Baptist HEALTH SYSTEMS

COMMUNITY HEALTH NEEDS ASSESSMENT HINDS, RANKIN, MADISON COUNTIES

STATE OF MISSISSIPPI

Mississippi Baptist Health Systems

- Mississippi Baptist Medical Center
- Restorative Care Hospital

COMMUNITY HEALTH NEEDS ASSESSMENT HINDS, RANKIN, MADISON COUNTIES STATE OF MISSISSIPPI

Contents

Mississippi Baptist Health Systems 1

Executive Summary 4

A. Health Status 4

B. Accountable Care Act 6

C. Possible community interventions 8

D. Possible interventions within the Affordable Care Act 9

Methodology 10

A. Objectives 10

B. Oversight 10

C. Study Steps 11

D. Community Health Needs Assessment Methodology Flow 12

E. Information Gaps 13

F. “Community” Defined 13

Quantitative Analysis 13

A. Demographic Analysis 13

B. Health Status Issues and Disparity Analysis 16

C. Major disease and disparity issues – heart, cancer, diabetes 16

D. Mississippi infant mortality issues and disparities 19

E. HIV/AIDS 21

F. Conclusions – Health Issues and Disparity Gap 23

Health Care Providers 24

A. Short-Term Acute Care Hospital Services 26

B. Long-Term Acute Care 27

C. Swing-Bed Services 27

D. Inpatient Rehabilitation Services 28

E. Long-Term Care 29

F. Mental Health 30
G. Distinct-Part Geriatric Psychiatric Services 31
Qualitative Analysis of Services and Delivery System Needs 32
A. Primary Data Gathering – Community Input 32
B. Community Strengths 33
C. Community Opportunities to Improve 34
D. Special Needs of Populations with Health Disparities 35
E. Special Needs of the Low Income Sector 36
F. Special Needs of the Minority Sector 37
G. Root Causes of Poor Health Status 38
H. Public Health Funding 39
Priority Health Service Issues/ Gaps 40
Community, Public Health and Provider Solutions 41
Conclusions 42

Executive Summary

A. Health Status

Hinds, Rankin, and Madison Counties health status is generally similar to the overall State of Mississippi health status – with variances among the service area counties. Key health status issues for the overall populations of both Mississippi and the three counties are:

1. **Deaths from heart disease**
   - For all three counties, heart disease mortality is significantly higher than the U.S. rate, but lower than the Mississippi rate.
   - Hinds County non-whites have higher heart disease mortality than whites; but heart disease mortality is higher for whites than non-whites in Rankin and Madison Counties.
   - Interestingly, the Mississippi non-white mortality from heart disease is *6.8% lower* than the U.S. rate.
2. **Deaths from cancer**
   - Hinds and Rankin cancer mortality is significantly lower than the U.S. mortality rates.
   - However, Madison County cancer mortality rates are significantly higher than the U.S. rate in both non-white and white populations.
3. **Deaths from diabetes**
   - Surprisingly, diabetes mortality rates for Mississippi are *better than the U.S. rates*.
   - All three counties show diabetes mortality rates that are significantly lower than the U.S. rates.
   - The major medical centers and the physician community in the three counties have established diabetes counseling, education and management programs that may be having a positive impact on diabetes.
4. **Infant mortality**
   - Hinds County has a higher infant mortality rate than other counties in the service area.
   - Teen pregnancy appears to be one underlying root cause of Mississippi's high infant mortality rate.
   - Low education levels appear to be both a cause and an effect of teen pregnancy.
   - The 2013 Proposed State Health Plan does not appear to show a need for more obstetrical beds in the three counties, but there does appear to be a need for more neonatal intermediate care and neonatal intensive care beds. Additional neonatal services could possibly reduce infant mortality in the area.

5. HIV/AIDS	• Jackson, Mississippi has the third highest HIV annual new case incidence rate among U.S. cities. • The Mississippi HIV rate among Black/African American population is 5.8 times the White rate. • Nationwide, 79% of new HIV diagnoses were in males, with 77% of those coming from male-to-male sexual contact. In women, 86% of the new diagnoses came from heterosexual contact.
6. Long-term care	• The Proposed State Health Plan – 2013 of the Mississippi Department of Health presents a need for 68 nursing home beds in Hinds, 544 beds in Rankin and 173 beds in Madison. • With this unmet bed need, an opportunity may exist to meet unmet long-term care needs through expanded home health care services.
7. Inpatient rehabilitation	• Based on the bed need formula found in the statewide criteria and standards section of the Proposed State Health Plan – 2013, Mississippi currently needs one Level I bed; however, Mississippi needs 86 additional Level II CMR beds.

Service area mortality rates reflect racial disparities that are also generally present in the other health status indicators, which are detailed in the body of the Assessment Report. Why does this gap exist and why do variances exist? There are several major reasons, including:

1. Demographics of the counties, which vary primarily by race, but also slightly by gender and age category.

2. Number of health care providers, which vary by county, but are largely considered one geographic health market.

3. Access to health care, expressed in the rate of uninsured (or as a factor of living below poverty income levels).

Evidence exists that the poor health status of Mississippi and the three service area counties is strongly correlated to poor diet, tobacco use, and sedentary lifestyle.

B. Accountable Care Act

Not having health insurance is often cited as a barrier to health care access and one of the root causes of health disparities. The Accountable Care Act, passed by Congress and signed by the President in 2010, was upheld as constitutional by the Supreme Court in June 2012, with the following key provisions:

1. Mandates that each individual purchase health insurance coverage that meets federal standards, or pay a personal tax.

1. Mandates that employers of more than 50 employees provide employee health insurance coverage that meets federal standards, or pay a non-tax-deductible penalty.

2. Provides incentive subsidies for employers of 25 or fewer employees to provide employee health insurance coverage that meets federal standards.

3. Does not mandate coverage or provide subsidies for employers of 26-49 employees.

4. Makes Medicaid available to all persons under 133% of Federal Poverty Level, versus the current categorical eligibility limits, if the States enact and fund the expanded Medicaid coverage.

5. Prohibits application of pre-existing condition limitations by health insurers.

However, it appears that there will still be a significant number of uninsured Mississippians:

- The Affordable Care Act did not mandate coverage to about 14 million people in the U.S, notably illegal aliens and persons employed by businesses with 1-49 employees.

- Mississippi's employment base is highly concentrated in the small business sector. With the possibly of partially subsidized Exchange coverage for employees and no penalty for employers with fewer than 50 employees, it is likely that many small employers will drop employee health plan coverage – even if they currently provide it.

- The cost to a 50+ employer to provide insurance is substantially higher than the penalty. Many of these mid-sized employers may drop coverage because there is the possibility of partially subsidized Exchange coverage for employees.

- Many people now eligible for Medicaid do not apply.

- The cost to the individual to purchase insurance is substantially more than the tax.

- The prohibition against insurers' pre-existing condition limitations increases individuals' "moral hazard" to not buy insurance until it is needed.

Hospitals are at high risk as the Accountable Care Act begins to be fully implemented in 2014.

- The Accountable Care Act assumed that hospitals would no longer need Disproportionate Share money which Medicare and Medicaid currently provide to hospitals with a high proportion of Medicaid and uncompensated care, so the Act removed this subsidy. However, still in effect is the EMTALA law which requires that hospitals provide a medical screening exam and stabilize the patient before discussing insurance or payment.

- The Supreme Court decided that the federal government could not penalize the states existing Medicaid financing if the states decided not to implement the expanded Medicaid coverage provisions of the Act. Mississippi political leaders have indicated that Mississippi cannot afford to enact the expanded Medicaid coverage. Yet Disproportionate Share Hospital payments will be phased out.

- The Act planned for 14 million people in the U.S. to continue as uninsured.

- Many Mississippi citizens cannot afford to buy the federally mandated insurance and will choose the tax.

- Many Mississippians will succumb to the "moral hazard" of not buying insurance until they think they need it due to the prohibition on pre-existing condition limits. However, when they do buy insurance, there may or may not be retroactive coverage, exposing hospitals to risk of even more uninsured patients.

- Many Mississippi employers (1-49 employees) are not required to buy insurance and will choose not to buy the federally mandated insurance for employees. According to web site www.manta.com as of July 20, 2012, there are approximately 248,638 businesses with 49 or fewer employees in Mississippi.

C. Possible community interventions

In a July 2007 article, "Thinking Aloud About Poverty and Health in Rural Mississippi," the author, Leonard Jack, Jr., PhD, described the link between poverty and poor health status. In this insightful article, Dr. Jack outlined the following recommended interventions. [1] While the recommendations are target to rural areas, the same disparities exist in Hinds, Rankin and Madison counties.

1. "Act on the determinants of health by influencing policy. According to the WHO (*World health Organization*) equitable distribution of the benefits of economic growth is central to reducing poverty. Maximize the health benefits of economic growth through public policies related to labor, trade, agriculture, environment, and health. Such policies affect people at each stage of life. Getting such policies implemented, however, requires collaborations and networks between public health and many other sectors of society.

2. "Ensure that health systems serve the poor effectively. Beyond ensuring that communities have the capacity to provide optimal health services, public health agencies must address the characteristics that cause health care systems to fail the poor. WHO recommends, at a minimum, that health care systems ensure access irrespective of income and that the poor are treated with dignity and respect, thus protecting the poor from unsafe practices and financial exploitation?

