

# DELTA HEALTH SYSTEM-THE MEDICAL CENTER

## Community Health Needs Assessment 2022



### Delta Health System-The Medical Center Community Health Needs Assessment

#### **Overview**

The Medical Center (TMC) is a community, not-for-profit hospital, located in Greenville, MS. The Medical Center is Washington County's largest employer, with a workforce of over 850 people. The medical staff consists of approximately fifty physicians, representing a large variety of specialties.

The Medical Center is licensed for 295 beds, with services including acute and critical care, inpatient rehabilitation, and outpatient services. Campuses include the main facility located at 1400 East Union Street, Greenville, Mississippi, and the West Campus of The Medical Center at 300 South Washington Street, as well as various rural health and physician clinics.

Annually, The Medical Center has approximately 5,541 discharges, and provides over 78,061 outpatient visits, and 31,169 Emergency Department visits. Last year, The Medical Center provided over \$12,410,161 in charity care to the citizens of the community we serve and incurred an additional \$11,950,870 in uncompensated care.

## **Community**

The Medical Center's primary service area is Washington County, with a population of 44,922 as of 2020. We continue to draw roughly 85% of our patient base from Washington County and the remaining from 7 other surrounding counties in the Tri-State Delta Region with a total population of 132,000. The Medical Center serves a community that is unique to other parts of the country, as well as Mississippi. An area that once thrived from cotton now focuses more on corn and soybean production. With advancing technologies in agriculture, we have transitioned from a high employee agriculturally based economy to a low employee agriculturally based economy. The once strong manufacturing base located in Washington County has dissipated due to both external and internal factors. As a result, the entire Delta continues to experience out migration, and Washington County has lost 6,215 people from its 2010 population of 51,137. This represents an 8.8% population loss over the ten-year period for an average loss of almost 1% per year. The median household income in Washington County is \$32,011 which is far below the national average of \$67,521 and well below the state average of \$46,511. (*census.gov*) The population of single individuals and average household size is decreasing. The two growing industries continue to be the Service Sector (health, education, scientific, social, and hospitality etc.) and the Government Sector. These Sectors generally rely on local tax funding with the exception of The Medical Center.

As in much of Mississippi, and especially in rural areas, Washington County is home to vulnerable populations. More than double the national average, 27.7% of the population of Washington County lives in poverty (annual income of less than \$12,760), and 18.4% of the adult population has less than a high school education. Pressing community health needs exist that will be described in this document. (*US Census Bureau, 2020*)

## **Methodology**

Technology plays the biggest part in helping the steering committee develop a wide range of available needs assessments and reports. In addition to this, the committee convenes regularly to identify unmet community needs, monitor outcomes, and obtain advice from various allied healthcare professionals and leaders in our community. During the time period May-October 2022, The Medical Center employed several methods to obtain information from various resources and experts in their respective fields. Individuals external to our organization who serve on the committee are Don Fisher, Delta Kidney Foundation, Lawrence Hudson, Western Line School District, Cindi Lofton and Margaret Schenk, Community Counseling Center, and Angela Warren, City of Hollandale. These individuals are all residents and advocates for public health who respectively serve the community of Washington County.

According to the Centers for Disease Control and Prevention, unintentional traumatic injury is the leading cause of death in the United States for persons between the ages of 1 and 44. According to the Mississippi State Department of Health, there were 892 violent crime deaths in the state. In our community, the leading cause of traumatic injuries is related to motor vehicles accidents with the leading cause of death being injuries from gunshot wounds.

As the only Level III Trauma Center in the area, The Medical Center is committed to providing medical services to the community ensuring prompt evaluation, treatment, and disposition of the trauma patients. Community education regarding motor vehicle safety will continue to be a major concern in an effort to decrease the number of serious injuries, disabilities, and deaths due to motor vehicle accidents. In conjunction with the National campaign and the Mississippi State Advisory Committee, The Medical Center is promoting the Stop the Bleed Program. This ensures all First Responders are equipped with knowledge and skills to “STOP THE BLEED.”

