

**MISSISSIPPI STATE DEPARTMENT OF HEALTH  
DIVISION OF HEALTH PLANNING AND RESOURCE DEVELOPMENT  
APRIL 2013**

**CON REVIEW HG-RC-1212-022  
BAPTIST MEMORIAL HEALTH CARE CORPORATION  
d/b/a BAPTIST MEMORIAL HOSPITAL-UNION COUNTY  
EMERGENCY DEPARTMENT ADDITION AND RENOVATION  
CAPITAL EXPENDITURE: \$12,088,860  
LOCATION: NEW ALBANY, UNION COUNTY, MISSISSIPPI**

**STAFF ANALYSIS**

**I. PROJECT SUMMARY**

A. Applicant Information

Baptist Memorial Hospital-Union County (“BMHUC” or the “Hospital”) is a nonprofit, 153-bed community hospital owned by Baptist Memorial Health Care Corporation. The hospital is governed by a six-member Board. The Hospital is accredited by the Joint Commission (formerly the Joint Commission on Accreditation of Healthcare Organizations).

The occupancy rates, average lengths of stay (ALOS), and the Medicaid utilization rates for Memorial are as follows:

**Baptist Memorial Hospital – Union County  
Utilization Data**

<b>Fiscal Year</b>	<b>Occupancy Rate (%)</b>	<b>ALOS (Days)</b>	<b>Medicaid Utilization Rate (%)</b>
2009	NA	NA	NA
2010	25.08	3.47	40.00
2011	24.15	3.32	32.00

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

B. Project Description

Baptist Memorial Hospital-Union County requests Certificate of Need (CON) authority for the addition to and renovation of its Emergency Services Department. The applicant expects that minor renovation will be necessary where the existing and new hospital areas connect. BMHUC submits that the expanded department will have 22 treatment positions with service capacity to satisfactorily accommodate patients, families and professionals in a high quality manner. The project entails: a new ambulance bay and entrance; an improved workstation and support area for EMS staff; and a new separate garage for ambulance vehicles on the hospital campus.

The project encompasses 23,087 square feet of space, to include 21,797 square feet of new construction, 1,290 square feet of renovation, and an additional 40 parking spaces as indicated below:

<b>Baptist Memorial Hospital ED Addition</b>	
<b>Location</b>	<b>Area Sq. Ft.</b>
New Construction-ED	18,577
Canopies	1,610
Renovation – ED	1,290
Ambulance Garage	<u>1,610</u>
<b>TOTAL</b>	<u><b>23,087</b></u>

The applicant states that the new facility will be designed with flexibility to provide the highest quality and technologically progressive services in a pleasant family oriented setting with sophisticated treatment capabilities. The project will entail new ED walk-in and ambulance canopied entries to guide and protect patient arrival; two private triage areas located in direct view of the walk-in entrance; 2 trauma exam rooms, 2 isolation exam rooms, and 18 additional exam rooms.

The hospital states that the ED will be equipped with an EKG, an upgraded mobile radiographic unit, a portable ultrasound and a CT room with existing equipment. A pneumatic tube system will be used for communication and new headwalls will be in each room. Physiological monitors will be provided in six exam rooms and in the trauma rooms with a corresponding eight bed central monitor station.

The applicant's final objective for the project is to improve the Emergency Services facility for the citizens of Union County, and all other residents of the Hospital's service area.

The applicant provides information concerning additional staffing in the application. However, the hospital states that if necessary, it has access to the resources of the Baptist Memorial Health Care Corporation for training and recruitment of other qualified personnel.

The total proposed capital expenditure is \$12,088,860, which includes \$6,189,020 for new construction and \$180,600 for renovation (See Expenditure Summary for a complete percentage breakdown of the project). The applicant projects that the capital expenditure will be obligated by April 2013 and the project will be complete by June 2015.

The applicant indicates the proposed capital expenditure will be funded from the hospital's accumulated cash reserves.

The MSDH Division of Health Facilities Licensure and Certification has approved the site for the Emergency Department Addition and Renovation project, as proposed.

## II. TYPE OF REVIEW REQUIRED

This project is reviewed in accordance with Section 41-7-173, 41-7-191 1(j), and 41-7-193 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 May 9, 2013.

