

**Mississippi State Department of Health  
Division of Health Planning and  
Resource Development  
February 2015**

**CON Review HG-NIS-1214-018  
Natchez Hospital Company, LLC  
d/b/a Natchez Regional Medical Center  
Offering of Diagnostic Cardiac Catheterization Services and  
Digital Subtraction Angiography Services  
Capital Expenditure: \$253,695  
Location: Natchez, Adams County, Mississippi**

**STAFF ANALYSIS**

**I. PROJECT SUMMARY**

**A. Applicant Information**

Natchez Hospital Company, LLC d/b/a Natchez Regional Medical Center (Natchez Regional) is a Delaware limited liability company operating a for profit general acute hospital at 54 Seargent Prentiss Drive, Natchez, Mississippi. Natchez Regional has an eleven (11) member Board of Trustees to oversee the functions of the Hospital. Natchez Regional was acquired effective October 1, 2014, by same entity owning Natchez Community Hospital. The applicant states it has a strategy to combine the hospital resources into a single primary location at the campus of Natchez Regional.

The applicant has 159 licensed medical/surgical beds (includes 12 geriatric psych beds), and 20 Rehabilitation beds.

**B. Project Description**

Natchez Regional Medical Center requests Certificate of Need (CON) authority to re-establish diagnostic cardiac catheterization ("cardiac cath") and digital subtraction angiography (DSA) services at its facility. The hospital received CON authority in 2010 to offer diagnostic cardiac cath and DSA service, but as of September 2013, Natchez Regional ceased providing the services due to loss of physician coverage and reduced utilization.

Natchez Regional submits that the same equipment will be used to provide invasive diagnostic imaging services, including diagnostic cardiac catheterization services and digital subtraction angiography services in the same procedure room in the radiology department.

The applicant plans to offer cardiac cath and DSA services in the same location using the same equipment with minor upgrades used previously. On November 26, 2014, the Department approved site pursuant to a site assessment performed on November 24, 2014. The applicant has recruited two board certified cardiologists and anticipates providing the services to the residents in the hospital's service area.

The project will require a capital expenditure in the amount of \$253,695 for equipment upgrades, although the applicant already has a fully operational cardiac cath lab. The applicant anticipates that services are expected to commence one month after CON approval.

## II. TYPE OF REVIEW REQUIRED

Projects which involve the establishment of specified institutional health services require CON review by the State Department of Health, pursuant to Section 41-7-191, subparagraphs (1)(d)(ii) for cardiac catheterization and (vii) for digital subtraction angiography services, Mississippi Code 1972, Annotated, as amended. The statute provides that a CON is required for these services if the proposed provider has not offered the services within the past 12 months. Natchez Regional has not offered diagnostic cardiac catheterization and digital subtraction angiography services in excess of the past 12 months.

In accordance with Section 41-7-197(2) of the Mississippi Code of 1972 Annotated, as amended, any affected person may request a public hearing on this project within 20 days of publication of the staff analysis. The opportunity to request a hearing expires on March 18, 2015.

## III. CONFORMANCE WITH THE STATE HEALTH PLAN AND OTHER ADOPTED CRITERIA AND STANDARDS

### A. State Health Plan (SHP)

The *FY 2015 State Health Plan* addresses policy statements, criteria and standards which an applicant is required to meet before receiving CON authority to provide diagnostic cardiac catheterization and digital subtraction angiography services. The application submitted by Natchez Regional Medical Center is in substantial compliance with applicable criteria and standards contained in the *Plan*.

#### Diagnostic Cardiac Catheterization Services

##### **SHP Criterion 1 - Need**

The *State Health Plan* indicates that the applicant shall document a minimum population base of 100,000 in the CC/OHSPA where the proposed diagnostic cardiac catheterization equipment/service is to be located.

