this SHRP as a point of comparison.

Since 2013, there have been notable shifts in CAH infrastructure including:

- A substantial decrease in the numbers of facilities owned by the county and not-for-profit entities.
- An increase in part-time staffing.
- A decrease in RNs and LPN and ancillary personnel.

Demand for rural hospital services continues to grow including a shift from inpatient care to outpatient visits that are non-emergency-related:

- A greater than 100% increase in non-Rural Health Clinic or ER visits
- An over 200% increase in Rural Health Clinic visits.

Small Rural Hospital Improvement Program (SHIP)

The Small Rural Hospital Improvement Program (SHIP) is a grant program supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration's Federal Office of Rural Health Policy (FORHP). Section 1820(g)(3) of the Social Security Act (SSA) authorizes SHIP to assist eligible hospitals in meeting the costs of implementing data system requirements established under the Medicare program, including using funds to assist hospitals in quality improvement initiatives in value and quality to health care such as:

- Value-Based Purchasing Programs (VBP)
- Accountable Care Organizations (ACOs)
- Payment Bundling (PB)/Prospective Payment System (PPS)

Small non-federal rural hospitals, with forty-nine (49) available beds or less, that provide short-term, general acute care to their communities are eligible for SHIP grants. They may be for-profit, not-for-profit, or tribal organizations. Critical access hospitals are eligible for the program.

2020-2021 SHIP Grantee Performance:

The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Survey, also known as the HCAHPS® Hospital Survey or Hospital CAHPS®, is a standardized survey instrument and data collection methodology that has been in use since 2006 to measure patients' perspectives of hospital care.

- Mississippi has 32 CAHs, of which 29 CAHs are SHIP grantees and 2 are not SHIP hospitals
- As of FY 2022, 30 of the 51 eligible Mississippi hospitals participate in HCAHPS.
- Mississippi's SHIP Value Based Purchasing (VBP) scores measure patient satisfaction and experiences. For 2020-21, VBP scores ranged from 69-21 out of a possible 100. The VBP score includes 9 measures:
 - 6 related to communication with providers concerning medications, staff responsiveness, and discharge planning, etc.
 - 2 related to cleanliness and quietness of the hospitals
 - 1 global or overall rating measure
- Anticipated Revenue Loss/At Risk for network SHIP hospitals ranged from a high of \$195,997 to a low of \$5,135
- 18 SHIP-eligible hospitals planned to provide services via mobile health and telehealth

SUBCHAPTER 6. MISSISSIPPI RURAL HOSPITAL

Hospital Performance Information for Mississippi Critical Access Hospitals

Table 20. Community Impact and Benefit Activities of Mississippi Critical Access Hospitals, 2018

CAH Rural Emergency Medical Services Performance In Median Minutes:				Quality Improvement* Avg. 24.5 reported		
	MS (n=31)	US (n=1,320)		<ul style="list-style-type: none"> Mississippi CAHs ranked: <ul style="list-style-type: none"> 38 for inpatient quality (83.9% reported) 36 for outpatient quality (74.2% reported) 		
Average Length of Stay	91.0	106.0				
Before transfer for acute care	87.5	68.0				
Long-term Services and Supports				Profitability (%) & Liquidity Indicators		
Averages	US CAHs	MS CAH	MS CAH	April 2020	US	MS
	Directly	Directly	Networks	Total Margin	1.61	-3.12
Adult Day Care	5.1	6.5	9.7	Cash Flow	5.71	-0.36
Home Health	22.4	0	19.4	Operating Margin	0.17	-4.80
Hospice	15.8	3.2	32.3	Days Cash	75.9	19.5
Skilled Nursing	38.4	35.5	38.7	Days in Accts. Receivable	50.8	43.77
Percent Population Health Activities: US vs. MS				Percent Providing Behavioral Health Service, MS vs. US		
Averages	US CAH	MS CAH	MS CAH		MS CAH	US
	Directly	Directly	Networks	Substance Use Inpat.	0	1.7
Cmty Outreach	68.1	48.4	58.1	Substance Use Outpat.	3.2	2.9
Enrollment Asst.	52.7	22.6	22.6	Psych, Inpatient	19.4	5.5
Health Fair	76.1	58.1	67.7	Psych, Outpatient	48.4	27.0
Immunization	49.4	32.3	38.7			
Indigent Care	10.1	16.1	16.1			
Other Essential Services Offered at CAHs, Percent MS compared to US					US	MS
	US	MS		US	MS	
Ambulance	22.4	6.5	Obstetrics	34.0	0	
Dental Services	5.6	22.6	Hemodialysis	3.0	3.2	
Certified Trauma Center	45.0	77.4				

Source: 2018 American Hospital Association Annual Survey, www.flexmonitoring.org

Table 20 compares MS CAH performance data with national data on select indicators. This report is prepared by a consortium of universities on behalf of HRSA. The data illustrates that Mississippi performs lower than the national average on population health activities, obstetrical care, and ambulance services. That being said, MS surpasses the national average based on shorter length of stay, dental care and psychiatric care. MS quality improvement scores were generally higher than the national average; however, MS scored lower on profitability and liquidity indicators. CAHs that were a part of a network performed better including adult day care, hospice, community outreach such as health fairs, and skilled nursing care.

NOTE: Subchapters 7 – 12 all address Critical Access Hospitals. These sections are directly from the 2015 State Rural Health Plan.

SUBCHAPTER 7. CRITICAL ACCESS HOSPITALS

Rule 1.7.1. Designation of CAHs

The designation process for achieving critical access hospital (CAH) status involves two steps: 1) submission of a satisfactory CAH application and 2) successful completion of a CAH survey by the Division of Licensure and Certification of the MSDH Division of Licensure and Certification.

Rule 1.7.2. CAH Survey

To satisfy state requirements for designation of a CAH, a hospital must meet all federal requirements for designation including successful completion of the survey by the Division of Licensure and Certification.

Rule 1.7.3 Federal Requirements for CAH Designation

See Appendix A.

SUBCHAPTER 8. STATE CRITERIA NECESSARY FOR PROVISION OF SERVICES

Rule 1.8.1 Certification of Hospitals Not Meeting CAH Federal Mileage Requirements

A hospital that does not meet the federal mileage requirements to be certified as a CAH is otherwise eligible to be certified by the state as a necessary provider of health care services if it meets two (2) or more of the following criteria:

1. The hospital is located in a county that is federally designated as a HPSA for medical care.
2. The hospital is located in a county that is federally designated as a Medically Underserved Area (MUA).
3. The hospital is located in a county where the percentage of families with income less than 100% of the federal poverty level is higher than the state average for families with income less than 100% of poverty.
4. The hospital is in a county with an unemployment rate that exceeds the state's average unemployment rate.
5. The hospital is in a county with a percentage of the population age 65 and older that exceeds the state's average.
6. The number of Medicare admissions to the hospital exceeds 50% of the facility's total number of admissions as reported in the most recent Hospital Annual Report for the facility.

Rule 1.8.2 CAH Appeal Conditions

Any hospital not meeting two (2) of the above criteria may appeal the decision to the MSDH, Office of Health Policy and Planning. Appeals must be submitted in writing and will only be considered if the appeal provides sound evidence that future access to health for the citizens of the facility's primary service area, as defined by the most recent patient origin study, will be jeopardized if it is not declared a necessary provider of health care services.

Rule 1.8.3 Designated Necessary Providers Must Complete the CAH Application Process

Facilities that meet the necessary criteria for provision of services are still required to complete the designation application process that includes: 1) submission of a satisfactory CAH application to the CAH Certification Application Review Committee, and 2) successful completion of the CAH survey by the MSDH Office of Licensure and Certification.