Mary Claire Glasco, Infectious Disease Nurse at The Medical Center was consulted regarding public health issues in the community. According to Ms. Glasco, the Delta area continues to face a growing number of patients suffering from community acquired MRSA and resistant strains of C-diff, as well as infections caused by a host of other multi-drug resistant organisms. TB has become more prevalent, and the identification of a strain resistant to INH (isonicotinic acid hydrazide) antibiotic treatment in our community is of major concern. Disease and illness in general have seemingly become extraordinarily complex to monitor as well as treat. The overuse of antibiotics has caused resistant strains of microorganisms that are often extremely difficult to treat- if the option is even available. At The Medical Center we closely monitor these pathogens as well as promote antibiotic stewardship.

The COVID-19 pandemic brought new challenges worldwide beginning in March 2020 and The Medical Center COVID-19 team was formed under the direction of Amy Walker, Chief Nursing Officer, and Mary Claire Glasco, Infectious Disease Nurse. The team consisted of physicians, nurse practitioners, nurses, respiratory technicians, safety directors and ancillary staff. The goal was to develop and maintain the most effective treatment plan for patients during this unprecedented time. As the healthcare leader in the region, The Medical Center was at the forefront for testing, treatment, and communication to the community.

Unmet needs are an integral part of our annual strategic planning. The Medical Center participates in a variety of task forces, committees, and partnerships with local and governmental agencies, leaders from the community, churches, and other associations.

## **Community Needs Index & Other Data**

The Community Needs Index identifies the severity of health disparities for every ZIP code in the United States. There are 6 different zip codes within Washington county, and according to the most recent Community Needs Index, Washington County's average remains just slightly below the highest level at (4.9) for socioeconomic indicators/barriers to healthcare that are known to contribute to health disparities related to education, culture, language, income and housing. (<http://cni.dignityhealth.org/>)

As more data becomes available, we utilize a range of other specific needs assessments and reports to identify unmet needs, such as the Community Commons - Health Needs Assessment Toolkit Core Indicators Reports and the Census.

## **Findings**

### ***Access to Care***

In Mississippi, 91,483 consumers selected or were automatically re-enrolled in quality, affordable health insurance coverage through the Marketplace as of December 2020. Nationwide, nearly 12 million consumers selected a plan or were automatically enrolled in Marketplace coverage. In our State 98% of Mississippi consumers who were signed up qualified for an average tax credit of \$545 per month through the Marketplace. Consumers had a choice from four issuers in the Marketplace depending on what county a person resides.

Open enrollment typically runs from November 1 – December 15, 2022. Consumers can visit ***HealthCare.gov*** or ***OneMississippi.com*** to assess qualifications of a Special Enrollment Period because of a life change such as: marriage, birth of a child or loss of other coverage. Enrollment in Medicaid and the Children's Health Insurance Program is open year-round.

The most recent data for 2020 indicates that 14.4% of those living in Washington County are uninsured which is higher than the State average of 14.5% and considerably higher than the National average of 9.7%. (*Data Source: Centers for Disease Control*)

## ***Disease Incidence and Prevalence***

***\*Throughout this document it will be important to note that incident rates are per 100,000 individuals. \****

### ***Diabetes***

Diabetes Mellitus affects an estimated 37.3 million people or 11.3% of the population in the United States and of that number over 250,000 are children and there are 8.5 million individuals undiagnosed. Diabetes is the 8<sup>th</sup> leading cause of death in the United States and the 7<sup>th</sup> leading cause of death in Mississippi. ([cdc.gov](http://cdc.gov)) Diabetes can lower life expectancy by up to 15 years and, increases the risk of heart disease twofold. It is also can lead to blindness, renal disease, and loss of limbs. If current trends continue, one in three U.S. adults could have diabetes by the year 2050 (*ADA, 2013*). In addition to the number of people who already have diabetes. With prediabetes, blood sugar levels are higher than normal but not high enough for a diabetes diagnosis. Prediabetes can increase a person's risk of type 2 diabetes, heart disease, and stroke. Over one in third of the U.S. population has prediabetes, approximately 96 million U.S. adults have prediabetes and more than eight out of ten do not know they have diabetes. ([cdc.gov/diabetes/basics](http://cdc.gov/diabetes/basics))

In 2021, Mississippi ranked the third highest in the U.S. for overall diabetes prevalence, 14.6%, with over 325,000 adult Mississippians having type 2 diabetes (over 14.4% of the adult population). African Americans are 77% more likely than whites to be diagnosed with diabetes, and one in four African American women older than 55 has diabetes. ([stateofchildhoodobesity.org](http://stateofchildhoodobesity.org)) ([cdc.gov/diabetes](http://cdc.gov/diabetes))

