

**Division of Health Planning and Resource Development
November 2002**

**CON Review HG-CB-0902-065
Baptist Memorial Hospital-DeSoto, Inc., Southaven
Expansion and Renovation With Equipment Addition
Capital Expenditure \$174,932,430
Location Southaven, DeSoto County, Mississippi**

STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

Baptist Memorial Hospital-DeSoto, Inc (BMH-DeSoto) presently operates as a 199-bed (169 acute and 30 rehabilitation beds), nonprofit, short-term, acute care hospital in Southaven, DeSoto County, Mississippi through an affiliation with Baptist Memorial Health Care Corporation of Memphis, Tennessee. BMH-DeSoto also operated a 120-bed long-term Progressive Care Center. The Baptist Cancer Institute at BMH-DeSoto provides radiation therapy services and, through its community education programs, offers, in cooperation with the American Cancer Society, numerous health screening. Such screening include mammography, prostate cancer, skin cancer, and colon cancer.

BMH-DeSoto's occupancy rate, average length of stay (ALOS), and the Medicaid utilization rate for the medical/surgical beds for the three most recent fiscal years are outlined below:

**Baptist Memorial Hospital-DeSoto
Utilization Data**

Year	Occupancy Rate (%)	ALOS (Days)	Medicaid * Utilization Rate (%)
1999	73.29	4.38	15.27
2000	87.89	4.58	10.71
2001	72.95	5.19	11.96

***Source: Division of Health Facilities Licensure and Certification,
Mississippi State Department of Health**

Applicant recently received CON authority to establish: cardiac catheterization and open-heart surgery services expansion and upgrade; a comprehensive cancer center; mobile lithotripsy services; ambulatory surgery services; a diagnostic imaging center; and PET imaging services.

B. Project Description

BMH-DeSoto proposes an expansion project that will culminate in an ten-story, 339-bed tertiary care faculty that will involve 410,555 square feet in new construction and 99,930 square feet in renovation. The new facility configuration supports a requested licensed inpatient capacity of 339 beds including 30 rehabilitation and 309 acute hospital beds (an total increase of 140 beds) and will also include surgical services, critical care and step-down beds along with expanded laboratory and pharmacy. Renovation will effectively reuse the existing structure.

This proposal includes an additional 140 acute care beds. The facility will maintain 30 rehabilitation beds in their current specialty location and 33 women's service beds in a recently completed addition. The remaining 136 existing acute beds will be relocated to the new patient tower where the additional 140 beds will be distributed to form a 36-bed critical care unit and five levels of 48-bed units, resulting in a ten-story patient tower configuration, with the tenth floor "shelled in" and reserved for future use.

BMH-DeSoto projects an increase of 235.46 full-time equivalent personnel at an estimated annual cost of \$8,257,513 for the proposed project. Applicant affirms that the project will not change cost or charges for ancillary or support services that will increase as a result of the proposal.

The total proposed capital expenditure \$174,932,430 is composed of the following: new construction - 46.6 percent (\$81,527,575), renovation - nine percent (\$15,786,925), fixed equipment - 11.3 percent (\$19,789,580), non-fixed equipment - 9.5 percent (\$16,555,035), site preparation - 1.7 percent (\$3,000,000), fees - 6.9 percent (\$12,037,740), contingency reserve - 6.8 percent (\$12,037,740), capitalized interest - six percent (\$11,211,435), and other - 1.8 percent (\$3,175,460).

According to the applicant, implementation of the project will begin immediately upon approval and is expected to be completed within four years. This long term plan is due to the sequence of moves involved in phasing relocation of operational hospital departments with minimal interference. BMH-DeSoto will work with the Division of Health Facilities Licensure and Certification to maintain and possibly expand inpatient capacity by using mobile and temporary services in the existing structure. The potential interim accommodations will provide relief as the needs increase over the development period. Renovations will occur over an extended time frame and are anticipated to be completed within six to seven years.

Division of Health Facilities Licensure and Certification has approved the site for this proposed project.

II. TYPE OF REVIEW REQUESTED

Projects which involve the addition of beds to a health care facility are reviewed in accordance with Section 41-7-19, subparagraph (1)(c), and 41-7-193, Mississippi Code of 1972, amended, and duly adopted rules, procedures, plans, criteria, and standards of the Mississippi State Department of Health.

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

A. State Health Plan (SHP)

The 2003 SHP contains criteria and standards which an applicant must meet before receiving CON authority to add acute care beds. This application complies substantially with all applicable criteria and standards.

SHP Criterion 1 – Need

The FY 2003 Mississippi State Health Plan requires an applicant to document the need for the proposed bed expansion and to also document that the facility in question has maintained an occupancy rate of least 70 percent for the most recent two years.

