

**MISSISSIPPI STATE DEPARTMENT OF HEALTH
DIVISION OF HEALTH PLANNING AND RESOURCE DEVELOPMENT
NOVEMBER 2011**

**CON REVIEW HG-R-0811-016
ST. DOMINIC-JACKSON MEMORIAL HOSPITAL
RENOVATION FOR THE CREATION OF A HYBRID
OPERATING ROOM
CAPITAL EXPENDITURE: \$2,679,601
LOCATION: JACKSON, HINDS COUNTY, MISSISSIPPI**

STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

St. Dominic-Jackson Memorial Hospital (St. Dominic) is a 535-bed short term, public, not-for-profit hospital. It is licensed to operate 417 medical/surgical beds, 35 adult chemical dependency beds and 83 adult psychiatric beds. St. Dominic is a not-for-profit Mississippi corporation. The hospital is governed by a 15-member Board of Directors. The hospital is accredited by the Joint Commission on the Accreditation of Healthcare Organizations and licensed by the Mississippi State Department of Health (MSDH).

The occupancy rates, average lengths of stay (ALOS), and the Medicaid utilization rates for St. Dominic are as follows for the years 2008 through 2010:

**St. Dominic-Jackson Memorial Hospital
Utilization Data**

Fiscal Year	Occupancy Rate (%)	ALOS (Days)	Medicaid Utilization Rate (%)
2008	66.33	4.65	16.81
2009	68.21	4.57	14.95
2010	71.43	4.50	15.40

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

B. Project Description

St. Dominic-Jackson Memorial Hospital requests Certificate of Need (CON) authority for renovation of its current hospital space for a hybrid operating room (OR). The applicant indicates that the scope of the proposed project involves renovation of the current sterile storage room located on the second floor of the hospital for a hybrid operating room and the renovation of additional space on the second floor for the relocation of the sterile storage room. The proposed project involves the complete renovation of 1,840 square feet on the second floor of the hospital. According to the applicant, the project involves 2,274 square feet of renovation for the creation of a hybrid operating room (1,150 square feet), relocation of the sterile storage area (690 square feet) and partial renovation of a hallway (434 square feet).

The proposed hybrid operating room is conveniently located on the same floor as the hospital cardiovascular operating rooms and heart catheterization labs. The proposed project will consist of the demolition, reconfiguration and build-back of an existing sterile supply/storage room and a portion of the old cardiologist lounge to allow for the creation of a new hybrid operating room. No new services will be offered as a result of this project.

The total proposed capital expenditure is \$2,679,601 and of that amount, approximately 16.31 percent is allocated for renovation; 18.13 percent for non-fixed equipment; 1.82 percent for fees (architectural, consultant, etc.); 2.68 percent for contingency reserve; 1.35 percent for other cost (demolition); and 59.71 percent for fixed equipment. The applicant indicates the proposed capital expenditure will be funded from cash reserves. The application contained a letter from the hospital's vice president of finance attesting to the financial feasibility of the project.

The MSDH Division of Health Facilities Licensure and Certification found the site to be acceptable and granted approval.

The applicant asserts that the proposed capital expenditure will be obligated January 2012 or upon CON approval and the anticipated date the proposed project will be completed is April 2012.

II. TYPE OF REVIEW REQUIRED

The Mississippi State Department of Health reviews applications for construction, renovation, expansion, or capital expenditure in excess of \$2,000,000 under the applicable statutory requirements of Section 41-7-191, subparagraphs (1) (j) of the Mississippi Code of 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 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 December 5, 2011.

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

A. State Health Plan (SHP)

The *FY 2011 State Health Plan* contains criteria and standards which an applicant is required to meet before receiving CON authority for construction, renovation, expansion, or capital improvements, replacement of health care facilities and addition of hospital beds. The application is in substantial compliance with these criteria.

Note: Projects are reviewed under the *State Health Plan* that is effective at the time the project is submitted. This project was received on August 31, 2011. The *2012 State Health Plan* became effective September 1, 2011.

