

**MISSISSIPPI STATE DEPARTMENT OF HEALTH
DIVISION OF HEALTH PLANNING AND RESOURCE DEVELOPMENT
MAY 2016**

**CON REVIEW HG-RC-0316-003
BAPTIST MEMORIAL HOSPITAL-DESOTO, INC.
EMERGENCY DEPARTMENT ADDITION
CAPITAL EXPENDITURE: \$19,204,530
LOCATION: SOUTHAVEN, DESOTO COUNTY, MISSISSIPPI**

STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

Baptist Memorial Hospital-Desoto (BMH-D) is a short-term, general acute care, public, not-for-profit hospital located in Southaven, Desoto County, Mississippi. The hospital is presently governed by 22 corporate officers and directors. Baptist Memorial Health Care Corporation (BMHCC) is the parent organization of Baptist Memorial Hospital-DeSoto. The Secretary of State's Office certified that BMH-DeSoto, Inc. of DeSoto County is in good standing with the State of Mississippi. The facility participates in the Medicaid and Medicare programs, and insurance programs.

Baptist Memorial Hospital-Desoto consists of 339 licensed beds (309 acute and 30 rehabilitation beds).

The occupancy rates, average lengths of stay (ALOS), and the Medicaid utilization rates for the three most recent fiscal years for Baptist Memorial Hospital-Desoto (medical/surgical beds only) are as follows:

**Baptist Memorial Hospital-Desoto
Utilization Data**

Fiscal Year	Occupancy Rate (%)	ALOS (Days)	Medicaid Utilization Rate (%)
2014	60.47	4.70	14.27
2013	62.28	4.55	13.11
2012	64.27	4.69	13.01

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

The applicant shows that Baptist Memorial Hospital-Desoto's utilization data for FY 2015 are as follows: occupancy rates (68.9%), average lengths of stay (4.95%). BMH-D's FY 2015 Medicaid utilization rate is not available as the date of this staff analysis.

B. Project Description

Baptist Memorial Hospital-Desoto requests Certificate of Need (CON) authority for an emergency department (ED) addition at the hospital. The proposal involves new construction of approximately 25,000 square feet for the first and second floor addition and the renovation of 13,500 square feet of existing space located on the second floor at the hospital, within the existing emergency department. The project will allow BMH-D to do the following:

Location	Area (sq. ft.)
First Floor (Shell) New Construction	11,000
Second Floor New ED Construction	14,000
Second Floor ED Renovation	<u>13,500</u>
Total	38,500

Baptist Memorial Hospital-Desoto asserts that the proposed addition involves a first floor area below the emergency department and it will remain as shell space at this time. The second floor ED project involves new construction and an addition of renovation as referenced in the above table. The project includes a total of 8 private intake and 8 private triage areas that will be provided to facilitate patient flow and reduce delays. If waiting is part of the process for patients or family members, the waiting area will accommodate up to 18 patients and the separate public waiting area will be equipped with a pediatric/child waiting area for patients or siblings. Although all rooms will be equipped to be used by pediatric and adult patients, structural modifications for older adults will make the area more comfortable for everyone, including enhanced lighting, colors and signage will enhance safety, mobility, memory cues and vision and hearing perception.

According to the applicant, new technology will permeate the emergency department by allowing access to telehealth/telestroke carts for acute stroke patients who are presented for evaluation and initial treatment. New technology and the telehealth carts will speed evaluation and treatment. The carts can also be used for consults with other specialists at BMH-D.

BMH-D indicates that the expanded ED will increase from 34 to 46 treatment positions and will include a waiting area for patients waiting on results with service capacity to satisfy and accommodate patients, families and professionals in a high quality manner.

According to the applicant, 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 new layout will meet the needs of increasing patient visits and will control confidential patient information in an environment that accommodates adult and pediatric patients. The applicant indicates that a total of 8 private intake and 8 private triage areas will be provided to facilitate patient flow and reduce delays. Although all rooms will be equipped to be

used by pediatric and adult patients, structural modifications for older adults will make the area more comfortable for everyone, including enhanced lighting, colors and signage. All will enhance safety, mobility, memory cues, vision and hearing perception for patients the proposed project.

