



Earl R. Wilson, Founding Chairman

**METHODIST**  
REHABILITATION CENTER

## **COMMUNITY HEALTH NEEDS ASSESSMENT**

**FY 2023-2025**

**Approved by the Board of Trustees May 26, 2022**

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## Executive Summary

Methodist Rehabilitation Center (MRC) located in Jackson, Mississippi, helps people recover after a stroke, brain or spinal cord injury, post-traumatic and post-surgical orthopedic conditions, or chronic pain. MRC also provides long-term care for persons with severe disabilities. MRC opened its doors in 1975 to fulfill a vision of its founders who recognized Mississippi's need for comprehensive medical rehabilitation services.

Methodist Rehabilitation Center serves people across the state of Mississippi, with the largest concentration of patients residing in the three-county Jackson metropolitan area. This broad service area is driven by two factors: The Jackson area is the largest hub for health care in the state, and MRC is the major provider of rehabilitation services across different areas of specialty. The community served by MRC includes adults and adolescents above 13 years of age of all socio-economic backgrounds, consistent with the demographics of the state.

For many years, MRC has conducted an annual community benefit assessment and presented a report to the center's Board of Trustees. The reports demonstrated the various ways the institution fulfills its mission as a 501(c)(3) not-for-profit hospital. The mandatory Community Health Needs Assessment now allows Methodist Rehabilitation Center to formalize and expand this process.

This Community Health Needs Assessment has been an ongoing process since the completion of the previous three assessments in 2013, 2016, and 2019. Patients, employees and community representatives with expertise in public health and various not-for-profit organizations that serve low-income and disadvantaged populations provided the main input. Additional information came from public databases, reports, and publications by state and national agencies. This Community Health Needs Assessment was approved by the MRC Board of Trustees at its annual meeting on May 26, 2022, with an effective date of July 1, 2022 (beginning of Fiscal Year 2023)

Based on the adopted principles for prioritizing community health care needs, the following key priorities were identified:

1. Promote Access to Comprehensive Rehabilitation
2. Educate & Train Clinicians Internally and in the Community
3. Monitor Outcomes / Build Relationships Along the Continuum of Care

The Implementation Plan section describes goals identified within each key priority area over the next three years. The Community Health Needs Assessment and Implementation Plan document is available at MRC's website [www.methodistonline.org/community-health-needs-assessment](http://www.methodistonline.org/community-health-needs-assessment).

## Introduction

### Mission Statement

*“In response to the love of God, Methodist Rehabilitation Center is dedicated to the restoration and enhancement of the lives of those we serve. We are committed to the excellence and leadership in the delivery of comprehensive rehabilitation services.”*



### About Us

In 1975, Methodist Rehabilitation Center (MRC) opened its doors to fulfill a vision to provide comprehensive medical rehabilitation services for all Mississippians. The center was created by four visionary founders, led by the late Earl R. Wilson, who served as chairman of the board from the center's inception until his death in 2000.

MRC's primary facility is a seven-floor, 124-bed inpatient hospital located on the campus of The University of Mississippi Medical Center. The entire facility and clinical programs are designed specifically to help patients restore abilities lost to injury or illness. Patients of similar injury types are housed on the same floor and share a dedicated staff of nurses and therapists. This promotes specialized expertise among staff, and the patients are encouraged as they recover with others overcoming similar challenges.

In 2005, MRC opened Methodist Specialty Care Center, a 60-bed, long-term residential center for younger adults with severe disabilities. In addition, MRC operates numerous clinics across Mississippi and Northeast Louisiana to provide outpatient rehabilitation services.

Most all patients admitted to MRC's main hospital are transferred from acute care hospitals located throughout Mississippi and the region. Besides providing inpatient and outpatient care, MRC serves the community through an array of outreach programs ranging from wheelchair sports clinics and competitions, monthly support groups, education events, as well as a clinical research program that allows patients to be part of research discoveries.

MRC is affiliated with the University of Mississippi Medical Center (UMMC) and serves as a teaching facility for students and residents. MRC is a founding member of UMMC's Neuro Institute, established in 2016, to advance clinical care, research and education in three areas: stroke, addictions, and neurotrauma. In addition, MRC serves as an internship site for undergraduate students from major universities in the state.

