

**DIVISION OF HEALTH PLANNING AND
RESOURCE DEVELOPMENT
JULY 2005**

**CON REVIEW: HG-MME-0505-011
THE UNIVERSITY HOSPITALS AND CLINICS, JACKSON
ADDITION OF A CARDIAC CATHETERIZATION LABORATORY
CAPITAL EXPENDITURE: \$2,020,517
LOCATION: JACKSON, MISSISSIPPI**

STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

The University Hospitals and Clinics of the University of Mississippi Medical Center is a state owned not-for-profit acute care teaching inpatient hospital with full emergency and outpatient services. The facility has a management service agreement with Quorum Health Resources of Nashville, Tennessee. The full authority and ultimate control of the hospital remains with the Board of Trustees of State Institutions of Higher Learning, with administrative authority delegated to the Chancellor and Vice Chancellor for Health Affairs of the University of Mississippi Medical Center. The facility is accredited through the Joint Commission on Accreditation of Healthcare Organizations.

The hospital is currently licensed to operate 664 medical/surgical beds, 21 adult psychiatric beds, 12 pediatric psychiatric beds and 25 rehabilitation beds. The total licensed bed capacity is 722.

The University Hospitals and Clinics' occupancy rates, average lengths of stay (ALOS) and the Medicaid utilization rates for the three most recent years are as follows (medical/surgical beds only):

Fiscal Year	Occupancy Rate (%)	ALOS (Days)	Medicaid Utilization Rate (%)
2002	71.73	6.91	49.0
2003	69.15	7.09	49.0
2004	69.32	6.89	50.5

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

B. Project Description

The University Hospitals and Clinics requests CON authority to purchase and install one cardiac catheterization laboratory utilizing a prefabricated modular building. The prefabricated modular building will be placed on the campus of the University of Mississippi Medical Center. The cardiac catheterization laboratory will be installed in the transportable building and will be dedicated to performing electrophysiology diagnostic studies and ablation of abnormal conducting pathways.

The proposed equipment will include the Phillips cardiac catheter imaging machine and power injector, PruKa Mac Lab, Bard EP recording system, Carto EP mapping system, and Tenys T-Line hemodynamics system.

The University Hospitals and Clinics has an application pending before the Department for relocation and expansion of the Heart Station, radiology interventional catheterization laboratories and the surgical pre-admissions and phase 2 recovery areas. The applicant states that this project, if approved, will provide for the correct sizing of the cardiovascular services at the Medical Center. It is estimated that the replacement Heart Station project will take at least two years. Given the current demand for cardiac catheterization services at the University Hospitals and Clinics, the applicant believes that it is necessary to bring one of the new cardiac catheterization laboratories on line as soon as possible. When the construction and renovation is completed for the expansion and relocation of the Heart Station, the cardiac catheterization laboratory proposed in this application will be relocated to the new Heart Station.

The applicant expects to hire 2 FTE personnel at an estimated annual cost of \$120,923 the first year.

The Division of Health Facilities Licensure and Certification has approved the site for the new catheterization lab. The applicant expects to obligate the capital expenditure upon approval.

II. TYPE OF REVIEW REQUIRED

This project is reviewed in accordance with Section 41-7-191, subparagraphs 1 (d)(i) and (ii), (f), and (j) of the Mississippi Code of 1972, Annotated, as amended, and duly adopted rules, procedures, plans, criteria, and standards of the Mississippi Department of Health.

In accordance with Section 41-7-197 (2) of the Mississippi Code of 1972, Annotated, 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 August 4, 2005.

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

A. State Health Plan (SHP)

The **FY 2005 State Health Plan** contains policy statements, criteria and standards which an applicant is required to meet before receiving CON authority for the acquisition or otherwise control of therapeutic cardiac catheterization equipment and for the provision of cardiac catheterization and open-heart surgery services. This application submitted by The University Hospitals and Clinics is in substantial compliance with the **FY 2005 State Health Plan**.

SHP Criterion 1 – Need

The applicant is a current provider of therapeutic cardiac catheterization services and has demonstrated a population base of 100,000.