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

### A. State Health Plan (SHP)

The *FY2013 State Health Plan* contains criteria and standards which the applicant is required to meet before receiving CON authority for construction, renovation, and expansion. This application is in substantial compliance with the applicable criteria stated in the *Plan as follows*:

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

#### **Projects which do not involve the addition of any acute care beds.**

The applicant submits that the current Emergency Department is approximately 6,035 square feet in area and contains 9 treatment positions that include: 1 Trauma Room, 1 Cardiac Room, 5 Exam Rooms, and 2 small exam rooms used for Fastrack services. According to the applicant, the current layout of the facility for registration limits the control of privacy when discussing patient condition or details about insurance.

Other inefficiencies/needs cited in the application include: cumbersome, inefficient and cramped patient flow from presentation to discharge; lack of a separate space in the waiting area for children and siblings for the 25% ED visits that are pediatric patients; the Emergency Medical Service work area inside the current ED is small and control of confidential communication is difficult since the registration and waiting areas are close; the ambulances also need better accommodations to

manage exhaust fumes and to allow parking that will not interfere with traffic flow at the ED entrance; a new decontamination area is needed to accommodate patients with special needs such as bariatric related complications. The project is designed to provide space to meet the needs of increasing patient visits, and control of confidential patient information in an environment that accommodates adult and pediatric patients.

The applicant proposes that the expanded Emergency Department will be designed for highly efficient patient triage and treatment flow and will be highly visible for immediate access by patients and emergency transportation vehicles.

The proposed project will expand the ED from approximately 6,000 square feet and 9 treatment positions to approximately 20,000 square feet and 22 treatment positions to accommodate approximately 20,000 patient visits per year. The following table indicates BMHUC's ED visits for 2009 through 2012:

Historical ED Visits				
Year	2009	2010	2011	2012
Visits	18,556	19,475	20,520	22,837
Increases		4.95%	5.37%	11.29%

The above table indicates that there were 22,837 visits in the current ED for FY 2012. The applicant asserts that American College of Emergency Physicians published a book titled *Emergency Department Design - A Practical Guide to Planning for the Future*. The applicant referenced a table from the book in the application and it states that the average space requirement for ED annual visits of 20,000 range from 13,500 square feet to 17,100 square feet and from 15 to 19 positions. For annual visits of 10,000, the average space requirements are 7,200 square feet to 9,900 square feet and 8 to 11 positions. Therefore, the applicant's current ED of approximately 6,035 square feet and 9 treatment positions is below the average requirements for ED areas.

In addition, the applicant cited growth projections for the ED in justification of the need for the project. Using mathematical regression analysis, the applicant projects the number of visits for years 2013, 2014, and 2015 to be 23,819, 25,208 and 26,597, respectively. In addition, for conservative estimates of utilization, BMHC projects slightly lower visits as 22,623, 24,207, 25,175, and 25,930 for years 2013, 2014, 2015, and 2016, respectively.

The Plan requires that in addition to demonstrating need for projects involving 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. Baptist Memorial Hospital-Union County asserts that it currently participates in the statewide trauma system as a Level IV provider.

**SHP Criterion 5 – Charity/Indigent Care**

BMHUC affirmed that it will continue to provide a reasonable amount of indigent/charity care to the residents of its service area. The applicant submits that the hospital projects to provide more than 9% of the gross revenue in indigent care for the first two years of operation of the new ED. The following table is a breakdown of historical and projected gross patient revenue provided or to be provided to medically indigent/charity patients.

Year	Medically Indigent/Charity Care (\$)	Medically Indigent//Charity Care (%)
Fiscal Year 2011	\$5,235,534	4.0%
Fiscal Year 2012	\$6,387,312	4.4%
Projected Year 1	\$6,805,880	4.5%
Projected Year 2	\$6,979,670	4.5%

**SHP Criterion 6 – Reasonableness of Cost**

The applicant demonstrated that the cost per square foot is reasonable in comparison with projects involving new construction as approved by the Department within the past 12 months.

**SHP Criterion 7 – Floor Area and Space Requirements**

Based on the *Emergency Department Design – A Practical Guide to Planning for the Future* book published by the American College of Emergency Physicians discussed in **SHP Criterion 1 Need** in this Staff Analysis, the square footage of the proposed ED is consistent with national norms for similar projects. The applicant submits that the construction is designed in compliance with all state and local building codes with national standards, including the American Institute of Architects guidelines.