SUBCHAPTER 9. CRITICAL ACCESS HOSPITAL DESIGNATION APPLICATION

Rule 1.9.1 The CAH Designation Application Content

The CAH Designation Application includes the following information:

1. A community needs assessment that includes an inventory of local health services and providers.
2. Evidence of implemented strategies to inform county and community residents, public officials, and health care providers of the proposed conversion of the hospital to CAH designation.
3. A financial feasibility study that will include:
 - Audited financial statements and notes for the three most recently completed years
 - Adult and pediatric admissions, adult and pediatric patient days, deliveries, and inpatient surgeries
 - Outpatient and emergency room utilization data
 - An inventory of medical staff by name, age, and medical specialty
 - A three-year CAH cost and revenue projection
 - A signed network agreement with a full-service hospital detailing the facility relationships including:
 - Patient referral and transfer
 - Communications systems
 - Provision of emergency and non-emergency transportation
 - Arrangements for credentialing and quality assurance
 - Other information and data that the Review Committee may determine are needed in order to make an appropriate recommendation

SUBCHAPTER 10. CRITICAL ACCESS HOSPITAL CERTIFICATION APPLICATION REVIEW COMMITTEE

Rule 1.10.1 A CAH Certification Application Review Committee

A CAH Certification Application Review Committee will be established by MSDH to review CAH applications and make recommendations to the State Health Officer regarding designation. The Committee membership will be comprised of one representative from each of the MSDH Mississippi Office of Rural Health and Primary Care (MORHPC); MSDH Office of Licensure and Certification; and the Mississippi Hospital Association; and two hospital representatives appointed by the Mississippi Hospital Association. The State Health Officer may appoint representatives of additional groups to the committee.

SUBCHAPTER 11. CRITICAL ACCESS HOSPITAL RELOCATION REQUIREMENTS

Rule 1.11.1

Information regarding guidelines for 42 CFR 485.610 (c), concerning CAH location relative to other hospitals or CAHs, and 43 CFR 486.610(d), concerning relocation of CAHs with a necessary provider designation, is available on the CMS website. This website also provides information about eligibility for the shorter, fifteen (15)-mile standard due to mountainous terrain or lack of primary roads.

SUBCHAPTER 12. LIST OF MISSISSIPPI CRITICAL ACCESS HOSPITALS

A 2021 list of Mississippi CAHs and other CAH information is included in Appendix B.

Rural Hospital Improvement Strategies

The SRHP Steering Committee stated that there were additional opportunities for Mississippi's CAHs to benefit further from performance improvement opportunities provided through CAH federal programs; and, that CAHs should increase their participation.

A. Issues, Challenges, and Opportunities

Critical Access Hospitals (CAHs) are sometimes reluctant to apply for the FLEX program due to the extensive program requirements.

B. Workgroup Recommendation

1. Promote the advantages of the FLEX program.

C. What Can MORHPC Do?

1. Conduct focus groups to determine reasons why CAHS are not fully participating in the FLEX program.
2. Conduct trainings and workshops to develop strategies to promote broader participation in FLEX.



Crosscutting Issues and Conclusions



Rural Health Inequities

Health disparities and healthcare inequities are challenging to address because they are complex in origin and require comprehensive approaches to resolve. For example, lower access to healthcare services among rural residents is associated with multiple factors including lower levels of health insurance, household financial insecurity, unreliable transportation, lower education levels, provider bias, and policies that have discouraged private investment in healthcare and the general economy. Yet, one fundamental policy change, such as the adopting the Affordable Care Act (ACA) provision, can be a game changer in promoting statewide healthcare access and is also associated with other financial advantages for consumers and providers. Multiple case studies are available that provide evidence of how the ACA has leveled the playing field for impoverished rural residents and boosted profitability for rural providers and facilities (www.ThatsMedicaid.org).

Involvement of multiple sectors of government is often required when implementing innovations that increase equity. This report uses tele-health technology as an example of a technological innovation that expands access to mental health care for rural residents. Yet, without infrastructure investments in expanding broadband to remote areas, this innovation may still be out of reach for many rural communities. Thus, collaboration between at least two sectors, health and public works, would be necessary to formulate a successful tele-health project.

Finally, cultural and language barriers may be at the core of some health inequities. The settings for these equity issues may be small ethnic communities whose health access issues are invisible to the broader public health delivery system, but could be resolved with a simple intervention such as utilizing a community health navigator (CHN) as a translator or an intermediary. For example, placing a bi-lingual CHN at a rural chicken processing plant to promote vaccinations, health screenings, and provide onsite primary care treatment could reduce transmission rates among these vulnerable populations. This type of occupational intervention could protect and save a vulnerable community from preventable diseases, while protecting workers' extended families from disease, and preserving family incomes.

Addressing Health Disparities

Mississippi data on health disparities for all racial and ethnic groups are unavailable, in part, because some racial and ethnic groups are small in number and difficult to disaggregate. Available data indicates large health disparities among non-Hispanic Blacks compared to non-Hispanic Whites. Table 7 illustrates that non-Hispanic Blacks suffer disproportionately from diabetes prevalence, cardiovascular disease mortality, infant mortality, and childhood obesity.

Every community is unique, and addressing health disparities may often be more effective at the local level. This means that access to county and community level data is necessary to identify the highest need(s), make a case to funders for support, establish baselines and evaluate success.

What Can MORHPC Do?

The MORHPC staff is skilled at applying data to health problems and could provide technical support to communities for such projects. The MORHPC could use the RWJF County Health Rankings to assist rural communities with establishing plans and use Healthy People (HP) 2030 to establish goals for making local health improvements. HP 2030 has updated health objectives which can be found at <https://health.gov/healthypeople/priority-areas/social-determinants-health>. The targets delineated in each objective are inclusive of related social determinants of health.

CROSSCUTTING ISSUES

Coronavirus Aid, Relief, and Economic Security Act

The COVID-19 pandemic has resulted in many innovations in outreach to small and remote areas and federal resources have been awarded to fund expanded services. The Health Resources and Services Administration's (HRSA) Federal Office of Rural Health Policy (FORHP) received funding through the Coronavirus Aid, Relief, and Economic Security (CARES) Act, made available from April 2020 through September 30, 2021. HRSA used CARES funding to assist hospitals eligible for the Small Rural Hospital Improvement Program (SHIP).

- Ensuring hospitals safety for staff and patients
- Detecting, preventing, diagnosing, and treating COVID-19
- Maintaining hospital operations



American Rescue Plan Act (ARPA) COVID-19 Testing and Mitigation

- HRSA's FORHP received funding through the American Rescue Plan (ARP) for COVID-19 testing and mitigation initiatives. HRSA anticipates \$398 million will be available to support the Small Rural Hospital Improvement Program (SHIP) to increase COVID-19 testing efforts, expand access to testing in rural communities, and expand the range of mitigation activities to meet community needs within the CDC Community Mitigation Framework. Mississippi was awarded \$12,918,800, which allowed fifty (50) SHIP hospitals to receive \$250,000 each.

Enhancing Emergency and Telehealth Services

Expanding Broadband, Connecting Rural Mississippi

Mississippi's expansion of internet services, fueled by \$570 million in federal money in April 2021, with additional funding anticipated, is life-altering for rural Mississippi residents. Mississippi ranked near the bottom, near 49th in broad-band access. This funding from the federal Rural Digital Opportunity Fund resulted in \$75 million in federal COVID-19 relief money for broadband expansion. The state expects to receive additional millions for broadband and other infrastructure improvements from the recently passed federal American Rescue Act.

Coordinating with Mississippi Emergency Support

The purpose of the Mississippi Emergency Support Function No. 8 (ESF 8) is to provide state assistance and coordinate local resources in response to public health and disaster medical care needs. The MSDH is responsible for the coordination of health response for ESF 8 including providing and coordinating services and resources, including but not limited to, emergency treatment and prevention; inspection of food, potable water, and on-site wastewater disposal; emergency mortuary service and mass fatality management; patient rehabilitation; vector and disease control; disease surveillance; and the restoration of health and medical infrastructure.