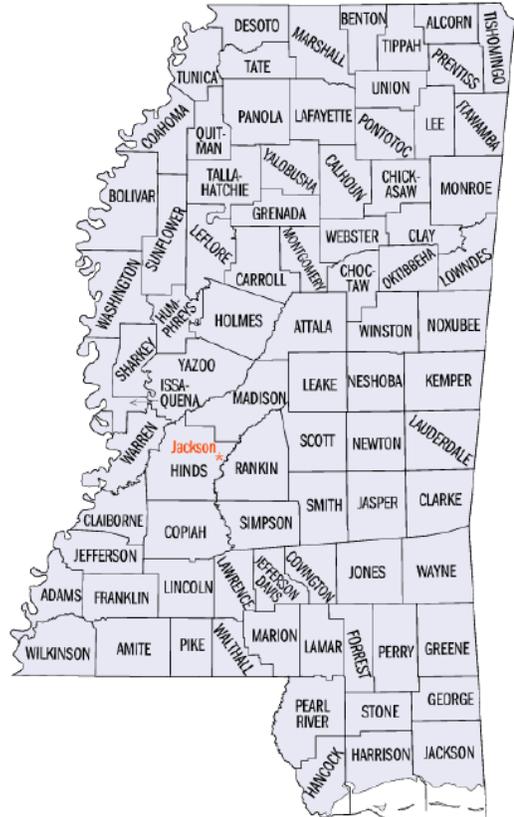
## Community Served

### Definition

MRC serves people across the entire state of Mississippi. Due to our geographic location, the majority of the community served resides in central Mississippi. This includes the city of Jackson and Hinds, Rankin and Madison counties, which is the state's most populated area. Beyond this Tri-County area, MRC serves a significant number of people from other, contiguous counties within a ~100 mile radius. Such a widespread catchment area is driven by the fact that the Jackson area is the major hub for health care across the entire state and by recognition of MRC as the major provider of rehabilitation services (inpatient and outpatient) across different areas of specialty.

The target population served includes male and female adults and adolescents age 13 and older from ethnic and socio-economic backgrounds that are representative of the state.

Our specialty area further defines the community served to those in need of comprehensive medical rehabilitation for various neurologic and orthopedic conditions, primarily acquired brain and spinal cord injuries or diseases, post-traumatic/post-surgical orthopedic conditions, chronic pain and long-term specialty care for the most severely disabled.



### Description

#### *Mississippi Demographics*

According to the most recent data from the *U.S. Census Bureau*, the population of Mississippi is nearly 3 million (52% women, 48% men). The median age is 38 years (77%  $\geq 18$  years, 16%  $\geq 65$  years). Caucasians represent 56% of the population and African-Americans 37%. While the majority of households consist of married couples (77%), the majority of family households consist of single parent families (51.7%) followed by married-couple families (43.8%). Among the people 25 or older, 86% have at least a high school diploma and 22% have a bachelor's degree or higher.

The median household income is ~\$45,800 (\$65,700 nationally) and the median family income is ~\$58,500 (\$80,900 nationally). About 20% live below the federal poverty level (12% nationally) – mainly children under 18 years (28%), followed by adults 18 to 64 years (18%) and 65 years and over (13%). In Mississippi 13.5% of households are enrolled in the supplemental nutrition assistance program (10.7% national level).

### *Mississippi Health Priorities*

It is well known that Mississippi ranks among the lowest in the U.S. in overall health. The main health problems in adults are hypertension (43.6% prevalence), obesity (39.7%), and diabetes (14.6%). These lead to cardio-vascular diseases including stroke, the main cause of death in the state (30% compared to the national rate of 28% in 2017). Over the next 20 years, obesity is expected to contribute to over 400,000 of new cases of type 2 diabetes, over 750,000 new cases of hypertension and over 800,000 new cases of coronary heart disease and stroke in Mississippi. In 2019, 35.1 percent of adults in Mississippi reported having a disability, compared to 26.7 percent nationally (CDC Disability and Health Data System, 2019).