3. "Focus on the health problems that disproportionately affect the poor. WHO proposes providing governments with the tools and guidelines they need to set up the best and most cost-effective interventions to tackle health challenges that disproportionately affect the poor in their countries. Similarly, U.S. public health agencies need to provide Mississippi with technical assistance and resources so that its state and local health departments, other state agencies, universities, and non-governmental organizations can set up interventions to prevent or control diseases that disproportionately affect poor rural Mississippians.

4. "Reduce health risks through a broad approach to public health. Improve poor people's access to basic public services (e.g. clean water, modern sanitation). In addition recognize that poor people are more likely to be exposed to violence and environmental hazards and more likely to suffer as a result of conflicts and natural disasters than affluent people. Planning and preparing for emergencies is particularly critical and requires participation not only by people with experience and expertise in first response and emergency management but also by people from diverse groups (e.g., sanitation specialists, chronic disease specialists)."

[1] Centers for Disease Control and Prevention, www.cdc.gov/pcd/issues/2007/jul/05_0019.htm, "Thinking Aloud About Poverty and Health in Rural Mississippi," Leonard Jack, Jr., PhD.

D. Possible interventions within the Affordable Care Act

Interventions that might make sense generally for hospitals to deal with these risks by helping the uninsured get coverage include:

1. In concert with insurers, offer opportunities for open enrollment assistance.

2. Participate with "One, Mississippi" (Mississippi's Health Insurance Exchange) by referring people to Exchange "navigators" who help people with the choices available to them.

3. Make Exchange navigators available within hospital-operated care settings.

4. Possibly, provide premium subsidies for selected chronic or acute patients who receive services at the facility. Chronically ill persons may not be able to afford coverage and Medicaid may not be sufficient to provide coverage for necessary hospital services.

5. Financially screen patients as soon as allowed under EMTALA and assist them in getting coverage. Many hospitals now do this to help patients get on Medicaid, SSI, the Mississippi Comprehensive Risk Pool, or other coverage.

6. Collaborate to sponsor primary care clinics staffed by nurse practitioners so that the clinics can possibly operate within the low Medicaid payment rates. This approach will help deal with the shortage of primary care providers that now exists in Mississippi and that most expect the Accountable Care Act to exacerbate.

* * * * * * *

The remainder of this report contains:

- Quantitative Assessment
- Qualitative Assessment
- Priority Health Service Issues/Gaps
- Community, Public Health and Provider Solutions

Mississippi Baptist Medical Center and the Restorative Care Hospital have developed objectives for improving community health status that are consistent with the Baptist mission, vision and values. These objectives have been approved by the Board of Directors' Mission Effectiveness Committee.

____

Approved by Mission Effectiveness Committee   Date

COMMUNITY HEALTH NEEDS ASSESSMENT

Methodology

A. Objectives

The following are the objectives for the Community Health Needs Assessment:

- Describe the health of populations residing in the primary and secondary service areas.
- Identify priority health service issues in those populations.
- Identify how priority health needs differ among subgroups of the population.
- Assess trends in the health status and health behaviors of residents, if possible.
- Identify opportunities to improve the health status of these populations.
- Develop opportunities for health status improvement that are within the scope of the hospital's mission.

B. Oversight

The ultimate oversight of the Assessment was provided by the Mississippi Baptist Medical Center's Board of Trustees, driven by the Mission Effectiveness Committee. Senior management and other resource personnel participated on the Assessment Team.

Mississippi Baptist Medical Center's Assessment Team for preparation of this Community Health Needs Assessment consisted of the following:

Name	Title	Role
Danny Rutland	Chief Development Officer	Project Champion
Russ York	Chief Financial Officer	Oversight/planning
Bill Grete	General Counsel	Oversight/planning
Ginger Cocke	Director of Corporate Communications	Oversight/data analysis/planning
Scott Reinhardt	Director of Strategic Planning and Financial Analysis	Oversight/data analysis
Mike Stevens	Director of Development	Oversight/planning
Patti Pettis	Executive Assistant	Administrative support

An independent consultant was engaged to assist in the Community Health Needs Assessment:

G. Edward Tucker, Jr.
Certified Management Consultant
739 South Main
Petal, MS 39465

ed@getucker.com
601-594-3030

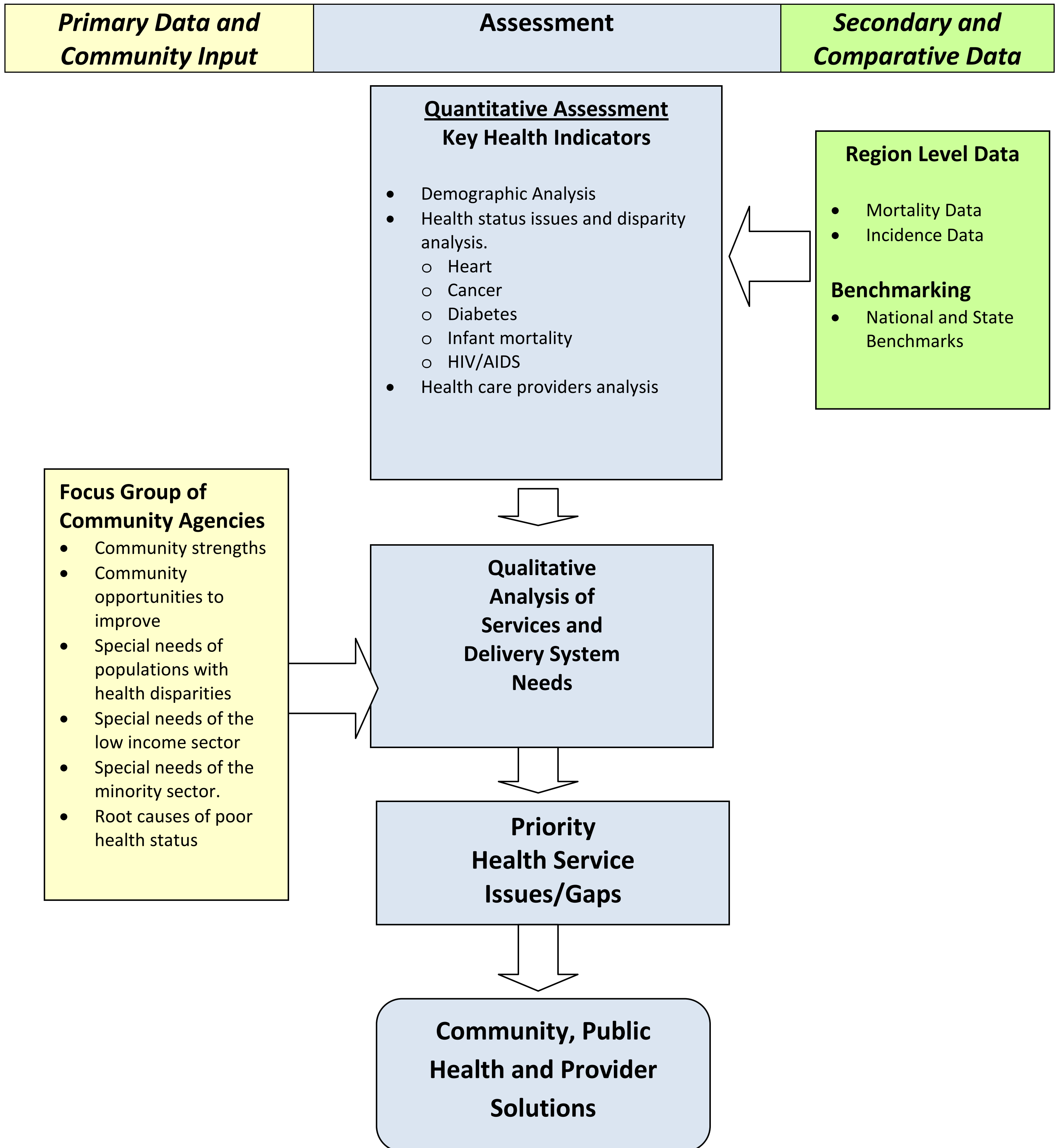
C. Study Steps

The primary steps of the study were:

- Define study regions.
- Profile the demographic composition of service areas.
- Identify peer group communities.
- Develop and conduct community health status, utilization and preference survey.
- Develop health status indicator profile and identify priority health issues.
- Assess current services for priority health issues.
- Develop health services planning document.
- Present findings to the Steering Committee, Board of Trustees and local stakeholders.
- Produce and disseminate final planning report.

The methodology is outlined in the flow diagram on the next page.

D. Community Health Needs Assessment Methodology Flow



E. Information Gaps

Information on demographics and health status of the community was fairly readily accessible on the internet from secondary sources.

Information gaps mainly existed in getting direct feedback from disadvantaged individuals in the community. In the interest of time, for the first assessment, the team established a focus group of community agencies serving disadvantaged individuals, who provided very reliable input on behalf of their constituencies.

Baptist does routine surveys about community perceptions of its services, and the team relied on these surveys during the work. Surveyed perceptions of Baptist were good and varied somewhat by service line.

F. "Community" Defined

Mississippi Baptist Medical Center has defined the "community" for purposes of this study as Hinds, Rankin and Madison Counties, Mississippi.

These three counties comprise Baptist's "Primary Service Area" – the counties where approximately 65 percent of the hospital's inpatients reside.