BMH-DeSoto performed, or caused to be performed, a regression analysis to indicate the utilization that will result if the trends established by the past 44 months continue. The regression modeling indicates that 314 **additional** acute care hospital beds will be needed by 2011. Applicant stated that the regression model considered historical trends only; hence, Applicant also applied a population-based model that analyzed the needs of various age cohorts over an extended but reasonable time frame. The needs were analyzed at the DRG level and included considerations for length of stay. The population based model indicates that 135 **additional** beds will be needed by 2011. Applicant expects 235,000 people to reside in BMH-DeSoto's primary and secondary Mississippi service areas by 2005, increasing to approximately 270,000 by 2010.

**Inpatient Utilization Forecast
 Baptist Memorial Hospital-DeSoto**

Regressive Calculation					Population Calculation			
Year	Patient Days	ADS	Need at 70% OCC	Add Beds From 199	Patient Days	ADC	Need at 70% Occ	Add Beds From 199
FY 02	56,184	154	220	21	56,207	154	220	21
FY 03	63,802	175	250	51	59,167	162	232	33
FY 04	72,195	198	283	84	62,087	170	243	44
FY 06	80,569	221	315	116	65,007	178	254	55
FY 07	88,963	244	348	149	67,927	186	266	67
FY 08	97,377	267	381	182	70,847	194	277	78
FY 08	105,770	290	414	215	74,497	204	292	93
FY 09	114,164	313	447	248	78,147	214	306	107
FY 10	122,558	336	480	281	81,7972	224	320	121
FY 11	130,952	359	513	314	85,447	234	334	135

Using the population model to forecast utilization as shown in the previous table, with allowance for flexibility to temporarily relocate services during minor maintenance and routine renovation, the conclusion was that a tower with nine floors is the most appropriate solution. The proposed facility will total 339 licensed beds and a tenth floor will have space available for future use. The project's combination of a new tower with renovation is anticipated to reasonably meet the needs for acute care beds for several years. If the proposal is approved, planning will continue during the construction period and other CON applications will be submitted as required, according to the applicant.

BMH-DeSoto has maintained an occupancy rate of 73.29, 87.89, and 72.95 percent during the years of 1999, 2000, and 2001, respectively. BMH-DeSoto has requested designation as a trauma care facility within the Delta Trauma Care System.

SHP Criterion 3 - Charity/Indigent Care

BMH-DeSoto has provided, and will continue to provide, a reasonable amount of charity and indigent care. During FY 2001, \$2,604,998 worth of traditional charity care, \$10,045,604 worth of unpaid amounts of Medicaid, and \$42,545,988 worth of unpaid amounts of Medicare were written off by the applicant.

SHP Criterion 4 - Project Cost: a. Comparable Square Foot Cost

BMH-DeSoto projects 410,555 square feet of new construction at an estimated \$276.40 per square foot and 99,930 square feet of renovation at a prorated renovation cost of \$226.73. Applicant explains that large equipment items, such as scanners, have been removed from fixed equipment, as instructed, and capitalized interest and contingency fees for this complicated addition are significant amounts that affects the formula used by the Department to calculate cost per square foot. Applicant states, additionally, that the applicant's recent construction experiences indicates that the costs are reasonable. Other projects recently approved by the state have ranged as high as \$296.22 per square foot for new construction of a replacement hospital (Amendment to CON # 359 HG-RLS-0999-109, River Region HealthCare Systems) and more than \$650 per square foot for renovation (CON REVIEW HG-R-1101-086, Health Management Association, Inc., d/b/a River Oaks Health Systems, River Oaks Hospital) depending on the complexity of the areas and the construction sequencing requirements. The complexity of the area affects cost. Construction of a new freestanding building, such as a replacement hospital, can be less expensive than merging a new facility with an existing functioning hospital, states the applicant.

Means Building Construction Cost Data, 2002 Edition suggest the lower, median, and upper quadrant cost of total hospital construction to be \$135, \$157, and \$233 per square foot, respectively.

SHP Criterion 4 - Project Cost: b. Equipment Cost

Applicant states that the equipment costs are based on information provided by equipment planning consultants and the procurement department of Baptist Memorial Health Care Corporation and are based on list cost and known available reductions through contractual purchasing arrangements.

SHP Criterion 5 - Floor Areas and Space Requirements a. Gross Square Footage, b. Architectural Design, and c. Special Considerations

BMH-DeSoto states that the space program and schematics were prepared by a professional architectural firm and compare favorably with national and state norms for similar projects.

SHP Criterion 6 - Renovation Cost Compared to New Construction Cost

The cost of the proposed renovation and expansion project does not exceed 85 percent of the cost of a replacement facility.

SHP Criterion 7 - Specific Services

This proposal does not involve new services, but provides additional space to provide previously approved existing services.