Natchez Regional Medical Center is located in CC/OHSPA 7, which is made up of the following nine counties: Adams, Amite, Franklin, Jefferson, Lawrence, Lincoln, Pike, Walthall, and Wilkinson. According to the projected 2020 population, these nine counties had a total projected population of 174,919.\*

**\*Source:** Mississippi Population Projections for 2015, 2020, and 2025, Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, February 2012, herein after referred to as "2020 Population Projections".

The applicant submits that a significant portion of the patients treated by Natchez Regional are Louisiana residents.

According to information submitted by the applicant, its primary service area includes the following counties: Adams, Amite, Franklin, Jefferson, and Wilkinson. These counties have a combined 2012 Population Projection of 67,572. The applicant's primary service area population increases to due to the residents of Louisiana parishes.

There is currently one existing provider of cardiac catheterization services in CC/OHSPA 7, which is Southwest Mississippi Regional Medical Center, in McComb, Pike County. Southwest Mississippi Regional Medical Center performed 965 procedures in 2012 and 1,014 in 2013.

Southwest Mississippi Regional Medical Center is located in excess of 45 miles from the proposed service, therefore, in accordance with Policy Statement 7 stated in the State Health Plan, the Department did not rely upon market share analysis for this criterion, as it was found inadequate to address access to care concerns.

### **SHP Criterion 2 - Minimum Procedures**

The applicant projects the following utilization for the cardiac cath services at Natchez Regional for the first three years:

<u>Year</u>	<u>Catheterization</u>
One	330
Two	347
Three	364

Approximately 47,596 diagnostic cardiac catheterizations were performed in Mississippi at 28 health care facilities in fiscal year 2013. Based on Mississippi's 2020 projected population of 3,156,054, Mississippi residents utilized diagnostic cardiac cath services an average of 15.08 per 1,000 population. Based on the statewide diagnostic cardiac cath utilization rate of 15.08/1,000 and the 2020 population projection for Adams County (29,718) there appears to be an unmet need of 448 diagnostic cardiac catheterization procedures in Adams County.

The application contains an affidavit of Brad LeMay, M.D. attesting to the procedures that he ordered or performed from 2011 to 2013 at Natchez Regional and states that he is confident that Natchez Regional will easily exceed 300 diagnostic procedures by the third year. The application also contains the affidavit of Vikram Dulam, M.D., attesting that in 2013 he performed 3 cardiac catheterization procedures and 9 diagnostic procedures using DSA and referred out 250 cardiac catheterization procedures and 175 diagnostic procedures using DSA.

### **SHP Criterion 3 - Impact on Existing Providers**

Applicant submits that the only other provider within CC/OHSPA 7 offering cardiac cath services is Southwest Mississippi Regional Medical Center, located 68.2 miles away from Natchez Regional. As stated earlier, Southwest Mississippi Regional Medical Center performed 965 diagnostic and therapeutic cardiac cath procedures in 2012 and 1,014 in 2013. Southwest Mississippi Regional Medical Center is located in excess of 45 miles from the proposed provider, and serves a completely different service area than the applicant; therefore, the instant project is not perceived to have an adverse impact on the current provider.

### **SHP Criterion 4 - Staffing Standards**

Natchez Regional certified that all personnel utilized in the cardiac cath lab will be trained according to the guidelines presented in the *Optimal Resources for Examination of the Heart and Lungs: Cardiac Catheterization and Radiography Facilities*, published by the inter-Society Commission for Heart Disease Resources. The applicant states that Dr. Vikram Dulam and Dr. Brad LeMay, cardiologists, will staff the cardiac cath lab along with technical staff. Drs. Dulam and LeMay are board-certified cardiologists; Dr. Dulam will serve as the medical director of the cardiac cath lab.

The applicant states that Natchez Regional Medical Center will provide training and in-service to the staff chosen to work in the cardiac cath lab., and will advise regarding policies, procedures and competency assessment.

