

**Division of Health Planning
And Resource Development
September 2003**

**CON Review HG-R-0603-018
Hancock Medical Center
Imaging Services Center Expansion Project
Capital Expenditure: \$477,000
Location: Bay St. Louis, Hancock County, Mississippi**

STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

Hancock Medical Center (HMC), a Hancock County owned, non-profit, short-term acute care hospital, receives governance by a seven-member board of trustees, appointed by the Hancock Board of Supervisors. Quorum Health Resources, Inc. provides management, and the facility is accredited by the Joint Commission on Accreditation of Healthcare Organizations.

HMC's bed capacity (as of June 1, 2003) includes 94 medical/surgical beds and 10 intensive care beds, for a total of 124 licenced beds. The hospital reported the following occupancy rates, average lengths of stay (ALOS), and Medicaid utilization rates of medical/surgical beds for the three most recent fiscal years:

Hancock Medical Center Utilization Data

FISCAL YEAR	OCCUPANCY RATE (%)	ALOS (DAYS)	MEDICAID UTILIZATION RATE (%)
2000	51.98	4.39	15.50
2001	53.66	4.48	15.00
2002	53.70	4.27	12.50

Source: Division of Health Facilities Licensure and Certification, MSDH.

B. Project Description

Hancock Medical Center requests Certificate of Need authority to renovate an existing, leased, off-campus, building to house a proposed expansion of the hospital's diagnostic imaging services. This expansion will provide imaging and other medical diagnostic services in a site more convenient to the out-lying population of the hospital's service area. The proposed imaging clinic will be located at 5401 Indian Hill Boulevard in Diamondhead, Mississippi, just north of Interstate Highway 10, some 16 miles from Hancock Medical Center, which is located in Bay St. Louis, Mississippi. The project includes an additional radiographic room, ultrasound unit, mammography equipment, CT scanner, and a fixed, open MRI unit. The applicant expects to obligate a portion of the proposed capital expenditure immediately upon project approval, with the remainder obligated incrementally as the project progresses. Applicant expects completion of the project within six months following approval.

II. TYPE OF REVIEW REQUIRED

This project for expansion of medical diagnostic imaging services, including MRI scanning services, through the establishment of an additional medical imaging center in an off-campus facility is being reviewed in accordance with Section 41-7-191, subparagraphs (1)(b), (f), and (j), Mississippi Code 1972, Annotated, as amended, and all adopted rules, procedures, plans, criteria, and standards of the Mississippi State Department of Health. The new open MRI machine does not fall within the cost framework of CON review; therefore, this project is being reviewed as an expansion of MRI screening services by the establishment of an additional imaging site in an off-campus location some 16 miles from the hospital.

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 October 6, 2003.

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

A. State Health Plan (SHP)

The *FY 2003 State Health Plan* does not contain criteria and standards for the establishment of a diagnostic imaging center; however, it does contain criteria and standards which an applicant is required to meet before receiving CON authority for the acquisition or otherwise control of MRI equipment, provide MRI services, and/or the establishment of additional MRI imaging services in a site that exceeds one mile from the original approved location.

Acquisition or Otherwise Control of MRI Equipment

SHP Criterion 1 - Need

Since HMC intends to expand its MRI scanning capacity by the establishment of an off-campus diagnostic imaging center some 16 miles from the hospital, this project is being reviewed as the establishment of a new MRI site and the lease of a fixed, open, MRI scanner.

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 second year of operation and the procedures estimation methodology that shall be used to project the annual patient service volume.

Hancock Medical Center is a current provider of MRI services, utilizing a mobile unit. Applicant plans to maintain the MRI service in the hospital in Bay St. Louis but expand it to provide medical diagnostic services to an underserved population in the Diamondhead, Mississippi, area. Imaging services will include ultrasound, mammography, and CT scanning, which are not regulated by the CON statute, and MRI imaging service, which is. Hancock Medical Center reported 1,540, 1,806, and 1,956 MRI scans during the years of 2000, 2001, and 2002, respectively. Applicant expects the expanded service to generate an additional 1,530, 1,760, and 2,023 MRI scans during the first, second, and third years of operation, respectively, well within the 1,700 scans need criteria outlined in the *SHP*.

SHP Criterion 3 - Information Recording/Maintenance

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

SHP Criterion 4 - Authorized Business Entity

Hancock Medical Center, an acute care facility, is authorized to do business in Mississippi, and has good standings with the Mississippi Secretary of State.

SHP Criterion 5 - Authorization to Provide MRI Service

The applicant is a current provider of MRI services. The Division of Health Planning and Resource Development has determined that the new MRI machine is exempt from review due to the cost of the machine being not within price constraints of CON statutes. The application contains letters of site approval from the Division of Health Facilities Licensure and Certification and a letter stating that the Division of Radiological Health will authorize this facility for the use of x-ray equipment associated with the imaging service upon the issuance of a CON by the Mississippi State Department of Health.