Screening is an essential measure in order to allow for early detection and treatment of diabetes. Every year an estimated 20,433 people in Mississippi are diagnosed with diabetes. ([diabetes.org](http://diabetes.org))

### ***Obesity***

Since 1980, obesity rates have increased drastically in the United States, doubling for adults, and tripling for children, a statistic that doctors have coined, "The Obesity Epidemic." Despite growing recognition of the problem, the obesity epidemic continues in the U.S., and obesity rates are increasing around the world. Because of the complexity of obesity, it is likely to be one of the most difficult public health issues our society has faced. There are numerous health issues linked to obesity, including increased risk for heart disease, stroke, and type2 diabetes all are fuel to our nation's skyrocketing healthcare costs. Additionally, recent studies on overweight children have

revealed correlations to depression, increased likeliness to miss school, and lowered academic performance in school. Unfortunately, 22.3 % of children from the ages of 10 to 17 suffer from obesity putting Mississippi in the number two spot with Kentucky number one. In 2021, Mississippi has the highest adult obesity rate in the nation. Mississippi's adult obesity rate is currently 39.7%, up from 39.5% in 2018. Rates of obesity now exceed 35 percent in nine states (Mississippi, West Virginia, Alabama, Louisiana, Indiana, Kentucky, Delaware, Iowa, Arkansas, and Oklahoma.), 21 states have rates above 30%, and every state is above 20%. Mississippi has the highest adult obesity rates at 39.7%, while Colorado has the lowest at 24.2%. Unfortunately, in Washington County, 48% of adults aged 20 and older self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the report area.  
([countyhealthrankings.org/app/Mississippi/2022](https://countyhealthrankings.org/app/Mississippi/2022) and [stateofchildhoodobesity.org](https://stateofchildhoodobesity.org).)

There are many preventions to reduce obesity which include but not limited to: choosing healthier foods (whole grains, fruits and vegetables, healthy fats and protein sources) and beverages, limiting unhealthy foods (refined grains and sweets, potatoes, red meat, processed meat) and beverages (sugary drinks), increasing physical activity, limiting television time, screen time, and other “sit time”, improving sleep, and reducing stress.

Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. Inactivity causes over 8% of premature mortality in the United States. ([cdc.org](https://www.cdc.org))

In Washington County, 29.1% of the population does not have access to healthy food outlets compared to 26.4% in Mississippi and 21.7% nationally. The percentage for low healthy food access is 18% in Washington County compared to 11% in the state of Mississippi and 2% nationally. ([countyhealthrankings.org/app/Mississippi/2022](https://countyhealthrankings.org/app/Mississippi/2022))  
Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. Physical inactivity at the county level is related to health care expenditures for circulatory system diseases. In Washington County, the percentage of the population over the age of 20 with no leisure time physical activity is 48% compared with a 37% in Mississippi and 23% nationally.  
([countyhealthrankings.org/app/Mississippi/2022](https://countyhealthrankings.org/app/Mississippi/2022))

## ***Heart Disease & Stroke***

Heart disease is the leading cause of death in Mississippi, accounting for 29.7% of all deaths in 2018. Mississippi's Cardiovascular Disease (CVD) mortality rate remains one of the highest in the nation. ([www.cdc.org](http://www.cdc.org)) Approximately every 40 seconds, an American will have a myocardial infarction. The average age of a person's first myocardial infarction is 65.6 years old for men and 72.0 years old for women. About 697,000 people in the United States died from heart disease in 2020—that's 1 in every 5 deaths. Every 40 seconds, on average, an American will have a stroke. In 2019, cerebrovascular disease (stroke) accounted for more than 1,700 deaths in Mississippi. About 795,000 Americans have a new or recurrent stroke annually. About 90% of stroke risk is due to modifiable risk factors; 74% is due to behavioral risk factors ([acc.org](http://acc.org)).