B. General Review Criteria

Chapter 8 of the *Mississippi Certificate of Need Review Manual*, Revised 2000, addresses general review criteria, by which all CON applications are reviewed. This application complies substantially with applicable general review criteria.

GR Criterion 2 - Long Range Plan

According to the applicant, this project is consistent with the long range BMH-DeSoto development plan to accommodate the health needs of the community it serves.

GR Criterion 3 - Availability of Alternatives

Applicant states that one alternative to the new construction was to continue expanding services by relocating them into adjacent professional office buildings. However, the office buildings do not meet hospital facility standards and could not appropriately support complex medical services. The necessary major renovation would have been at least as expensive as the new tower. This alternative was dismissed since it would result in a less effective service configuration that would have been more operationally expensive and would lack flexibility for future adaptation without additional major cost and service disruption.

Applicant also considered the construction of a separate freestanding facility. However, the enhancements in service quality that comes from staff exposure to multidisciplinary issues, and the operational efficiencies and skill proficiencies that come from interactions with other professionals in a sophisticated setting could have been diluted. Divided staff would have reduced individual development opportunities and would have increased cost with some required duplication. After searching and evaluating alternatives to solve the inability of the existing physical plant to support continued development, this proposal was the best selection.

GR Criterion 4 - Economic Viability

Based on the operation projections provided by the applicant, this appears to be an economically viable project. Financial projections contained in the application reflect a net income of \$93,196; \$1,853,077; and \$8,739,145 during the first, second, and third year of operation of the completed project, respectively.

GR Criterion 5 - Need

Applicant has demonstrated through regressive calculation that BMH-DeSoto will need 314 additional beds by 2011, and by population calculation an additional 135 beds for the same period.

GR Criterion 6 - Accessibility

BMH-DeSoto is a nonprofit, tax-exempt hospital affiliated with the Baptist Memorial Health Care Corporation. During the 2000 and 2001 fiscal years, the most recent complete periods available, BMH-DeSoto provided the following community benefits:

Benefits for the Indigents:		
	FY 2000	FY 2001
Traditional Charity Care	\$ 1,192,620	\$ 2,604,998
Unpaid Amounts of Medicaid	<u>7,801,470</u>	<u>10,045,604</u>
Total	<u>\$ 8,994,090</u>	<u>\$ 12,650,602</u>
Benefits for the Broader Community:		
Unpaid Amount to Medicaid	<u>\$ 32,327, 336</u>	<u>\$ 42,545,988</u>
Total	<u>\$ 41,321,426</u>	<u>\$ 55,196,590</u>

The application contained 18 letters of support and some 16 additional letters were received the Department after the application was filed. These letters came from physicians, elected officials, and other community leaders in Memphis and north Mississippi. The Department also received two letters of opposition from Jackson, Mississippi law firms. See GR Criterion 8 below for discussion on these two letters.

GR Criterion 7 - Information Requirement

BMH-DeSoto affirms 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 days of request for same.

GR Criterion 8 - Relationship to Existing Health Care Systems

BMH-DeSoto is located in General Hospital Services Area 2 (GHSA 2), which contains 1,454 licensed acute care beds, distributed among 15 hospitals. The proposed project involves 140 additional acute care beds in GHSA 2. Staff believes that the proposed project will provide greater access to care for patients of GHSA 2 and should have no adverse affect on other hospitals in the referenced service area.

Letters of Opposition

Watkins Ludlam Winter & Stennis, P.A. and Brunini Attorneys At Law, both of Jackson, Mississippi and both, directly or indirectly, seem to be representing the City of Olive Branch, wrote letters of opposition to the BMH-DeSoto expansion project. Both law firms raised interesting and factual points pertaining to the distribution of acute care beds in DeSoto County. These comments would be helpful if the Department were considering competing CON applications for hospital beds in each town, but, as it stands, only Baptist Memorial Hospital-DeSoto has an application under consideration.

Brunini raised concerns that the bed need projections contained in the application would not be until 2011.

According to the applicant, the top floor of the ten-story patient tower, which is designed to contain 48 beds, will be left vacant until such time as they are needed. Considering the drastic population expansion of DeSoto County and surrounding areas, staff is convinced that they will be needed soon. Staff is also convinced that it would be less expensive to construct the tenth story of the patient tower during this project rather than adding it later.

GR Criterion 9 - Availability of Resources

This proposed project expands existing service capacity only. No new services will be added by this proposal. Recruitment and training programs are in place and are functional. And the applicant has access to the vast recourse of the Baptist Memorial Health Care Corporation for training and recruitment of qualified personnel.

GR Criterion 16 - Quality of Care

The applicant is in compliance with the Minimum Standards of Operation for Mississippi Hospitals and has been accredited by the Joint Commission of Accreditation of Healthcare Organizations.