SHP Criterion 1a – Need

Projects which do not involve the addition of any acute care beds: The applicant shall document the need for the proposed project. Documentation may consist of, but is not limited to, citing of licensure or regulatory code deficiencies, institutional long-term plans (duly adopted by the governing board), recommendations made by consultant firms, and deficiencies cited by accreditation agencies (JCAHO, CAP, etc.). In addition, for projects which involve construction, renovation, or expansion of emergency department facilities, the applicant shall include a statement indicating whether the hospital will participate in the statewide trauma system and describe the level of participation, if any.

According to St. Dominic, the proposed project does not involve the addition of any acute care beds or the offering of new institutional health services. The proposed hybrid operating rooms combine technology that is traditionally housed in the radiology center of a hospital with the operating room. These rooms are transforming surgical care. With this technology, surgeons for the first time will be able to collaborate with pathologist and radiologists during the surgery and make assessments using real-time or instantaneous images. It further allows surgeons to immediately follow a diagnostic procedure with a therapeutic one. The configuration is also advantageous for surgery patients requiring more than one procedure discipline such as vascular and cardiac during one session. Since all of the necessary services can be provided in one operating room, emergencies or complications can be handled in one spot without putting a patient's safety at risk. St. Dominic believes the proposed hybrid operating room will enable the hospital to streamline the delivery of healthcare, with fewer clinical staff involved in patient care and an improvement in cross-specialty communication. Without this technology, patients would be left to seek health care elsewhere throughout the state of Mississippi or even outside of the state of Mississippi. St. Dominic asserts that the project is consistent with its long-term plans and has been duly endorsed by its Board of Directors.

The proposed project will not involve additional beds or the offering of a new institutional health service.

St. Dominic participates in the statewide trauma system as an in-state Level 4 Trauma Center.

SHP Criterion 2 – Bed Service Transfer/Reallocation/Relocation

This project does not involve the transfer/reallocation or relocation of beds.

SHP Criterion 3 – Uncompensated Care

St. Dominic affirms that it will provide a reasonable amount of indigent/charity care as required of this criterion. The applicant asserts that all patients, regardless of their circumstances, will be treated at St. Dominic. According to the applicant, the hospital provides the same level of care to all patients, regardless of their financial abilities. In 2009 and 2010, St. Dominic provided \$20,998,653 and \$46,391,635 in indigent/charity care which was 2.35 percent and 4.80 percent of total gross patient revenue, respectively.

SHP Criterion 4 – Cost of Project

The project will cost \$824.61 per square foot for renovation (see Attachment 2). The *Means Construction Cost Data, 2011*, does not compare costs of renovation projects. The proposed project involves the purchase of fixed and non-fixed equipment.

According to the applicant, the cost of fixed and non-fixed equipment is estimated at \$2,086,000 or 77.84 percent of the total project.

SHP Criterion 5 – Floor Area and Space Requirements

As previously mentioned, the project involves 2,274 square feet of renovation for the creation of a hybrid operating room (1,150 square feet), relocation of the sterile storage area (690 square feet) and partial renovation of a hallway (434 square feet).

SHP Criterion 7 – Need for Service

This application does not propose the need for new services. St. Dominic proposes renovation of current hospital space for the creation of a hybrid operating room.

B. General Review (GR) Criteria

Chapter 8 of the *Mississippi Certificate of Need Review Manual, Revised May 1, 2010*; addresses general criteria by which all CON applications are reviewed. This application is in substantial compliance with general review criteria.

GR Criterion 2 – Long Range Plan

According to the applicant, its planning process started over a year ago with team meetings between key hospital leaders and physicians. The planning process included an evaluation of site location for the hybrid operating room by the hospital's architect and engineers. This team also communicated with various vendors and other hospital offering similar services to determine the appropriate staffing, equipment and square footage for the hybrid operating room.

St. Dominic asserts that it has provided cardiac care to the residents of Mississippi for over 35 years. The hospital is continuing to make major investment to improve its facilities and harness a new generation of medical advancements in technology so its physicians can practice aggressive interventional cardiovascular medicine with outstanding clinical results. The hybrid operating room is another medical advancement that will allow St. Dominic to provide outstanding cardiac care to its patients.

