

**DIVISION OF HEALTH PLANNING AND
RESOURCE DEVELOPMENT
FEBRUARY 2008**

**CON REVIEW: HG-NIS-0907-022
JEFF ANDERSON REGIONAL MEDICAL CENTER
ACQUISITION OF MRI EQUIPMENT
& ESTABLISHMENT OF MRI SERVICES
CAPITAL EXPENDITURE: \$3,684,900
LOCATION: MERIDIAN, LAUDERDALE COUNTY, MISSISSIPPI**

STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

Jeff Anderson Regional Medical Center (JARMC) is a non-profit, 260-bed general acute care hospital. The hospital is governed by a five-member Board of Directors. Jeff Anderson Regional Medical Center is accredited by the Joint Commission on the Accreditation of Healthcare Organizations and licensed by the Mississippi State Department of Health.

The occupancy rates, average lengths of stay (ALOS), and the Medicaid utilization rates for JARMC are as follows for the years 2004 through 2006:

**Jeff Anderson Regional Medical Center
Utilization Data**

Fiscal Year	Occupancy Rate (%)	ALOS (Days)	Medicaid Utilization Rate (%)
2004	58.16	5.36	10.78
2005	59.95	5.44	12.16
2006	56.19	5.34	14.39

Source: Division of Health Facilities Licensure and Certification, Mississippi State Department of Health (MSDH).

B. Project Description

JARMC requests Certificate of Need authority to acquire a fixed MRI scanner and establish MRI services at 2124 14th Street, Meridian, Lauderdale County, Mississippi, located in General Hospital Service Area 4 (GHSA 4). JARMC operates 24 hours per day, seven days per week. The project includes the purchase of a General Electric (GE) Signa HDx 1.5T Echo Speed 16-Channel Fixed MRI scanner. The applicant states that JARMC desires to add magnetic resonance imaging to its present complement of diagnostic services (e.g. diagnosis and treatment in cardiology, neurology, neurosurgery, oncology, and radiology) in order to provide additional diagnostic imaging capability at the medical center. The applicant proposes to use the said scanner to perform breast imaging, and states that none of the current MRI units in Meridian, Mississippi, are technically capable of generating magnetic resonance breast images.

The applicant states that the addition of MRI scanning on-site at JARMC will provide quicker

and safer diagnostic evaluation of both critically ill patients and patients who are received in the emergency room department.

The applicant provided a detailed quotation and the specifications and description of the GE Signa HDx1.5T Echo Speed 16-Channel Fixed Site MR system prepared by GE Healthcare. The application contained a floor plan for the proposed space prepared by Foil-Wyatt Architects & Planners PA., and the Mississippi State Department of Health, Division of Licensure and Certification, approval letter for the proposed MRI services at Jeff Anderson Medical Center dated May 10, 2007.

JARMC is a co-owner of Regional Medical Support Center, Inc. (RMSC), a freestanding MRI center located at 2115 13th Street, Meridian, Mississippi, several blocks from the hospital. Thus, JARMC proposes to establish MRI services on its campus to promote quality and continuity of care, as well as to increase access to its patients. The MRI suite is designed as a one-story concrete frame addition at the west end of the existing Imaging Suite at JARMC. The applicant proposes to construct a total of 3,040 square feet of space at a cost of \$381.57 per square foot for 2,220 square feet new construction and \$145.46 per square foot for 820 square feet of renovation.

The applicant states that the addition is intended to accommodate one MRI scanner immediately and one additional MRI in the future. The applicant further states that the construction will match the existing building with exterior pre-cast concrete panels and a concrete frame. The foundation will be auger-cast concrete piling and the roof is a flat modified bitumen roof. The site work includes the following:

1. Earthwork – Leveling site for construction
2. Relocation of an existing tunnel
3. Paving and finishing on existing parking lot.

The applicant submits that the additional space to house the MRI scanner shall utilize the hospital's existing mechanical and electrical systems.

The applicant believes that the proposed project would eliminate the need to transport critically ill patients to an off-site facility and provide MRI breast images for those patients at risk for breast cancer.

The applicant projects the addition of 2 FTE personnel at a cost of \$188,622 the first year of operation.

