

**Health Planning and Resource Development  
November 2004**

**CON Review HG-RC-0904-034  
Mississippi Baptist Health Systems, Inc.  
d/b/a Mississippi Baptist Medical Center  
West Tower Construction/Renovation and Relocation Project  
Capital Expenditure: \$82,230,000  
Location: Jackson, Mississippi**

**Staff Analysis**

**I. Project Summary**

**A. Applicant Information**

Mississippi Baptist Medical Center, Inc. (MBMC) is a Mississippi not-for-profit corporation composed of 4 corporate officers and an 11-member Board of Directors. MBMC is owned by Mississippi Baptist Health Systems, Inc. (MBHS), a Mississippi not-for-profit corporation composed of 5 corporate officers and a 14-member Board of Directors. MBMC is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

MBMC currently has outstanding certificates of need for the construction of a freestanding ambulatory surgery facility in Madison County, the purchase and installation of a PET scanner, the establishment of MRI services at the Baptist Madison Imaging Center, and the construction of a medical office building in Madison County.

The 649-bed short term acute care hospital consists of 529 medical/surgical beds, 12 Geropsych beds, 88 adult CDU beds, and 20 adolescent CDU beds.\*

The occupancy rates, average lengths of stay, and the Medicaid utilization rates for Mississippi Baptist Medical Center are as follows for medical surgical beds only:

**Mississippi Baptist Medical Center  
Utilization Rates**

<b>Fiscal Year</b>	<b>Occupancy Rate (%)</b>	<b>ALOS (Days)</b>	<b>Medicaid Utilization Rate (%)</b>
<b>2002</b>	<b>50.58</b>	<b>5.45</b>	<b>8.85</b>
<b>2003</b>	<b>50.71</b>	<b>5.20</b>	<b>9.08</b>
<b>2004</b>	<b>54.35</b>	<b>5.40</b>	<b>10.25</b>

Source: Division of Health Facilities Licensure and Certification, MSDH

\*On July 29, 2004, the MSDH issued a certificate of need to Tri-Lakes Medical Center for the lease and relocation of 10 adolescent CDU beds from MBMC, which are included in this total.

**B. Project Description**

Mississippi Baptist Medical Center requests certificate of need approval to construct a seven-story 236,084 square foot West Tower, to be built to the west of the existing hospital building. Housing primarily Obstetrics and Cardiac Services, the building is designed to house relocated services and provide space for future expansion/growth to meet projected needs of the community.

The project entails relocation and reallocation of patient beds within the Medical Center but will not result in a change of licensed beds in any licensure category. A breakdown of the West Tower, showing the floor level and services, is as follows:

Lower Level	Entrance Lobby to Women's Services Support Service Space Shelled Space for Future Use
First Floor	Entrance Portable to Cardiac Services Outpatient Cardiac Unit Cardiac Support Administrative Offices 24-bed Short Stay Unit
Second Floor	Non-Invasive Cardiovascular Diagnostic Testing 16-bed Cardiac Intensive Care Unit (CICU)
Third Floor	24-bed Telemetry Unit
Fourth Floor	Well-Baby Nursery Neonatal Intensive Care Unit (NICU) 19-bed Post Partum Unit
Fifth - Sixth Floors	Shelled In Space

The project also includes approximately 38,284 square feet of renovations to the existing hospital in space where facilities will be relocated to the West Tower. The second and fourth floors of the existing hospital will be renovated to provide more efficient and modern space for Cardiac and Women's Services within the hospital. The second floor will be renovated to relocate two existing heart operating rooms to be contiguous to an existing vascular room and to create a second vascular room. The space vacated by the two heart operating rooms in the general operating suite will be used for general surgery, providing two rooms which meet today's size requirements and will provide flexibility for the future. The existing loading dock and mobile MRI pad will be relocated to the lower level of the new building, and existing internal Medical Center campus circulation routes and parking areas will be reconfigured as needed to meet the revised circulation and parking needs of the campus.

MBMC believes that the location of new Cardiac and Women's Services areas in the West Tower will allow direct access to and interaction between the new and existing Cardiac and Women's Services areas of the Medical Center, thus providing consolidated, integrated services for seamless, effective, coordinated patient care. The project will also create

publically identifiable service specific entrances and regions of the Medical Center devoted to Cardiac Services and Women's Services. That should diffuse traffic throughout the campus of Baptist and help the public learn where to access the general categories of services they desire. The applicant believes that this consolidation also decreases duplicative and inefficient use of resources contributing to cost-effective use of health care resources and dollars.