IV. FINANCIAL FEASIBILITY

A. Capital Expenditure Summary

Construction Cost – New	\$ 81,527,575
Construction Cost – Renovation	15,786,935
Total Fixed Equipment* Cost	19,789,580
Total Non-Fixed Equipment Cost	16,555,035
Land Cost	
Site Preparation Cost	3,000,000
Fees	12,037,740
Contingency Reserve	11,848,680
Capitalized Interest	11,211,435
Other Cost	<u>3,175,460</u>
Total Estimated Project Cost	<u>\$174,932,430</u>

* Applicant states in this application that..."Large equipment items such as scanners, etc. have been removed from fixed equipment as instructed."

The proposed capital expenditure project will involve 410,555 square feet of new, construction, 99,930 square feet renovation, related equipment, and related expenses of a building project of this complexity. Of the construction project, 80.42 percent will be new construction and 19.58 percent will be renovation. New construction is estimated at \$276.40 per square feet and renovation will be \$26.73 per square feet.

B. Method of Financing

The proposed project will be financed through accumulated cash reserve of BMH-DeSoto in the amount of \$64,032,430 (37.2 percent) and a loan from Baptist Memorial Health Care Corporation of Memphis, Tennessee in the amount of \$110,000,000 (62.8 percent).

C. Effect on Operating Cost

Applicant projects the following expenses, utilization, and results from operation for the first three years following completion of the entire project:

Baptist Memorial Hospital-DeSoto
Three Year Operating Projection

Patient Revenue	Year 1	Year 2	Year 3
Inpatient	\$ 294,919,254	\$ 341,124,790	\$ 393,622,241
Outpatient	<u>89,467,358</u>	<u>87,839,770</u>	<u>106,738,827</u>
Gross Patient Revenue	384,386,612	438,964,560	500,361,067
Deductions From Revenue			
Contractual Allowances	196,037,172	228,261,571	260,187,755
Charity Care	<u>6,534,572</u>	<u>7,901,362</u>	<u>9,506,860</u>
Total Deductions From Revenue	202,571,745	236,162,933	269,694,615
Net Patient Revenue	181,814,868	202,801,627	230,666,452
Other Operating Revenue	<u>1,057,196</u>	<u>1,088,912</u>	<u>1,121,579</u>
Net Operating Revenue	182,872,064	203,890,538	231,788,031
Operating Expense			
Salaries, Wages, and Benefits	68,242,507	75,208,708	82,556,870
Professional Fees	13,453,531	1,373,906	1,415,123
Supplies and Miscellaneous Expense	52,106,207	59,046,107	66,770,644
Utilities	2,941,521	3,185,860	3,442,212
Purchased Services	6,092,558	6,790,832	7,550,966
Equipment Maintenance	2,890,199	3,130,275	3,382,154
Other Expense	2,909,153	2,996,427	3,086,320
Bad Dept	<u>28,175,539</u>	<u>32,176,102</u>	<u>36,676,466</u>
Operating Expense w/o Int & Depr	164,691,573	183,908,217	204,880,755
Income before Int, Depreciation	18,180,491	19,982,321	26,907,276
Depreciation	12,511,181	12,636,292	12,762,655
Interest	<u>6,976,114</u>	<u>6,892,952</u>	<u>6,805,476</u>

total Int. and Dep.	19,487,295	19,529,245	19,568,131
Income after Int & Depreciation	(1,306,804)	453,077	7,339,145
Non-Operating Revenue	<u>1,400,000</u>	<u>1,400,000</u>	<u>1,400,000</u>
Net Income	<u>\$ 93,196</u>	<u>\$ 1,853,077</u>	<u>\$ 8,739,145</u>

**Baptist Memorial Hospital-DeSoto
Assumptions of First Year of Operation of Completed Project**

Patient Days	70,847
Cost Per Patient Day	\$2,325
Charge Per Patient Day	\$2,566

D. Cost to Medicare /Medicaid

The impact of the project on third party payors is as follows:

Patient Mix	Utilization Percentage	First Year Cost
Medicaid	12.2	\$ 46,895,166
Medicare	32.4	124,541,262
Other Payors	<u>55.4</u>	<u>212,950,184</u>
Total	100	\$384,386,612

V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES

The Division of Medicaid estimates that the increase annual cost to Medicaid for the proposed capital expenditure to be \$1,309,567 for inpatient hospital services.

VI. CONCLUSION AND RECOMMENDATION

This project complies substantially with the criteria and standards for the addition of 140 additional hospital beds in General Hospital Service Area 2 as contained in the *2003 State Health Plan*, the Certificate of Need Review Manual (2000 revision), all adopted rules, procedures, and plans of the Mississippi State Department of Health.

The Division of Health Planning and Resource Development recommends approval of this application for the addition of 140 hospital beds submitted on behalf of Baptist Memorial Hospital-DeSoto, Inc.