Quantitative Analysis

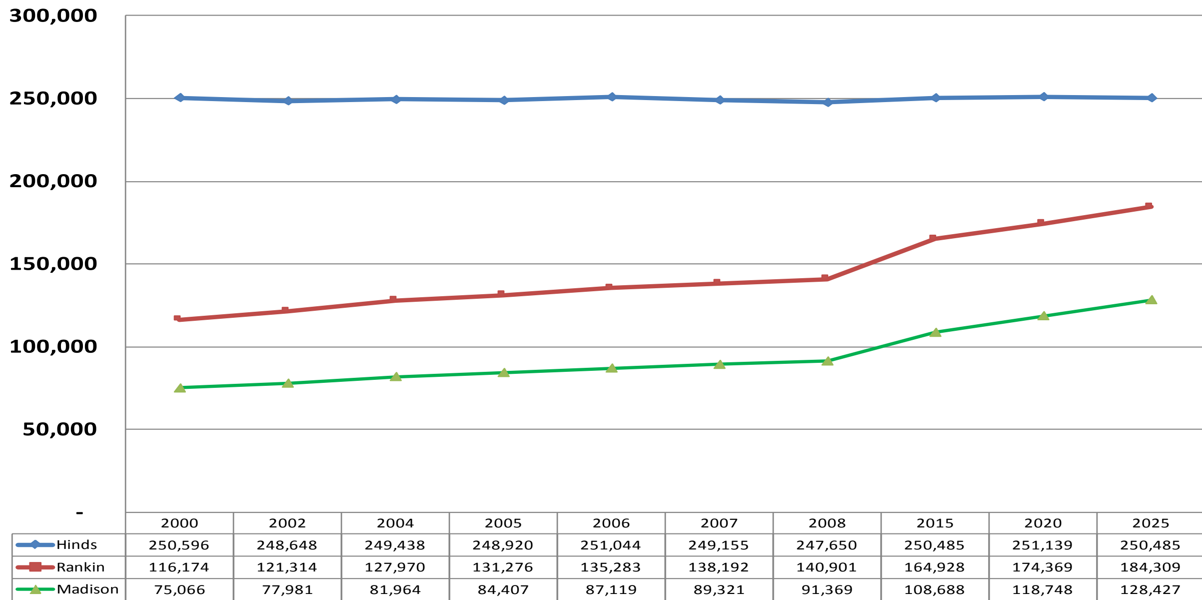
A. Demographic Analysis

The Hinds, Rankin, Madison tri-county area generally is considered Mississippi's capital city region. These three counties together have the highest population in the State.

The following analysis shows that from 2000 and projected through 2025:

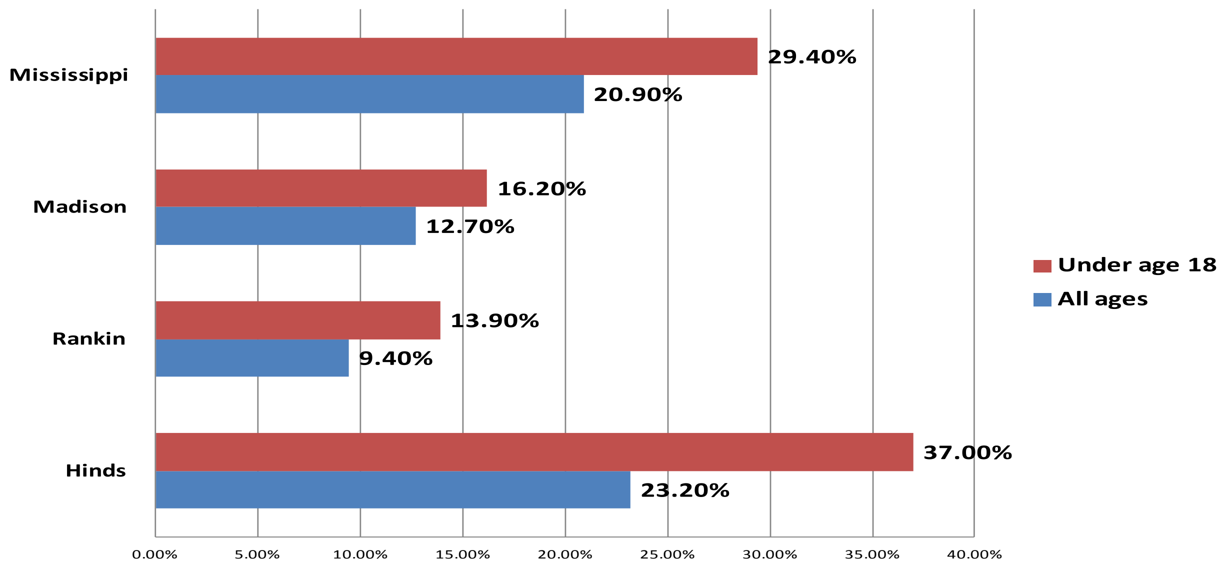
- Hinds County is the most populous at about 248,000 in 2008 and its population has been and is expected to be flat to slightly declining.
- Rankin County is second in area population at about 141,000 in 2008, projected to grow to 184,000 by 2025.
- Madison County is third in area population at about 91,000 in 2008, projected to grow to 128,000 by 2025.

The chart on the following page shows these trends (*Source: Mississippi Department of Health*).



	2000	2002	2004	2005	2006	2007	2008	2015	2020	2025
Hinds	250,596	248,648	249,438	248,920	251,044	249,155	247,650	250,485	251,139	250,485
Rankin	116,174	121,314	127,970	131,276	135,283	138,192	140,901	164,928	174,369	184,309
Madison	75,066	77,981	81,964	84,407	87,119	89,321	91,369	108,688	118,748	128,427

Poverty is a strong predictor of poor health status. The percentage of the populations living in poverty is shown in the chart below (*Source: Mississippi Department of Health*). Rankin and Madison have less poverty than the Mississippi average, while Hinds County poverty is higher than the State average.



The study team gathered secondary data already published on various web sites to analyze the demographics of the three counties as compared to Mississippi and the United States. The following is a high-level summary of the demographic data:

Table 1 – Demographic Indicators					
Indicator	**Hinds**	**Rankin**	**Madison**	**Mississippi**	**U.S.**
Gender distribution					
Male	47%	49%	48%	48%	49%
Female	53%	51%	52%	52%	51%
Racial distribution					
White	29%	78%	60%	61%	65%
Non-white	71%	22%	40%	39%	35%
Age distribution					
Age 0-14	23%	22%	24%	23%	22%
Age 15-24	16%	13%	14%	16%	14%
Age 25-44	25%	29%	28%	28%	30%
Age 45-64	25%	25%	24%	21%	22%
Age 65+	11%	11%	10%	12%	12%
Poverty					
Percent in poverty, 2009 – all ages	23.3%	11.2%	12.7%	21.8%	14.3%
Percent in poverty, 2009 – under 18	32.9%	15.8%	17.1%	30.7%	20.0%
Workforce					
Unemployment rate, May 2011	8.8%	6.1%	6.9%	10.0%	9.2%

Poverty Levels: http://www.census.gov/did/www/saipe/county.html
Gender, Racial, and Age Distribution: http://www.msdh.state.ms.us/msdhsite/_static/31,0,299,463.html
Unemployment Levels:
http://www.policymap.com/LandingPages/unemployment.html?gclid=CK7BgqLepqoCFYgW2godcXC7Wg

Conclusions – Demographics:

Each of the three counties in this study is proportionately distributed for gender in relation to Mississippi and the United States. Hinds County is predominantly non-white, which differs from the other two counties, the state of Mississippi, and the United States where white is the predominate race. Age distributions within the counties are distributed in the same proportion, as are age distributions in Mississippi and the United States.

Poverty rates in Rankin and Madison Counties are lower than the overall poverty rates in Mississippi and the United States. The poverty rate of Hinds County is significantly higher than the poverty rates in the compared counties and the United States. Hinds County has the highest poverty rate of the counties studied.

The May 2011 unemployment rates of all three counties were lower than the rates of Mississippi and the United States.

B. Health Status Issues and Disparity Analysis

Major health status issues in Mississippi relate to the following:

- Heart disease
- Cancer
- Diabetes and obesity
- Infant mortality
- HIV/AIDS

From the Proposed State Health Plan – 2013, made available by the Mississippi Department of Health in June 2012, the team identified the following service area *community* health system needs:

- Long-term care
- Inpatient rehabilitation

C. Major disease and disparity issues – heart, cancer, diabetes

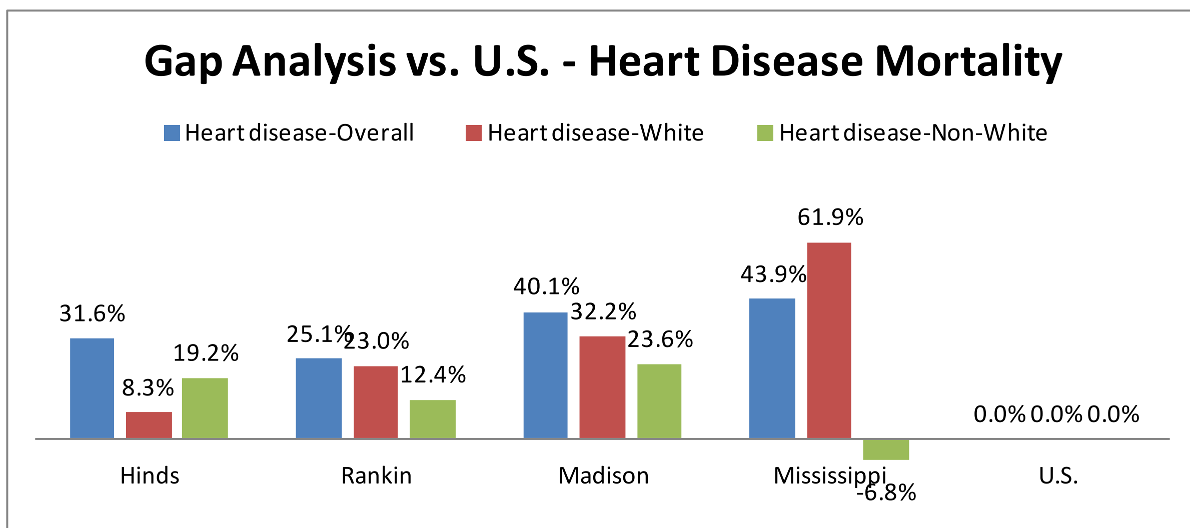
The study team gathered secondary data already gathered on various web sites to analyze the health status of the three chosen counties as compared to Mississippi and the United States. The following is a summary of the health status data:

Table 1 – Mortality Rates – Age Adjusted Causes of Death (Rate per 100,000)					
Indicator	**Hinds**	**Rankin**	**Madison**	**Mississippi**	**U.S.**
Heart disease-Overall	251.3	238.9	267.5	274.8	190.9
Heart disease-White	203.2	230.8	248.1	303.7	187.6
Heart disease-Non-White	294.6	277.8	305.3	230.3	247.1
Cancer-Overall	157.4	131.1	454.8	203.2	183.8
Cancer-White	130.4	131.6	412.6	226.1	182.4
Cancer-Non-White	193.7	127.3	542.9	167.7	224.2
Diabetes-Overall	13.7	13.6	14.2	21.9	22.5
Diabetes-White	4.8	10.4	8.6	18.4	20.5
Diabetes-Non-White	23.4	34.0	26.9	27.3	42.8
Source: Office of Vital Records, Mississippi State Department of Health, 2007					

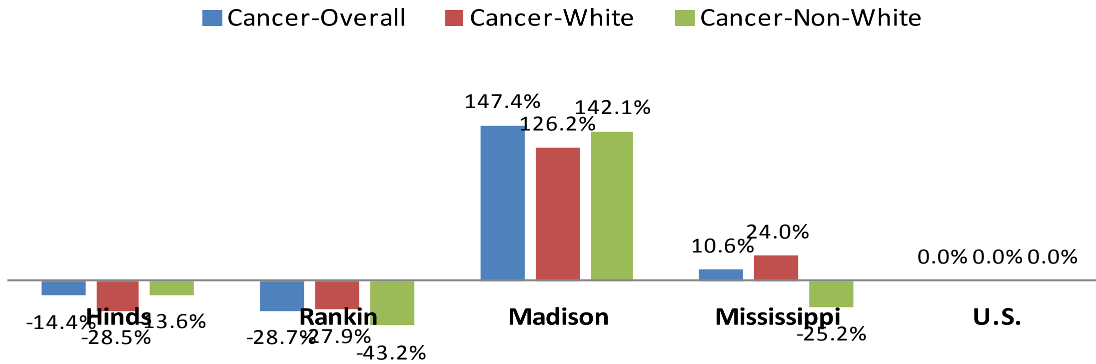
The health status gap is defined as the gap in the key population health metrics between each county's population health status and:

- Mississippi's health status
- U.S. health status

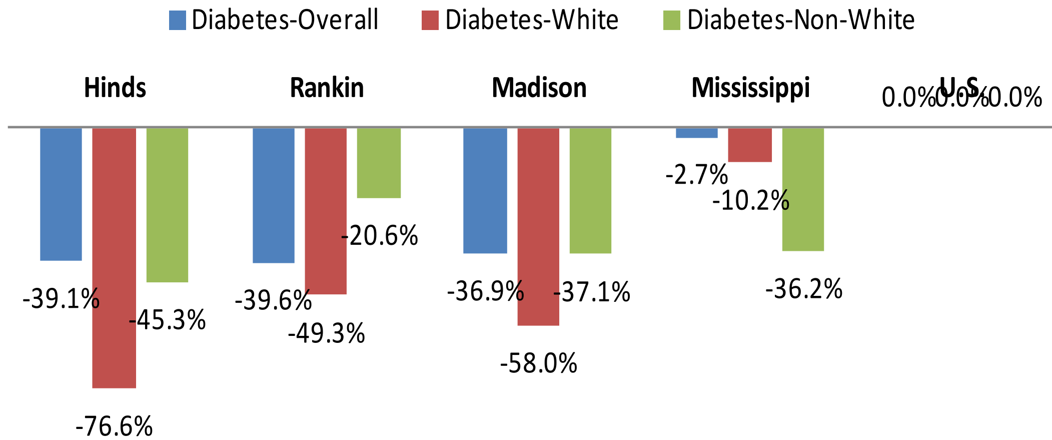
Following is a mortality "gap analysis" for each of the three major disease categories, measured by the percentage gap between mortality rates for each county compared to the U.S. mortality rate.



Conclusion: For all three counties, heart disease mortality is significantly higher than the U.S. rate, but lower than the Mississippi rate. Hinds County non-whites have higher heart disease mortality than whites; but heart disease mortality is lower for non-whites than whites in Rankin and Madison Counties. Interestingly, the Mississippi non-white mortality from heart disease is *6.8% lower* than the U.S. rate.



Conclusion: Hinds and Rankin cancer mortality is significantly lower than the U.S. mortality rates. However, Madison County cancer mortality rates are significantly higher than the U.S. rate in both non-white and white populations.



Conclusion: Surprisingly, diabetes mortality rates for Mississippi are *better than the U.S. rates*. All three counties show diabetes mortality rates that are significantly lower than the U.S. rates. The major medical centers in the three counties have established diabetes counseling, education and management programs that may be having a positive impact on diabetes.

D. Mississippi infant mortality issues and disparities

According to the Mississippi Department of Health's Proposed State Health Plan – 2013[2]:

"Infant mortality remains a critical concern in Mississippi, with the rate increasing to 10.0 deaths per 1,000 live births in 2009 from 9.9 in 2008. Table 4-1 shows the 2009 infant mortality rate, neonatal, and post-neonatal mortality for non-whites all substantially above the rates for whites. (Note: 2009 vital statistics data is the most recent currently available.)

2009 Infant Mortality Rates (deaths per 1,000 live births)			
Category	**Overall State Rate**	**White Rate**	**Non-White Rate**
Total infant mortality (age under 1 year)	10.0	7.0	13.4
Neonatal mortality (age under 28 days)	6.1	4.2	8.3
Post-neonatal mortality (age 28 days to 1 year)	3.8	2.7	5.1

Many factors contribute to Mississippi's high infant mortality rate: the high incidence of teenage pregnancy, low birthweight, low levels of acquired education, low socioeconomic status, lack of access for planned delivery services, and lack of adequate perinatal and acute medical care.

More than 98 percent of expectant mothers received some level of prenatal care in 2008. More than 82 percent (35,445) began prenatal care in the first trimester; 13.0 percent (5,570) began in the second trimester, and2.0 percent (859) during the third trimester. More than one percent (504) of expectant mothers received no prenatal care prior to delivery; the month was unknown for 307 mothers (0.7 percent); and it was unknown whether 124 mothers (0.3 percent) received any prenatal care. White mothers usually receive initial prenatal care much earlier in pregnancy than do nonwhites.

In 2009, 12.2 percent of births were low birthweight (less than 5.5 pounds – 2,500 grams) and 17.4 percent were premature (gestation age less than 37 weeks). These indicators differ markedly by race of the mother: 8.9 percent of white births were low birthweight compared to 16.0 percent for nonwhites, and 14.0 percent of white births were premature versus 21.4 percent for nonwhites.

A total of 7078 Mississippi teenagers gave birth in 2009 — 16.5 percent of the state's 42,809 live births. Until 2008 births to teenagers have increased each year since 2005, and the 2009 umber represents a 3.2 percent decrease from the 7,310 births to teenagers in 2008. Teen pregnancy is one of the major reasons for school drop-out. Teenage mothers are (a) more likely to be unmarried; (b) less likely to get prenatal care before the second trimester; (c) at higher risk of having low birthweight babies; (d) more likely to receive public assistance; (e) at greater risk for abuse or neglect; and (f) more likely to have children who will themselves become teen parents. In 2009, 13.4 percent of the births to teenagers were low birthweight, and 18.4 percent were premature.

[2] Mississippi Department of Health, Proposed State Health Plan, 2013

Of the 42,809 total births in 2009, 32,731 were associated with "at risk" mothers (76.5percent). “At risk" factors include mothers who are and/or have:

- ☐ under 17 years of age or above 35 years of age;
- ☐ unmarried;
- ☐ completed fewer than eight years of school;
- ☐ had fewer than five prenatal visits;
- ☐ begun prenatal care in the third trimester;
- ☐ had previous terminations of pregnancy; and/or
- ☐ a short inter-pregnancy interval (prior delivery within 11 months of conception for the current pregnancy).”

Infant mortality rates in the service area for 2005-2009, according to the 2013 Proposed State Health Plan were as shown to the right.