GR Criterion 3 – Availability of Alternatives

St. Dominic considered two alternatives to the proposed project submitted to the Department. First, St. Dominic considered whether to use an existing space in the hospital to provide the services found in a hybrid operating room instead of renovation. The applicant asserts that the typical square footage for a heart catheterization laboratory is approximately 500-700. The typical square footage for an operating room and prep area is approximately 600-800. A hybrid operating room however requires between approximately 1,000 to 1,200 square feet of space to accommodate all of the necessary medical equipment and medical personnel. Thus, St. Dominic rejected this alternative.

Second, St. Dominic considered whether to maintain status quo and do nothing. St. Dominic considered doing nothing and not offering this service to the residents of Mississippi. Not offering the services would require St. Dominic's patients to seek the treatment elsewhere in the State or even outside of Mississippi. Thus, St. Dominic rejected this alternative.

According to the applicant, the proposed project most effectively benefits the health system by increasing the accessibility of the services offered in a hybrid operating room. The use of the hybrid operating room also directly impacts patient safety. Since all of the necessary services can be provided in one operating room, emergencies or complications can be handled in one spot without putting a patient's safety at risk. Hybrid operating rooms also reduce the length of stay for patients. Because patients would not have to have their surgery staged over a period of days, things are more convenient and, consequently, cost effective.

The applicant believes that St. Dominic cannot offer the same services offered in a hybrid operating room in its current hospital operating rooms or catheterization laboratories. It would be impractical for St. Dominic to construct additional buildings or floors for only the construction of a hybrid operating room. Finally, doing nothing would continue to require patients to undergo multiply surgeries staged over an extended period of time instead of receiving the same service in one operating room. Renovation of St. Dominic's existing building space is the only efficient solution to the identified need.

GR Criterion 4 - Economic Viability

Based on the applicant's three-year projections, this project will produce a net income of \$543,973, \$575,945, and \$606,128 for the first, second, and third year of operation, respectively.

The application contained a letter from the hospital's vice president of finance, Jennifer Sinclair attesting to the financial feasibility of the project.

GR Criterion 5 - Need for the Project

St. Dominic asserts that it serve all patients regardless of circumstances or ability to pay. The determination of whether a patient is treated in the hybrid operating room is based upon the diagnosis or procedure required. The benefits of the hybrid operating room are numerous. It will improve the efficiency of the hospital by allowing multiple procedures to be performed in the same setting at the same time. Currently, open-heart surgery and cardiac stents are being performed in separate rooms. With the hybrid operating room, these procedures can be performed in the same room if necessary. The hybrid operating rooms also lower the length of stay for patents and decrease the cost to the patients.

According to the applicant, the final objective of the proposed project is to allow surgeons and their colleagues to perform combined open, minimally invasive, image guided and/or catheter-based procedures in the same operating room in the same operative setting. In other words, the surgical suite allows physicians to diagnose and treat patients in the same operating room. These interdisciplinary, multifunctional rooms bring technology to the patient with the goals of maximizing patient care, improving overall outcomes and decreasing time in the hospital. The applicant asserts that the hybrid operating room increase patient safety while decreasing a patient's recovery time and hospital length of stay.

The application contains nine (9) letters of support for the proposed project.

No adverse comments were received from the community.

GR Criterion 6 - Access to the Facility or Service

- a. **Medically Underserved Population:** St. Dominic asserts that it makes its services available to all patients regardless of ability to pay. This includes Medicaid recipients, charity/medically indigent patients, racial and ethnic minorities, women, handicapped persons and the elderly. The applicant asserts that it will treat all medically indigent patients who seek or present for services at the hospital.
- b. **Performance in Meeting Federal Obligations:** The applicant submits that St. Dominic does have existing obligations under federal regulations requiring uncompensated care, community service, or access by minority/handicapped persons.

The applicant asserts that the hospital is a charitable organization under section 501(c)(3) of the Internal Revenue Code. St. Dominic is organized and operated exclusively for charitable, religious, and educational purposes. Each year St. Dominic Health Services prepares an annual community benefit report. The application contains a copy of the annual community benefit report.