The applicant's final objectives for the proposed project are to improve the emergency services for the patients, and have access for all residents of the hospital's service area by providing adequate treatment spaces for the current and projected increase for the next foreseeable years. The proposed project will provide a larger and more sophisticated facility that will operate at a highly advanced, state-of-the-art emergency department that will response to the community's immediate and long-term health care needs. The applicant believes that the implementation of the proposed project will allow BMH-D to meet the needs of the people it serves with the highest quality in a sophisticated, compassionate and caring environment at the hospital.

The applicant indicates that 1,402.7 full-time equivalents (FTEs) personnel are currently employed at BMH-D and projects an addition of 84.2 FTE personnel for the proposed project at an annual cost of \$3,787,290. No new services or additional beds will be offered as a result of this project.

The total proposed capital expenditure is \$19,204,530, at an estimated cost of \$523.49 per square foot for new construction and \$235.91 per square foot for renovated space (see Expenditure Summary for complete percentage breakdown of project). The applicant projects that the capital expenditure will be obligated October 2016 and the project is expected to be complete by March 2018.

The applicant indicates the proposed capital expenditure will be funded through Baptist Memorial Health Care Corporation, the applicant's parent organization. The application contains a signed letter from Baptist Memorial Health Care Corporation's Chief Financial Officer, attesting to the financial feasibility of the project.

The MSDH Division of Health Facilities Licensure and Certification approved the site for the project on March 21, 2016.

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 June 6, 2016.

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

A. State Health Plan (SHP)

The *FY 2015 Mississippi 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 and standards stated in the *Plan as follows*:

SHP Criterion 1 - Need

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

In projects that do not involve the addition of acute care beds, the applicant shall document the need for the proposed project. In addition, projects that involve construction, renovation, or expansion of emergency department facilities shall include a statement indicating whether the hospital will participate in the statewide trauma system and describe the level of participation, if any. The applicant documents that Baptist Memorial Hospital-Desoto participates in the statewide trauma system as a Level III Trauma Center.

The project involves approximately 25,000 square feet of new construction for a new addition to the existing hospital. The first floor area will be shelled and the second floor location of the current emergency department will be extended over the new first floor addition. Renovation of 13,500 square feet will occur within the existing sections of the second floor ED.

According to the applicant, the current emergency department contains 34 treatment positions and these rooms cannot accommodate the number of patients seeking care in the emergency department at its heaviest capacity of patients in the evening. BMH-D asserts that the space is not available adjacent to the ED or within the current hospital.

The following table indicates BMH-D's ED visits for 2012 through 2015:

Historical ED Visits

Year	2012	2013	2014*	2015
Visits	60,659	62,056	58,568	58,300

The above table indicates that there were 58,300 visits in the current ED for FY 2015. 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 shows that the applicant's proposed ED expansion from 34 to 46 treatment positions is within the range for space requirements for ED areas.

The MSDH, Division of Health Facilities Licensure and Certification substantiate the FY 2014 ED visits of 58,568 at Baptist Memorial Hospital-Desoto's emergency department.*

In addition, BMH-D used the Centre for Health Planning, the American College of Emergency Physicians and reasonable projections into the future to analyze the need for additional treatment spaces at BMH-D's emergency department. 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 ED visits for years (2016) 58,300 and (2017) 58,600 during the first phase of implementing the proposed project, respectively. In addition, after the proposed project is complete the applicant projects the number of ED visits for years (2018) 60,100, (2019) 61,932 and (2020) 62,400, respectively.

SHP Criterion 5 – Charity/Indigent Care

The applicant states that BMH-D affirms it will continue to provide a reasonable amount of indigent care.

According to the applicant, BMH-D is committed to treating all patients who qualify for financial assistance, BMH-D utilizes payment procedures for uninsured or medially underinsured, which consideration to other payment arrangements with insurance companies, managed care networks, and government sponsored programs.