II. TYPE OF REVIEW REQUIRED

The Mississippi State Department of Health reviews applications for major medical equipment acquisition and offering of MRI services in accordance with Sections 41-7-173; 41-7-191, subparagraphs (1)(d)(xii), (f), and (i), and 41-7-193, Mississippi Code 1972 Annotated, as amended, and duly adopted rules, procedures, plans, criteria, and standards of the Mississippi State Department of Health.

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 March 6, 2008.

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

A. State Health Plan (SHP)

The *FY 2007 State Health Plan* contains criteria and standards which an applicant is required to meet before receiving CON authority to acquire or otherwise control MRI equipment and to offer MRI services.

Acquisition or Otherwise Control of MRI Equipment

SHP Criterion 1- Need

An entity desiring to acquire or otherwise control MRI equipment must document that the equipment shall perform a minimum of 1,700 procedures per year by the end of the second year of operation, utilizing the procedures estimation methodology contained in the *Plan*.

JARMC projects the following procedures for the first, second, and third years of operation: 1,950; 2,250; and 2,450. The applicant states that these projected numbers are based on actual referrals to Regional Medical Support Center, Inc. (RMSC) for the past two years and with the anticipated referrals, identified by physicians in the Breast Imaging Center, for MRI breast studies. However, JARMS is a hospital, thus required to use the procedures estimation methodology contained in the *Plan*. JARMC projects 3,828 MRI procedures, based upon the procedures estimation methodology contained in the *FY 2007 State Health Plan*.

SHP Criterion 2 – Assurances

JARMC affirms that they currently provide full body computed axial tomography, ultrasound, angiography, nuclear medicine and conventional radiological services.

The applicant further affirms that the GE Signa Model HDx has been approved by the FDA.

SHP Criterion 3 - Information Recording/Maintenance

JARMC affirms that they will record and maintain the information required by this criterion and shall make the data available to the Mississippi State Department of Health within fifteen (15) business days of request.

SHP Criterion 4 - Authorized Entity

Jeff Anderson Memorial Hospital Foundation, Inc. was formed on August 6, 1947, by the filing of a Certificate of Formation with the Office of the Mississippi Secretary of State.

SHP Criterion 5 - Authorization to Provide MRI

The application seeks CON approval from the Mississippi State Department of Health, Division of Health Planning and Resource Development, for the acquisition of MRI equipment.

Criteria for Offering of MRI Services

SHP Criterion 1- Need

An entity desiring to offer MRI services must document that the equipment shall perform a minimum of 1,700 procedures per year using the procedures estimation methodology presented in the *FY 2007 State Health Plan*. The *Plan* provides, however, that: "If the MRI unit in question is presently utilized by more than one provider of MRI services, the actual number of procedures performed by them during the most recent 12-month period may be used instead of the formula projections". In addition, the *Plan* requires that if a particular MRI unit is utilized by more than one provider of MRI services, all existing or proposed providers of MRI services must jointly meet the required service volume of 1,700 procedures annually.

In 1987, Regional Medical Support Center (RMSC), which is co-owned by the three general acute care hospitals in Meridian, was established to provide MRI scanning for the Meridian service area. RMSC is located in a building distinctly separate from any of the three hospitals and provides predominantly outpatient MRI imaging. An inpatient at Jeff Anderson Regional Medical Center needing an MRI must be transported via ambulance to RMSC for a scan. In the early years of MRI, the majority of the scans were performed on an outpatient basis, and this arrangement was acceptable; however, in 2006, JARMC transferred approximately 1500 patients to RMSC for MRI scans. Ambulance transport for an MRI scan is less than ideal for critically ill patients and expensive. JARMC believes there are more patients presenting in the emergency department which require an MRI scan, and they too have to be transferred via ambulance to RMSC to receive a scan. The applicant considers the method of transferring a patient for an MRI scan to be unacceptable.

According to the applicant, earlier this year, the National Cancer Institute, the American Cancer Society, and the American College of Radiology all developed guidelines recommending breast MRIs for patients with an unusually high risk of developing breast cancer. The applicant cited none of the current MRI scanners in Meridian are capable of generating acceptable MRI breast images. The applicant further states that it is anticipated that the offering of MRI breast imaging at JARMC will generate additional MRI procedures per year.

JARMC projects 3,828 MRI procedures, based upon the procedures estimation methodology contained in the *FY 2007 State Health Plan*.