40% of MS lacks access to broadband.

Innovating through the Mississippi Center for Emergency Services (MCES)

The University of Mississippi Medical Center established the Mississippi Center for Emergency Services (MCES) in 2014 to expand Mississippi's ability to maintain medical communications for disaster and emergency preparedness and response.

Telehealth as a Rural Health Innovation

Case Study:

From July 1, 2020, through June 30, 2021, Southwest Mississippi Mental Health Complex (SMMHC) experienced a 30% increase in clients served. SMMHC serves a largely rural, impoverished geographic region encompassing more than 5,000 square miles, with more than 150,000 individuals. Last year, SMMHC received a \$659,092 Federal Communications Commission (FCC) grant for telehealth to broaden the availability of services to clients, enhance staff ability, provide services, and increase service options. SMMHC expanded computer equipment access to 80% of staff by purchasing fourteen (14) telemedicine carts and placing one in each of the sites throughout the region; creating three (3) telemedicine kiosks in the largest sheriff's departments in the region; upgrading the server and software; and purchasing a "Mist" system that enables clients to access a "guest" service login from the parking lots of facilities, allowing them to access services without entering facilities. These enhancements: 1) expanded telehealth services; and 2) allowed staff to access the Emergency Health Records from tablets or laptops to provide remote telehealth services, thereby eliminating the need for staff to travel to remote offices and reducing travel costs

CROSSCUTTING ISSUES

A. Challenges, Issues, Opportunities

Telehealth Challenges

Having made considerable advances, tele-mental health is an important model to study. Documented successes include increased patient receptivity because the care environment is associated with increased privacy and reduced stigmatization. The more private care setting results in increased compliance with the telehealth model.

Despite advances in the field, there are still challenges such as insufficient reimbursement for telehealth services. In the past, insurance companies have reimbursed small rural providers less for telehealth, not recognizing the expenses related to acquisition of telehealth equipment and software, as well as the ongoing maintenance and upgrading costs. Adequate broadband coverage is still a problem in many rural areas; however, policy changes and federal prioritization of broadband expansion may provide new opportunities.

Emergency Services

When telehealth technology is part of the infrastructure for emergency services, it improves access to tertiary and specialty services closer to home. For example, emergency room physicians located at remote medical centers can be consulted in cases of rural injuries. Additionally, local telehealth networks can create business opportunities closer to home. For example, when primary care centers or CAHs use local or regional imaging centers, laboratories, etc., more business activity is captured closer to home.

B. Work Group Recommendation

1. Consider applying for new broadband funding to expand telehealth capacity, in association with the recent legislative appropriation towards innovative growth.

C. What Can MORHPC Do?

1. Work with local health providers to promote viable telehealth modeling to expand emergency care capacity and quality, and to expand mental and behavioral healthcare.
2. Incorporate telehealth solutions in local planning activities.
3. Host convenings and webinars to promote telehealth solutions in care delivery, medical education, and financing.

CONCLUSIONS

Mississippi's greatest asset for improving the health status of its rural residents is its diverse array of skilled public health officials and health providers. Many served as stakeholders for the 2022 State Rural Health Plan planning process, clearly demonstrating high motivation and professionalism dedicated toward creating a healthier rural Mississippi. The resounding theme of the stakeholders was that more can be accomplished when health entities collaborate. Stakeholders encouraged broad participation in conducting community health assessments and collective action to develop solutions. They emphasized avoiding duplication, applying a keen focus on filling service gaps, and the importance of listening to colleagues and contributors at all levels. With stakeholder input, specific recommendations were developed for each major component in the Plan. MORHPC staff reviewed these recommendations and identified how they can contribute within their scope of activities and resources. The next steps for the MORHPC is to identify the key items to be implemented in the coming years and to formulate goals, objectives, and timelines for these activities.

The rural health stakeholders share common objectives and potential resources. MORHPC will utilize a number of resources to inform and guide this work. Some of these are mentioned below:

- The Healthy People 2030 (HP2030) is an excellent resource for establishing state goals and objectives that mirror the larger goals and objectives set for the nation as a whole (<https://health.gov/healthypeople/objectives-and-data/browse-objectives>). HP2030 is a source of national comparison data for health conditions, health behaviors, population health, and health systems and settings. HP2030 also addresses the impacts of the social determinants of health and provides research and examples of best practices.
- The most recent MSDH Strategic Plan provides guidance on state health priorities and strategic direction.

PARTNERS AND STAKEHOLDERS

Major Technical Assistance Partners and Roles

- The Community Health Center Association of Mississippi supports twenty-one (21) Community Health Center corporations and 208 sites providing primary care services throughout the state.
- MS Hospital Association provides technical assistance to CAHs under the FLEX grant program.
- The MS Public Health Institute provides technical support to the MORHPC.
- MS Nurses Foundation encourages high school students to become nurses.
- MS Rural Health Association coordinates annual rural health and rural health clinic conferences, webinars, and newsletters.
- MS State Medical Association supports the Rural Physician Scholars Program, which recruits and retains health professionals in the state's rural areas.
- MS State University Extension Services exposes high school students to rural medical practice and health sciences.

APPENDIX A: 2022 MS RURAL HEALTH CARE PLAN STEERING COMMITTEE

Organization	Name & Title	Contact Information
Mississippi Nurses Foundation	Amanda Crawford, MS Executive Director	acrawford@msnurses.org
MSDH Office of Oral Health	Angela F. Filzen, D.D.S. State Dental Director	angela.filzen@msdh.ms.gov
MS Academy of Family Physicians	Beth Embry Executive Director	beth@msafp.org
Mississippi Hospital Association	Chad Netterville Executive Director Rural Hospital Alliance and Center for Rural Health	cnetterville@mhanet.org
Mississippi State Medical Association	Claude D. Brunson, MD, MS, CPE, FASA Executive Director	cbrunson@msmaonline.com
Baptist Medical Center of Leake	Daryl Weaver Chief Executive Officer	daryl.weaver@bmhcc.org
Division of Medicaid	Drew Snyder Executive Director	drew.snyder@medicaid.ms.gov
Mississippi Public Health Institute	Glenda Crump Chief Administrative Officer	gcrump@msphi.org
Tishomingo Hospital	Jamie Pruitt Director of Support Services North Mississippi Health Services	jpruitt@nmhs.net
UMMC Office of MS Physician Workforce	John Mitchell, MD, FAFP Executive Director	jrmitchell@umc.edu

APPENDIX A: 2022 MS RURAL HEALTH CARE PLAN STEERING COMMITTEE

Organization	Name & Title	Contact Information
Aaron E. Henry Community Health Services Center, Inc.	Dr. Johnnie Cummings, Jr. Director	jcummings@aechhc.org
Mississippi Department of Mental Health	Katie Storr Chief of Staff	katie.storr@dmh.ms.gov
MSDH Office of Preventive Health And Health Equity	Dr. Kina White Director Office of Community Health Improvement	kina.white@msdh.ms.gov
Mississippi Hospital Association	Lanelle Weems, MSN, RN Director Center for Quality and Workforce	lweems@mhanet.org
MSDH STD/HIV Office	Melverta Bender, MLS, MPH Director	melverta.bender@msdh.ms.gov
North Mississippi Health Services of Eupora	Robin Mixon, MSHA, NHA, CHSP, FACHA, FACHE CEO/Administrator	rmixon@nmhs.net
Mississippi Rural Health Association	Ryan Kelly Executive Director	ryan.kelly@mississippirural.org
The University of Mississippi Medical Center	Tammy Dempsey, Ed.D Director of Community Engagement and Service Learning	tdempsey@umc.edu
Community Health Center Association of Mississippi	Terrance Shirley Chief Executive Officer	tshirley@chcams.org