SHP Criterion 6 – Reasonableness of Cost

Baptist Memorial Hospital-Desoto submits that the projected renovation and new construction costs fall within the range of previously approved MSDH projects and the projected non-fixed equipment and fixed equipment costs are also reasonable when compared with the equipment costs of other hospital renovation and expansion projects approved by the MSDH.

SHP Criterion 7 – Floor Area and Space Requirements

The gross square footage of the proposed project is 38,500 square feet consisting of 25,000 square feet of new construction and 13,500 square feet of renovation. The applicant states that the proposed project is consistent with the benchmarks involving multiple projects. The proposed new construction is designed in compliance with all state and local building codes with national standards, including the American Institute of Architects guidelines.

SHP Criterion 8 – Renovation vs. Replacement

The applicant submits that the proposed renovation/expansion project does not apply to 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 2015 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 the proposed project is to improved the emergency services for the patients, and have access for all residents of the hospital's service area by offering adequate treatment space for the current and projected increase. The proposed construction of a larger and more sophisticated ED 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. The applicant asserts that with the implementation of this project BMH-Desoto will be able to meet the needs of the people it serves with the highest quality in a sophisticated, compassionate, and caring environment at the hospital.

GR Criterion 3 – Availability of Alternatives

The applicant considered three alternatives before proceeding with the proposed project:

Maintain the Status Quo: BMH-D contends that this option would have been for the hospital to continue operation without change. This alternative was rejected because it would not allow the hospital to effectively meet the needs of the people it serves. The growth in ED visits requires attention. Travel to other facilities for emergency services is not acceptable.

Establish Freestanding Emergency Services: BMH-D contends that this option was dismissed because it would have resulted in a less efficient service configuration that would have been more operationally expensive and potentially encounter staffing difficulties.

Add Space to the Existing Hospital for the ED: BMH-D contends that this option to add additional space to the existing hospital for emergency services is the only reasonable solution.

GR Criterion 4 - Economic Viability

The applicant asserts that the charges associated with this proposed project 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 experienced and calculations of need from internal corporation resources and external consultants. No new services are being added, but the facilities are being upgraded to improve current access, satisfaction and flexibility for immediate need and some future growth.

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

GR Criterion 5 - Need for the Project

- a. **Access by Population Served:** The applicant states that the community need for the proposed expansion of the ED is evidence related to the growth in the emergency visits. The patient population includes many medically underserved groups, including racial and ethnic minorities, Medicaid recipients, and the indigent. The ED is designed with attention for all ages and special accommodations for pediatric and geriatric patients of the service area.

BMH-D asserts that one of the primary goals of this proposed project is to establish an ED, which will be more operationally efficient in order to reduce the cost of delivering health services while improving access and patient satisfaction.

- b. **Relocation of Services:** The project does not propose the relocation of services outside the existing facility.
- c. **Community Reaction:** The application contains five letters of support from the following: General Surgery of Southaven, Desoto County Economic Development Council, Stanley C. Thompson, MD, FACEP of Team Health, FedEx Ground, David A. Hooker MD of Team Health and Southaven Internal Medicine for the proposed project.

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

GR Criterion 6 - Access to the Facility or Service

Baptist Memorial Hospital-Desoto submits that it is accessible to all residents of the service area, and does not exclude patients because of race, age, sex, ethnicity, or ability to pay. Medically underserved groups will continue to have access to all facilities and services available in the emergency department.

The applicant submits that the percentage of gross patient revenue (GPR), actual and projected dollar amount of health care provided to medically indigent care patients for the last two years, and projections for the next two years of operation are as follows for this project:

Gross Patient Revenue Amount

	Medically Indigent/Charity Care	Charity Care (\$)
Historical Year 2015	Less than 1%	\$1,810,185
Projected Year 1	Less than 1%	\$1,846,905
Projected Year 2	Less than 1%	\$1,883,316

According to the applicant, all patient groups, including the medically underserved, will greatly benefit from the addition to the emergency department at BMH-D.