Criteria for Offering of MRI Services

SHP Criterion 1 - Need

The applicant has adequately demonstrated that the expanded MRI scanning service should feasibly generate in excess of 1,700 MRI scans by the end of the second year of operations.

SHP Criterion 2 - Documentation of Diagnostic Imaging Modalities

The applicant submits that Hancock Medical Center currently offers a full range of diagnostic imaging modalities and will continue with expanded utilization reflective of service growth.

SHP Criterion 3 - Accessibility

The applicant certifies that neither Hancock Medical Center nor its medical staff have not now, and will not in the future, implement policies which would exclude patients because of race, color, age, sex, ethnicity, or ability to pay.

SHP Criterion 4 - Staffing

Applicant projects only a minor increase in full-time equivalent staff. The hospital will reassign existing staff, and hire two additional radiologic technologists. Studies will continue to be read by the physician radiologist group.

SHP Criterion 5 - Research Staffing

Applicant indicates that Hancock Medical Center does not anticipate that the MRI unit will be used for experimental study.

SHP Criterion 6 - Data Requirement

Applicant states that it will maintain and provide all information required by this criterion to the Mississippi State Department of Health upon request.

SHP Criterion 7 - CON Approval

Hancock Medical Center is an approved MRI provider who seeks to expand its MRI services with an additional MRI unit to be located in the proposed medical imaging clinic. The additional MRI unit will be a fixed, open, unit.

**Note: All projects are required to be reviewed under the Plan in effect at the time the application is received. This application was received on June 30, 2003, and the FY 2004 State Health Plan had an effective date of August 11, 2003. This application will be reviewed under the FY 2003 State Health Plan.*

B. General Review (GR) Criteria

Chapter 8 of the *Mississippi Certificate of Need Review Manual*, revised 2000, addresses general criteria by which all CON applications are reviewed. The applicable criteria are as follows:

GR Criterion 3 - Availability of Alternatives

Applicant states the availability of services conveniently north of Interstate 10 will allow patients to seek treatment and testing locally, slowing the flow of Mississippi patients and state funds to Louisiana-based providers. Alternatives considered included demolition of an existing physical plant, new construction off site, and leasing of other facilities nearby. The proposed project site was deemed to be the most efficient and efficacious use of community resources for these services. The selected site location provides high visibility and is convenient to major traffic arteries in the community.

GR Criterion 4 - Economic Viability

The applicant projects a net profit for the MRI scanning services of \$86,466 the first year, \$143,309 the second year, and \$196,767 the third year for the proposed project. The project appears to be economically viable.

GR Criterion 5 - Need for Service

The applicant submits that the open MRI will perform procedures normally performed using the older closed-type MRI technology; however, the open system will accommodate some patients that cannot undergo scanning by a closed system. Procedures include studies of the abdomen, brain, breast, cardiac function, spine, chest, joints, and extremities. The establishment of the medical diagnostic imaging services off-campus of Hancock Medical Center will provide better access to the total community of Hancock and contiguous counties of Mississippi and parishes of Louisiana. The availability of services conveniently north of Interstate 10 will allow patients to seek treatment locally and not have to go out of state for such services.

Applicant used several need determination methodologies to ascertain the present and future needs for an open MRI scanner in Hancock County. They are as follows:

Patient mix analysis: An analysis of the number of patients seen at HMC that required an MRI scan prior to admission versus the exams performed on the existing MRI unit at the hospital indicated that a large number of patients received MRI imaging elsewhere just prior to admission due to either the girth of some patients not being compatible with the hospital's "closed" bore unit. Others were unable to be imaged due to maximum patient weight limitations of the equipment; but most patients were unable to tolerate an MRI procedure due to the "claustrophobic feel" of the existing closed-bore unit, and would require sedation to successfully obtain good results. This is not a preferred method for many patients with various complications and co-morbid conditions.

Random medical records review: A review of closed medical chart demonstrated that some patients being admitted received open MRI scans as far away as New Orleans, Slidell, Mobile, Jackson, and Hattiesburg. In some cases, HMC inpatients used HMC's ambulance to be transported to New Orleans area and to Gulfport for procedures on an "open" MRI unit, due to the patient's girth (did not fit into the bore of the hospital scanner). Physicians indicated that these patients would have been more easily served on an outpatient basis if an open MRI were available in Hancock County.

Physician interview: Interviews with hospital medical staff indicated that local physicians are referring patients to an outpatient center in Gulfport that is able to schedule patients more quickly than is normally available in the hospital setting, since they do not have to contend with inpatients and emergency patients competing for scanning time with outpatients. The proposed Diamondhead Imaging Center will be able to offer this level of flexibility to Hancock County residents, and provide faster turnaround of results from the studies to the patient's treating physician, improving the overall quality and timeliness of care for area residents.

