

**DIVISION OF HEALTH PLANNING AND RESOURCE DEVELOPMENT  
NOVEMBER 2004**

CON Review: HG-MME-0904-035  
Mississippi Baptist Medical Center, Inc.  
Establish a Computerized Physician Order Entry System  
Capital Expenditure: \$2,655,551.94  
Jackson, Mississippi

**STAFF ANALYSIS**

**I. PROJECT SUMMARY**

**A. APPLICANT INFORMATION**

Mississippi Baptist Medical Center, Inc. is a 529-bed short-term acute care hospital with 12 Geriatric Psychiatric beds, 88 Adult Chemical Dependency beds, and 20 Adolescent Chemical Dependency beds. The Mississippi Hospital for Restorative Care, Inc. is an intermediate care facility that consists of 25 General Med/Restorative beds. Mississippi Baptist Medical Center, Inc., The Mississippi Baptist Health System and The Mississippi Hospital for Restorative Care, Inc. are non-profit corporations authorized to do business in Mississippi.

Mississippi Baptist Medical Center, Inc. is presently governed by an eleven-member Board of Directors; The Mississippi Baptist Health System is presently governed by a fifteen-member Board of Trustees; and The Mississippi Hospital for Restorative Care, Inc., is governed by a five-member Board of Directors. The facilities participate in the Medicaid and Medicare programs and with the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Also, The Mississippi Hospital for Restorative Care, Inc. is accredited by the Commission on the Accreditation of Rehabilitation Facilities. The occupancy rates, average length of stay (ALOS), and Medicaid Utilization for the three most recent years are as follows (medical/surgical beds only):

<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**

**B. PROJECT DESCRIPTION**

Mississippi Baptist Medical Center, Inc (MBMC) requests Certificate of Need (CON) authority to establish a Computerized Physician Order Entry System. The project consists of the purchase and installation of a computerized physician order entry (CPOE) system which involves the purchase and installation of computer software services and related hardware to enable the existing information technology systems of Baptist and the Mississippi Hospital for Restorative Care to implement and operate a CPOE system to assist the medical staffs of both hospitals in reducing medical errors arising out of the human factor in the making, recording and carrying out of physician patient care orders of all varieties. No new construction or renovation will be necessary for the installation and operation of the CPOE system. The existing information technology architecture at Baptist and the Mississippi

Hospital for Restorative Care, Inc. will, with some modifications, accommodate this system. This project involves no new institutional health services.

MBHS does not anticipate a change in the use of ancillary or support services to support this project other than the use of existing IT personnel to service and support the CPOE system. The capital expenditure for this project has been tentatively approved by the pertinent governing body of MBHS. The capital expenditure will not be fully obligated until after the CON is approved and the full MBHS Board approval is obtained. The project is expected to be completed within twenty-four (24) months after CON approval.

## II. TYPE OF REVIEW REQUIRED

Projects which propose the acquisition or replacement of non-medical equipment are reviewed in accordance with Section 41-7-191, subparagraphs (1)(j) and Section 41-7-173 (c)(ii), Mississippi Code of 1972, 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 December 6, 2004.

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

### A. State Health Plan (SHP)

The FY 2005 State Health Plan does not contain criteria and standards for the acquisition of non-medical equipment. However, this application is in substantial compliance with the overall objectives of the *State Health Plan*.

### B. General Review (GR) Criteria

Chapter 8 of the *Mississippi Certificate of Need Review Manual, 2000 revisions*, 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**

This project is consistent with Mississippi Baptist Health Systems' long range strategic plans developed by its management staff and approved by the MBHS Board of Trustees for the provision of state-of-the-art, accessible, cost effective, efficient, quality health care services to the communities and areas served by MBHS' operating hospitals. Furthermore, the installation and operation of a CPOE system to serve the operating hospitals of MBHS comports with MBHS' goal to provide quality, efficient healthcare to all residents of the Central Mississippi/Jackson metropolitan area community.

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

There is no less costly or more effective alternative method of providing the services this project contemplates. Taking no action to eliminate the potential for systemic medical errors is an unacceptable alternative, particularly when there is a mechanical or electronic system which can be implemented without the necessity of ongoing personnel additions to the operating budget of a health care provider.

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

This project has been determined to be financially feasible by the MBHS' management staff. The three year operating projections reflect a first year operating expense of \$857,496.56, \$1,115,691.56 the second year, and \$1,115,691.56 the third year.

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

The applicant states that MBHS' operating hospitals serve all patients regardless of their ability to pay, including low income persons, racial and ethnic minorities, women, handicapped persons, the elderly and other underserved groups. These groups currently have and will continue to have access to all of the services provided by MBHS' operating hospitals. All residents of the service area of MBHS' operating hospitals, regardless of income levels, ethnicity, handicap or ability, age, gender or traditional level of access to health care services, have need for quality, minimal-error health care services. The proposed CPOE system will be utilized in the provision of care for all in-patients of both Baptist and RCH and also for a significant portion of out-patients as well.

The applicant states that it is not aware of any facilities in the MBHS' service area that have similar or dissimilar equipment, and states this project will have no adverse impact on existing facilities. Hopefully the institution of this system at Baptist and RCH will spur other health care providers in Mississippi to implement similar medical error avoidance/minimization initiatives as well, which would be of benefit to the Mississippi health care system and all of its patients.