SHP Criterion 2 - Documentation of Diagnostic Imaging Modalities

JARMC affirms that a full range of diagnostic imaging modalities for verification and complimentary studies will be available through either itself or other providers with whom its members have staff privileges. Among these modalities are full body computed axial tomography, ultrasound, angiography, nuclear medicine and conventional radiology services.

SHP Criterion 3- Accessibility

JARMC provides health care services to patients in need of the service regardless of age, creed, sex, race or ability to pay.

SHP Criterion 4 - Staffing

The applicant affirms that a Director, Board Certified radiologist or a nuclear medicine imaging physician, or other board eligible licensed physician, and an MRI Technologist/Radiographer will be on site during the hours of operation to ensure the center functions properly and provide interpretation of clinical images. The MRI service shall be directed by John R. Blackwell, M.D., Chief of Radiology.

SHP Criterion 5 - Research Staffing

JARMC affirms that the facility does not anticipate using MRI equipment for experimental procedures.

SHP Criterion 6 -Recording of Data

JARMC affirms that the facility will record and maintain the information required by this criterion and shall make the data available to the Mississippi State Department of Health regarding the operation of the MRI equipment. Also, the facility states it will record source of payment for procedures and the total amounts charged during the fiscal year.

SHP Criterion 7 - CON Approval

The applicant seeks CON approval to offer MRI services at JARMC in GHSA 4.

B. General Review (GR) Criteria

Chapter 8 of the *Mississippi Certificate of Need Review Manual, Revised November 12, 2006, as amended* (in effect at the time this application was submitted) addresses general criteria by which all CON applications are reviewed.

GR Criterion 2 - Long Range Plan

According to the applicant, the long range development plan of JARMC is the provision of cost effective, accessible MRI services provided for both patients and physicians in a timely manner.

GR Criterion 3- Availability of Alternatives

The applicant states that they could make no change in the current arrangement for MRI services; however, due to the medical center's tremendous growth in the delivery of health care services, this option has caused significant difficulty in obtaining MRI scans for its patients. JARMC considers this alternative unacceptable. The applicant asserts that the only acceptable alternative is the establishment of MRI services. JARMC recognizes the need for the service and believes their choice is very simple. The hospital could either implement the proposed service or continue to transfer patients to other facilities to receive an MRI procedure, which is less than ideal for critically ill patients.

The applicant contends that it is the only 260 bed hospital in Mississippi which does not offer MRI scanning at its facility.

GR Criterion 4 - Economic Viability

The applicant states that the proposed charges for MRI scans shall be comparable to the charges of other providers for similar services statewide based upon Medicare and private reimbursement rates.

JARMC asserts that the projected levels of utilization for the proposed service are reasonable and consistent with those experienced by similar facilities and the need within the service area.

The applicant projects net income of \$51,317; \$122,179; and \$303,467 for the first, second, and third year of operation, respectively.

The application contains a financial feasibility study prepared by the Controller at JARMC stating that sufficient funds exist and will be generated to meet JARMC's operating expenses, working capital needs, and other financial requirements for the project.

GR Criterion 5 - Need for the Project

In addressing the need for additional MRI services in GHSA 4, the applicant points out that for the most recent three years, JARMC has transferred the following number of patients to RMSC for MRI scans:

JARMC Number of Transferred Patients for MRI Procedures		
2005	2006	2007
1,588	1,486	1,900

The applicant determined that there is a need for an MRI scanner with the ability to perform MRI breast imaging in GHSA 4. Also, the applicant notes that the request for the addition of MRI breast imaging emanates from the medical staff of JARMC.

For 2006, staff identified five fixed FTE units and two mobile FTE units, for a total of seven FTE MRI units in existence in GHSA 4; 5.4 of the 7.0 FTE units are located in Lauderdale County.

The application contains two (2) endorsement letters from area physicians supporting this proposed project.

GR Criterion 6- Access to the Facility

The applicant contends that JARMC complies with all applicable federal regulations concerning community service, access by under-served groups and handicapped persons, and the provision of uncompensated care.

GR Criterion 7- Information Requirement

JARMC affirms that they will record and maintain the information required by this criterion and shall make the data available to the Mississippi State Department of Health within fifteen (15) business days of request.

