

**MISSISSIPPI STATE DEPARTMENT OF HEALTH  
DIVISION OF HEALTH PLANNING AND RESOURCE DEVELOPMENT  
FEBRUARY 2010**

**CON REVIEW HG-RC-1109-030  
NORTH MISSISSIPPI MEDICAL CENTER  
WEST BEDTOWER EXPANSION AND RENOVATION  
CAPITAL EXPENDITURE: \$55,103,273  
LOCATION: TUPELO, LEE COUNTY, MISSISSIPPI**

**STAFF ANALYSIS**

**I. PROJECT SUMMARY**

A. Applicant Information

North Mississippi Medical Center (NMMC) is a 650-bed general acute care, short-term medical/surgical hospital. NMMC is a non-profit, tax-exempt, Delaware corporation licensed in Mississippi. It is licensed to operate 554 medical/surgical beds, 20 adult chemical dependency beds, 33 adult psychiatric beds, 13 adolescent chemical dependency beds, and 30 rehabilitation beds. NMMC offers a broad scope of specialty and sub-specialty services as the major regional medical center of the area, General Hospital Service Area 1 (GHSA 1). North Mississippi Medical Center is governed by a 17-member Board of Directors. The hospital is accredited by the Joint Commission on the Accreditation of Healthcare Organizations, the Commission on Accreditation of Rehabilitation Facilities, and licensed by the Mississippi State Department of Health (MSDH).

The occupancy rates, average lengths of stay (ALOS), and the Medicaid utilization rates for NMMC are as follows for the years 2006 through 2008:

**North Mississippi Medical Center  
Utilization Data**

<b>Fiscal Year</b>	<b>Occupancy Rate (%)</b>	<b>ALOS (Days)</b>	<b>Medicaid Utilization Rate (%)</b>
2006	60.65	4.23	29.52
2007	62.17	4.57	11.97
2008	94.52	5.68	21.99

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

**B. Project Description**

North Mississippi Medical Center requests Certificate of Need (CON) authority to expand and renovate the west bedtower on the campus of North Mississippi Medical Center. The applicant indicates that the scope of the proposed project involves adding approximately 137,033 square feet of new construction and completely renovating the existing 69,710 square feet west bedtower.

According to North Mississippi Medical Center the proposed project involves construction of a seven (7) floor west bedtower built adjacent to the existing west bedtower. Set apart by 50 feet, the existing west bedtower will be completely renovated to match in design the patient bedrooms built through the west bedtower expansion. In addition to matching the five (5) patient room floors, the expansion will have a full basement in which will be placed mechanical and electrical equipment in support of the project. A penthouse will be constructed on the top floor in which air handling units, elevator equipment, and mechanical items will be placed. The goals of the project include providing a total of 250 patient bedrooms, all sized and designed exactly alike, and all about 50 percent larger than the current rooms. Unlike current rooms, all new and renovated rooms will have full toilets with showers, and the new facility will have multiple staff work stations to offer flexibility for bedside and/or centralized charting. Upon completion of the expansion, the existing five (5) story west bedtower will be completely renovated, which means all interior partitions, plumbing, electrical, etc. will be removed. Where three (3) patient rooms existed, the new design will place two patient bedrooms, thus increasing the size of each bedroom by 50 percent. These bedrooms will match the design and general size of the expansion.

North Mississippi Medical Center asserts that the bed capacity on each floor will increase from a 30-33 bed range to 40-45 bed range which develops greater efficiency and will enable transfer of 45 beds from the east bedtower which currently houses three 15-bed units. The expansion will not result in increased bed capacity.

The total proposed capital expenditure is \$55,103,273 and of that amount, approximately 59.13 percent is for new construction; 24.94 percent for renovation; 4.05 percent for non-fixed equipment; 4.412 percent for fees (architectural, consultant, etc.); 4.20 percent for contingency reserve; and 3.27 percent for other cost. The applicant indicates the proposed capital expenditure will be funded from a bond issue. The application contained a letter from the hospital's financial analyst attesting to the financial feasibility of the project.