With 82 counties in Mississippi, Washington County is 13<sup>th</sup> in county rankings for CVD mortality in Mississippi. In Washington County, 17.9% of individuals diagnosed with hypertension admit to not taking their blood pressure medicine. In addition, 46.8% of those 18 years of age or older have been told by a physician or other allied healthcare professional that they have high cholesterol. A more recent indicator reports the percentage of the Medicare fee-for-service population with ischemic heart disease in Washington County is only slightly above the State average at 28.63%. Patients within this same sample report high cholesterol to be 4% lower than the State's average at 36.35% ([cdc.gov/brfss](http://cdc.gov/brfss)).

Cholesterol, blood pressure, blood sugar and body mass index numbers are key indicators of risk for major illness. The target range for each indicator include blood pressure at 120/80; Blood sugar 80-99; Body mass index below 25. The normal range for total cholesterol is less than 200. You also need to know your "healthy" HDL cholesterol and "bad" LDL cholesterol numbers. High total cholesterol, high LDL, or low HDL means you need to take immediate action to prevent a possible heart attack or stroke. There are no definite symptoms of high cholesterol. That is why it is important to see your doctor and know your cholesterol numbers (*Mississippi State Department of Health*).

The majority of people who die of coronary heart disease are 65 or older. However, a heart attack can occur at any age. While heart attacks can strike people of both sexes in old age, women are at greater risk of dying. Men have a greater risk of heart attack than women do, and men have heart attacks earlier in life. Children of parents with heart disease are more likely to develop heart disease themselves. African Americans have more severe high blood pressure than Caucasians, and a higher risk of heart disease. Heart disease risk is also higher among Mexican Americans, Native Americans, native Hawaiians, and some Asian-Americans. This is partly due to higher

rates of obesity and diabetes. Most people with a significant family history of heart disease have one or more other risk factors. (*American Heart Association*).

There are certain risk factors that can be controlled to help prevent heart disease and cerebrovascular disease. These risk factors include cholesterol, blood pressure, obesity, diabetes, physical inactivity, and tobacco abuse. The prevalence of CVD risk may be reduced by risk factor modification, including smoking cessation, physical activity, blood pressure control, eating a healthy diet, and lowering blood cholesterol levels. Currently, three-fourths of Mississippians have at least one CVD risk factor (*Mississippi Task Force on Heart Disease and Stroke Prevention*).

### ***High Blood Pressure/Hypertension***

According to the Centers for Disease Control and Prevention, hypertension (or high blood pressure) is a leading cause of stroke, heart attack and kidney failure. Nearly half of adults in the United States (47%, or 116 million) have high blood pressure. Mississippi ranks second in the nation with the highest incidence of hypertension with 43.6%. In 2020, more than 670,000 deaths in the United States had hypertension as a primary or contributing cause. Only 24% of the people with high blood pressure have their condition under control. Nearly 30% of Americans have prehypertension, blood pressure numbers that are higher than normal, but not yet in the high blood pressure range. (*cdc.gov*)

Using the updated 2017 American Academy of Pediatrics (AAP) Clinical Practice Guideline, a CDC study shows that about 1 in 25 youth ages 12 to 19 have hypertension, and 1 in 10 has elevated blood pressure (previously called “prehypertension”). Youth with obesity had the highest prevalence of hypertension. High blood pressure in youth is linked to health problems later in life. The good news is that high blood pressure is preventable and treatable. An estimated 1.3 million youth ages 12 to 19 would have high blood pressure according to the new guidelines, or about 1 in 25 children. In a classroom of 30 youth, 1 person would have hypertension, and about 3 more would have elevated blood pressure. the updated guideline reclassifies 2.6% of youth in the United States, or nearly 800,000 young people, as having high blood pressure. (*cdc.gov*)

In 2018, African Americans were 30 percent more likely to die from heart disease than non-Hispanic whites. Although African American adults are 40 percent more likely to have high blood pressure, they are less likely than non-Hispanic whites to have their blood pressure under control. African American women are nearly 60 percent more likely to have high blood pressure, as compared to non-Hispanic white women. (*minorityhealth.hhs.gov*) High blood pressure is more common in non-Hispanic



black adults (56%) than in non-Hispanic white adults (48%), non-Hispanic Asian adults (46%), or Hispanic adults (39%).<sup>3</sup> Among those recommended to take blood pressure medication, blood pressure control is higher among non-Hispanic white adults (32%) than in non-Hispanic black adults (25%), non-Hispanic Asian adults (19%), or Hispanic adults (25%). (cdc.gov)