- c. **Unmet Needs to be served by Applicant:** The applicant submits the following percentage of gross patient revenue (GPR) and actual dollar amount of health care provided to charity care patients for the last two years as well as the projected amounts for the two years following completion of the proposed project:

Charity Care Patients

	GPR %	GPR Dollar Amount
Historical Year 2008	2.35	\$ 20,998,653
Historical Year 2009	4.80	\$46,391,635
Projected Year 1	4.80	\$49,925,709
Projected Year 2	4.80	\$ 51,432,480

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 System

St. Dominic Jackson-Memorial Hospital is located in General Hospital Service Area 5. St. Dominic offers its catheterization and open heart surgery services by referral and scheduled collaboration with a private or employed cardiologist or cardiovascular surgeons. Generally, patients are referred to St. Dominic for these services or arrive to the hospital via the emergency department.

The applicant believes that the hybrid operating room will give St. Dominic the ability to perform all endovascular procedures and future transcatheter aortic valve procedures in one room. Work flow and efficiency will increase because the patient can receive treatment in one room without having to visit multiple rooms for therapy.

According to the applicant, failure to implement the proposed project would result in St. Dominic not being able to serve the aging population of Mississippi or those patients with multiple co-morbidities. In addition, patients will continue to experience longer recover times and increased length of stay in the hospital.

Because no new services will be offered as a result of this project, staff concludes that this project would have no adverse affect on other providers in the referenced service area.

The Department received no letters of opposition concerning the proposed project.

GR Criterion 9 - Availability of Resources

According to the applicant, the project is expected to result in an additional 3.1 FTE (full-time equivalent employees) at an annual additional cost of \$170,000. St. Dominic asserts that the hospital will use its existing personnel to staff the hybrid operating room. In addition, St. Dominic has 28 cardiologists, five (5) cardiovascular surgeons and three (3) vascular surgeons available to provide services to its patients. The applicant currently recruits staff

through normal human resource channels including, but not limited to, advertising on the internet, radio, television, newspaper and professional publication. St. Dominic also attends career fairs and conducts interviews at schools. These recruiting channels will continue to be used for the additional FTEs for this proposed project.

GR Criterion 14 - Construction Projects

- a. **Cost Estimate:** The application contains a cost estimate prepared by Barlow, Eddy, Jenkins, P.A. of Jackson, Mississippi.
- b. **Schematic Drawing:** The application contains a schematic drawing of the proposed project.
- c. **Space Allocations:** The applicant submits that the space will conform to all applicable local and state licensing standards for the proposed project.
- d. **New Construction Projects:** This project involves renovation of 2,274 square feet of space.
- e. **Cost per Square Foot:** The project will cost \$824.61 per square foot for renovation (see Attachment 2). The *Means Construction Cost Data, 2011*, does not compare costs of renovation projects.

GR Criterion 16 - Quality of Care

St. Dominic-Jackson Memorial Hospital is in compliance with the *Minimum Standards for the Operation of Mississippi Hospitals*, according to the Division of Health Facilities Licensure and Certification, MSDH. The facility is accredited by the Joint Commission on Accreditation of Health Care Organizations.

IV. FINANCIAL FEASIBILITY

A. Capital Expenditure Summary

The total estimated capital expenditure is allocated as follows:

	Item	Cost	Percent of Total
a.	Construction Cost -- New	0	0
b.	Construction Cost -- Renovation	\$437,285	16.31%
c.	Capital Improvements	0	0
d.	Total Fixed Equipment Cost	1,600,000	59.71%
e.	Total Non-Fixed Equipment Cost	486,000	18.13%
f.	Land Cost	0	0
g.	Site Preparation Cost	0	0
h.	Fees (Architectural, Consultant, etc.)	48,863	1.82%
i.	Contingency Reserve	71,053	2.68%
j.	Capitalized Interest	0	0
k.	Other	36,400	1.35%
	Total Proposed Capital Expenditure	\$2,679,6010	100%

B. Method of Financing

The applicant indicates that the proposed capital expenditure will be funded from hospital cash reserves. The application contained a letter from the hospital's vice president of finance, Jennifer Sinclair.