The MSDH Division of Health Facilities Licensure and Certification has approved the site for the west bedtower expansion and renovation, as proposed.

The applicant asserts that the proposed capital expenditure is anticipated within 30 days of CON approval and the anticipated completion of the project is 36 months after construction has begun.

## 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 March 10, 2010.

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

### A. State Health Plan (SHP)

The *FY 2010 State Health Plan* contains criteria and standards which an applicant is required to meet before receiving CON authority for construction, renovation, expansion, or capital improvement involving a capital expenditure in excess of \$2,000,000. The application is in substantial compliance with these criteria.

#### **SHP Criterion 1 – 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 the applicant, during the period 2003 and 2009, planning and design meetings were held with leadership, staff, medical staff, patients, and government groups expressing a desire to contribute to the proposed project. Concurrently, NMMC asserts that the architectural firm, HDR, of Dallas, Texas, was hired to perform a peer review and ascertain if the proposed west bedtower expansion and

renovation to be the best solution. As a result, the architectural firm, HDR, confirmed the proposed expansion and renovation to be the best solution. The peer review reflected on the appropriateness of the proposed patient bedroom design which calls for identical rooms, all same handed, and all containing features for flexibility. Recognizing the building to be a 50-100 year life structure, maximum flexibility must be employed.

The applicant asserts that the hospital's main unit is the oldest and offers less friendly room accommodations than the newer facilities of campus. The west wing, a five story, 155 bed attached tower, was constructed in the 1950's to the early 1970's. Traditional construction methods and dimensions of the time were used. By today's standards, the bedrooms are woefully inadequate in size and accommodations. Nearly each of the 155 patient bedrooms do not have private shower facilities nor are they large enough to accommodate a day bed for a visiting relative or care giver. These inadequacies have been voiced repeatedly through the patient satisfaction survey efforts and other reporting practices to include daily complaints to the administrator. The applicant asserts that the east patient wing and the north patient wing have similar problems regarding size and lack of showers. These three patient wings are addressed by the proposed west bedtower expansion and renovation project.

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

North Mississippi Medical Center participates in the statewide trauma system as an in-state Level 2 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**

North Mississippi Medical Center asserts that it treats anyone requesting medical assistance. As a major referral hospital in essence owned by its community, the expectation is to actively provide care for all people in its region. According to the applicant, the hospital provided \$60,977,629 in charity care for FY 2009. This amount is up from the previous year and easily reflects NMMC's commitment to the health of its region. The applicant asserts that charity care at NMMC does not include bad debt or uncompensated care, which total in the hundreds of millions each year at North Mississippi Medical Center.

#### **SHP Criterion 4 – Cost of Project**

The project will cost \$260.61 per square foot for new construction and \$220.37 per square foot for renovation (see Attachment 2). The cost of the project is below the

high cost of \$315 when compared to hospital construction projects listed in the *Means Construction Cost Data, 2009*. The *Means Construction Cost Data, 2009*, does not compare costs of renovation projects. The proposed project involves the purchase of only non-fixed equipment.

According to the applicant, the cost of equipment is estimated at \$2,224,600 or 4 percent of the total project. The cost of equipment is proportionately low due to the nature of the project. The entire project ultimately enables replacement of current beds. The applicant asserts that the current bedrooms are completely furnished and the associated nurse station and staff areas are fully equipped and furnished. Therefore, limited new equipment will be purchase, hence, the low estimated cost.

### **SHP Criterion 5 – Floor Area and Space Requirements**

The project includes 137,033 square feet of new construction and 69,710 square feet of renovation. North Mississippi Medical Center asserts that for comparison purposes, the size of typical patient bedroom compared to regional or national bedroom sizes would reflect the standing of the project. As part of the master planning/peer review process, HDR Architects compared the size of the proposed typical patient bedroom with other averages yielded from evidence based design HDR designed with other similar projects. The applicant states that NMMC proposed new bedrooms, while meeting the expressed needs for the hospital patients, are 17 percent smaller than the national average determined by HDR Architects.