APPENDIX B: FEDERAL REQUIREMENTS FOR CRITICAL ACCESS HOSPITALS

Rule 1.7.3 Federal Requirements for Critical Access Hospitals

1. Located in a state that has established a Medicare Rural Hospital Flexibility Program with the Centers for Medicare and Medicaid Services (CMS)
2. Currently participates in Medicare as a rural public, nonprofit or for-profit hospital; or was a participating hospital that ceased operation during the 10-year period from November 29, 1989, to November 29, 1999; or is a health clinic or health center that was downsized from a hospital
3. Located in a rural area or area treated as rural
4. Located more than a 35-mile drive from any other hospital or CAH (in mountainous terrain or in areas with only secondary roads available, the mileage criterion is 15 miles)
5. Maintains no more than 25 inpatient beds
6. Maintains an annual average length of stay of 96 hours per patient for acute inpatient care
7. Complies with all CAH Conditions of Participation, including the requirement to make available 24-hour emergency care services seven days per week
8. Staff must be sufficient to provide the services essential to the operation of the CAH (e.g., emergency services, direct services, and nursing services).
9. Must have a professional health care staff that includes one or more physician assistant, nurse practitioner, or clinical nurse specialist
10. A registered nurse, clinical nurse specialist, or licensed practical nurse on duty whenever the CAH has one or more inpatients
11. Inpatient and emergency care, laboratory, and x-ray services required. Some ancillary services (lab, radiology) may be provided part time off-site
12. Emergency services required 24 hours a day, seven days a week. Staff in the emergency room must have emergency services training/experience
13. A system in place with the local emergency medical system so emergency medical personnel are aware of who is on call and how to contact them
14. A doctor of medicine or osteopathy available by phone or radio 24 hours a day, seven days a week
15. Facilities have an agreement with at least one hospital that is a member of the network for:
 - Patient referral and transfer
 - The development and use of communications systems
 - The provision of emergency and non-emergency transportation
 - Credentialing and quality assurance
16. CAH applicants meet all additional CAH Conditions of Participation as established by CMS. Compliance with the CMS CAH Conditions of Participation is determined by the survey conducted by the MSDH Office of Licensure and Certification

APPENDIX C: CRITICAL ACCESS HOSPITAL PERFORMANCE DATA, 2021

2021 Critical Access Hospitals (CAHs) Data	Admissions (Hosp., Other & NH)			Inpatient Days (Hosp., Other & NH)		
Critical Access Hospitals (CAHs)	Total	Hosp.	Other or NH	Total	Hosp. Inpat.	Other or NH Inpat.
Totals	8,692	8,470	222	197,074	47,343	149,731
Baptist Memorial Hospital - Attala	337	337	--	1,136	1,136	--
Baptist Memorial Hospital - Calhoun	290	249	41	1,335	1,335	--
Baptist Memorial Hospital - Leake *	544	544	--	2,185	2,185	--
Baptist Memorial Hospital - Yazoo **	465	465	--	1,848	1,848	--
Choctaw Regional Medical Center	167	151	16	1,887	499	1,388
Claiborne County Medical Center	242	242	--	5,422	3,161	2,261
Copiah County Medical Center	443	443	--	5,542	2,118	3,424
Covington County Hospital	252	252	--	21,093	1,038	20,055
Field Health System	223	223	--	918	918	--
Franklin County Memorial Hospital	71	71	--	245	245	--
Greene County Hospital	63	63	--	164	164	--
H.C. Watkins Memorial Hospital, Inc.	343	343	--	718	718	--
Jefferson Davis Community Hospital	76	54	22	179	179	--
John C. Stennis Memorial Hospital	84	84	--	266	266	--
Lackey Memorial Hospital	745	739	6	7,647	3,695	3,952
Laird Hospital	318	318	--	4,619	4,619	--
Lawrence County Hospital	298	298	--	3,026	3,026	--
Monroe Regional Hospital	342	342	--	3,325	3,325	--
North Mississippi Medical Center-Pontotoc ***	384	353	31	16,377	1,143	15,234
North Sunflower Medical Center	556	537	19	27,549	2,615	24,934
Noxubee General Hospital	358	329	29	23,108	3,219	19,889
Pearl River County Hospital & Nursing Home	25	23	2	29,446	58	29,388
Perry County General Hospital	41	41	--	107	107	--
Scott Regional Hospital	229	229	--	341	341	--
Sharkey-Issaquena Community Hospital	117	117	--	411	411	--
Simpson General Hospital	418	418	--	3,284	1,201	2,083
Tallahatchie General Hospital	88	66	22	28,900	3,556	25,344
Tippah County Hospital	480	446	34	1,611	1,583	28
Tyler Holmes Memorial Hospital	356	356	--	3,239	1,488	1,751
University of Mississippi Medical Center -Holmes County	212	212	--	729	729	--
Walthall General Hospital	125	125	--	417	417	--

APPENDIX C: CRITICAL ACCESS HOSPITAL PERFORMANCE DATA, 2021

Critical Access Hospitals (CAHs)	Ownership						Part of Health System
	County Owned	Corporate Ownership (not-for-profit)	City and County Owned	For Profit	Partnership	State	
Totals	18	9	2	0	1	1	16
Baptist Memorial Hospital - Attala	--	1	--	--	--	--	1 Baptist Memorial Health Care Corporation
Baptist Memorial Hospital - Calhoun	--	--	1	--	--	--	1 Baptist Memorial Health Care Corporation
Baptist Memorial Hospital - Leake *	--	1	--	--	--	--	1 Baptist Memorial Healthcare Corp
Baptist Memorial Hospital - Yazoo **	--	1	--	--	--	--	1 Baptist Memorial Healthcare Corporation
Choctaw Regional Medical Center	1	--	--	--	--	--	0 None
Claiborne County Medical Center	1	--	--	--	--	--	0 None
Copiah County Medical Center	1	--	--	--	--	--	0 None
Covington County Hospital	1	--	--	--	--	--	0 None
Field Health System	1	--	--	--	--	--	0 None
Franklin County Memorial Hospital	1	--	--	--	--	--	0 None
Greene County Hospital	1	--	--	--	--	--	1 George Regional Health System
H.C. Watkins Memorial Hospital, Inc.	--	1	--	--	--	--	1 Rush Health Systems Inc.
Jefferson Davis Community Hospital	1	--	--	--	--	--	1 Forrest Health
John C. Stennis Memorial Hospital	--	1	--	--	--	--	1 Rush Health Systems
Lackey Memorial Hospital	--	1	--	--	--	--	0 None
Laird Hospital	--	1	--	--	--	--	1 Rush Health Systems
Lawrence County Hospital	1	--	--	--	--	--	1 Southwest Health Systems
Monroe Regional Hospital	--	--	1	--	--	--	1 Boa Vida Hospital of Aberdeen, MS, LL
North Mississippi Medical Center-Pontotoc ***	1	--	--	--	--	--	1 North MS Health Services, Inc.
North Sunflower Medical Center	1	--	--	--	--	--	0 None
Noxubee General Hospital	1	--	--	--	--	--	0 None
Pearl River County Hospital & Nursing Home	1	--	--	--	--	--	1 Forrest Health
Perry County General Hospital	--	--	--	--	1	--	0 None
Scott Regional Hospital	--	1	--	--	--	--	1 Rush Health Systems, Inc.
Sharkey-Issaquena Community Hospital	1	--	--	--	--	--	0 None
Simpson General Hospital	--	1	--	--	--	--	0 None
Tallahatchie General Hospital	1	--	--	--	--	--	0 None
Tippah County Hospital	1	--	--	--	--	--	0 None
Tyler Holmes Memorial Hospital	1	--	--	--	--	--	0 None
University of Mississippi Medical Center -Holmes County	--	--	--	--	--	1	1 University of Mississippi Medical Center
Walthall General Hospital	1	--	--	--	--	--	1 Forrest Health