#### **SHP Criterion 5 - Recording and Maintenance of Data**

The applicant affirms that Natchez Regional will maintain the data required by this criterion and make it available to the Mississippi State Department of Health annually.

#### **SHP Criterion 6 - Referral Agreement**

The application contained a formal transfer agreement for the provision of emergency cardiac services, including open-heart surgery with River Region Health System (n/k/a Merit Health River Region) in Vicksburg.

#### **SHP Criterion 7 - Patient Selection**

The applicant delineates the steps which will be taken to insure that high-risk or unstable patients are not catheterized in the facility. Natchez Regional furthermore certifies that therapeutic cardiac catheterization services will not be performed in the facility unless and until the applicant has received CON approval to provide therapeutic cardiac catheterization services. The applicant included its policy regarding scope of cardiac catheterization services in the application.

#### **SHP Criterion 8 - Regulatory Approval**

Natchez Regional requests approval for the addition of diagnostic cardiac catheterization services at the facility and affirms that it await commencement of services until after obtaining CON approval.

### **Digital Subtraction Angiography**

#### **SHP Criterion 1 - Need**

The applicant certified that Natchez Regional shall have in place, proper protocols for screening, consultation, and medical specialty backup before services are rendered by personnel other than those with specialized training. The applicant states only Drs. Dulam and LeMay, board certified cardiologists, will perform the cardiac cath procedures and DSA procedures.

#### **SHP Criterion 2 - CON Approval**

Natchez Regional states that no DSA services will be offered or equipment used by the applicant until the CON, that is the object of this application, has been issued.

## **B. General Review (GR) Criteria**

Chapter 8, *Mississippi Certificate of Need Review Manual, September 1, 2011*, contains general criteria by which all applications for Certificate of Need are reviewed. This project is in substantial compliance with applicable criteria.

### **GR Criterion 1 – Compliance with State Health Plan**

As discussed above, the application is in compliance with the 2015 State Health Plan.

### **GR Criterion 2 - Long Range Plan**

The applicant states that its long range plan is to provide patients with a local option to receive diagnostic cardiac cath and DSA services that were successful and productive for the hospital in the past. The applicant states it has no long range plan to develop an open heart program or to perform stent procedures. The applicant believes that offering diagnostic cardiac cath and DSA services would better equip the applicant to realize the goals of its long range plan.

### **GR Criterion 3 - Availability of Alternatives**

Natchez Regional submits that the only alternative to the offering of diagnostic cardiac catheterization and digital subtraction angiography services at Natchez Regional is the status quo. The applicant states that currently, no cardiac cath services are available within 65 miles of Natchez, and historically and disproportionately under served populations are forced to do without such choice in maintenance of cardiac health or to travel a minimum of 65 miles for these services. Therefore, the applicant states it has rejected the status quo as an abdication of its responsibility to meet the significant healthcare needs of the citizens it serves.

### **GR Criterion 4 - Economic Viability**

Natchez Regional projects net incomes of \$961,440, \$1,016,827, and \$1,073,960 for first, second, and third years of operation, respectively. Therefore, the project appears to be economically viable.

Costs and charges appear to be comparable to the charges established by other facilities in the planning area and the State.

The only provider of cardiac cath services in CC/OHSPA 7, Southwest Mississippi Regional Medical Center, performed 965 diagnostic cardiac cath procedures in 2012 and 1,014 procedures in 2013. The *FY2014 State Health Plan* indicates that Natchez Regional performed 394 diagnostic cardiac cath procedures in 2011. The *FY2015 State Health Plan* indicates that Natchez Regional performed 399 and 257 diagnostic cardiac cath procedures in 2012 and 2013, respectively. Therefore, the applicant's projections appear to be reasonable.

### **GR Criterion 5 - Need for Project**

The applicant states that this application directly responds to the stated goal - "to improve access to cardiac care and to encourage the establishment of additional cardiac cath and open heart surgery programs within the state that can serve the poor, minorities, and the rural population in greater numbers."