(Per 1,000 Live Births)	**Infant Mortality Rate**
Hinds	13.2
Rankin	8.1
Madison	7.8
Mississippi	10.1

Following is utilization data for service area hospitals with Obstetrical Deliveries for 2009 and 2010, from the Proposed State Health Plan – 2013:

County	Facility	2009	2010
Hinds	University Hospital & Clinics	3,190	2,880
Hinds	St. Dominic – Jackson Memorial Hospital	1,412	1,272
Hinds	Mississippi Baptist Medical Center	1,104	1,045
Hinds	Central Mississippi Medical Center	1,198	1,025
Rankin	River Oaks Hospital	1,809	1,967
Rankin	Woman’s Hospital at River Oaks	1,634	1,537
Madison	Madison County Medical Center	314	243

Hinds, Rankin & Madison Counties are located in Perinatal Planning Area V. The Proposed 2013 State Health Plan shows the following neonatal special care bed need for District V.

Perinatal Planning Area	Number Live Births	Neonatal Intensive Care Bed Need	Neonatal Intermediate Care Bed Need
V	11.364	11	34

Conclusions: Infant Mortality

- Hinds County has a higher infant mortality rate than other counties in the service area.
- Teen pregnancy appears to be one underlying root cause of Mississippi's high infant mortality rate.
- Low education levels appear to be both a cause and an effect of teen pregnancy.
- The 2013 Proposed State Health Plan does not appear to show a need for more obstetrical beds in the three counties, but there does appear to be a need for more neonatal intermediate care and neonatal intensive care beds in the tri-county area. Additional neonatal services could possibly help reduce infant mortality in the area.

E. HIV/AIDS

The Centers for Disease Control and Prevention (CDC) released 2010 HIV/AIDS surveillance information in March 2012. On Tuesday, March 20, 2012, the *Clarion-Ledger* headline read, "Jackson No. 3 in HIV/AIDS rate." The article read:

> "…Jackson has a rate of 29.2, which means that 29 of every 100,000 people have HIV/AIDS, the CDC data reports.
>
> "The CDC reports that Baton Rouge ranks first with a rate of 33.7; Miami is second with a rate of 30.3; Baltimore is fourth with a rate of 26.8; and the New Orleans metro area ranks fifth with a rate of 26.2."

It appears that the *Clarion-Ledger* article may have been in error, in that the rate of 29.2 per 100,000 is not the number of people who *have* AIDS, but possibly the annual incidence of new cases. According to the CDC report, the Mississippi rate for 2008 was 19.1 per 100,000.

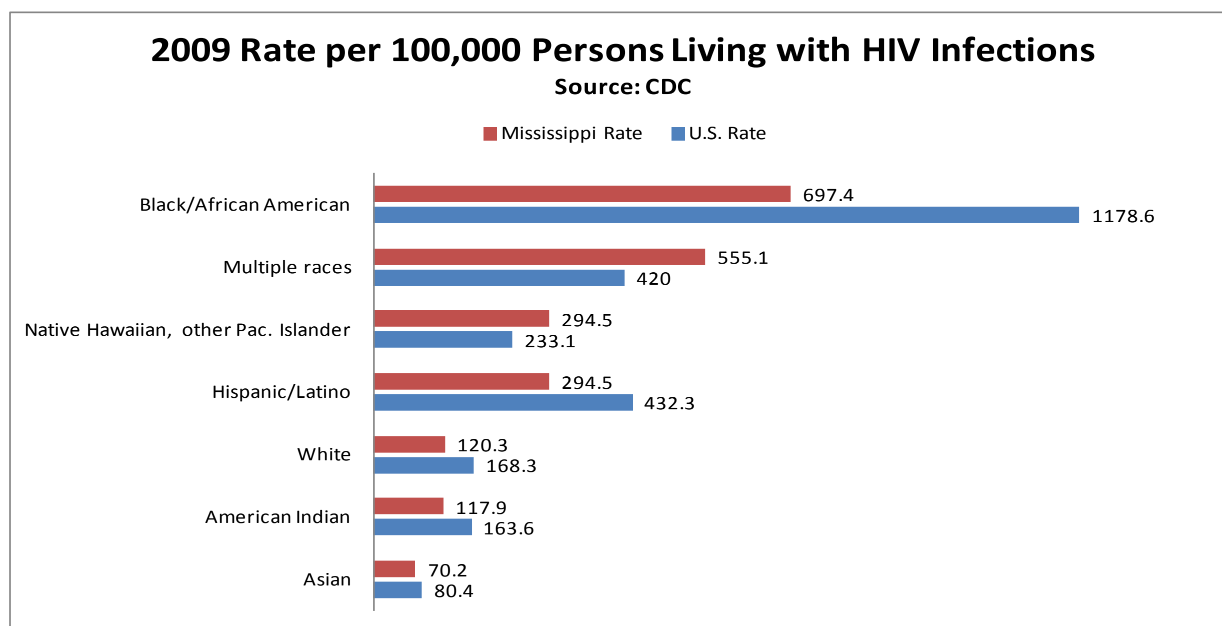
Following is an excerpt from the CDC report for the Jackson metro area:

Diagnoses of HIV infection, 2010, and persons living with a diagnosis of HIV infection, year-end 2009 *Source: CDC*				
	Diagnosed, 2010		**Living with HIV infection, year-end 2009**	
Jackson, MS MSA	184	34.0	2,952	545.8

Following, from the CDC report, is a summary of persons living with HIV infection in the U.S. and Mississippi, by race/ethnicity:

Race/Ethnicity	United States Living with HIV infection, year-end 2009		Mississippi Living with HIV infection, year-end 2009	
	Number	Rate/1000	Number	Rate/1000
American Indian	3,030	163.6	13	117.9
Asian	8,323	80.4	14	70.2
Black/African American	333,842	1178.6	5,961	697.4
Hispanic/Latino	150,578	432.3	150	294.5
Native Hawaiian, other Pac. Islander	606	233.1	2	294.5
White	273,480	168.3	1,736	120.3
Multiple races	11,130	420.0	85	555.1
TOTAL	**781,756**	**324.6**	**7,996**	**333.6**

Graphically the disparities in the rates show that while the Mississippi Black/African American rate of persons living with HIV is 5.8 X the white rate, it is 41% lower than the U.S. Black/African American rate.



The CDC report shows that nationwide in 2010, 37,910 males and 10,168 females were newly diagnosed with HIV infection. Nationwide, in males, 77% of the new diagnoses came from male-to-male sexual contact with 12% coming from heterosexual contact. In women, 86% of new diagnoses came from heterosexual contact.

F. Conclusions – Health Issues and Disparity Gap

- Mortality rates of the counties' major health issues reflect *racial disparities* among the counties, the State of Mississippi and the United States.

  Heart disease mortality:

  - *Non-whites* have an overall higher heart mortality rate in Hinds, Rankin and Madison counties and the U.S.

  - *Whites* in *other* Mississippi counties have higher heart disease mortality than non-whites.

  Cancer mortality:

  - Cancer mortality rates in the U.S. and in *Hinds and Madison* Counties are higher in *non-whites*.

  - In Mississippi and Rankin County, whites have a higher cancer mortality rate than non-whites.

  Diabetes mortality:

  - Hinds, Rankin and Madison Counties show a higher mortality rate from diabetes in *non-whites*, which is mirrored in Mississippi and the U.S.

  Infant mortality:

  - Mississippi's infant mortality rate is high – especially in Hinds County.
  - Teen pregnancy appears to be one root cause.
  - Poor educational achievement appears to be both a root cause and a long-term outcome of teen pregnancy.

- HIV/AIDS:

  - The Mississippi incidence of HIV infection is 6 times higher in Black/African Americans than in whites.
  - The Jackson Metro area was Number 3 in the U.S. in the incidence of new HIV/AIDS cases in 2010.
  - Sexual activity (including both male-to-male sex and heterosexual sex) is the overwhelming main source of HIV infection.

Health Care Providers

According to the Mississippi Center for Health Workforce, in 2008, almost one-third of Mississippians resided in a Primary Care Health Professional Shortage Area. This means that residents of those areas have a more difficult time finding primary health care.

The patient load of Primary Care Physicians in Hinds County tends to stay within the recommended levels. Primary Care Physicians in Rankin and Madison Counties have a patient load that is up to double the recommended level. *These differences in physician availability may contribute to the health disparities within the counties in Mississippi.*

Source: Mississippi State University, Mississippi Center for Health Workforce, 2008

According to the Health Resources and Services Administration's Office of Shortage Designation, Mississippi has a total of 136 primary care health professional shortage area (HPSA) designations. Seventy of the designations are single county designations. The United States Department of Health and Human Services defines a primary care health professional shortage area (HPSA) as a geographic area that has a ratio in excess of 3,500 persons per primary care physician and insufficient access to those physicians within a 30 minute traveling radius. Also, areas with 3,000 to 3,500 persons per primary care physician that have unusually high needs for primary care services and have insufficient access to primary care doctors within a 30 minute traveling radius can also be designated as a primary care HPSA.

Source: Proposed State Health Plan,

Mississippi Department of Health (web site June 2012)

On the following page is a map of Mississippi counties with the number of physicians by county of residence. Hinds, Rankin and Madison Counties have a good number of physicians compared to other counties. Medical centers and physician clinics in these counties tend to attract patients from other counties. This area is truly the "medical center" of Mississippi.