APPENDIX C: CRITICAL ACCESS HOSPITAL PERFORMANCE DATA, 2021

Critical Access Hospitals (CAHs)	Employees by Category						Utilization (Hospital)						
	Full-Time Employees	Part-Time Employees	Workers on Contract	RNs	LPNs	Ancillary Personnel	ER Visits	Non-RHC Clinic Visits	Average Daily Census	Admissions	Inpatient Days	Swing-Bed Day	RHC Visits
Totals	3,931	1,492	783	717	259	297	156,150	255,641	130.37	8,470	47,343	79,755	574,793
Baptist Memorial Hospital - Attala	100	53	35	46	4	0	10,191	13,714	3.11	337	1,136	3,218	3,996
Baptist Memorial Hospital - Calhoun	96	26	32	20	1	10	4,480	9,562	3.66	249	1,335	3,292	2,667
Baptist Memorial Hospital - Leake *	139	39	0	36	7	0	8,971	0	5.99	544	2,185	3,800	3
Baptist Memorial Hospital - Yazoo **	149	43	11	28	6	0	9,043	13,199	5.12	465	1,848	2,171	0
Choctaw Regional Medical Center	122	76	4	19	16	0	3,461	15,221	1.37	151	499	1,388	31,138
Claiborne County Medical Center	82	83	15	17	3	9	4,015	2,446	8.66	242	3,161	2,009	0
Copiah County Medical Center	118	92	8	28	3	0	9,633	0	5.80	443	2,118	3,424	0
Covington County Hospital	250	105	55	33	26	24	7,827	28,438	N/A	252	1,038	4,824	42,641
Field Health System	138	56	33	25	11	12	4,052	11,724	2.52	223	918	2,694	36,067
Franklin County Memorial Hospital	137	69	32	25	5	20	2,100	0	0.67	71	245	6,428	16,041
Greene County Hospital	36	16	4	8	1	4	3,118	0	0.45	63	164	1,253	5,304
H.C. Watkins Memorial Hospital, Inc.	70	53	0	11	4	6	3,221	37,784	1.97	343	718	2,344	37,784
Jefferson Davis Community Hospital	52	17	43	13	4	5	4,456	6,847	0.49	54	179	841	5,611
John C. Stennis Memorial Hospital	49	54	0	14	3	2	3,385	0	0.89	84	266	2,113	48,846
Lackey Memorial Hospital	206	79	35	49	11	38	7,206	296	10.83	739	3,695	2,512	60,510
Laird Hospital	114	45	0	15	1	3	4,123	10,288	12.65	318	4,619	4,006	73,896
Lawrence County Hospital	94	39	1	21	9	6	4,390	0	8.29	298	3,026	1,723	5,700
Monroe Regional Hospital	278	97	66	34	33	22	5,133	4,002	9.11	342	3,325	3,320	15,004
North Mississippi Medical Center-Pontotoc ***	162	24	29	33	11	8	8,931	0	0.00	353	1,143	3,768	32,171
North Sunflower Medical Center	424	38	77	49	19	37	3,757	60,435	7.16	537	2,615	4,463	46,789
Noxubee General Hospital	106	34	17	14	1	10	3,141	0	8.82	329	3,219	1,826	19,202
Pearl River County Hospital & Nursing Home	80	34	37	14	3	6	4,333	9,305	0.16	23	58	2,246	9,705
Perry County General Hospital	49	3	2	13	3	0	2,333	0	0.29	41	107	922	9,345
Scott Regional Hospital	52	45	4	13	1	5	3,855	3,020	0.93	229	341	2,107	19,209
Sharkey-Issaquena Community Hospital	69	14	9	13	3	9	1,990	0	1.13	117	411	0	0
Simpson General Hospital	156	62	0	22	22	25	3,224	7,230	9.00	418	1,201	2,841	17,453
Tallahatchie General Hospital	174	47	11	19	17	11	2,199	0	9.74	66	3,556	3,116	0
Tippah County Hospital	121	76	100	25	6	5	5,501	3,783	4.34	446	1,583	2,971	3,898
Tyler Holmes Memorial Hospital	140	38	118	21	14	8	6,189	7,616	4.08	356	1,488	1,751	13,152
University of Mississippi Medical Center - Holmes County	91	14	4	21	8	5	5,855	413	2.00	212	729	1,463	6,702
Walthall General Hospital	77	21	1	18	3	7	6,037	10,318	1.14	125	417	921	11,959

APPENDIX D: LIST OF MISSISSIPPI QUALIFIED HEALTH CENTERS

Rural Mississippi Qualified Health Centers (MQHCs)

- Aaron E. Henry Community Health Services Center
- Access Family Health Services
- Claiborne County Family Health Services
- Delta Health Center
- East Central Mississippi Health Care
- Family Health Center
- Greater Meridian Health Clinic
- Jefferson Comprehensive Health Center
- Mallory Community Health Center
- Mantachie Rural Health Care
- North Mississippi Primary Health Care
- Northeast Mississippi Health Care
- Outreach Health Services

Main Site

Clarksdale
Smithville
Port Gibson
Mound Bayou
Sebastopol
Laurel
Meridian
Fayette
Lexington
Mantachie
Ashland
Byhalia
Shubuta

Urban MQHCs

- Central Mississippi Health Services
- Coastal Family Health Center
- Family Health Care Clinic
- G.A. Carmichael Family Health Center
- Jackson-Hinds Comprehensive Health Center
- Southeast Mississippi Rural Health Initiative

Jackson
Biloxi
Pearl
Canton
Jackson
Hattiesburg

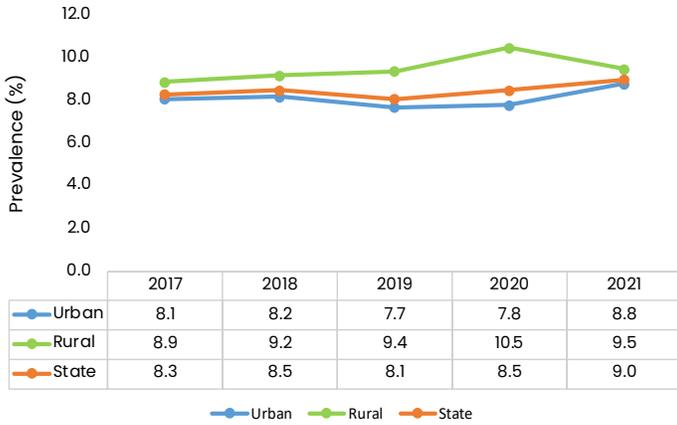
Source: Community Health Center Association of Mississippi