The applicant submits that the need for cardiac cath is particularly marked in the region surrounding Natchez, where the population is poorer, more rural, and consists of a higher minority population than most other parts of the state. It is reported that the percentage of population living in poverty in Adams County is higher than the percentage of population living in Mississippi in all age groups.

The applicant anticipates that the vast majority of all its patients who will be served by the cardiac cath and DSA services will be Medicare patients. The number of Adams County residents over the age of 65 years old is expected to increase over the next decade.

Natchez Regional is located in CC/OSHSPA 7, which consists of nine counties. The applicant states that five of these counties are in its primary service area: Adams, Amite, Franklin, Jefferson, and Wilkinson. The other four counties in CC/OHSPA 7 are served primarily by Southwest Mississippi Regional Medical Center in McComb. The facility in McComb served well in excess of the required 450 therapeutic and diagnostic procedures, and with the exception of Amite County, serves an entirely different population than the applicant. The offering of diagnostic cardiac cath services at Natchez Regional is not expected to have an adverse impact on the offering of services in McComb.

This application includes over 30 letters of support/comment from physicians, employers, including medical, service and production industry, banks, professional associations, political office holders, and other community organizations.

**GR Criterion 6 - Access to the Facility or Service**

Applicant certifies that all residents of the health planning service area, hospital service area or patient service area, including Medicaid recipients, charity/medically indigent patients, racial and ethnic minorities, women, handicapped persons, and the elderly have access to the services of the existing facility and will continue to have access to the proposed services.

The applicant estimates that approximately 14% of its cardiac cath services will be offered to Medicaid patients, and slightly over 53% of the reinstated services will be offered to Medicare patients. In addition, the applicant projects that approximately 2% of its services will be in the nature of uncompensated charity care. The table below depicts the level of care offered or proposed to be offered to medically indigent and charity patients;

<b>Gross Patient Revenues</b>				
	<b>Medically Indigent (%)</b>	<b>Charity Care (%)</b>	<b>Medically Indigent (\$)</b>	<b>Charity Care (\$)</b>
<b>Historical Year 2013</b>	0%	1%	\$0	\$1,146,000
<b>Historical Year 2014</b>	0%	1%	\$0	\$1,550,000
<b>Projected Year 1</b>	0%	2%	\$0	\$3,799,307
<b>Projected Year 2</b>	0%	2%	\$0	\$3,915,777

**GR Criterion 7 - Information Requirement**

The applicant affirms that it will record and maintain the information required by this criterion and make it available to the Mississippi State Department of Health within 15 business days of request.

#### **GR Criterion 8 - Relationship to Existing Health Care Systems**

The only current provider of cardiac cath services in CC/OSHPA 7 is Southwest Mississippi Regional Medical Center in McComb, Pike County, that primarily serves patients from three counties of Amite, Pike, and Walthall. The applicant states that it primarily serves patients from four counties of Adams, Franklin, Jefferson, and Wilkinson plus Concordia Parish in Louisiana. The facility in McComb served well in excess of the required 450 therapeutic and diagnostic procedures and it serves an entirely different population than the applicant. The offering of diagnostic cardiac cath services at Natchez Regional is not expected to have an adverse impact on the offering of services in McComb.

#### **GR Criterion 9 - Availability of Resources**

Applicant states that it will have two board certified cardiologists providing services at its hospital, Dr. Vikram Dulam and Dr. Brad LeMay.

#### **GR Criterion 16 - Quality of Care**

Natchez Regional Medical Center is in compliance with the *Minimum Standards of Operation for Mississippi Hospitals*. The Hospital is accredited by the Joint Commission on Accreditation of Health Care Organizations and certified as a participant in the Medicare/Medicaid programs. Natchez Regional is also certified as a training center by the American Heart Association for Basic Life Support (BLS), Advanced Cardiac Life Support (ACLS), and Pediatric Advanced Life Support (PALS).