### *Barriers to Health Care Access*

The *Community Need Index*, developed by *Dignity Health* and *Truven Health Analytics*, reflects the barriers to health care access in a given community based on socio-economic indicators (income, ethnicity/language, education, insurance, and housing). An average score is assigned to each ZIP code, from 1.0 (lowest) to 5.0 (highest socioeconomic barriers), and the county score is comprised of the average score of the ZIP codes within the county. The latest available scores (2021) for Mississippi counties range from 2.8-5.0. The “highest need” (score 4.2-5.0) was projected for 52 counties with 1.28 million people (43% of total population), “high need” (score 3.4-4.1) for 27 counties with 1.22 million people (41%), and “moderate need” (2.6-3.3) for the remaining 3 counties with 448,000 people (15%). The barriers accounted for by the *Community Need Index* also apply to the communities primarily served by MRC (figure).

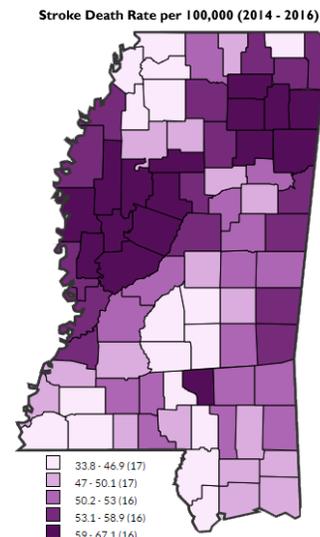
### *Uninsured & Governmental Insurance*

In 2019, 376,872 Mississippians (13%) are estimated to be without insurance. There are somewhat more uninsured men (53%) than women (47%). Most uninsured belong to the age group of 19-44 years, which accounts for 71% of all uninsured Mississippians. The rate of uninsured among African-Americans (13.9%) is higher than among Caucasians (11.5%). About 61% of all uninsured persons 26 years or older have a high school diploma or less and 51% of the entire uninsured Mississippi population are unmarried. In terms of household income, 31% of the uninsured earn less than \$25,000, 30% between \$25,000 and \$49,999, 17% between \$50,000 and \$74,999, 11% between \$75,000 and \$99,999, and 11% earn \$100,000 or over.

In 2019, it is estimated that 697,000 Mississippians (24%) received Medicaid benefits. In addition, about 573,000 Mississippi residents (20%) are Medicare beneficiaries, of whom almost 209,000 (37%) have elected to participate in a Medicare Advantage plan. In total, an estimated 44% of Mississippi’s population is receiving governmental insurance benefits.

### *Health Problems Leading to MRC Admissions*

Health problems that lead to admission to MRC result from trauma or diseases affecting the nervous system (stroke, spinal cord injury, brain injury) or musculo-skeletal system (amputation, broken bone, joint replacement). According to the most recent Mississippi Trauma Care System Report (October – December 2018, prepared January 2019), trauma remains the leading cause of death for Mississippians age 1 to 44, and Mississippi ranks 3<sup>rd</sup> in the nation for unintentional injury deaths. The population sustaining a trauma increased approximately from 15,000 in 2006 to 24,000 in 2018, and those who sustained unintentional traumatic injuries were more likely to survive. As a result, many people are admitted for rehabilitation after traumatic brain or spinal cord injury or broken or lost limb. The number of post-traumatic cases admitted to MRC is likely to increase due to a decline in mortality and the population growth.



The most recent Heart Disease and Stroke Prevention and Control State Plan (2004-2013) reveals that a high prevalence of diabetes, obesity, and hypertension translates into a high rate of stroke in Mississippi. It is estimated that each year

about 5,000 Mississippians suffer a stroke for the first time and another 2,000 a recurrent stroke. Stroke occurs twice more often in Mississippians with income of less than \$25,000 (~7%) than in those who earn more than \$25,000 (~3.5%).

Stroke was the seventh leading cause of death in Mississippi in 2020 and occurs at a rate of 54.5 per 100,000 people, the highest in the nation. Although mortality from stroke is on the decline, it is highest in several counties north and south of Hinds County where MRC is located.