SHP Criterion 2 – Minimum Procedures

The University Hospitals and Clinics is a state owned hospital. MDH's Joint Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of Cardiac Catheterization Equipment and/or the Offering of Cardiac Catheterization Services and the Acquisition of Open-Heart Surgery Equipment and/or the Offering of Open-Heart Surgery Services includes a provision that it shall not consider utilization of equipment/services at any hospital owned and/or operated by the state or its agencies when reviewing CON applications.

SHP Criterion 3 - Impact on Existing Providers

The State Health Plan provides that no hospital owned and/or operated by the state or its agencies shall be considered an existing unit in the Cardiac Catheterization/Open-Heart Surgery Planning Area under this section. Therefore, staff contends that The University Hospitals and Clinics will not have a significant impact on other providers of therapeutic cardiac catheterization services in the service area.

SHP Criterion 4 - Staffing Standards

The applicant submits that it recruits physicians qualified to perform cardiac catheterization diagnostic and therapeutic procedures from both across the United States and internationally. The physicians are

nationally board certified in their individual specialty and their qualifications conform to guidelines presented in *Optimal Resources for Examination of the Heart and Lungs: Cardiac Catheterization and Radiographic Facilities*.

SHP Criterion 5 – Staff Residency

The applicant submits that the requirement for faculty response to call from home is 30 minutes. The applicant exceeds the requirements of this criterion.

SHP Criterion 6 – Recording and Maintenance of Data

The applicant affirms that it will provide the required information upon request.

SHP Criterion 7 – Open-Heart Surgery

The applicant submits that open-heart surgery including balloon pump, left ventricular assist, right ventricular assist and heart transplant is available at The University Hospitals and Clinics at all times.

SHP Criterion 8 – Regulatory Approval

The applicant is in compliance with this criterion.

B. General Review (GR) Criteria

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

GR Criterion 1 – Consistency with the State Health Plan

This application is consistent with the **FY 2005 State Health Plan**.

GR Criterion 2 – Long Range Plan

The applicant submits that the objective of the project is to provide state-of-the-art facilities to support the teaching, research and patient care mission of the University of Mississippi Medical Center.

GR Criterion 3 – Availability of Alternatives

The applicant states that the optimum solution is to construct a new cardiac diagnostic and treatment facility. This solution has been adopted

by The University of Mississippi Medical Center. The applicant is requesting authority to purchase one cardiac catheterization laboratory and to install it in a temporary location until CON approval, project design and construction of the permanent facility are completed.

GR Criterion 4 – Economic Viability

The project appears to be economically viable. The applicant projects a net income of \$1,266,887 the first year, \$1,358,514 the second year, and \$1,447,562 the third year of operation.

GR Criterion 5 – Need for the Project

The applicant submits that cardiovascular disease is the leading cause of death and disability in the United States. The University of Mississippi Medical Center is committed to the prevention and treatment of cardiovascular disease through its teaching, research and patient care programs. Its teaching programs train the future primary care providers and cardiovascular specialists needed to manage patients who have or who are at risk for developing cardiovascular disease. Its research programs focus on developing a better understanding of the link between cardiovascular disease and risk factors such as obesity, hypertension and diabetes.

The applicant further submits that accomplishing its teaching, research and patient care missions requires a state-of-the-art facility. According to the applicant, specific limitations of the current cardiovascular facilities include: inadequate invasive laboratory space, widely dispersed cardiovascular services, and inadequate academic and administrative space. This project is part of a larger project which requests the relocation and expansion of the Heart Station, radiology intervention catheterization laboratories and the surgical pre-admissions and phase 2 recovery areas. Because it will take approximately two years to complete the Heart Station, the applicant states that the current demand for cardiac catheterization services at The University Hospitals and Clinics makes it necessary to bring one of the new cardiac catheterization laboratories on line as soon as possible. The applicant contends that once the Heart Station is complete, the equipment proposed by this application will be relocated to the new facility.

GR Criterion 6 – Access to Facility or Services

The applicant submits that all residents of the health planning service area, hospital service area and/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.

GR Criterion 7 – Information Requirement

The applicant affirmed that it will record and maintain the required information and make it available to the Mississippi Department of Health upon request.