APPENDIX E: URBAN-RURAL DEMOGRAPHICS, 2017 & 2021

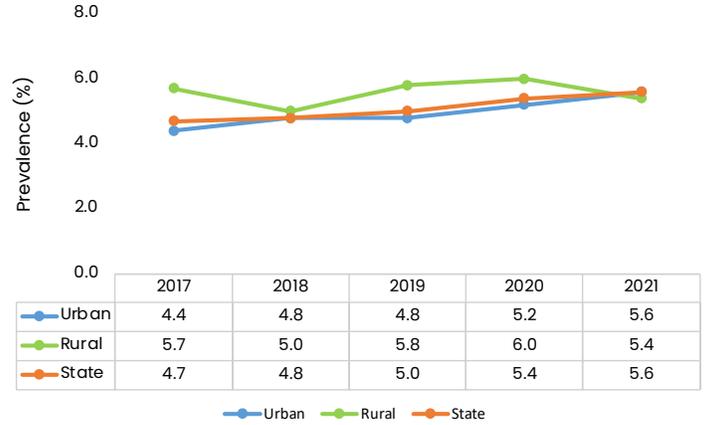
	2017						2021											
	Urban			Rural			State			Urban			Rural			State		
	Rate	95% LCI	95% UCI															
Urban	--	--	--	--	--	--	76.1	74.5235	77.6055	--	--	--	--	--	--	76.5	75.1002	77.9458
Rural	--	--	--	--	--	--	23.9	22.3945	25.4765	--	--	--	--	--	--	23.5	22.0542	24.8998
White, NH	58.9	56.3845	61.3828	59.6	55.7566	63.4616	59.1	56.9535	61.1586	57.6	55.224	59.9244	61.8	58.2558	65.2748	58.6	56.5821	60.5259
Black, NH	35.3	32.8662	37.7854	35.8	31.9226	39.5921	35.4	33.3572	37.4995	36.3	34.0947	38.5819	32.6	29.3156	35.8351	35.5	33.5863	37.3309
Other	5.8	4.4952	7.0859	4.6	3.1363	6.1308	5.5	4.4647	6.5664	6.1	4.5445	7.6304	5.7	3.3376	7.9811	6.0	4.6861	7.2886
Female	52.1	49.6805	54.5728	52.5	48.6879	56.2681	52.2	50.1416	54.2799	51.9	49.5647	54.2637	53.2	49.714	56.7237	52.2	50.2394	54.2016
Male	47.9	45.4272	50.3195	47.5	43.7319	51.3121	47.8	45.7201	49.8584	48.1	45.7363	50.4353	46.8	43.2763	50.286	47.8	45.7984	49.7606
Less than HS	15.5	13.4482	17.6095	22.8	19.1831	26.4024	17.3	15.4637	19.0746	13.9	11.9977	15.7193	18.2	14.9782	21.3735	14.9	13.2655	16.4795
HS Grad or Equiv	29.4	27.1435	31.6658	33.2	29.6979	36.6569	30.3	28.4002	32.2169	29.0	26.8689	31.2116	34.6	31.333	37.8202	30.3	28.5162	32.1647
Some college	34.4	32.0691	36.7570	31.1	27.5834	34.5838	33.6	31.6451	35.5857	34.7	32.3785	36.9605	33.2	29.848	36.568	34.3	32.4054	36.2471
College Grad	20.7	19.0669	22.2400	13.0	11.0897	14.8029	18.8	17.5261	20.0877	22.4	20.8038	24.0598	14.0	12.0851	15.994	20.5	19.1396	21.782
Less than \$15K	15.1	13.2308	17.0298	22.6	19.2158	25.9841	16.9	15.2348	18.5539	10.0	8.1833	11.7532	10.9	7.9928	13.7024	10.2	8.6454	11.6913
\$15K to \$24,999	22.3	19.9749	24.5412	26.9	23.0337	30.7597	23.4	21.3824	25.3247	14.5	12.6925	16.3664	14.5	11.868	17.024	14.5	12.9768	16.0442
\$25K to \$34,999	12.1	10.2128	13.8825	11.5	9.0977	13.8595	11.9	10.4027	13.4238	16.8	14.8059	18.7168	23.1	19.6211	26.5147	18.2	16.4937	19.8997
\$35K to \$49,999	13.0	11.2779	14.7527	12.1	9.6586	14.4475	12.8	11.3452	14.2309	14.6	12.7478	16.3553	14.7	11.973	17.4659	14.6	13.0617	16.1179
\$50K or more	37.6	35.1031	39.9943	27.0	23.4493	30.4942	35.1	33.0107	37.0909	44.2	41.579	46.7999	36.9	32.9729	40.8652	42.5	40.3342	44.7352

APPENDIX F: HEALTH CONDITIONS GRAPHS

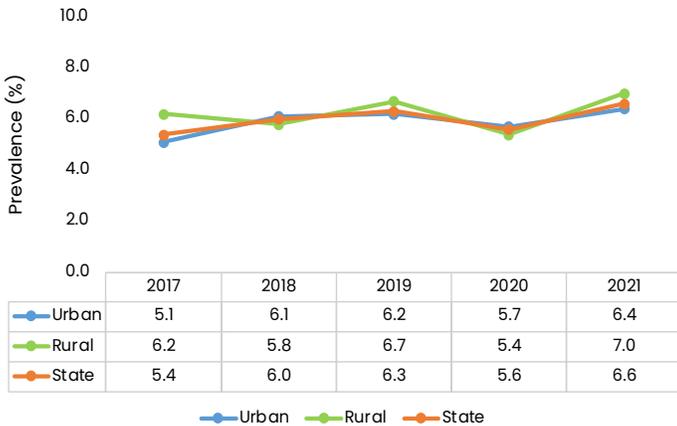
History of Heart Disease (MS BRFSS)



History of Stroke (MS BRFSS)



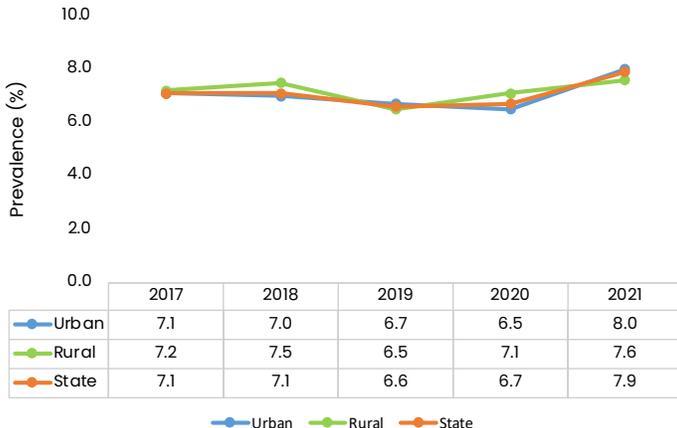
History of Skin Cancer (MS BRFSS)



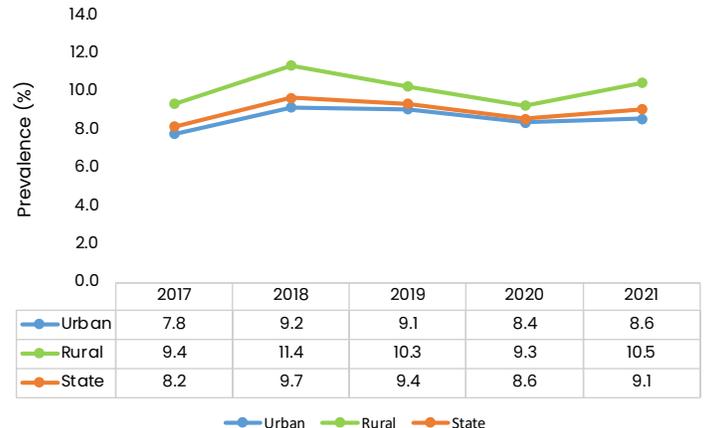
Current Obesity (MS BRFSS)