The applicant contends that the existing ED is not capable of expansion in the current location. The proposed ED is designed to accommodate future growth in health services with attention to patient needs and comfort in an efficient and cost-effective manner.

BMHUC states that adding to the cost of the project is special consideration given the site preparation involving relocation of utility lines that run below the proposed building site.

### **SHP Criterion 8 – Renovation versus Replacement**

According to RS Means Building Construction Cost Data, the average cost per bed for 2013 is \$228,000. Therefore, the cost to replace the 153-bed facility would be approximately \$34,884,000. Based on this estimate, the cost of this project is approximately 34% of the cost to replace the facility and is well below the 85% stated in this criterion.

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

Chapter 8 of the *Mississippi Certificate of Need Review Manual, Revised September 1, 2011*; addresses general criteria by which all CON applications are reviewed. This application is in substantial compliance with general review criteria contained in the manual.

#### **GR Criterion 1- Consistency with the *State Health Plan***

The project is in substantial compliance with all criteria, standards, and policies of the *FY 2013 Mississippi State Health Plan* applicable to the construction, renovation, and expansion projects.

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

The applicant states that the final objective of this project is to improve the Emergency Services facility for the citizens of Union County and all other residents of the Hospital's service area. The applicant believes that construction of a larger and more sophisticated facility and operation of a highly advanced state-of-the-art Emergency Department is responsive to the community's immediate and long-term health care needs.

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

The applicant considered three other alternatives to the proposed project and determined that adding additional space to the existing hospital for the ED is the only reasonable solution.

One option considered was to continue operation without change. This alternative would not allow the hospital to effectively meet the needs of the people it serves. Another option to expand the existing facility was rejected because the current location was not feasible due to surroundings and need for additional space. Finally, the applicant considered establishing freestanding emergency services. This alternative was dismissed since it would have resulted in a less efficient service configuration that would have been more operationally expensive and potentially the hospital would encounter staffing difficulties.

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

The applicant asserts that the charges associated with this ED are comparable to charges for similar services currently provided at other Baptist Memorial Hospital facilities. In addition, the applicant states that the projected levels of utilization are based on current and historical experience and calculations of need from internal corporate resources and external consultants.

Based on the applicant's financial projections, the operations of this project will result in a net loss of \$150,144 the first year, \$125,939 the second year, and \$107,934 the third year after completion of the project. The applicant states, however, that the operation of the hospital's other departments will offset the initial projected negative cash flow from the ED. In addition, the applicant contends that Baptist Memorial Health Care Corporation, the parent of BMHUC, has the financial resources needed to cover any unexpected expenses.

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**

- a. **Access by Population Served:** The applicant indicates that the service is available to all residents of the service area, including low income persons, racial, and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups.
- b. **Relocation of Services:** This application does not propose the relocation of services. However, the ED will move into the newly constructed space and the vacated ED area is expected to be used as an education center.
- c. **Current and Projected Utilization of Like Facilities in the Area:** BMHUC, located in General Hospital Service Area (GHSA) II, is the only hospital in Union County. However, according to the 2011 Report on Hospitals, GHSA II had 177,111 ED visits. The applicant contends that the approval of this project will enable BMHUC to fulfill its role as a provider of Emergency Services in Union County.
- d. **Probable Effect on Existing Facilities in the Area:** The project is not expected to have an adverse impact on other hospitals in GHSA II, or other providers. The project will meet a current need in BMHUC.
- e. **Community Reaction:** The application contains eight (8) letters of support for the project from the President of the Union-County Board of Supervisors, physicians, local facilities, and various officials of the Hospital. No letters of opposition were received in the department from the community.

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

- a. **Medically Underserved Population:** BMHUC affirmed that all residents of the health planning 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 facilities and will continue to have access to the Hospital. The applicant proposes to provide 4.5% of gross revenue the first year or \$6,805,880, and 4.5% or \$6,979,670 for the second year to care for the medically indigent patients. The Hospital operates 7 days per week, 24 hours per day.
- b. **Performance in Meeting Federal Obligations:** The applicant submits that BMHUC has no obligations under 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 all patient groups, including the medically underserved will greatly benefit from the addition to the Emergency Department.