Stroke leaves ~2,000 Mississippians disabled each year. The percent of people living with stroke (~4%) has been steady the past 7 years. Better emergency care and survival means more disabled people in need of comprehensive rehabilitation services.

### *Demographics of People Admitted to MRC*

In the fiscal year 2021 (July 1, 2020 - June 30, 2021), 1,407 Mississippians were admitted to MRC inpatient rehabilitation. Of those, 45% were women and 55% men; 50% were Caucasians and 48% African-American; 41% were married, 26% never married, 14% widowed, 14% divorced, and 4% separated. These demographics are representative of the entire state of Mississippi.

The people admitted to MRC represent 77 of 82 Mississippi counties (84%). Before admission, 50% resided in three counties of the Jackson Metro area and an additional 42% within a radius of 120 miles. The most frequent reasons for admission were stroke (32%), orthopedic (e.g. leg fracture or joint implants) (20%), traumatic or non-traumatic spinal cord injury (11%), and traumatic or non-traumatic brain injury (9%). These conditions represent 71% of all admissions. While Medicare remains our most common payer source (48%) upon admission, 4% of people admitted in the fiscal year 2021 were uninsured.

### *Rehabilitation facilities outside of MRC primary service area*

Other providers of Level 1 comprehensive rehabilitation outside of MRC primary service area are in the northern counties (De Soto, Washington, Lee) and southern counties (Forrest, Harrison). They are two or more hours driving distance from MRC and account for a combined 64% of all Level 1 licensed rehabilitation beds in the state (FY 2022 State Health Plan, MS Dept. of Health).

## Preceding CHNA/Implementation Plan

The previous CHNA was conducted in FY 2019 and implemented during FY2020-FY2022. Three priority areas were identified and these activities are described below.

1. Improve Access to Comprehensive Rehabilitation
2. Educate & Train Rehabilitation Practitioners in the Community
3. Monitor Outcomes & Build Relationships along the Continuum of Care

Throughout the previous cycle, MRC did not receive any written comments regarding our CHNA and Implementation Plan. All verbal comments received have been positive.

## Process and Methods

### Publicly Available Data Sources

Publicly accessible databases, reports, and publications by various state and national agencies were extensively searched for the purpose of the CHNA.

DATA – MISSISSIPPI		
Source	Title (Year)	Summary
Mississippi Insurance Department	Mississippi health insurance marketplace 2022 guide (2022)	Information about health insurance carriers, enrollment process, premium changes, the number of people enrolled through Mississippi's health insurance exchange
	<a href="https://www.healthinsurance.org/health-insurance-marketplaces/mississippi/">https://www.healthinsurance.org/health-insurance-marketplaces/mississippi/</a>	
Mississippi State Department of Health	Heart Disease and Stroke Resources (2019)	Information on stroke facts, prevention, protocols for treatment, rehabilitation options, and patient quality of care issues
	<a href="https://msdh.ms.gov/msdhsite/_static/43,0,297,77.html#page_end">https://msdh.ms.gov/msdhsite/_static/43,0,297,77.html#page_end</a>	
Mississippi State Department of Health	Mississippi Stroke System-of-Care (2021)	Collaborative effort between the Mississippi State Department of Health, the Mississippi Healthcare Alliance, the American Heart Association, and the Mississippi Hospital Association.
	<a href="https://msdh.ms.gov/msdhsite/_static/44,0,397,689.html">https://msdh.ms.gov/msdhsite/_static/44,0,397,689.html</a>	
Mississippi State Department of Health- Trauma Care System	Fact Sheets (2018)	The only functioning mandatory Trauma System in the country nationally recognized as a model Trauma System
	<a href="http://msdh.ms.gov/msdhsite/_static/resources/4648.pdf">http://msdh.ms.gov/msdhsite/_static/resources/4648.pdf</a>	
The State Data Center of Mississippi	Population Projections for Mississippi, 2020 – 2050	Projections of an increase in Mississippi population by county, sex and race
	<a href="https://sdc.olemiss.edu/population-projections/">https://sdc.olemiss.edu/population-projections/</a>	