Following the above consideration of the MRI needs of both the area patients and physicians, the applicant estimates that the existing system would generate a minimum of six scans daily, for a total of 1,530 scans during the first year of operation, and a 15 percent increase per year after that, or 1,760 during the second year, and 2,023 scans during the third year of operation. Applicant feels that the availability of an open MRI system would not detract appreciably from the hospital's MRI unit.

GR Criterion 6 - Accessibility

The applicant states that neither Hancock Medical Center nor its staff have policies or procedures which would exclude patients because of race, age, sex, ethnicity, or ability to pay. The diagnostic imaging center will contribute to the continuum of services available in the community and improve accessibility for all patients served by the hospital.

GR Criterion 7 - Maintenance of Information

Hancock Medical Center certifies that it will record and maintain the required information and make it available to the Mississippi State Department of Health as requested.

GR Criterion 8 - Relationship to Existing Health Care System

The applicant submits that the proposed diagnostic imaging center will improve convenient accessibility to the continuum of services available to residents of the hospital's service area and will prevent travel to other locations that may be in other states but still closer than open gantry MRI machines in other Mississippi counties.

The project is not expected to have any significant negative impact on the health care system as a whole and applicant expects it will have a positive impact on patients served by Hancock Medical Center.

The application contained nine letters of support for the project from community organizations and physicians.

GR Criterion 9 - Availability of Resources

The applicant demonstrated the hospital had sufficient cash reserve and personnel to implement this project.

GR Criterion 16 - Quality of Care

Hancock Medical Center complies with the Minimum Standards of Operation for Mississippi Hospitals and is accredited by the Joint Commission on Accreditation of Health Care Organizations.

IV. FINANCIAL FEASIBILITY

A. Capital Expenditure Summary

Construction Cost-Renovation	\$ 150,000
Capital Improvement Costs	14,000
Fixed Equipment	260,000
Non-Fixed Equipment	28,000
Land Cost	0
Fees	25,000
Contingency Reserve	0
Capitalized Interest	0
Other costs	0
Total Capital Expenditure	\$477,000

The above capital expenditure will provide for 2,390 square feet of renovation of an existing, off-campus, hospital-leased building at approximately \$200 per square foot. The cost of renovation of medical imaging center is not covered by *Means Construction Cost Data, 2003 Edition*, but the cost of approximately \$200 per square foot is well within the range of similar medical imaging diagnostic centers approved through the CON procedure established by the Mississippi State Department of Health.

B. Method of Financing

This proposed project will be financed through the hospital's capital reserve.

C. Effect on Operating Cost

The applicant projects the following revenues and expenses for the first three years of operation:

	First Year	Second Year	Third Year
Salaries/Wages/Benefits	\$ 101,887	\$ 1 05,962	\$ 110,201
Construction/Build Out	6,963	6,963	6,963
Imaging Equipment-MRI	154,030	154,030	154,030
Profess. Radiology Fees	121,176	139,352	160,255
Other Expense	<u>337,318</u>	<u>379,400</u>	<u>440,152</u>
Total Expenses	\$ 721,374	\$ 785,707	\$ 871,601
MRI Revenues	<u>\$1,683,000</u>	<u>\$1,935,450</u>	<u>\$ 2,225,768</u>
Deductions (-)	(875,160)	(1,006,434)	(1,157,400)
Net Patient Revenue	\$807,840	\$929,016	\$ 1,068,368
Net Income	\$ 86,466	\$ 143,309	\$ 196,767
MRI Procedures	1,530	1,760	2,023
Cost/Procedure*	N/A	N/A	N/A
Charge/Procedure	\$1,100	\$ 1,100	\$1,100

*This project involves the expansion and upgrade of equipment, including CT scanner, diagnostic x/ra y, mammography, MRI, and ultrasound. Therefore, it is difficult to calculate the cost/procedure for MRI services only.

D. Cost to Medicare/Medicaid

The cost of the project to third party payers is as follows:

Patient Mix By Type of Payor	Percentage	First Year Cost
Medicaid	13.5	\$ 109,058
Medicare	46.7	\$ 377,261
Other Payors	<u>39.8</u>	\$ 321,521
Total	<u>100</u>	<u>\$ 807,840</u>

The applicant projects that approximately seven percent of its patients will be medically indigent/charity care patients, and approximately 3.24 percent will be bad debt patients.

V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES

The Division of Medicaid voiced no opposition to this application.

VI. CONCLUSION AND RECOMMENDATION

This project is in substantial compliance with the criteria and standards for the expansion of existing MRI equipment and services as contained in the *FY 2003 State Health Plan*; the *Mississippi Certificate of Need Review Manual*, 2000 revisions; 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 this application submitted on behalf of Hancock Medical Center for the establishment of a Diagnostic Imaging Center and expansion of an existing MRI imaging capability to include an additional fixed open MRI machine.