C. Effect on Operating Cost

St. Dominic's three-year projected operating statement is presented at Attachment 1.

D. Cost to Medicaid/Medicare

Based on the applicant's projections, the cost to third party payors the first year of operation is as follows:

Patient Mix	Utilization Percentage	First Year Revenue
Medicaid	11	\$4,446,334
Medicare	54	21,827,459
Other	35	14,147,427
Total	100	\$40,421,220

St. Dominic projects 4.80 percent care to charity care for the proposed project.

V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES

The Division of Medicaid estimates that the increased annual cost to Medicaid for the proposed project will be \$951,214 in inpatient hospital services, and that outpatient services will be paid as outlined in the *Medicaid State Plan*. The Division of Medicaid opposes this project.

VI. CONCLUSION AND RECOMMENDATION

This project is in substantial compliance with the criteria and standards for the construction, renovation, expansion, capital improvements, replacement of health care facilities, and addition of hospital beds as contained in the *FY 2011 State Health Plan*; the *Mississippi Certificate of Need Review Manual, Revised May 1, 2010*; and duly adopted rules, procedures, and plans of the Mississippi State Department of Health.

The Division of Health Planning and Resource Development recommends approval of the application submitted by St. Dominic Jackson-Memorial Hospital for the renovation of hospital space for creation of a hybrid operating room.

St. Dominic Jackson-Memorial Hospital
HG-R-0811-016
Attachment 1

Three-Year Operating Statement (Project Only)			
	Year 1	Year 2	Year 3
Revenue			
Patient Revenue:			
Inpatient	\$29,585,556	\$30,473,123	\$31,387,316
Outpatient	10,835,664	11,160,734	11,495,556
Gross Patient Revenue	\$40,421,220	\$41,633,857	\$42,882,873
Charity Care	2,142,325	2,206,594	2,272,792
Deductions from Revenue	23,510,545	24,215,861	24,942,337
Net Patient Revenue	\$14,768,351	\$15,211,401	\$15,667,744
Expenses			
Operating Expenses:			
Salaries	\$170,000	\$175,100	\$180,353
Benefits	43,010	44,300	45,629
Supplies	10,877,100	11,203,413	11,539,515
Services	0	0	0
Lease	112,495	115,870	119,346
Depreciation	456,773	456,773	456,773
Interest	0	0	0
Other	2,565,000	2,640,000	2,720,000
Total Expenses	\$ 14,224,378	\$ 14,635,456	\$ 15,061,616
Net Income (Loss)	\$ 543,973	\$ 575,945	\$ 606,128
Assumptions			
Inpatient days	2,009	2,069	2,131
Outpatient days	416	428	441
Procedures	780	803	827
Charge per outpatient day	\$26,047	\$26,047	\$26,047
Charge per inpatient day	\$14,727	\$14,727	\$14,727
Charge per procedure	\$51,822	\$51,822	\$51,822
Cost per inpatient day	\$7,080	\$7,073	\$7,067
Cost per outpatient day	\$34,193	\$34,157	\$34,127
Cost per procedure	\$18,236	\$18,217	\$18,212

**St. Dominic-Jackson- Memorial Hospital
 HG-R-0811-016
 Attachment 1
 Computation of Renovation Cost***

<u>Cost Component</u>	<u>Total</u>	<u>Renovation</u>
New Construction Cost	0	0
Renovation Cost	\$437,285	\$ 437,285
Total Fixed Equipment Cost	\$1,600,000	\$1,600,000
Total Non-Fixed Equipment Cost	\$486,000	0
Land Cost	0	0
Site Preparation Cost	0	0
Fees (Architectural, Consultant, etc.)	\$48,863	\$48,863
Contingency Reserve	\$71,053	\$71,053
Capitalized Interest	0	0
Other	36,400	0
Total Proposed Capital Expenditure	\$ 2,679,601	\$2,157,201

Square Footage	2,616	2,616
Allocation Percent		100%

Costs Less Land, Non-Fixed Eqt. & Other	\$2,157,201	\$2,157,201
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\$824.61	\$824.61
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*Source: Mississippi Certificate of Need Review Manual, Revised May 1, 2010