DATA - NATIONAL		
Source	Title (Year)	Summary
US Census Bureau	Explore Census Data (2020)	Summary of demographic and socio-economic statistics for the state of Mississippi
	<a href="https://data.census.gov/cedsci/profile?g=0400000US28">https://data.census.gov/cedsci/profile?g=0400000US28</a>	
Dignity Health	Community Need Index- Interactive web application (2022)	Community Need Index scores the severity of health disparity for every zip code in the US and demonstrates the link between health need, access to care, and preventable hospitalizations
	<a href="http://cni.dignityhealth.org/">http://cni.dignityhealth.org/</a>	
Centers for Disease Control and Prevention	Behavioral Risk Factor Surveillance System Survey Data and Documentation (2020)	The largest on-going telephone survey system tracking health conditions and risk behaviors in the United States yearly since 1984
	<a href="https://www.cdc.gov/brfss/annual_data/annual_2020.html">https://www.cdc.gov/brfss/annual_data/annual_2020.html</a>	
Centers for Disease Control and Prevention	Outpatient Rehabilitation Among Stroke Survivors - -- 20 States and the District of Columbia, 2013, and Four States, 2015 (2018)	Report from 21 States, including Mississippi, indicates lower than expected utilization of outpatient rehabilitation services among stroke survivors
	<a href="https://www.cdc.gov/mmwr/volumes/67/wr/mm6720a2.htm">https://www.cdc.gov/mmwr/volumes/67/wr/mm6720a2.htm</a>	
Model Systems Knowledge Translation Center	Multiple documents	Summarizes research, identifies health information needs, and develops information resources related to traumatic brain injury
	<a href="http://www.msktc.org/tbi">http://www.msktc.org/tbi</a>	
National Spinal Cord Injury Statistical Center	Spinal Cord Injury Facts and Figures at a Glance (2020)	Largest source of information about causes, demographics, and consequences of traumatic spinal cord injury in the U.S.
	<a href="https://www.nscisc.uab.edu/Public/Facts%20and%20Figures%202020.pdf">https://www.nscisc.uab.edu/Public/Facts%20and%20Figures%202020.pdf</a>	

## Input from Employees

The following MRC employees participated in CHNA as the Steering Committee members or panelists in a focus group (listed in alphabetical order).

<b>MRC PARTICIPANTS</b>	
<b>STEERING COMMITTEE</b>	
Mark A. Adams, President & CEO	Arash Sepehri, MA, Director, Quality Management & Medical Informatics
Gary Armstrong, Executive Vice President & Chief Financial Officer	Dobrivoje S. Stokic, MD, DSc, Vice President, Research & Innovation
Chris Blount, Executive Director, Wilson Research Foundation	Tammy Voynik, Vice President, Legal Affairs
Douglas Boone, Vice President, Business Development and Community Relations	David McMillin, Chairman of the Board
<b>EMPLOYEE PANELISTS</b>	
Martha Davis, Financial Assistance Counselor	Bridgett Pelts, Occupational Therapist
Misty Ferguson, Occupational Therapist	
Amanda Griggs, Social Worker	
Nauvoo Ferguson, Physical Therapy Canine	

## Input from Community Representatives

### Methods

Representatives of the community and others with knowledge of challenges/gaps/barriers experienced by those we serve were identified for interviews through internal and external sources. The response rate was 100%. Some interviews were conducted in-person, others telephonically. As with the focus group, thematic content analysis was used to identify and cluster common themes.

### Sources

Information about the representatives interviewed is presented in the table below.