### **GR Criterion 7 - Information Requirement**

The applicant affirmed that the facility 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**

The applicant asserts that BMHUC complements existing health services by offering Emergency Services as a Level IV ED. With the implementation of this project, BMHUC will have space to accommodate current need and reasonable future ED need. BMHUC states that it will not be able to continue serving the growth in ED utilization without expanding service capacity.

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

The applicant states that this proposal continues existing services. Highly trained professional staff will continue providing the services. The physicians will continue to staff the ED under contract. The applicant further states that if necessary, Hospital has access to the resources of the Baptist Memorial Health Care Corporation for training and recruitment of other qualified personnel.

### GR Criterion 14 - Construction Projects

- a. **Cost Estimate:** The application contains a cost estimate prepared by Earl Swensson Associates, Inc., a professional corporation, licensed to do business in Mississippi.
- 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 21,797 square feet of new construction and 1,290 square feet of renovated space.
- e. **Cost per Square Foot:** The applicant used three methods of calculating cost per square foot: (1) using construction and renovation (the applicant determined that the project will cost \$284 per square foot of new construction and \$140 per square foot of renovation); (2) using construction, renovation, site preparation and fees, cost of new construction would be \$352.27 and renovation would be \$208.50 per square foot); and (3) using the formula described in the CON Manual (applicant determined that the cost would be \$439.68 per square foot for new construction and \$223.93 for renovation).

Using the formula stated in the CON Manual, staff calculated the cost to be \$421.45 per square foot for new construction and \$223.96 per square foot for renovation (see Attachment 2). The *Means Building Construction Cost Data, 2013, Edition*, lists new construction costs for hospitals ranging from \$196 (where 20% of projects cost less) to \$335 (where 25% of projects cost more) per square foot. This project slightly exceeds the high range for construction listed in this publication.

According to the applicant, contributing to the high cost of construction are: site preparation on the existing hospital campus requires rerouting utility lines

that are below the area of construction; fixed equipment cost; and the ED area is one of the more complex hospital departments in the hospital with multiple medical gas outlets required in the headwalls.

**GR Criterion 16 - Quality of Care**

Baptist Memorial Hospital-Union County 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 and certified for participation in the Medicare and Medicaid programs.

**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	\$6,189,020	51.20
b.	Construction Cost -- Renovation	180,600	1.49
c.	Capital Improvements	0	0
d.	Total Fixed Equipment Cost	637,340	5.27
e.	Total Non-Fixed Equipment Cost	1,259,150	10.42
f.	Land Cost	0	0
g.	Site Preparation Cost	928,000	7.68
h.	Fees (Architectural, Consultant, etc.)	649,990	5.38
i.	Contingency Reserve	1,287,660	10.65
j.	Legal and accounting fees	1,500	.01
k.	Other	955,600	7.90
	<b>Total Proposed Capital Expenditure</b>	<b>\$12,088,860</b>	<b>100.00*</b>

\*99.99 percent is rounded to 100 percent.

The above capital expenditure is proposed for construction and renovation of the Emergency Department at Baptist Memorial Hospital-Union County. The proposed project involves approximately 21,797 square feet of new space at an estimated cost of \$439.68 per square foot and 1,290 square feet of renovation at an estimated cost of \$223.43 per square foot (see Attachment 2). The costs for projects listed in *The Means Building Construction Cost Data, 2013 Edition*, ranged from \$196 to \$335 per square foot, with a median cost of \$246 per square foot. The *Means Building Construction Cost Data* does not compare costs of renovation projects.

The application contains a letter signed by the Chief Financial Officer, attesting to the financial feasibility of the project.

**B. Method of Financing**

The applicant proposes to finance the proposed capital expenditure from accumulated cash reserves.

The applicant provided financial statements documenting the ability to fund the project.

**C. Effect on Operating Cost**

The hospital's three-year projected operating statement is presented in Attachment 1.

**D. Cost to Medicaid/Medicare**

The applicant projects the cost to third party payors as follows:

<b>Payor Mix</b>	<b>Utilization Percentage (%)</b>	<b>First Year Revenue (\$)</b>
<b>Medicare</b>	20	\$ 109,985
<b>Medicaid</b>	32	176,424
<b>Commercial</b>	47	263,321
<b>Self Pay</b>	1	3,078
<b>Other</b>	<1	1,968
<b>Total</b>	<b>100</b>	<b>\$ 554,776</b>

**V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES**

The Division of Medicaid was provided a copy of this application for review and comment. The Division of Medicaid commented that effective September 1, 2012, it changed the methodology by which outpatient services are reimbursed so that the cost incurred subsequent to that date will no longer affect outpatient payments. Also, effective October 1, 2012, the Division changed the methodology by which it reimburses inpatient services so that the cost incurred subsequent to that date will only affect cost outlier payments. The Division further states that the estimated increase in cost outlier payments resulting from this CON cannot be determined at this time. The Division of Medicaid opposes the project.