Active Primary Care Medical Doctors by County of Residence – FY 2010

Source: Proposed State Health Plan 2013, Mississippi Department of Health

Active Primary Care Medical Doctors - 2,211

Includes: Family Practice, General Practice, Internal Medicine, Obstetrics and Gynecology and Pediatrics

Source: Mississippi State Board of Medical Licensure FY 2010, Licensing Year 2011

A. Short-Term Acute Care Hospital Services

Following is data about bed complement for General Hospital Service Area 5, in which Hinds, Rankin and Madison Counties are included.

General Hospital Service Area 5 *(Source: Mississippi Department of Health Proposed State Health* Plan – 2013)					
Facilities	**Licensed Beds**	**Abeyance Beds**	**Average Daily Census**	**Occu-pancy Rate**	**Length of Stay**
Central Mississippi Medical Center	400	0	138.29	34.57	5.03
Crossgates River Oaks Hospital	134	0	71.00	52.99	5.28
Hardy Wilson Memorial Hospital	35	0	14.68	41.95	4.89
Holmes County Hospital and Clinics	25	10	3.11	12.45	2.93
King's Daughters Hospital-Yazoo City	35	0	18.11	51.75	5.28
Leake Memorial Hospital - Carthage	25	0	6.73	26.90	3.03
Madison County Medical Center	67	0	12.33	18.41	3.07
Magee General Hospital	64	0	19.05	29.77	3.88
Mississippi Baptist Medical Center	541	0	263.61	48.73	5.21
Montfort Jones Memorial Hospital	71	0	18.98	26.73	4.30
Patient's Choice Medical Center of Claiborne	32	0	12.36	38.62	5.55
County Patients' Choice Medical Center of Smith	29	0	0.00	0.00	0.00
County River Oaks Hospital	160	0	73.25	45.78	3.76
River Region Health System	261	0	118.13	45.26	4.76
S.E. Lackey Critical Access Hospital	35	0	15.19	43.41	3.49
Scott Regional Hospital	25	0	12.68	50.74	3.22
Sharkey - Issaquena Community Hospital	29	0	7.47	25.75	5.37
Simpson General Hospital	35	0	12.42	35.48	5.23
St. Dominic-Jackson Memorial Hospital	417	0	297.88	71.43	4.50
University Hospital & Health System	664	0	442.02	66.57	6.32
Woman's Hospital at River Oaks	111	0	23.87	21.51	3.61
General Hospital Service Area 6	**925**	**19**	**325.24**	**35.16**	**4.78**

The State Health Plan does not specify a need for more acute care hospital beds in the service area, leaving that work up to applicants.

B. Long-Term Acute Care

Following is data from the 2013 Proposed State Health Plan regarding Long-Term Acute Care Hospital capacity.

General Hospital Service Area 5		Authorized Beds	Licensed Beds	Occupancy Rate	Dis-charges	ALOS
		149	**149**	**77.35**	**1,704**	**24.97**
Mississippi Hospital for Restorative Care	- Jackson	25	25	70.07	229	25.85
Promise Hospital of Vicksburg	- Vicksburg	35	35	72.74	374	25.39
Regency Hospital of Jackson	- Jackson	36	36	75.18	415	23.80
Select Specialty Hospital of Jackson	- Jackson	53	53	85.30	686	25.16

The Plan does not calculate any need for new LTACH beds, leaving that work up to applicants.

C. Swing-Bed Services

Federal law allows hospitals of up to 100 beds to use designated beds as “swing beds” to alternate between acute and extended care. Patients occupy swing-beds for a few days to several weeks. Hospitals must meet several requirements for certification as swing-beds under Medicare and Medicaid. Federal certification requirements focus on eligibility, skilled nursing facility services, and coverage requirements. Eligibility criteria include rural location, fewer than 100 beds, a Certificate of Need, and no waiver of the 24-hour nursing requirement.

Mississippi Baptist Medical Center does not qualify for swing bed treatment due to being bigger than 100 beds.

D. Inpatient Rehabilitation Services

Need for these services are considered on a statewide basis. Following is a table of hospital based Level II Comprehensive Medical Rehabilitation services from the Proposed 2013 State Health Plan.

Hospital-Based Level I CMR Units
FY 2010

Facilities	Licensed Bed Capacity	Average Daily Census	Average Length of Stay	Occupancy Rate (%)
Baptist Memorial Hospital - DeSoto	30	15.50	13.08	51.67
Delta Regional Medical Center -West Campus	24	7.07	12.84	29.46
Forrest General Hospital	24	17.79	13.11	74.12
Memorial Hospital at Gulfport	33	18.94	15.13	57.40
Mississippi Methodist Rehab Center	80	48.06	15.32	60.08
North Miss Medical Center	30	18.79	16.77	62.63
University Hospital and Health System	25	20.81	16.84	83.24
State Total	**246**	**20.99**	**14.73**	**59.80**

Source: 2010 Report on Hospitals, Mississippi State Department of Health

Hospital-Based Level II CMR Units
FY 2010

Facility	Licensed Bed Capacity	Average Daily Census	Average Length of Stay	Occupancy Rate (%)
Baptist Memorial Hospital - North Miss	13	7.16	12.56	55.05
Greenwood Leflore Hospital	20	8.49	12.26	42.44
Natchez Regional Medical Center	20	5.85	13.94	29.25
Northwest Miss Regional Med Center	14	2.31	9.81	16.52
Riley Memorial Hospital	20	14.75	13.53	73.75
Singing River Hospital	20	17.15	12.90	85.77
TOTALS	**107**	**9.29**	**12.50**	**50.46**

Source: 2010 Report on Hospitals, Mississippi State Department of Health

Based on the bed need formula found in the criteria and standards section of the Proposed State Health Plan – 2013, Mississippi currently needs one Level I bed; however, Mississippi needs 86 additional Level II CMR beds.

E. Long-Term Care

According to the Proposed State Health Plan – 2013 of the Mississippi Department of Health available on its web site in June 2012:

> "Long-term care" simply means assistance provided to a person who has chronic conditions that reduce their ability to function independently. Many people with severe limitations in their ability to care for themselves are able to remain at home or in supportive housing because they have sufficient assistance from family, friends, or community services.
>
> Mississippi's long-term care (nursing home and home health) patients are primarily disabled elderly people, who make up 20 percent of the 2025 projected population above age 65. Projections 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."

Options for long-term care presented in the Proposed 2013 State Health Plan include:

- Community-based elder care such as adult day care, senior centers, transportation, meals on wheels, meals at community locations, and home health services.
- Housing for the elderly such Personal Care Homes – Residential Living, Personal Care Home – Assisted Living.
- Continuing Care Retirement Communities. There are three CCRCs in the service area – two in Rankin County and one in Madison County.
- Retirement communities or senior housing facilities.

When a person becomes disabled relative to activities of daily living, nursing homes are often the only option. According to the Proposed State Health Plan – 2013, available on the web site of the Mississippi Department of Health in June 2012, the nursing home complement for the service area is shown in the table to the right.

County	Licensed Nursing Home Beds	Occupancy Rate	Average Daily Census
Hinds	397	75.4%	248.54
Rankin	244	73.1%	176.70
Madison	327	81.4%	255.03

Hinds, Rankin and Madison Counties are in Long Term Care Planning District III. The Proposed State Health Plan – 2013, shows a need for 5,390 beds, with current licensed/CON approved beds of 4,675, or a statewide shortage of 689 nursing home beds. The table to the right taken from the Plan shows that the tri-county nursing home shortage actually exceeds the overall state need. There is over-capacity in other areas of the State.

County	Bed Need	Licensed/ CON-approved Beds	Differ-ence
Hinds	1,501	1,427	68
Rankin	894	350	544
Madison	568	395	173

County	Unmet MR/ DD Bed Need
Hinds	214
Rankin	-273
Madison	-57

The Proposed State Health Plan – 2013 shows a 2015 projected need for Mentally Retarded /Developmentally Disabled beds. The Plan shows that the three-county area does not have an unmet need (table left).

F. Mental Health

The Mississippi Department of Health Proposed State Health Plan – 2013 available in June 2012 on the Department's web site shows the following Mental Health capacity in the three counties.

County	Acute Adult Psychiatric Facility	2010			
		Licensed Beds	Inpatient Days	Occupancy Rate	ALOS
Hinds	Central Mississippi Medical Center	29	8,444	79.77%	5.02
Hinds	St. Dominic Hospital	83	12,768	42.15%	5.18
Rankin	Brentwood Behavioral Health	48	6,923	39.51%	9.05

County	Acute Adolescent Psychiatric Facility	2010			
		Licensed Beds	Inpatient Days	Occupancy Rate	ALOS
Hinds	University Hospital & Clinics	12	1,766	40.32%	9.65
Rankin	Brentwood Behavioral Health	59	23,236	107.90%	12.85

Mississippi Baptist Medical Center is licensed for 20 adolescent chemical dependency beds, but does not operate them.