MBMC does not anticipate an increase or decrease in staffing as a result of the project. It states that staffing is dependent upon day to day fluctuating levels of utilization in the various units.

The proposed capital expenditure of \$82,233,000 is composed of construction cost (53 percent), renovation (5 percent), non-fixed equipment (20 percent), site preparation ( 5 percent) and fees, contingency reserve and capitalized interest (17 percent). The applicant proposes to fund the project from accumulated cash reserves; however, it states that depending on investment return and the cost of borrowing, the applicant may elect to finance construction with bank loans or with bond financing.

The proposed project site has been approved by the MSDH Division of Health Facilities Licensure and Certification. The applicant submits that the capital expenditure for this project was tentatively obligated upon approval of the project by the MBHS Board of Trustees on July 21, 2004. The capital expenditure will not be fully obligated until after the CON is approved and full MBMC and MBHS Board approvals are obtained. The project is expected to be completed within 36 months after CON approval.

## **II. Type of Review Required**

This project for the construction of a West Tower, renovation of existing space, and relocation of services , is reviewed in accordance with Section 41-7-191, subparagraph (1)(j), 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 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 December 6, 2004.

## **III. Conformance with the *State Health Plan* and Other Adopted Criteria and Standards**

### **A. *State Health Plan***

The *FY 2005 State Health Plan* contains criteria and standards which an applicant must meet prior to undertaking major construction, renovation, expansion, capital improvements, replacement, and addition of hospital beds.

#### **SHP Criterion 1 - Need**

MBMC cites a study, analysis, and recommendations made by D. J. Sullivan & Associates of Ann Arbor, Michigan, in the fall of 1998 in justifying the need for this project. According

to the applicant, the study pointed out physical impediments to the most effective operation of the Baptist Medical Center Cardiac and Women's Services. The applicant states that these conclusions were reiterated in a 2001 study conducted by Tri-Brook Healthcare Consultants of Illinois.

The applicant also cites growth in utilization of Cardiac and Women's Services. The following table shows the changes in these areas for the past four fiscal years.

Number of Procedures	Fiscal Year			
	2001	2002	2003	2004 (Annualized)
<u>Cardiac Services:</u>				
Cath - total	3943	4290	4609	4900
Cath - interventional	1076	1066	1128	1201
EP	268	577	599	844
Cardiovascular Surgery	389	383	341	314
<u>Women's Services:</u>				
Deliveries	977	1078	1101	1166
NICU Cases	693	535	555	475
NICU Days	5477	3461	6454	5208
NICU ADC	15.01	9.48	17.68	14.25
Multiple Deliveries	31	27	45	25
ADC - high risk		1.6	2.5	2.0
ADC - L & D OP		2.7	2.4	2.3
Low Birth weight Babies	117	141	179	93
Maternal Fetal Specialist's Patients	271	240	373	550

In further justification of the project, MBMC submits that the current Neonatal Intensive Care Unit (NICU) at Baptist consists of 23 of Baptist's acute care beds with 59 square feet per baby. Baptist states that although it has allocated 23 acute care beds in its annual license renewal application, in reality there is only space for approximately 18 babies. When census reaches approximately 18 babies and acuity is high, an annex nursery is usually opened to accommodate the overflow. The applicant contends that the opening of this annex is a duplication of services and results in an inefficient use of resources and staff. *Guidelines for Perinatal Care* recommend 150 square feet for critical care babies and 125 square feet for intermediate care. Also, over the last few years there has been a trend toward "family-centered" care which allows more access to the baby by the family. The applicant states that this concept, coupled with additional staff and equipment, creates overcrowding and compromises the privacy of patients.

The applicant states that in FY 2003, there were 191 days when NICU census was 18 or higher and 20 days when it was above 23.

In FY 2004, there were 71 days when NICU census was 18 or higher and 9 days when it was above 23.

One of the factors which contribute to the increase in NICU census is the birth of multiples (twins, triplets, quints, etc.). The applicant states that while the number of babies born in a multiple delivery was down in 2004, it is difficult to predict when it might increase, and there must be capacity when it happens.

#### SHP Criterion 3 - Charity/Indigent Care

MBMC affirmed that it will continue to hold to its mission of providing compassionate Christian healthcare and provide a "reasonable amount" of indigent/charity care.