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

All of MBHS' operating facilities serve all of the population, including low income, racial and ethnic minorities, women, handicapped and elderly persons. The proposed CPOE system will be utilized for the benefit of all patients of Baptist and RCH and consequently to those segments of the population which have traditionally had difficulties accessing health care services. MBHS provides health care services to any individual who comes to it in need of such services, regardless of age, creed, sex, race, religion or ability to pay. This proposed CPOE system is expected to enhance quality of care across the whole spectrum of patients receiving health care at Baptist Health System's operating hospitals and may attract additional patients of all demographic groups.

This project does not involve the provision of health care services and so no charges, patient utilization, or patient origin data will be generated by the applicant in relation to this project.

The applicant provided the following dollar amount and percentage of care to medically indigent patients in 2001, 2002, and 2003:

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

**GR Criterion 7 - Information Requirement**

This project does not involve the provision of health care services and so no charges, patient utilization or patient origin data will be generated by the applicant in relation to this project.

**GR Criterion 8 - Relationship to Existing Health Care System**

The applicant submits that this project will serve as a complement to the existing health care system of the area. MBMC further contends that the approval of this application will enhance the existing health care system for patients in the service area of MBHS' operating hospitals by providing them with local access to quality, minimal-error health care services.

**GR Criterion 17 - Quality of Care**

The applicant states that MBHS' operating facilities provide and will continue to provide quality healthcare. All MBHS' operating hospitals currently have in place a Quality Improvement Program, the purpose of which is to ensure the delivery of the highest quality of care to their patients in the most efficient and effective manner with the resources available. This project is proposed solely for the purpose of improving quality of care.

MBHS facilities are in compliance with the Minimum Standards of Operation for Mississippi Hospitals, according to the Division of Health Facilities Licensure and Certification. MBHS' facilities are accredited by the Joint Commission on Accreditation of Health Care Organizations, licensed and certified by the Mississippi State Department of Health, and certified for participation in the Medicare and Medicaid programs.

**IV. FINANCIAL FEASIBILITY**

**A. Capital Expenditure Summary**

MBHS submitted the following capital expenditure summary:

New Construction	\$	0
Total Non-Fixed Equipment	\$	57,859
Software	\$	1,149,300
Implementation Services	\$	1,323,393
Fees	\$	25,000
Contingency Reserve	\$	<u>100,000</u>
<b>Total Expenditure</b>	<b>\$</b>	<b><u><u>2,655,552</u></u></b>

The proposed capital expenditure is for a Computerized Physician Order Entry System. The capital expenditures for software and equipment purchased for this project will be depreciated over three (3) to five (5) years using straight line method of depreciation. The applicant submitted the following depreciation for the first three years:

Year 1	Year 2	Year 3
\$ 832,497	\$ 832,497	\$ 832,497

**B. Method of Financing**

The applicant proposes to finance this project with accumulated cash reserves. No additional debt is projected.

**C. Effect on Operating Cost**

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

<b>EXPENSES</b>	<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>
Maintenance Contract	\$ 0	\$ 250,195	\$ 250,195
Other Direct Expense	\$ 25,000	\$ 25,000	\$ 25,000
Depreciation	\$ 832,497	\$ 832,497	\$ 832,497
<b>TOTAL EXPENSES</b>	<b>\$ <u>857,497</u></b>	<b>\$ <u>1,107,692</u></b>	<b>\$ <u>1,107,692</u></b>
<b>NET PATIENT SVC. REV.</b>	<b>\$ <u>0</u></b>	<b>\$ <u>0</u></b>	<b>\$ <u>0</u></b>
<b>NET INCOME (LOSS)</b>	<b>\$ <u>-857,497</u></b>	<b>\$ <u>-1,107,692</u></b>	<b>\$ <u>-1,107,692</u></b>

\*The Computerized Physician Order Entry System is a non-revenue producing project; therefore, the applicant did not project revenue.

**D. Cost to Medicaid/Medicare**

According to the applicant, the proposed project is nonrevenue generating and therefore, there will be no cost to Medicaid and Medicare as a result of this project. However, the following table shows a first year expense of \$74,092 as it relates to the annual depreciation cost. The 8.9 percent utilization was indicated in another proposed application.

<b>Patient Mix by Type Payor</b>	<b>Utilization Percentage</b>	<b>First Year Expenses</b>
<b>Medicaid</b>	8.9%	\$ 74,092
<b>Medicare</b>	50.1%	\$ 417,081
<b>Blue Cross</b>	0.0%	\$ 0
<b>Other</b>	41.0%	\$ 341,324
<b>Self Pay</b>	0.0%	\$ 0
<b>TOTAL</b>	<b>100.0%</b>	<b>\$ 832,497</b>

**V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES**

The Division of Medicaid was provided a copy of this application for comment. The Division of Medicaid estimates that the increased annual cost to Medicaid for the capital expenditure will be \$99,411 for inpatient hospital services.

**VI. CONCLUSION AND RECOMMENDATION**

This project is in substantial compliance with overall objectives of the 2005 State Health Plan; the Certificate of Need Review Manual, revised 2000; 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 Mississippi Baptist Medical Center, Inc., to establish a Computerized Physician Order Entry System.