## **VI. CONCLUSION AND RECOMMENDATION**

This project is in substantial compliance with the criteria and standards for construction, renovation, expansion or capital improvements involving a capital expenditure in excess of \$2,000,000 contained in the *FY 2013 Mississippi State Health Plan*; the *Mississippi Certificate of Need Review Manual, 2011 Revision*; 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 Baptist Memorial Hospital-Union County for Emergency Department Addition and Renovation.

**Attachment 1**

<b>Baptist Memorial Hospital – Union County Three-Year Operating Statement (Project Only)</b>			
	Year 1	Year 2	Year 3
<b>Revenue</b>			
Patient Revenue:			
Inpatient	\$ 258,924	\$ 269,281	\$ 277,359
Outpatient	2,330,315	2,423,528	2,496,234
<b>Gross Patient Revenue</b>	<b>\$ 2,589,239</b>	<b>\$ 2,692,809</b>	<b>\$ 2,773,593</b>
Charity Care	240,949	250,587	258,105
Deductions from Revenue	1,793,515	1,865,255	1,921,213
<b>Net Patient Revenue</b>	<b>554,775</b>	<b>576,966</b>	<b>594,275</b>
<b>Expenses</b>			
Operating Expenses:			
Salaries	\$ 312,000	\$ 312,000	\$ 312,000
Benefits	87,742	87,742	87,742
Supplies	5,178	3,164	2,468
Services			
Lease			
Depreciation	300,000	300,000	300,000
Interest			
Other			
<b>Total Expenses</b>	<b>\$704,919</b>	<b>\$ 702,905</b>	<b>\$ 702,209</b>
<b>Net Income (Loss)</b>	<b>\$ (150,144)</b>	<b>\$ (125,939)</b>	<b>\$ (107,934)</b>
<b>Assumptions</b>			
Inpatient days*	12,966	12,707	12,453
Outpatient days*	45,420	46,328	47,255
Procedures	1,599	977	762
Charge per outpatient day	\$	\$	\$
Charge per inpatient day	\$	\$	\$
Charge per procedure	\$ 1,620	\$ 2,755	\$ 3,638
Cost per inpatient day	\$	\$	\$
Cost per outpatient day	\$	\$	\$
Cost per procedure	\$ 441	\$ 719	\$ 921

\*Projections are based on income statement with projections.

**Attachment 2  
 Baptist Memorial Hospital – Union County  
 Computation of Construction and Renovation Cost**

<u>Cost Component</u>	<u>Total</u>	<u>New Construction</u>	<u>Renovation</u>
New Construction Cost	\$6,189,020	\$6,189,020	
Renovation Cost	\$180,600		\$180,600
Total Fixed Equipment Cost	\$637,340	\$239,935	
Total Non-Fixed Equipment Cost	\$1,259,150	\$0	
Capital Improvement	\$0		
Land Cost	\$0	\$0	
Site Preparation Cost	\$928,000	\$928,000	
Fees (Architectural, Consultant, etc.)	\$649,990	\$613,656	\$36,334
Contingency Reserve	\$1,287,660	\$1,215,680	\$71,980
Capitalized Interest		\$0	\$0
Other ( Legal & Acct. Fees, Temp Parking	\$957,100		
<b>Total Proposed Capital Expenditure</b>	<b>\$12,088,860</b>	<b>\$9,186,290</b>	<b>\$288,915</b>
Square Footage	<b>23,087</b>	21,797	1,290
Allocation Percent		94.41%	5.59%
<b>Costs Less Land, Non-Fixed Eqt. Cap. Improvement, &amp; Other</b>	<b>\$10,829,710</b>	<b>\$9,186,290</b>	<b>\$288,915</b>
<b>Cost Per Square Foot</b>	<b>\$469.08</b>	<b>\$421.45</b>	<b>\$223.96</b>
<i>Source: FY 2013 Mississippi State Health Plan</i>			