#### SHP Criterion 4 - Cost of Project

The applicant proposes to construct approximately 236,080 square feet of new space at an estimated cost of \$254.92 per square foot. The applicant's square foot cost is slightly below the high range (\$275) for hospital construction as stated in the *Means Construction Cost Data*, 2005 edition. Construction projects reviewed by the Department over the past 12 months ranged from \$143 per square foot to \$276 per square foot.

The applicant further proposes to renovate 38,284 square feet of existing space at approximately \$159.12 per square foot.

According to the applicant, the total square footage of the present facility is 545,641. Based on information contained in the *Means Construction Cost Data, 2005 edition*, the cost to replace a facility this size would range from \$82,937,432 to \$150,596,916. The estimated cost to replace the entire facility with the added 236,080 square footage would cost from approximately \$118,821,592 to \$215,754,996.

#### 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. This application is in substantial compliance with general review criteria.

#### **GR Criterion 2 - Long Range Plan**

MBMC states that the project is consistent with the long range strategic plans developed by its management staff and approved by the MBHS' Board of Trustees and MBMC's Board of Directors for the provision of state-of-the-art, accessible, cost effective, efficient healthcare services to the communities and areas served by MBMC.

#### **GR Criterion 3 - Less Costly/More Effective Alternative**

The applicant submits it considered and rejected four other alternatives to this project, which included: 1) no action whatsoever; 2) the construction of additional floors above the Hederman Cancer Center; 3) vertical expansion of the existing bed tower; and 4) relocation and reconstruction of the cardiac and/or women's services at another location off the Baptist Medical Center campus.

The applicant states that the proposed project was clearly the most cost effective and most feasible alternative to enable the enhancement of existing working and work flow relationships.

**GR Criterion 4 - Economic Viability**

The applicant submits that this project has been determined to be financially feasible by the Medical Center’s management staff. Further, the West Tower Project will not have any impact on charges for healthcare services inasmuch as the uses of the “new” space will generally provide services similar to existing uses. The applicant expects that utilization of existing Cardiac and Women’s Services facilities at MBMC will remain stable. The application contained a financial feasibility signed by the vice president-corporate controller of Mississippi Baptist Health Systems.

MBMC projects net operating income to be \$7,454,000 the first year, \$10,104,000 the second year, and \$12,975,000 the third year after completion of this project.

**GR Criterion 5 - Need**

The applicant submits that General Hospital Service Area (GHSA) 3 and the state of Mississippi have a growing need for quality, cost effective and technologically advanced cardiac and women’s services. MBMC believes that this project’s redesign of the facilities for delivery of such inpatient acute services and outpatient services will most efficiently, effectively, and conveniently satisfy those needs.

MBMC states that Baptist Medical Center’s healthcare services have historically been provided to Medicare and Medicaid patients, patients insured by commercial insurance, and patients with no insurance or for charity, regardless of the patient’s income, race, sex, religion, handicap, or age. The applicant expects that the West Tower project will have no effect on those access policies and practices.

The applicant submits that the project should have minimal effect on the other hospitals in the area providing similar services since it is planned based solely on current and projected community needs as related to Baptist Medical Center utilization. The application contained approximately 20 letters of support for the project.

**GR Criterion 6 - Accessibility**

The applicant submits that MBMC provides services to any individual who comes to it in need of services, regardless of age, handicap, creed, sex, religion, race, or ability to pay. The following table shows the percentages and dollar amounts of care provided to Medicaid and medically indigent patients for the past three fiscal years at MBMC:

<b>Fiscal Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Medicaid Utilization	7.5%	7.2%	8.0%
Indigent Care Utilization	1.9%	2.5%	2.5%
Dollar Amount	\$7,113,000	\$10,829,000	\$13,085,000

#### **GR Criterion 7 - Information Requirements**

MBMC affirmed that it will record and maintain the required information and shall 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**

The project involves the relocation and renovation of existing Cardiac and Women's Services facilities. The applicant submits that the project is supportive of existing health care services and the existing health care system of GHSA 3.

#### **GR Criterion 9 - Availability of Resources**

The applicant submits that all the resources necessary for the services are already in place to ensure proper implementation of the project. Nursing, allied health, and support staff for these inpatient acute care services and beds are already in place and would be redeployed in a more efficient manner with the project.