County	Adult Chemical Dependence Facility	2010			
		Licensed Beds	Inpatient Days	Occupancy Rate	ALOS
Hinds	Mississippi Baptist Medical Center	77	0.74	0.96%	4.35
Hinds	St. Dominic Hospital	35	0.17	0.49%	4.00
Rankin	Brentwood Behavioral Health *(Brentwood will lease four beds from Mississippi Baptist Medical Center)*	48			

The Mississippi Department of Health's Proposed State Health Plan – 2013 views psychiatric and chemical dependency bed need on a statewide basis, as follows:

Service Category	Projected Bed Need	Licensed Beds	Difference
Adult psychiatric	490	576	-86
Child adolescent psychiatric	251	242	9
Adult chemical dependency	327	292	35
Child/adolescent chemical dependency	108	52	56

G. Distinct-Part Geriatric Psychiatric Services

Below is a summary of operating data from the Proposed State Health Plan – 2013 for Geri-Psych services in the three counties. Mississippi Baptist Medical Center has excess capacity in this service line.

County	Acute Adult Psychiatric Facility	2010			
		Licensed Beds	Inpatient Days	Occupancy Rate	ALOS
Hinds	Central Mississippi Medical Center	18	2,515	38.28%	5.02
Hinds	Mississippi Baptist Medical Center	24	3,589	40.97%	12.65
Rankin	Crossgates River Oaks Hospital	15	4,880	89.13%	12.42

Qualitative Analysis of Services and Delivery System Needs

The Qualitative Analysis that follows provides more insight into the human factors that are at work in the health care issues faced in Hinds, Rankin and Madison Counties.

A. Primary Data Gathering – Community Input

There is limited data available directly from disadvantaged individuals, so the assessment team decided to use an efficient data collection method by engaging a focus group of community agencies serving the disadvantaged population. On May 25, 2012, Mississippi Baptist Medical Center conducted a focus group of community agencies to get their perspectives on the needs of the community for health services. The agencies and representatives were:

Name	Agency	Agency Role
Shane McNeil	Mississippi Department of Education	Public education
Lee Thigpen	Mission First, Inc.	Medical clinics for the indigent
Stacey Howard	Stewpot	Community food service
Shelley Johnson	Partners to End Homelessness	Homeless advocacy
Jeanann Reeves	American Cancer Society	Cancer research and support
Carol Burger	United Way	Community agency support
Jennifer Wellhausen	American Heart Association	Heart disease research and support
Kane Ditto	State Street Group	Baptist Board Member
Mary Ann Simpkins	Health Teacher	Health education program sponsored by Baptist.

The agencies were purposely selected because of their community roles in serving the disadvantaged population. The focus group was facilitated toward a series of structured information needs (as reflected in the tables that follow), but the group facilitation was done with open-ended questions to get maximum participation and input.

The Qualitative Analysis relied heavily on the "grass roots" information brought by the community agency focus group listed in the Primary Data Gathering section of this report. The focus group findings helped move the study findings from the statistical focus brought by secondary data analysis to the human focus from the primary data gathering from the focus group. Because the focus group members work directly with much of the disadvantaged population, their input efficiently put forth the human needs for the study.

B. Community Strengths

Strengths of the Hinds, Rankin, Madison community listed by the focus group were:

FOCUS GROUP	
Community Strengths	**Explanation**
• The number of local hospitals and specialists.	• The Jackson metro area has the most hospitals and physicians of any area in Mississippi.
• Teaching hospital, medical school, schools of nursing and allied health	• Source of new physicians, nursing and other clinical staff.
• Concentration of health care resources	• Compared to other areas of Mississippi, this area has significantly more health care resources and choice.
• Competitiveness of hospitals and physicians improves quality.	• Many areas of Mississippi have only one hospital and a small number of physicians. The group felt that competition can provide an impetus for improvement of quality.
• Nurses in the public schools are mostly funded locally by hospitals and other providers.	• The large medical centers are able to afford to sponsor school nurses and see that as part of their community service.
• Subsidized providers help the uninsured	• Federally Qualified Health Centers receive federal funding for uncompensated care. • University Hospital gets significant special DSH funds.

C. Community Opportunities to Improve

The focus group listed the following weak areas where the community could improve health status:

FOCUS GROUP	
Community Opportunities to Improve	**Explanation**
• Health education is below the needed level. Mississippi is behind in school and community resources related to health education and promotion.	• Education levels and health education can improve health status. • The perception is that the schools are behind other states in health education.
• Gap in resources	• Even with the most resources in Mississippi, we lag behind other states.
• Poor attitude of providers	• Many providers and staff were said by the focus group to be rude to lower income people. (*It was noted that Baptist was an exception*).
• Health disparities	• Minority health status is lower than non-minority.
• Health insurance is difficult to afford	• Insurance cost is high due to underlying cost and the level of mandated health benefits imposed. • High cost of health insurance is hard for employers and employees alike to afford.
• Poor resources for the mentally ill.	• Mississippi's government mental health infrastructure is residentially-focused, not community based. • Payer sources for mental health are limited.
• Access to prescription drugs is often limited	• The mentally ill and chronically ill have difficulty affording the prescription drugs.
• Limited access to home diabetic supplies and durable medical equipment	• Lack of insurance coverage.
• Are we prepared to deal with the aging population and chronic disease tsunami?	• This was more of a *question* than a statement, but still needs investigation.

D. Special Needs of Populations with Health Disparities

The focus group identified the following special needs of populations with health disparities.

FOCUS GROUP		
Special Needs of Populations with Health Disparities		
Population Sector	**Special Need**	**Explanation**
✓ **Children** ✓ **Minorities** ✓ **Aged**	• Health education	• All population sectors, but especially children, minorities, aged.
✓ **Children**	• Health education • Nutrition • Exercise	• With the childhood obesity epidemic, children need health education, nutrition and exercise. • With the Healthy Schools Act of 2007, public policy is in place. The Act requires 150 minutes per week of physical education and 45 minutes of health education per week for K-8.
✓ **Teens**	• Sex education	• Teen pregnancy is very high, and is contributing to infant mortality and future poverty, which is a cycle of poor health.
✓ **Low income**	• Healthy, fresh food	• It costs more to eat healthy. Even donated food is usually low cost and therefore high in fat, salt, sugar, etc.
✓ **Low income**	• People in "food deserts" need access to fresh food.	• There are "food deserts" in Jackson, areas where fresh food is not available or hard to find.
✓ **Low income**	• Possibly, assistance with lunches in the summer.	• No school lunches in summer
✓ **Elderly**	• Elderly need access to quality long term care at home	• It is difficult for many elderly to get out for encounters with the health care providers.
✓ **Elderly**	• Lower cost of prescription drugs	• The Medicare Part D premiums cut into limited budgets. • The Part D "donut hole" hits the chronically ill elderly very hard, and they often cannot afford their medicines.
✓ **Rural elderly**	• Services closer to home • Transportation • Help in navigating the insurance and provider systems.	• Those who live in rural areas of Hinds, Rankin and Madison do not have ready access geographically to the area's health care resources.
✓ **Low income** ✓ **Elderly**	• Public transportation	• Low cost public transportation is needed for the low income and elderly population.
✓ **Single parents with cancer**	• Children's health care and emotional needs	• When the single parent has cancer, there is no energy, time or money to take care of the children's health care.

E. Special Needs of the Low Income Sector

Focusing on the low income population sector, the focus group identified the following special needs.

FOCUS GROUP	
Special Needs of the Low Income Sector	
Need	**Explanation**
• Education • Health education	• It is hard for these individuals to understand provider instructions and their own roles in their health care.
• Reduce obesity	• Obesity leads to heart disease, stroke, diabetes, and possibly cancer
• Mental health	• The low income person with health problems often has a sense of *hopelessness* after diagnosis of a medical condition because of no insurance and limited access to prescriptions.
• Attitude shaping	• Among the low income sector, it is considered "normal" to have diabetes and hypertension.
• Access to primary care	• The uninsured often wait to get primary care, getting care in the ER after the condition has worsened.
• Flexible payments for physician visits and prescription drugs	• The uninsured low income people often cannot go to the doctor or get their prescriptions because payment is expected at time of service.
• Socialized medicine	• For the low income uninsured, it was suggested that socialized medicine is needed. *(Note: Medicaid is available for some low income sector and FQHCs have subsidies. But there are gaps.)*
• Assistance in dealing with physical and mental health issues resulting from crime, violence and trauma.	• The low income population is subject to these issues at a higher rate than the general population.
• Smoking cessation	• Smoking is more prevalent in under-educated.
• Chemical dependency services	• There is a perception that chemical dependency is more prevalent in the under-educated.