The applicant submits that the primary design restraint has been matching floor elevations between existing and new construction. Older construction provided approximately 11 feet between floors. New, unencumbered construction provides 14 to 16 feet between floors. North Mississippi Medical Center asserts that the hospital has chosen to provide floor levels to match existing floor levels, hence, no major ramps.

North Mississippi Medical Center asserts that no special considerations due to local conditions were identified for the proposed project.

### **SHP Criterion 6 –Renovation versus Replacement**

According to the applicant, regardless of cost, building a replacement hospital to enable larger bedrooms was not an option. The cost per square foot for a new hospital would exceed \$300 per square foot. The applicant asserts that the cost of the proposed expansion and renovation is considerably less.

North Mississippi Medical Center asserts that the location of the west bedtower in relation to main unit clinical and support services is satisfactory and worth preserving. Renovation of the bedtower, therefore, is preferred over replacement.

### **SHP Criterion 7 – Need for Service**

This application does not propose the need for new services. North Mississippi Medical Center proposes to renovate and expand its five story west bedtower to improve the size, appearance and function of all bedrooms and support areas.

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

Chapter 8 of the *Mississippi Certificate of Need Review Manual, Revised December 1, 2009*; addresses general criteria by which all CON applications are reviewed. This application is in substantial compliance with general review criteria.

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

According to the applicant, three alternatives to the expansion and renovation of the NMMC west bedtower were considered as follows:

**Alternative #1:** Make no changes to the existing west bedtower. This option was rejected due to the urgent need for improvements to meet the clinical and environmental needs and expectations of NMMC patients.

**Alternative #2:** Expand the south bedtower to meet the needs of patients treated in the current west bedtower. Convert the vacated west bedtower to administrative services or demolish. This option was rejected due to interference with current services, code issues involving structures over 75 feet in height and inefficiencies caused by a nine story bedtower. (Assumes a three floor expansion of the south bedtower)

**Alternative #3:** Construct a new bedtower to replace the west bedtower. This option was rejected due to insufficient and appropriately located land on which to build a new bedtower.

Utilizing the services of the McCarty Company architects, a master planning effort was pursued to identify all opportunities for expansion and replacement. The applicant states that even though the south patient tower (5 floors at 50 beds per floor) was determined to be capable of supporting additional floors, the south tower design of patient bedrooms was not conducive to the desired level of care and flexibilities needed by the medical and nursing staff to render care. For that reason, and the plausibility of building an additional patient tower adjacent to the west bedtower and, upon completion, renovation of the existing west bedtower, NMMC believes that the most effective alternative is the expansion of the west bedtower.

North Mississippi Medical Center asserts that the option selected, which is to expand and renovate the existing west bedtower will most effectively benefit the health care system by allowing for a logical expansion and modernization of existing facilities. Given the current location of the west bedtower, the available space to expand that

tower and modernize the rooms, NMMC believes that an expansion and renovation project is the most effective means of modernizing its facilities and meeting the needs of its patients, staff, physicians, and community. The applicant asserts that no less costly alternative to providing the same benefits are identified.

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

Financial projections indicate losses of \$5,089,619 for the first three years after completion of the project. However, the only expenses to be incurred by the project are depreciation and interest.

The application contained a letter from the hospital's financial analyst attesting to the financial feasibility of the project.

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

According to the applicant, the background scope of the existing west bedtower was constructed over a nine year period (1967-1976) with significant renovation performed in the late 1980s. In spite of its marginal size and appearance, the west bedtower is heavily used as one of the two primary bedtowers at North Mississippi Medical Center. The applicant believes that continued long term use of the west bedtower will not meet patient, physician or staff expectations. Deficiencies such as the lack of patient room bathing facilities, small bedroom size, insufficient support space, out of date fixtures and windows, along with air quality issues, ADA accessibility problems and lack of automatic fire sprinkler coverage support major renovation or replacement.

According to the applicant, NMMC believes that the objective of the proposed project is to provide adequately sized and designed patient bedrooms and support areas to enable appropriate patient care and comfort. The project will also accommodate the needs of visitors, staff, and physicians.