Representatives of the Community Who Provided Input				
Date	Name/Degree	Title	Affiliation	Expertise/Leadership Role
Multiple	Thomas Dobbs III, MD, MPH <sup>1,2</sup>	State Health Officer	Mississippi State Department of Health (MSDH)	20+ years of experience as a clinician, educator, researcher, and public health leader
5/9/2022	Kate Beller, JD <sup>1,2,4</sup>	Executive VP for Government Relations and Policy Development	American Medical Rehabilitation Providers Assoc.	30+ years of association/public health legal/policy experience
5/12/2022	Roger Bullock <sup>1,3,4</sup>	Independent Living Specialist	LiFe of Mississippi	Information and referral, peer support, advocacy, skills training and community transition for those living with disabilities

<sup>1</sup> **Mandatory:** Representative of federal/tribal/regional/state/local health departments/agencies with current data/information relevant to the needs of the community

<sup>2</sup> **Mandatory:** Person with special knowledge/expertise in public health (provide name, title, affiliation, a brief description of special knowledge/expertise)

<sup>3</sup> **Mandatory:** “Leaders/Representatives”/member of medically underserved, low-income, minority populations, and populations with chronic disease needs

<sup>4</sup> **Optional:** Consumer advocates; nonprofit organizations; academic experts; local government officials; community-based organizations; health care providers (with focus on low-income persons, minority groups, or those with chronic disease needs); private businesses; and health insurance and managed care organizations.

The Steering Committee developed criteria for identifying community health needs, as indicated below, and used these criteria to define community health care needs that will be addressed in the 2023-2024 Implementation Plan, which will be completed in the fall of 2022.

Process and criteria for prioritizing health needs

The process analogous to “multi-voting technique” was chosen for prioritizing community health care needs. This was done through a series of meetings during which each round of votes was followed by narrowing of the priority list. Before voting, the Steering Committee agreed upon the following guiding principles:

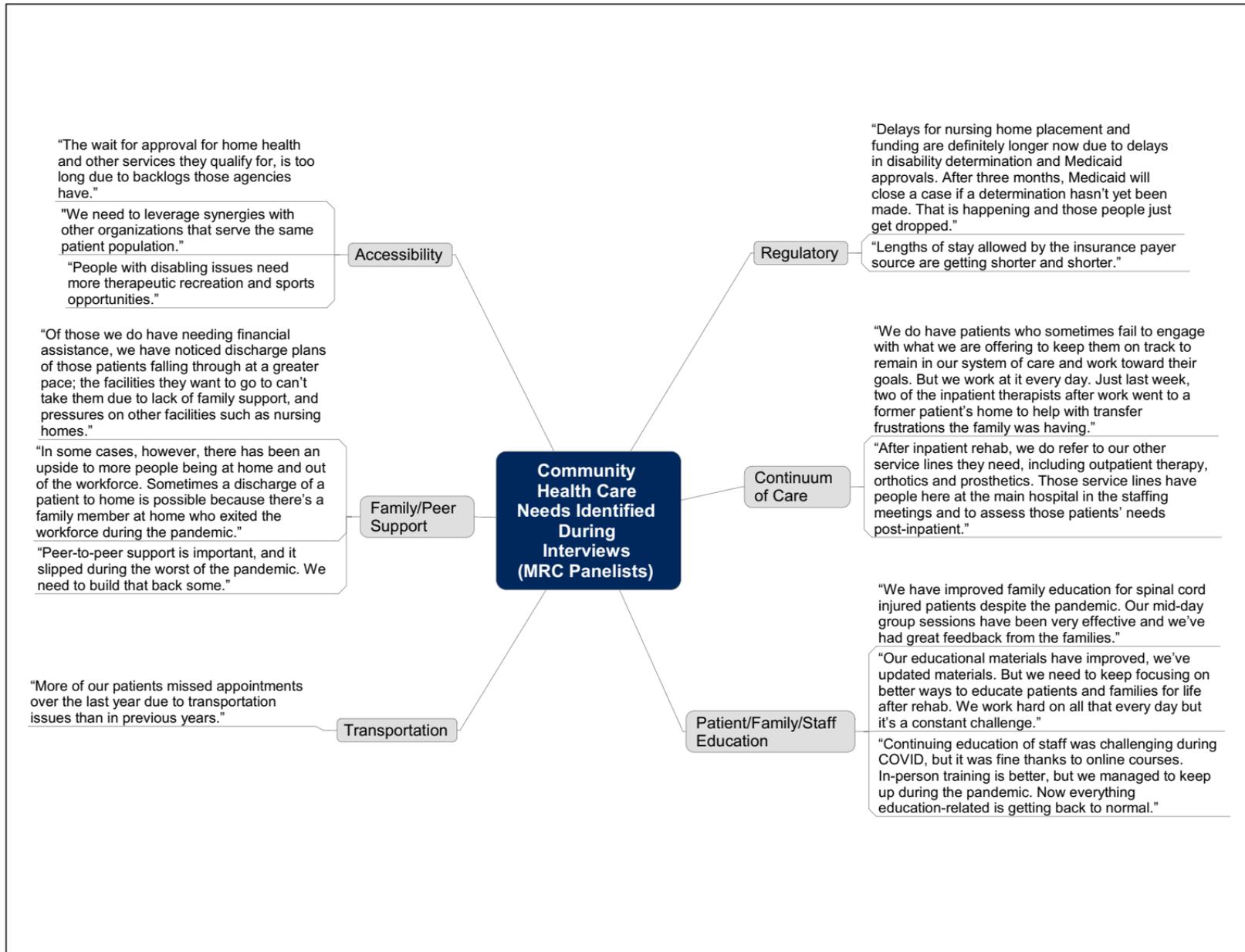