More than 700,000 Mississippi adults have high blood pressure (hypertension), and thousands more may be at risk. In Washington County, over 13,900 adults have high blood pressure which is approximately 51.8% of the population. This is higher than the national level. 66.2% of the Medicare population reports having high blood pressure. (careshealth)

## **Mental Health**

Mental illnesses are common in the United States. Nearly one in five U.S. adults' lives with a mental illness (52.9 million in 2020). Two broad categories can be used to describe these conditions: Any Mental Illness (AMI) and Serious Mental Illness (SMI). AMI encompasses all recognized mental illnesses. SMI is a smaller and more severe subset of AMI. Mental illnesses include many different conditions that vary in degree of severity, ranging from mild to moderate to severe. In 2020, there were an estimated 52.9 million adults aged 18 or older in the United States with AMI. This number represented 21.0% of all U.S. adults. The prevalence of AMI was higher among females (25.8%) than males (15.8%). Young adults aged 18-25 years had the highest prevalence of AMI (30.6%) compared to adults aged 26-49 years (25.3%) and aged 50 and older (14.5%). The prevalence of AMI was highest among the adults reporting two or more races (35.8%), followed by White adults (22.6%). The prevalence of AMI was lowest among Asian adults (13.9%). (nimh.nih.gov/health/statistics/mental-health)

Mississippi has a population of approximately three million people. Close to 4.7% of adults in Mississippi live with serious mental health conditions such as schizophrenia, bipolar disorder, and major depression. Only 38.3% of adults with mental illness in Mississippi receive any form of treatment from either the public system or private providers (according to SAMHSA). The remaining 61.7% receive no mental health treatment. Mississippi is ranked 48 out of the 50 states and Washington D.C. for providing access to mental health services. (<https://mhanational.org/issues/ranking-states#four>)

The number of Psychiatrists, Psychologists, Clinical Social Workers, and Licensed Professional Counselors in Washington County is 77 per 100,000 individuals. Access to Mental Health Professionals in our county is way below the State average of 121 and the National average of 201. (careshq.org)

Nationally, youth mental health is worsening. From 2012 to 2017, the prevalence of past-year Major Depressive Episode (MDE) increased from 8.66 percent to 13.01 percent of youth ages 12-17. Now over two million youth have MDE with severe impairment. Only 28.2 percent of youth with severe MDE were receiving some consistent treatment. ([mhanational.org/issues/ranking-states#youthdata](http://mhanational.org/issues/ranking-states#youthdata))

Mississippi's percentage of major depressive episode (MDE) among adolescents aged 12–17 was similar to the national percentage in 2013–2014. In Mississippi, about 26,000 adolescents aged 12–17 (10.6% of all adolescents) per year in 2013– 2014 had at least one MDE within the year prior to being surveyed. ([samhsa.gov](http://samhsa.gov))

## **Response to Findings**

### ***Identified Needs***

Strategic planning consisted of evaluating potential priority areas using the following criteria:

- Are a substantial number of Washington County residents affected by this issue?
- What is the level of public concern or awareness regarding the issue?
- Does this issue contribute (either directly or indirectly) to early mortality?
- Are there disparities in care associated with this issue?
- Is there a way to quantify accomplishment related to activities regarding the issue?
- Do we have the clinical strength and infrastructure available to address the issue?

The Steering Committee narrowed the priority focus areas to the following:

- Diabetes
- Obesity
- Heart Disease & Stroke
- High Blood Pressure
- Mental Health

### ***Internal Steering Committee Members***

**Iris Stacker, Interim Chief Executive Officer**

**Amy Walker, RN, MSN Chief Nursing Officer**

**Stephanie Patton, Executive Director of Health System Development**

**Lakendra Washington, Administrative Director of Nursing Services**

**Chad Neal, Director of Crossroads & Health Equity Initiatives**

**VeSharne McPherson, Director of Case Management**

**Kim Dowdy, Manager, Community Development**

### ***Community Benefit Plan***

- The Medical Center's Community Benefit Plan is outlined in the attached summary. This document is based on the Community Health Needs Assessment completed in 2022 and is intended to guide the program for fiscal years 2022 – 2024. This summary is a living document that will undergo changes as we evaluate current processes and implement new ones that focus on one or more of the six priority focus areas.