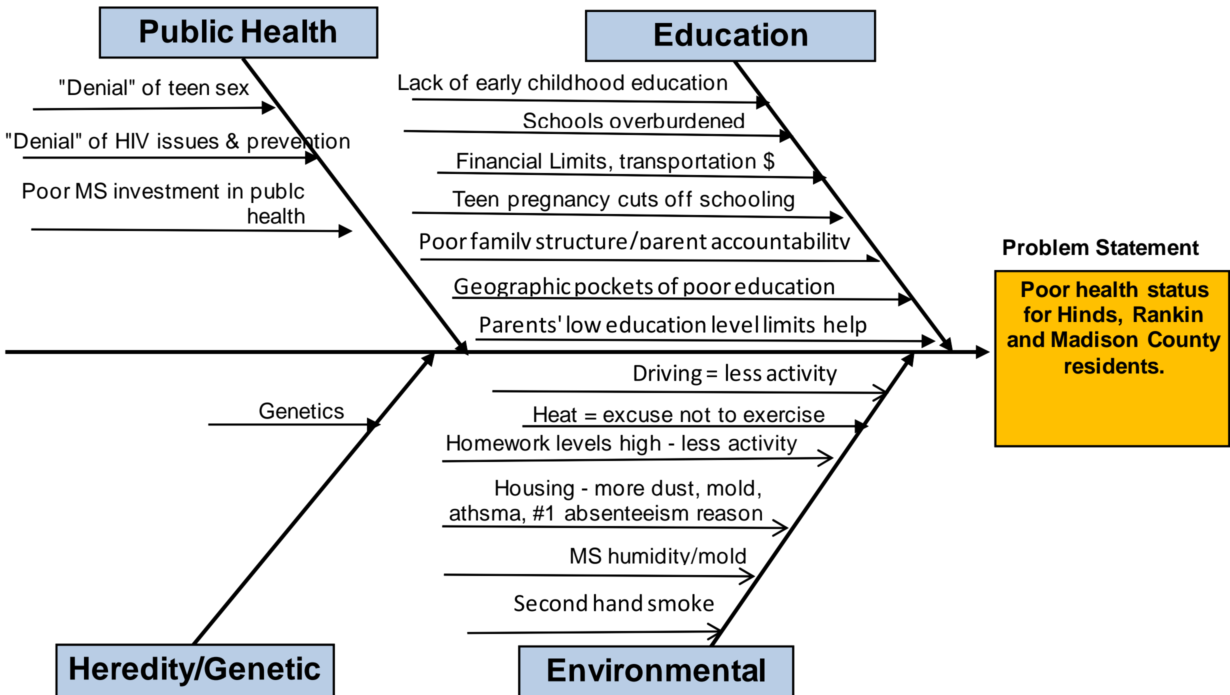
F. Special Needs of the Minority Sector

Focusing on the special needs of minorities, the group noted the following.

FOCUS GROUP	
Special Needs of the Minority Sector	
Need	**Explanation**
• Overcome cultural barriers to seeking health care services.	• Some minority sectors resist going to the doctor or hospital.
• Education and assistance with chronic disease prevention	• Minorities have disparities in cardiac, stroke, diabetes, HIV/AIDS, etc.
• Improved attitude and manner by physicians, nurses and staff	• For minorities, there is real or perceived discrimination.
• Improved cultural competency of providers	• Providers are technically trained, and may need additional training in cultural idiosyncrasies.
• For Hispanics, overcome language barriers.	• Language barriers complicate communication of both symptoms and care instructions.
• More minority providers	• Helps with the initial atmosphere in the encounter.

G. Root Causes of Poor Health Status

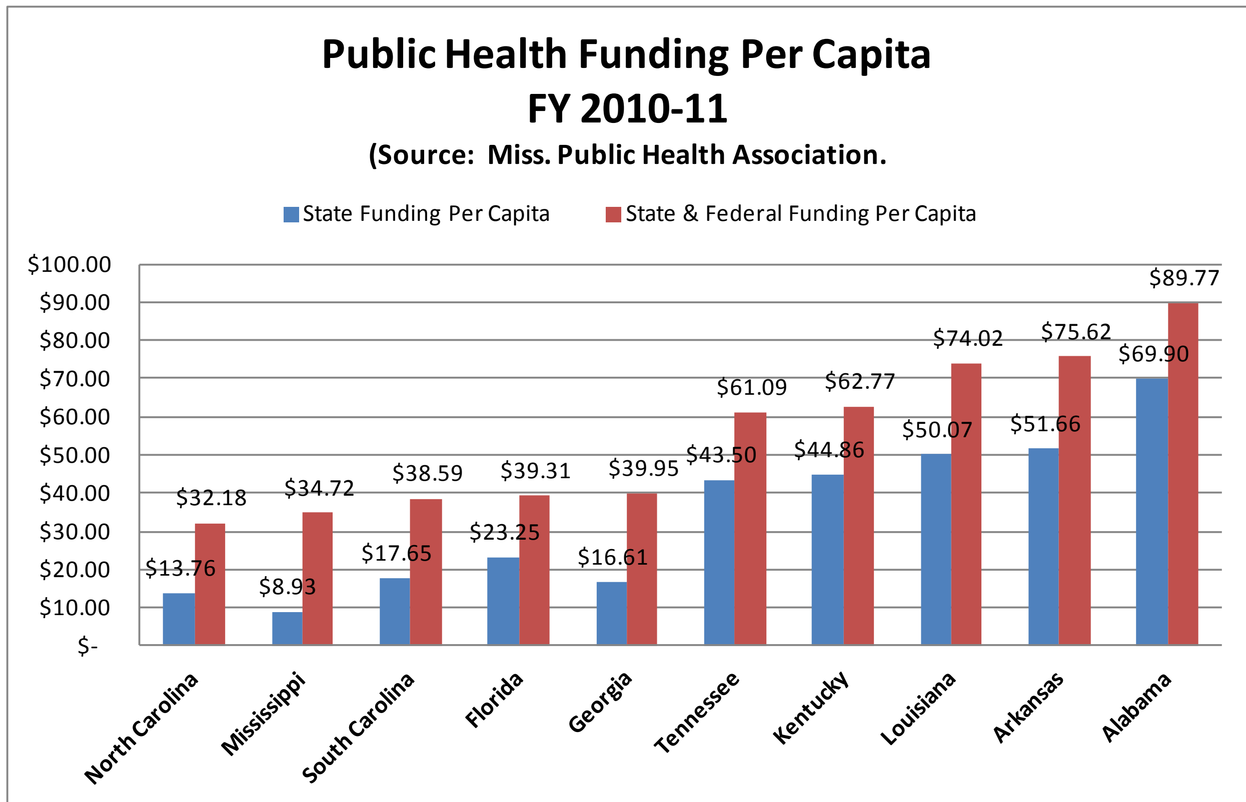
The focus group was asked for their perspectives of the *root causes* of the poor health status of Hinds, Rankin and Madison Counties. These are presented below in a "fishbone" diagram, which is often used in root cause analysis.



When categorized, the focus group settled into the root causes as being highly correlated to education, environmental issues, and public health issues (including "denial" of teen sex and HIV issues).

H. Public Health Funding

It was important to test the focus group's perception of limited public health funding by referring to available secondary data). Mississippi indeed does provide severely limited funding for public health, as shown by the chart below using information provided by the Mississippi Public Health Association. The chart shows that Mississippi ranks lowest in per capita state funding among southeastern states at $8.93, and second lowest in total state and federal per capita funding at $34.72. By contrast, Alabama funded public health at $89.77 total per capita, Tennessee at $61.09, Louisiana at $74.02 and Arkansas at $75.62.



Priority Health Service Issues/ Gaps

Why do these gaps and variances exist? There are several major reasons, including:

- Demographics of the counties, which vary primarily by race, but also slightly by gender and age categories.
- Low educational levels.
- Sedentary lifestyles. This lifestyle may be partially driven by fairly geographically sparse population coupled with minimal public transportation, resulting in more driving and less walking than other urban areas.
- Mississippi's hot, humid climate, which contributes somewhat to certain respiratory diseases, including asthma.
- Number of health care providers, which vary by county, but that many consider one geographic health market with good resources for Hinds, Rankin and Madison Counties taken as a whole.
- Access to health care, expressed in the rate of uninsured (or as a factor of living below poverty income levels).
- Mississippi's rank as lowest in per-capita state public health funding among southeastern states.

Community, Public Health and Provider Solutions

In Hinds, Rankin and Madison Counties, health care facilities and resources are more readily available in the metropolitan areas than in the rural areas of these counties. However, roads are generally good so that geography itself is not a major barrier to care. Rather, conditions associated with low income, race and age (including children and seniors) appear to be the most significant barriers. In remote areas of the three counties, the community should pay special attention to transportation and access needs of these population sectors.

The Community Health Needs Analysis has identified the possible community strategies below to address the community health status needs gap based on the target sectors and health status issues.

Target Sectors	Health Status Issue	Community/Public Health Solutions	Provider Solutions
Low income **Minorities** **Seniors**	➢ **Heart disease** ➢ **Diabetes** ➢ **Stroke**	• Health education • Diabetes education • Nutrition education • Exercise • Smoking cessation	• Adequate primary care supply • Specialty physicians • Hospital centers of excellence • Collaboration in community solutions
Teens	➢ **Infant mortality**	• Health education • Sex education • Exercise • Smoking cessation	• Adequate pre-natal service supply • Hospital OB centers of excellence, including NICU • Collaboration in community solutions
Homosexual and bisexual males *(concentration on African-American)* **Women** **Teens**	➢ **HIV/AIDS**	• STD education • Specialized HIV clinic • STD education • Sex education	• Adequate primary care supply. • Adequate infectious disease supply • Hospital infectious disease services • Collaboration in community solutions
Low income **Minorities** **Seniors** **Children**	➢ **Access to care**	• Insurance expansion • Socialized (subsidized) health care services • Subsidized or affordable prescription drug payments • Financial assistance (flexible payments & charity) • Transportation	• Participation in insurer provider networks. • Financial assistance (flexible payments & charity) • Collaboration in community solutions.

Conclusions

In keeping with our goals, Mississippi Baptist Medical Center and The Restorative Care Hospital intend to, within our statements of Mission, Vision and Values, improve the population health status in Hinds, Rankin, and Madison Counties. It is Baptist's intent to:

- ✓ Continually improve existing clinical service lines that are within core competencies of Mississippi Baptist Medical Center and The Restorative Care Hospital.

- ✓ Explore options and implement interventions to narrow health disparities, thereby improving the overall health status of the three counties.