1. *Define a “health care need”*: We adopted the definition of health care need as a “capacity to improve health”.<sup>1</sup> This was understood to include the capacity (ability) of a community to improve health and the capacity of providers to overcome identified deficiencies given the available evidence and resources. Equal weight was given to each capacity. If both were scored low, the presumed “need” was considered a “desire” and received a lower priority. It was recognized, however, that the “need” and “desire” represent ends of the spectrum and that efforts are warranted toward changing circumstances that would potentially elevate “desire” to a “need”.
2. *Give priority to input from community representatives over the results of desk research*: Given the paucity of research on health care needs of the community we serve, it was considered that themes which emerged from interviews and focus groups are most relevant for addressing immediate health care needs. At the same time, the potential bias of the participants was acknowledged as a shortcoming.
3. *Give priority to the needs with potential to create partnerships and eliminate redundancies*: Community health care needs unlikely can be met by a single organization. Therefore, higher priority is given to those needs that can be met through collaboration with another public or private entity for which the opportunity to create a partnership exists.
4. *Give priority to the needs with measurable performance indicators, including both “outputs” and “outcomes”*: Outputs relate to activities or “what was done and whom we reached,” whereas outcomes refer to “what difference did it make”. Both are justified because the activity must be delivered as intended before the expected outcomes can occur. It is recognized that early performance indicators will mainly be limited to outputs before outcomes can be reliably assessed.
5. *Give higher priority to the needs where significance of problem has about the same weight as likelihood of implementing a solution*: Based on the items in the table below, both significance of problem and solution implementation were scored low, medium, or high. Lower priority was given to needs with discrepant scores (low-high or high-low) in favor of the needs scored above low and equal (e.g., medium-medium, high-high).