#### **GR Criterion 13 - Special Needs and Circumstances**

The applicant submits that since MBMC is a tertiary referral center, it is an entity which provides a substantial portion of its services to individuals residing outside of GHSA 3. The West Tower project will enhance that tertiary referral center status and function. MBMC also believes that the other entities which this tertiary referral hospital serves will also have their services and abilities enhanced by the efficient expansion and renovation of the Baptist Medical Center.

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

The applicant avers that the renovated operating suite will conform to all applicable local and/or minimum standards and have been planned with those standards in mind.

MBMC further affirmed that the new construction component of the project is an element of the entire reallocation and renovation plan. Therefore, the project is essentially the modernization of existing facilities to meet current and projected community needs which was considered as an alternative to the creation and relocation of entire departments of the hospital to another location on or off the Baptist Medical Center campus.

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

Mississippi Baptist 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. The hospital is accredited by the Joint Commission on Accreditation of Healthcare Organizations. The applicant submits that the healthcare services at MBMC have long been considered a center of excellence in the state of Mississippi.

**IV. FINANCIAL FEASIBILITY**

A. Capital Expenditure Summary

Construction - New	\$ 43,860,000
Renovation	4,200,000
Total Non-Fixed Equipment	15,960,000
Site Preparation	4,700,000
Fees	6,213,000
Contingency Reserve	4,850,000
Capitalized Interest	<u>2,450,000</u>
<b>Total</b>	<b><u>\$ 82,233,000</u></b>

The applicant proposes new construction of 236,080 square feet at approximately \$254.92 per square foot, and renovation of 38,284 square feet at approximately \$159.12 per square foot. The *Means Construction Cost Data, 2005 edition*, lists costs for hospital new construction ranging from \$152 to \$275 per square foot.

B. Method of Financing

The applicant proposes to finance the project with accumulated cash reserves. The application contained a statement signed by the vice president-corporate controller of Mississippi Baptist Health Systems, attesting to the financial feasibility of this project.

C. Effect on Operating Cost

The applicant projects the following expenses, utilization, and results from operation for the first three years following completion of the proposed project:

<u>Expenses</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
Salaries and Benefits	\$ 112,919,000	\$120,259,000	\$128,076,000
Bad Debt	14,946,000	15,917,000	16,952,000
Supplies & Drugs	84,171,000	89,642,000	95,469,000
MBHS Purchased Services	45,200,000	46,556,000	47,953,000
Depreciation & Interest	53,000	53,000	53,000
Rents and Utilities	9,212,000	9,811,000	10,448,000
MBHS Bldg & Equip Lease	<u>18,053,000</u>	<u>18,184,000</u>	<u>18,317,000</u>
<b>Total Expenses</b>	<b><u>\$ 284,554,000</u></b>	<b><u>\$300,422,000</u></b>	<b><u>\$317,268,000</u></b>
Gross Patient Revenue	\$703,418,000	\$808,931,000	\$930,270,000
Discounts, Bad Debts, Etc.	<u>(419,817,000)</u>	<u>(506,896,000)</u>	<u>(608,603,000)</u>
Net Patient Revenue	283,601,000	302,035,000	321,667,000
Other Revenue	<u>8,407,000</u>	<u>8,491,000</u>	<u>8,576,000</u>
Total Revenue	<u>\$292,008,000</u>	<u>\$310,526,000</u>	<u>\$330,243,000</u>
<b>Net Operating Income</b>	<b><u>\$ 7,454,000</u></b>	<b><u>\$ 10,104,000</u></b>	<b><u>\$ 12,975,000</u></b>



The applicant projects first year patient days to be 121,071 at a cost of \$2,350 per patient day and charges of \$5,810.

D. Cost to Medicaid/Medicare

The impact of the project on third party payors is expected to be negligible. The applicant projects 2.1 percent care for bad debt patients and 2.5 percent care to medically indigent and charity care patients.

**V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES**

The Division of Medicaid estimates the increased annual cost to Medicaid for this project will be \$4,755 for inpatient hospital services.

**VI. CONCLUSION AND RECOMMENDATION**

This project is in substantial compliance with the criteria and standards for the construction, renovation, expansion, capital improvements, replacement, and addition of hospital beds as contained in the *FY 2005 State Health Plan*, Chapter 8 of the *Certificate of Need Review Manual, 2000 Revision*, 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 by Mississippi Baptist Health Systems, Inc. and Mississippi Baptist Medical Center for the West Tower construction, renovation, and relocation project.