GR Criterion 7 - Information Requirement

Baptist Memorial Hospital-Desoto affirmed 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

Baptist Memorial Hospital-Desoto is located in General Hospital Service Area 1 (GHSA 1). The applicant believes that it will not be able to continue serving the growth in the ED utilization without implementing the proposed project. The applicant states that the proposed project will offer space to accommodate current need and reasonable future ED need for BMH-D's service area. The project is not expected to have an adverse effect on other health care providers in GHSA 1.

As previously mention, the Department received no letters of opposition concerning the proposed project.

GR Criterion 9 - Availability of Resources

The applicant indicates that 1,402.7 full-time equivalents (FTEs) personnel are currently employed at BMH-D and projects an addition of 84.2 FTE personnel for the proposed project at an annual cost of \$3,787,290. According to the applicant, the highly trained professional staff will continue providing ED services, and the physicians at BMH-D will continue to staff the emergency department under contract. BMH-D asserts that if necessary, it has access to the resources of Baptist Memorial Health Care Corporation for training and recruitment of other qualified personnel for the proposed project.

GR Criterion 10 – Relationship to Ancillary or Support Services

The applicant states that all necessary support and ancillary service is available for the existing emergency department services and will be for this proposed emergency department addition. The applicant does not expect any changes in cost or charges as a direct result of the project.

GR Criterion 14 - Construction Projects

- a. **Cost Estimate:** The application contains a cost estimate prepared by a Earl Swenson Associated, Inc., Nashville, Tennessee, 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 25,000 square feet of new construction.
- e. **Cost per Square Foot:** The applicant estimates the cost of new construction to be \$523.49 per square foot. *RSMMeans Building Construction Cost Data (RSMBCCD), 2015, Edition*, lists new construction costs for hospital construction ranges as \$206 to \$355 per square foot. The applicant projects renovation will cost \$235.91 per square foot. The *RSMBCCD* does not compare costs of renovation projects.

GR Criterion 16 - Quality of Care

Baptist Memorial Hospital-Desoto 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 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	\$7,352,000	38%
b.	Construction Cost -- Renovation	2,430,000	13%
c.	Capital Improvements	0	
d.	Total Fixed Equipment Cost	3,917,686	20.40%
e.	Total Non-Fixed Equipment Cost	1,779,641	9.12%
f.	Land Cost	0	0
g.	Site Preparation Cost	420,000	2.19%
h.	Fees (Architectural, Consultant, etc.)	752,400	4%
i.	Contingency Reserve	1,400,000	7.29%
j.	Capitalized Interest	0	0
j.	Legal and accounting fees	0	0
k.	Other	1,152,803	6%
	Total Proposed Capital Expenditure	\$19,204,530	100%

The above capital expenditure is proposed for construction and renovation of the emergency department addition at BMH-D. The proposed project involves 25,000 square feet of new space. The project will also require 13,500 square feet of renovated space at approximately \$235.91 per square foot. Staff calculated cost of new construction to be \$347.25 per square foot and cost of renovation to be \$216.36 per square foot (see Attachment 2). The costs for projects listed in *The RSMeans Building Construction Cost Data, 2015 Edition*, ranged from \$202 to \$355 per square foot, with a median cost of \$258 per square foot. The RSMBCCD does not compare costs of renovation projects.

B. Method of Financing

The applicant indicates the proposed capital expenditure will be funded through Baptist Memorial Health Care Corporation, the applicant's parent organization.

C. Effect on Operating Cost

The Hospital's three-year projected operating statement is presented at Attachment 1.

D. Cost to Medicaid/Medicare

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

Payor Mix	Utilization Percentage (%)	First Year Revenue (\$)
Medicare	54	\$ 627,651,215
Medicaid	13	146,922,436
Commercial	14	158,913,303
Self Pay	9	103,766,521
Charity Care	0	1,846,905
Other	<u>11</u>	<u>131,382,201</u>
Total	100	\$ 1,170,482,580

V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES

The Division of Medicaid was provided a copy of this application for review and comment. The Division states that effective September 1, 2012, it changed the methodology by which it reimburses outpatients services so that the cost incurred, subsequent to the date, will no longer affect outpatient payments.