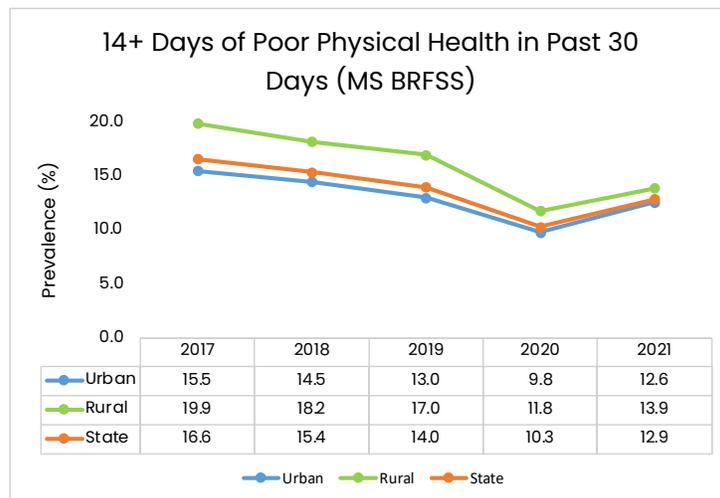
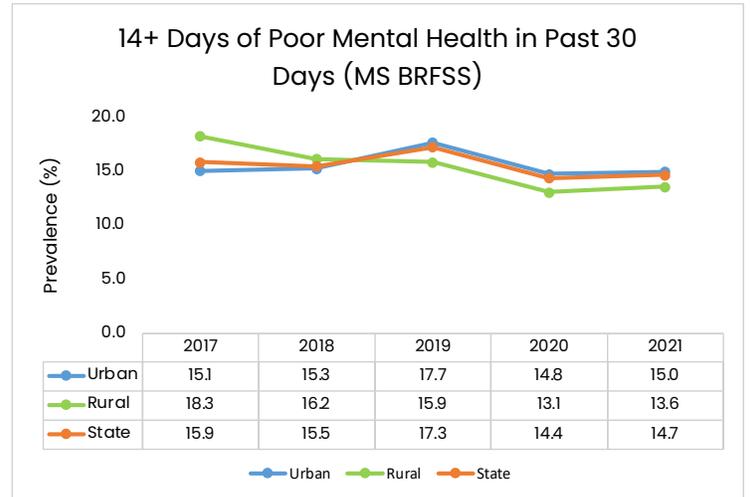
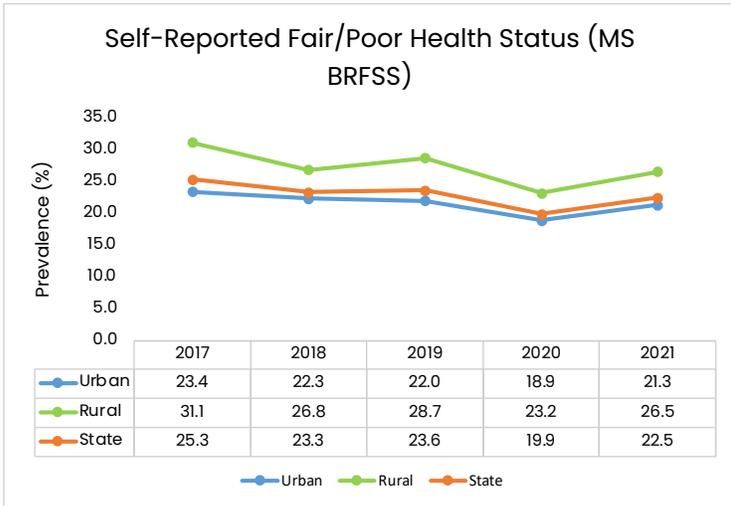
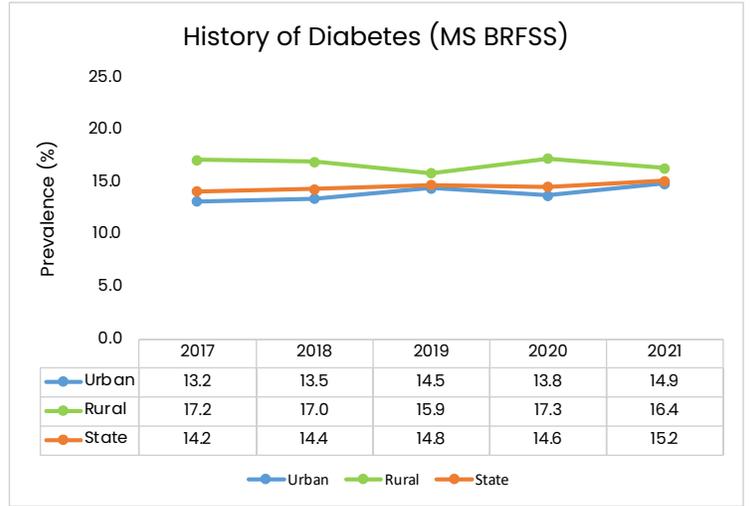
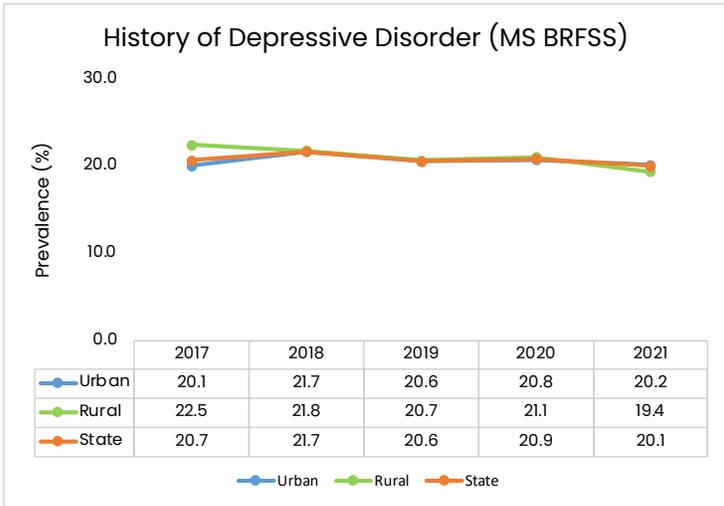


History of Other Types of Cancer (MS BRFSS)