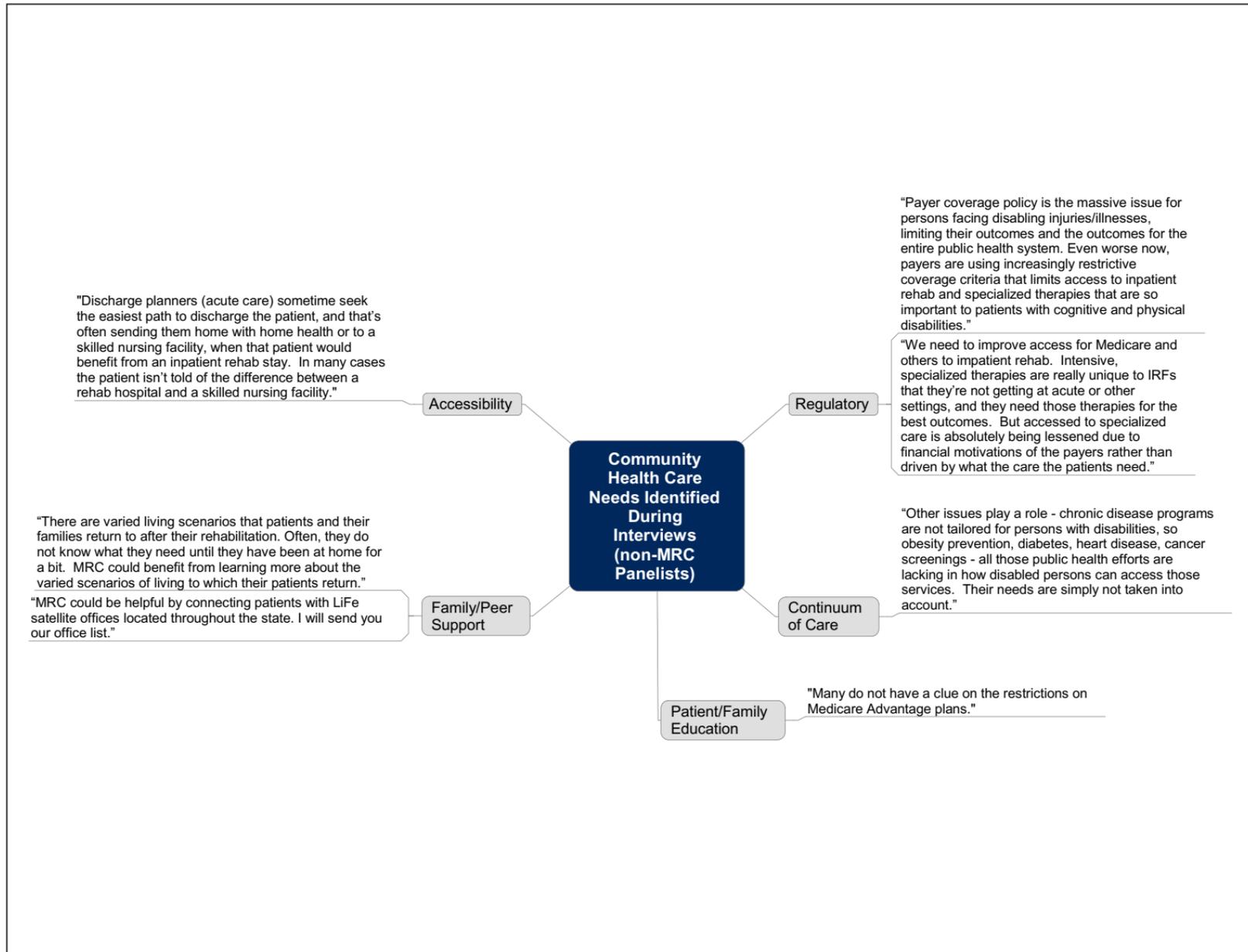
Priority of Problem	Solution for Problem
▶ Impact of problem	▶ Expertise to implement solution
▶ Urgency of solving problem	▶ Effectiveness of solution
▶ Availability of solutions	▶ Potential impact on health
▶ Availability of resources to solve problem	▶ Ease of implementation/maintenance
▶ Cost and/or return on investment	▶ Potential negative consequences

Comments received from participants during this community needs assessment are summarized on the following two pages.

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<sup>1</sup>Stevens A, Raftery J. Introduction Health care needs assessment. Oxford: Radcliffe Medical Press, 1994:1-30.





## Priority Areas Identified

In prioritizing health care needs, members of the Steering Committee were guided by the above stated criteria. The following key priority areas were selected:

1. Promote Access to Comprehensive Rehabilitation
2. Educate & Train Rehabilitation Practitioners in the Community
3. Monitor Outcomes & Build Relationships along the Continuum of Care

### Facilities/Resources Available to Meet the Needs

MRC will utilize the existing facilities and resources to address the selected priority areas. The activities will mainly be provided by the clinical, research, education, process improvement and volunteer personnel. The expertise and interest will be matched to the designated activities in each priority area. MRC will also utilize the existing facilities at different locations for conducting these activities, including the main hospital and several outpatient facilities.

As appropriate, MRC plans to collaborate with public and private organizations and agencies to address the key priority areas, including, but not limited to the University of Mississippi Medical Center, State Department of Health, LiFe of MS, Mississippi Paralysis Association, Mississippi Primary Health Care Association, and appropriate municipal departments.