In addition, 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. Based on the Division of Medicaid's analysis, the estimated increase in cost outlier payments resulting from this project cannot be determined at this time. The Division of Medicaid opposes this 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 2015 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-Desoto for an emergency department addition at the hospital.

Attachment 1

Baptist Memorial Hospital-Desoto Three-Year Operating Statement (With Project)			
	Year 1	Year 2	Year 3
Revenue			
Patient Revenue:			
Inpatient	\$610,591,400	\$622,803,228	\$ 635,259,293
Outpatient	559,891,180	571,089,004	582,510,784
Gross Patient Revenue	\$1,170,482,580	\$ 1,193,892,232	\$ 1,217,770,076
Charity Care	1,846,389	1,883,316	1,920,983
Deductions from Revenue	902,196,762	920,240,697	938,645,511
Net Patient Revenue	\$ 266,439,430	\$271,768,218	\$ 277,203,583
Other Operating Revenue	3,972,838	3,972,838	3,972,838
Total Operating Revenue	\$ 270,412,268	\$ 275,741,056	\$ 281,176,421
Expenses			
Operating Expenses:			
Salaries	\$ 82,386,013	\$ 84,033,734	\$ 85,714,408
Benefits	20,463,898	20,873,176	21,290,639
Supplies	62,773,131	64,028,594	65,309,166
Services	59,847,072	61,044,014	62,264,894
Lease	0	0	0
Depreciation	14,139,489	14,139,489	14,139,489
Interest	3,589,616	3,589,616	3,589,616
Other	15,702,288	15,859,312	16,017,908
Total Expenses	\$ 258,901,507	\$ 263,567,934	\$268,326,120
Net Income (Loss)	\$ 11,510,761	\$ 12,173,122	\$ 12,850,301
Assumptions			
Inpatient days	81,528,	83,998	84,630
Outpatient days	84,851	87,446	88,111
Procedures	60,100	61,932	62,400
Charge/outpatient day	\$6,599	\$6,531	\$6,611
Charge per inpatient day	\$ 7,489	\$7,415	\$7,506
Charge per procedure	\$19,476	\$19,277	\$19,516
Cost per inpatient day	\$3,176	\$3,138	\$3,171
Cost per outpatient day	\$3,051	\$3,014	\$3,045
Cost per procedure	\$4,308	\$3,256	\$4,300

Attachment 2
Baptist Memorial Hospital-Desoto
Emergency Department Addition
Computation of Construction and Renovation Cost

<u>Cost Component</u>	<u>Total</u>	<u>New Construction</u>	<u>Renovation</u>
New Construction Cost	\$7,352,000	\$7,352,000	
Renovation Cost	\$2,430,000		\$2,430,000
Total Fixed Equipment Cost	\$0	\$0	\$0
Total Non-Fixed Equipment Cost	\$1,779,641		
Land Cost	\$0	\$0	\$0
Site Preparation Cost	\$420,000	\$420,000	\$0
<i>Fees (Architectural, Consultant, etc.)</i>	\$752,400	\$0	\$0
<i>Contingency Reserve</i>	\$1,400,000	\$909,160	\$490,840
<i>Capitalized Interest</i>	\$0	\$0	\$0
<i>Other</i>	\$1,152,803	\$0	\$0
Total Proposed Capital Expenditure	\$19,204,530	\$8,681,160	\$2,920,840
Square Footage	38,500	25,000	13,500
<i>Allocation Percent</i>		64.94%	35.06%
Costs Less Land, Non-Fixed Eqt., Other	\$17,424,889	\$8,681,160	\$2,920,840
Cost Per Square Foot	\$452.59	\$347.25	\$216.36

Source: Mississippi Certificate of Need Review Manual, Revised 2011 and FY 2015 MSHP.