### **IV. FINANCIAL FEASIBILITY**

#### **A. Expenditure Summary**

The project will require a capital expenditure in the amount of \$253,695 for equipment upgrades, although the applicant already has a fully operational cardiac cath lab.

#### **B. Method of Financing**

The applicant projects to pay for the project with its cash reserves.

#### **C. Effect on Operating Cost**

The Three-Year Projected Operating Statement is presented in Attachment 1.

#### **D. Cost to Medicaid/Medicare**

The impact of the project on third party payers is as follows:

<b>Payor Mix</b>	<b>Utilization Percentage</b>	<b>Costs to First Year</b>
Medicaid	14.0%	\$851,859
Medicare	53.0%	\$3,331,077
Other Payers	33.0%	\$2,045,154
Total	100.0%	\$6,228,090

**V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES**

The Division of Medicaid was provided a copy of this application for comment. Effective September 1, 2012, the Division of Medicaid changed the methodology by which it reimburses outpatient services so that the cost incurred subsequent to that date will no longer affect outpatient payments. Effective October 1, 2012, the Division of Medicaid changed the methodology by which it reimburses inpatient services so that the cost incurred subsequent to that date will only affect cost outlier payments. The Division was unable to estimate the increased in cost outlier payments resulting from this project. The Division of Medicaid opposes the project.

**VI. CONCLUSION AND RECOMMENDATION**

This project is in substantial compliance with criteria and standards for offering of diagnostic cardiac catheterization and digital subtraction angiography services, as contained in the *FY 2015 State Health Plan*; the *Mississippi Certificate of Need Review Manual, revised 2011*; and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

Therefore, the Division of Health Planning and Resource Development recommends approval of the application submitted by Natchez Regional Medical Center for the re-establishment of diagnostic cardiac catheterization and digital subtraction angiography services.

## Attachment I

### Natchez Regional Medical Center Reinstatement of Cardiac Cath and DSA Services Three-Year Projected Operating Statement (Project Only)

	Proposed Year 1	Proposed Year 2	Proposed Year 3
<b>Revenue</b>			
Inpatient Care Revenue	\$ -	\$ -	\$ -
Outpatient Care Revenue	\$ 6,228,090	\$ 6,539,495	\$ 6,866,469
<b>Gross Patient Care Revenue</b>	6,228,090	6,539,495	6,866,469
Charity Care	124,562	130,790	137,330
Deductions from Revenue	4,646,623	4,878,954	5,122,902
<b>Net Patient Care Revenue</b>	\$ 1,456,905	\$ 1,529,750	\$ 1,606,238
Other Operating Revenue			
<b>Total Operating Revenue</b>	<b>\$ 1,456,905</b>	<b>\$ 1,529,750</b>	<b>\$ 1,606,238</b>
<b>Operating Expense</b>			
Salaries	149,750	137,243	165,110
Benefits	37,440	39,312	41,273
Supplies	130,843	193,185	205,94
Services	58,922	61,868	64,932
Lease			
Depreciation	38,500	33,110	28,475
Interest			
Other	24,000	25,200	26,460
<b>Total Operating Expense</b>	<b>\$ 495,465.00</b>	<b>\$ 512,923.00</b>	<b>\$ 532,278.00</b>
<b>Net Operating Income (Loss)</b>	<b>\$ 961,440</b>	<b>\$ 1,016,827</b>	<b>\$ 1,073,960</b>
Inpatient days	330	347	364
Outpatient days			
Procedures			
Charge per outpatient day	\$ -	\$ -	\$ -
Charge per inpatient day	\$ 18,873	\$ 18,873	\$ 18,873
Charge per procedure	\$ -	\$ -	\$ -
Cost per inpatient day	\$ -	\$ -	\$ -
Cost per outpatient day	\$ -	\$ -	\$ -
Cost per procedure	\$ 1,501	\$ 1,480	\$ 1,463