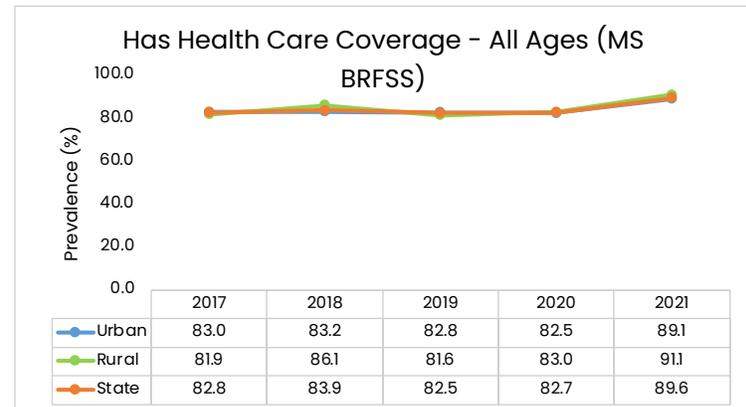
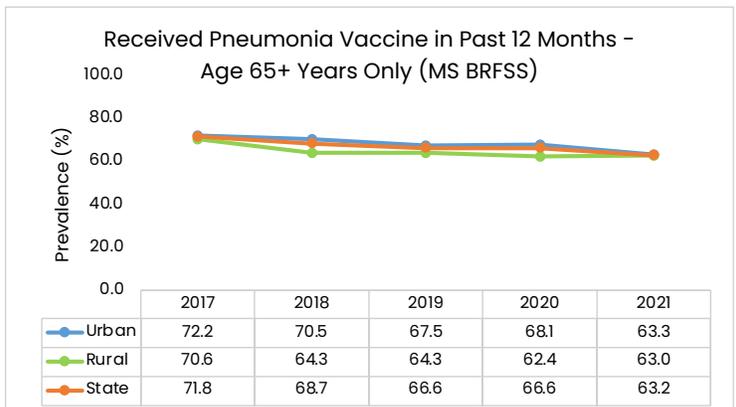
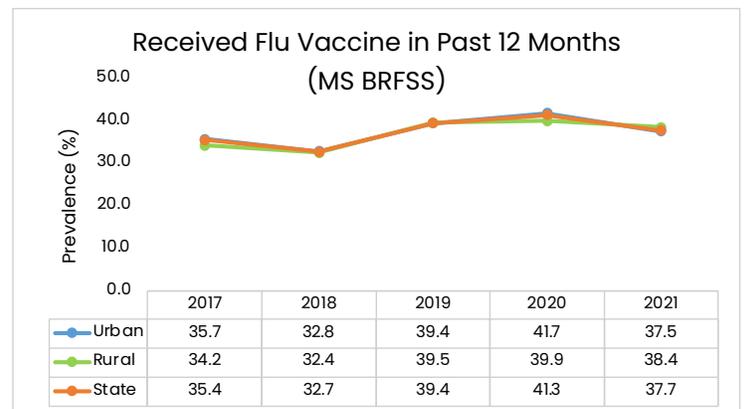
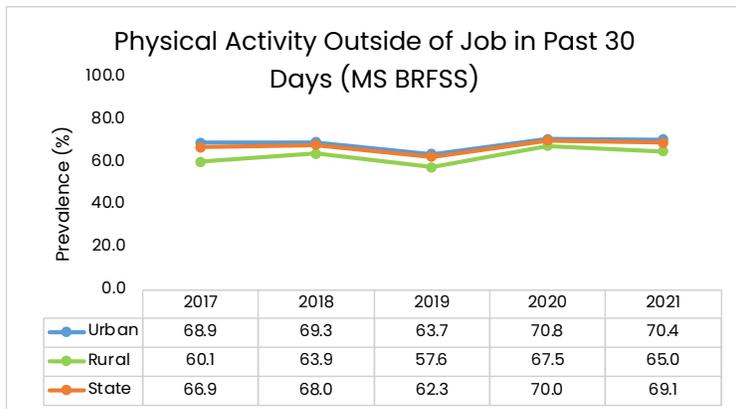
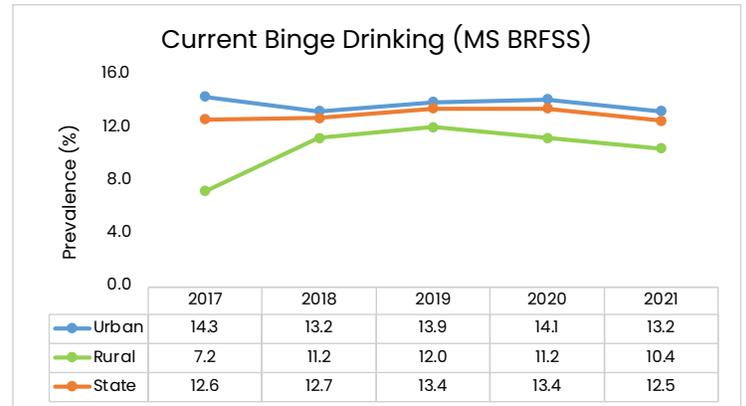
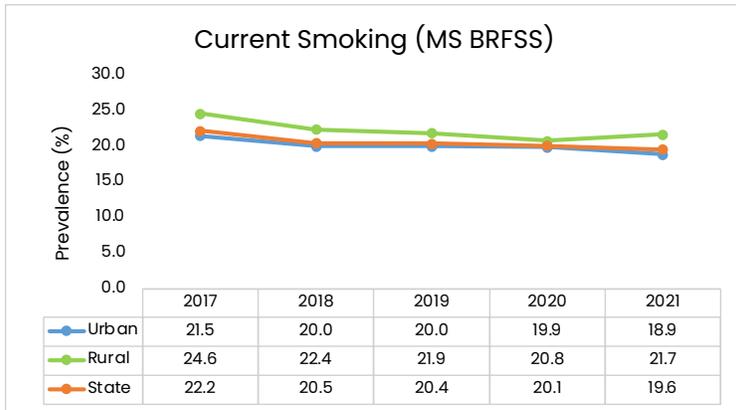
History of COPD (MS BRFSS)

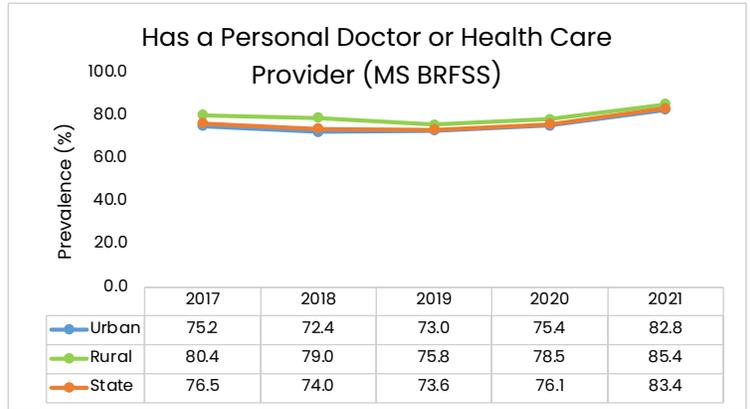
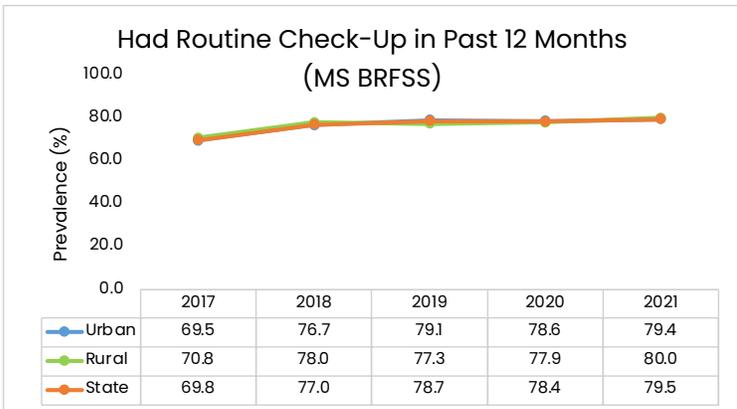
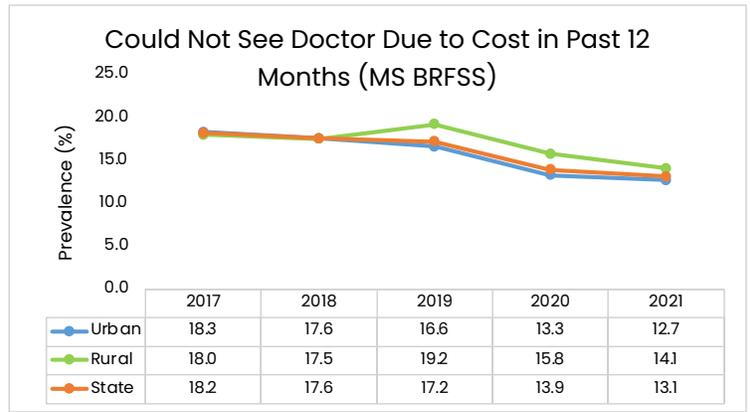
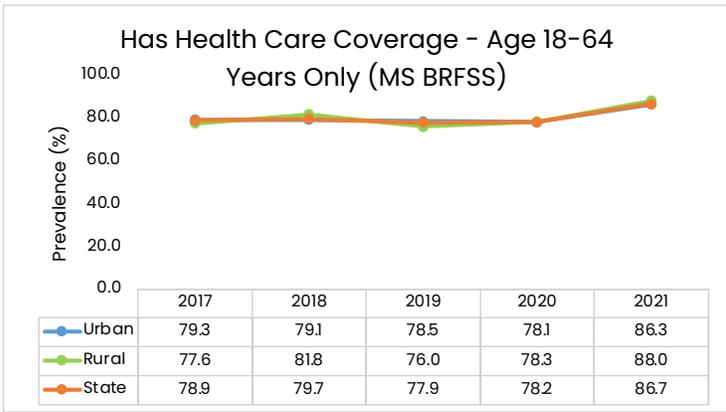




APPENDIX G: DIFFERENCES IN HEALTH BEHAVIORS

RURAL-URBAN





Mississippi State Department of Health

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