- a. **Access by Population Served:** The applicant indicates that utilization of inpatient services has increased and will increase proportionately with population. As to accessibility, NMMC serves the entire population regardless of status, class, or race.
- b. **Relocation of Services:** This application does not propose the relocation of services. North Mississippi Medical Center proposes to renovate and expand its five story west bedtower to improve the size, appearance and function of all bedrooms and support areas.
- c. **Current and Projected Utilization of Like Facilities in the Area:** No additional services are being proposed.
- d. **Probable Effect on Existing Facilities in the Area:** According to the applicant, the current tort environment, in the applicant's opinion, will cause

centralization of advanced clinical services at major medical centers such as NMMC. Concurrently, population growth will increase utilization to the current facility, requiring both renovation and expansion. No new services are being proposed by the applicant. Therefore, no significant effect is anticipated on existing facilities in the area.

- e. **Community Reaction:** The application contains four letters of support from the propose project.

No adverse comments were received from the community.

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

- a. **Medically Underserved Population:** North Mississippi Medical Center asserts that it serves all of the population; including Medicaid, charity/medically indigent patients, racial and ethnic minorities, women, handicapped persons, and the elderly. The hospital treats all people regardless of ability to pay.
- b. **Performance in Meeting Federal Obligations:** The applicant submits that North Mississippi Medical Center has no obligations under any federal regulations requiring uncompensated care, community service, or access by minority/handicapped persons.
- c. **Unmet Needs to be Served by Applicant:** The applicant submits that the percentage of gross patient revenue (GPR) and actual dollar amount of health care provided to medically indigent patients for the last three years are as follows for this project:

	GPR %	GPR Dollar Amount
Historical Year 2007	5.53	\$ 54,982,855
Historical Year 2008	4.55	\$ 47,925,600
Projected Year 1	5.04	\$ 84,815,006
Projected Year 2	5.15	\$ 92,533,171

**GR Criterion 7 - Information Requirement**

The applicant asserts 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**

North Mississippi Medical Center is located in General Hospital Service Area 2 (GHSA 2), which contained 1,059 licensed acute care beds in FY 2008. This application does not propose new services in General Hospital Service Area 2.

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 hospital has available, or in the case of health personnel will obtain, adequate resources for continuation of clinical services and anticipated volume increases. The applicant prepares, maintains, and adheres to human resources development and recruitment plan and a physician recruitment plan to ensure adequate resources. In addition, NMMC experiences consistent staffing levels with a turnover rate lower than the industry average.

### **GR Criterion 14 - Construction Projects**

- a. **Cost Estimate:** The application contains a cost estimate prepared by The McCarty Company Design Group, PA.
- b. **Schematic Drawing:** The application contains a schematic drawing of the proposed project.
- c. **Space Allocations:** The applicant submits that space will conform to applicable local and state licensing standards.
- d. **New Construction Projects:** This project involves new construction of 137,033 square feet of space.
- e. **Cost per Square Foot:** The project will cost \$260.61 per square foot for new construction and \$220.37 per square foot for renovation (see Attachment 2). The cost of the project is below the high cost of \$315 when compared to hospital construction projects listed in the *Means Construction Cost Data, 2009*. The *Means Construction Cost Data, 2009*, does not compare costs of renovation projects.

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

North Mississippi Medical Center 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	\$32,578,968	59.13%
b.	Construction Cost -- Renovation	13,747,522	24.94%
c.	Capital Improvements	0	0
d.	Total Fixed Equipment Cost	0	0
e.	Total Non-Fixed Equipment Cost	2,224,600	4.05%
f.	Land Cost	0	0
g.	Site Preparation Cost	0	0
h.	Fees (Architectural, Consultant, etc.)	2,432,141	4.41%
i.	Contingency Reserve	2,316,320	4.20%
j.	Capitalized Interest	0	0
k.	Other	1,803,722	3.27%
	<b>Total Proposed Capital Expenditure</b>	<b>\$55,103,273</b>	<b>100.00%</b>

**B. Method of Financing**

The applicant indicates that the proposed capital expenditure will be funded from a bond issue. The application contained a letter from the hospital's financial analyst attesting to the financial feasibility of the project.