GR Criterion 8 – Relationship to Existing Health Care System

The applicant submits that as Mississippi's only true tertiary referral center and the Level I Trauma Center, The University Hospitals and Clinics has patient transfer agreements with all hospitals in the health planning service areas as well as most, if not all hospitals in the state.

According to the applicant, this project is not expected to have an adverse impact on any other provider of cardiac catheterization services.

GR Criterion 9 – Availability of Resources

The applicant submits that it recruits physicians qualified to perform cardiac catheterization diagnostic and therapeutic procedures from both across the United States and internationally.

GR Criterion 10 – Relationship to Ancillary or Support Services

The applicant states that the only increase in ancillary or support services will be the additional services that are directly related to operating the additional cardiac catheterization laboratory.

GR Criterion 16 – Quality of Care

The University Hospitals and Clinics is in compliance with the **Minimum Standards of Operation for Mississippi Hospitals**. The hospital is accredited by the Joint Commission on Accreditation of Healthcare Organizations.

IV. Financial Feasibility

A. Capital Expenditure Summary

Construction Cost – New	\$309,520
Capital Improvements	0
Total Fixed Equipment	1,560,997
Site Preparation Cost	150,000
Fees (Architectural, Consultant, Etc.)	*
Contingency Reserve	**
Capitalized Interest	*
Other Cost	0
Total Proposed Capital Expenditure	\$2,020,517

*Included in the modular building cost (new construction).

**Included in the site preparation costs.

The above capital expenditure is proposed for the purchase of one cardiac catheterization laboratory, a modular building to house the laboratory and other associated costs of installation. There is no comparative cost available on modular buildings in the **Means Construction Cost Data** book.

B. Method of Financing

The applicant proposes that the project will be financed through the Institution of Higher Learning (IHL) Capital Lease Program and patient reserves.

C. Effect on Operating Cost

The applicant projects the following results from operation for the first three years following completion of the project:

Three Year Projected Operating Statement

	First Year	Second Year	Third Year
Revenue			
Gross Revenue	\$9,863,770	\$11,472,042	\$12,647,926
<i>Deductions</i>	<i>5,972,860</i>	<i>7,042,522</i>	<i>7,869,996</i>
Net Revenue	\$3,890,911	\$4,429,521	\$4,777,930
Expenses			
Salaries & Wages	\$96,622	\$99,521	\$102,507
Fringe Benefits	24,300	25,030	25,780
Contractual	118,470	128,125	138,568
Commodities	2,198,016	2,518,314	2,776,441
Interest	60,808	48,401	35,456
Depreciation	125,808	251,616	251,616
Total Expenses	\$2,624,024	\$3,071,007	\$3,330,368
Net Income	\$1,266,887	\$1,358,514	\$1,447,562
Total Procedures	644	676	710
Cost per Procedure*	\$4,075	4,543	4,691
Charge Per Procedure*	\$15,316	\$16,971	\$17,814

*Staff calculations.

D. Cost to Third Party Payors

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

Patient Mix	Utilization Rate	First Year Cost
Medicare	18	\$472,324
Medicaid	23	603,526
Other Payors*	59	1,548,174
Total	100.00	\$2,624,024

*The applicant projects 8.4 percent bad debt patients and 16 percent for charity care.

V. RECOMMENDATION OF OTHER AFFECTED AGENCIES

The Division of Medicaid was provided an opportunity to review and comment on this application. The Division of Medicaid estimates that the additional cost to the Medicaid program will be \$297,285.

VI. CONCLUSIONS AND RECOMMENDATION

This application is in substantial compliance with the criteria and standards for the acquisition or otherwise control of therapeutic cardiac catheterization equipment and the provision of therapeutic cardiac catheterization services, as contained in the **FY 2005 State Health Plan**; the **Mississippi Certificate of Need Review Manual, 2000 Revisions**; and all adopted rules, procedures, and plans of the Mississippi Department of Health.

The Division of Health Planning and Resource Development recommends approval of this application submitted by The University Hospitals and Clinics of the University of Mississippi Medical Center.