GR Criterion 8 - Relationship to Existing Health Care System

JARMC does not believe that approval of the proposed MRI unit will have an adverse affect on existing facilities. The applicant cited that the addition of MRI services at JARMC is a progressive step in the provision of state-of-the-art medical treatment to the patients of East Central Mississippi.

The applicant contends that Regional Medical Support Center, Inc. (RMSC), a free-standing MRI imaging center, will continue to provide outpatient MRI scanning for the Meridian area.

The Department received one letter of opposition concerning this proposed project. Riley HMA, Inc. d/b/a Riley Memorial Hospital opposed this project citing, if approved, the proposed project will have a significant adverse impact upon its operations.

Staff concludes that this project should have no significant adverse affect on existing MRI providers in GHSA 4.

GR Criterion 9 - Availability of Resources

The applicant affirms JARMC has access to the resources and personnel necessary to provide MRI services. The applicant states that the MRI service shall be under the direction of Meridian Radiology Associates, the radiologists who serve the patients of JARMC. JARMC will use the hospital's cash reserves to fund the project.

GR Criterion 10 - Relationship to Ancillary or Support Services

JARMC asserts that the addition of the GE Signa HDx 1.5T scanner, and its capabilities of providing MR breast imaging services, will complement the existing services in GHSA 4 and that all necessary support and ancillary services for the proposed MRI service are available.

IV. FINANCIAL FEASIBILITY

A. Capital Expenditure Summary

	Capital Expenditure	Percentage
New Construction	\$789,000	21.41%
Renovation Construction	52,000	1.41%
Capital Improvements		
Fixed Equipment		
Non-Fixed Equipment	2,639,600	71.63%
Land Cost		
Site Preparation	51,500	1.40%
Fees (Architectural, Consultant, etc)	53,550	1.45%
Contingency Reserve	89,250	2.42%
Capitalized Interest		
Other (legal & Acct. fees)	10,000	.28%
Total Proposed Capital Expenditure	\$3,684,900	100.00%

The above estimated capital expenditure is proposed for new construction of 2,220 square feet of space at a cost of \$381.57 per square foot and 820 square feet of renovation at \$145.46 per square foot (See Attachment 2). The application contains documents quoting a price of \$2,500,000 for the purchase of the 1.5T MRI scanner.

B. Method of Financing

JARMC will use the hospital-s cash reserve to fund the project. The financial information contained in the application reveals that sufficient cash and cash equivalents are available to fund the project.

C. Effects on Operating Costs

The applicant's three-year projected operating statement is provided in Attachment 3. The applicant's projections include: expenses, utilization, and results from operation for the first three years following completion of the project.

D. Cost to Medicaid/Medicare

Payor	Utilization Percentage	First Year Cost
Medicaid	4%	\$110,380
Medicare	57%	\$1,572,915
Other	39%	\$1,076,205
Total	100%	\$2,759,500

The applicant projects approximately 2% of gross patient revenues will be provided to medically indigent patients.

V. RECOMMENDATION OF OTHER AFFECTED AGENCIES

The Division of Medicaid was provided a copy of this application for comment. No written comment has been received as of publication date.

VI. CONCLUSION AND RECOMMENDATION

This project is in substantial compliance with the criteria and standards for the acquisition or otherwise control of MRI equipment and for offering of MRI services as contained in the *FY 2007 Mississippi State Health Plan*; Chapter 8 of the *Mississippi Certificate of Need Review Manual*, revised November 2006; and all adopted rules, procedures, and plans of the MSDH.

The Division of Health Planning and Resource Development recommends approval of the application submitted by Jeff Anderson Regional Medical Center, Meridian, for the acquisition of MRI equipment and establishment of MRI services.