**C. Effect on Operating Cost**

North Mississippi Medical Center'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 Expenses
Medicaid	12	\$116,550,069
Medicare	49	475,912,785
Other	39	378,787,727
<b>Total</b>	<b>100</b>	<b>\$971,250,581</b>

North Mississippi Medical Center projects 5.04 percent care to charity care. The applicant asserts that the hospital does not track specifically medically indigent patients. Charity care would include those patients as well.

**V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES**

The Division of Medicaid was provided an opportunity to review and comment on 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 2010 State Health Plan*; the *Mississippi Certificate of Need Review Manual, Revised December 1, 2009*; 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 North Mississippi Medical Center for the west bedtower expansion and renovation.

**North Mississippi Medical Center  
HG-RC-1109-030  
Attachment 1**

North Mississippi Medical Center Three-Year Operating Statement (Project Only)			
	Year 1	Year 2	Year 3
<b>Revenue</b>			
Patient Revenue:			
Inpatient	0	0	0
Outpatient	0	<u>0</u>	<u>0</u>
<b>Gross Patient Revenue</b>	<b>0</b>	<b>0</b>	<b>0</b>
Charity Care	0	0	0
Deductions from Revenue		0	0
<b>Net Patient Revenue</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Expenses</b>			
Operating Expenses:			
Salaries	0	0	0
Benefits	0	0	0
Supplies	0	0	0
Services	0	0	0
Lease	0	0	0
Depreciation	2,334,455	2,334,455	2,334,455
Interest	2,755,164	2,755,164	2,755,164
Other	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Expenses</b>	<b>\$ 5,089,619</b>	<b>\$ 5,089,619</b>	<b>\$ 5,089,619</b>
<b>Net Income (Loss)</b>	<b>\$(5,089,619)</b>	<b>\$(5,089,619)</b>	<b>\$(5,089,619)</b>
<b>Assumptions</b>			
Inpatient days	0	0	0
Outpatient days	0	0	0
Procedures	0	0	0
Charge per outpatient day	0	0	0
Charge per inpatient day	0	0	0
Charge per procedure	0	0	0
Cost per inpatient day	0	0	0
Cost per outpatient day	0	0	0
Cost per procedure	0	0	0

**North Mississippi Medical Center  
 HG-RC-1109-030  
 Attachment 2  
 Computation of New Construction Cost\***

<u>Cost Component</u>	<u>Total</u>	<u>New</u>	
		<u>Construction</u>	<u>Renovation</u>
New Construction Cost	\$32,578,968	\$32,578,968	0
Renovation Cost	\$13,747,522	0	\$13,747,522
Total Fixed Equipment Cost	0	0	0
Total Non-Fixed Equipment Cost	\$3,283,100	\$3,283,100	0
Land Cost	0	0	0
Site Preparation Cost	0	0	0
Fees (Architectural, Consultant, etc.)	\$2,432,141	\$1,605,213	\$826,928
Contingency Reserve	\$2,316,320	\$1,528,771	\$787,549
Capitalized Interest	0	0	0
Other (Furnishings, minor equipment)	\$1,803,722	\$1,803,722	0
<b>Total Proposed Capital Expenditure</b>	<b>\$55,103,273</b>	<b>\$40,799,774</b>	<b>\$15,361,999</b>

Square Footage	<b>206,742</b>	137,033	69,710
<i>Allocation Percent</i>		66%	34%

<b>Costs Less Land, Non-Fixed Eq. &amp; Other</b>	<b>\$50,016,451</b>	<b>\$35,712,952</b>	<b>\$15,361,999</b>
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<b>Cost Per Square Foot</b>	<b>\$241.92</b>	<b>\$ 260.61</b>	<b>\$220.37</b>
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\*Source: Mississippi Certificate of Need Review Manual, Revised December 1, 2009