**ATTACHMENT 1
 General Hospital Service Area 4
 Location and Number of MRI Procedures**

Facility	Location	Type / No. of Equipment	Number of Procedures 2004	Number of Procedures 2005	Updated Numbers 2006*	Days of Operation	FTE Unit
H.C. Watkins Memorial Hospital	Quitman/Clarke	M	CON	76	256	Thur.	0.2
Laird Hospital	Union/Newton	M	-	CON	574	M, W, F	0.6
Neshoba General Hospital	Philadelphia/Neshoba	M	1,598	1,698	1,745	Tu. Thur. Sat.	0.6
Newton Regional Hospital	Newton	M	357	382	299	M	0.2
Regional Medical Support Center, Inc. ¹	Meridian/Lauderdale	F(3)	7,564	7,011	7,021	M-F	3.0
Rush Medical Group ²	Meridian/Lauderdale	F(2)	4,700	6,768	6,380	M-F	2.0
Rush Orthopaedic & Sports Medicine Clinic/Orthopaedic Imaging Associates, LLC ³	Meridian/Lauderdale	M	CON	809	988	Tu. & Thur.	0.4
Total			14,219	16,744	17,263	-	-
Full Time Equivalent Units			5.8	6.4	7.0	-	-
Average Number of Procedures (operating units)			2,451	2,616	2,466	-	-

Source: FY 2007 State Health Plan

*FY 2006 Survey and Hospital Report

F/M Fixed/Mobile MRI unit

FTE – Full Time Equivalent

¹Regional Medical Support Center, Inc. performs MRI's for Jeff Anderson Regional Medical Center, Riley Memorial Hospital, and Rush Foundation.

²Rush Medical Group performs MRI's for Rush Foundation Hospital.

³Orthopaedic Imaging Associates, LLC (OIA) holds a CON to provide MRI services to Rush Orthopaedic & Sports Medicine Clinic (ROSMC) and other patients in the area through physician referrals. OIA has a contractual agreement with Alliance Imaging, Inc. Rush Medical Group (RMG) is the Management Service Organization that does the billing for OIA. Rush Orthopaedic & Sports Medicine Clinic is owned by Rush Foundation Hospital and Gus A. "Sonny" Rush, III, MD owns Rush Orthopaedic & Sports Medicine Clinic.

Attachment 2

**Jeff Anderson Regional Medical Center
 Acquisition of MRI Equipment & Establishment of MRI Services
 Computation of Construction and Renovation Cost**

<u>Cost Component</u>	<u>Total</u>	<u>New Construction</u>	<u>Renovation</u>
New Construction Cost	\$789,000	\$789,000	
Renovation Cost	\$52,000		\$52,000
Total Fixed Equipment Cost			\$0
Total Non-Fixed Equipment Cost	\$2,639,600	\$0	\$0
Capital Improvement			
Land Cost	\$0		
Site Preparation Cost	\$51,500	\$51,500	
Fees (Architectural, Consultant, etc.)	\$53,550	\$44,248	\$9,302
Contingency Reserve	\$89,250	\$73,747	\$15,503
Capitalized Interest	\$0	\$0	\$0
Total Proposed Capital Expenditure	\$3,674,900	\$958,496	\$76,804

Square Footage	3,040	2,512	528
Allocation Percent		82.63%	17.37%

Costs Less Land, Non-Fixed Eqt.& Cap. Improvement	\$1,035,300	\$958,496	\$76,804
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Cost Per Square Foot	\$340.56	\$381.57	\$145.46
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ATTACHMENT 3

**Jeff Anderson Regional Medical Center
 Acquisition of MRI Equipment and Service, Meridian, MS
 Three-Year Operating Statement**

	Year 1	Year 2	Year 3
Revenue			
Gross Patient Care Revenue	\$2,759,500	\$3,472,715	\$4,096,579
Deduction From Revenue	(\$1,746,324)	(\$2,206,545)	(\$2,601,976)
Charity	(\$58,425)	(\$66,941)	(\$76,197)
Net Patient Care Revenue	\$954,751	\$1,199,229	\$1,418,406
Total Operating Revenue	<u>\$954,751</u>	<u>\$1,199,229</u>	<u>\$1,418,406</u>
Operating Expenses			
Salaries	\$157,185	\$162,097	\$167,149
Benefits	31,437	32,419	33,430
Supplies	36,582	42,210	45,962
Services	0	130,000	130,000
Lease	0	0	0
Depreciation	554,052	554,052	554,052
Interest	0	0	0
Other	124,178	156,272	184,346
Total Operating Expense	<u>\$903,434</u>	<u>\$1,077,050</u>	<u>\$1,114,939</u>
Net Operating Income	<u>\$51,317</u>	<u>\$122,179</u>	<u>\$303,467</u>
Assumptions			
Number of Scans	1,950	2,250	2,450
Charge per Scan	\$1,415	\$1,543	\$1,672
Cost per Scan	\$463	\$479	\$455