

**DIVISION OF HEALTH PLANNING AND RESOURCE DEVELOPMENT
AUGUST 2005**

**CON REVIEW: HG-NIS-0605-019
BAPTIST MEMORIAL HOSPITAL-BOONEVILLE, INC.
ESTABLISHMENT OF PORTABLE LITHOTRIPSY SERVICES
CAPITAL EXPENDITURE: \$-0-
LOCATION: BOONEVILLE, PRENTISS COUNTY, MISSISSIPPI**

STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

Baptist Memorial Hospital-Booneville, Inc. (BMH-Booneville) is a non-profit hospital owned by Prentiss County, Mississippi, and the City of Booneville, Mississippi, and leased by Baptist Memorial Health Care Corporation, a Tennessee non-profit corporation. A four-member Board of Directors governs the operation of the hospital. BMH-Booneville is licensed as a 99-bed short-term, acute care facility, with a 15-bed geriatric psychiatric unit.

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

Baptist Memorial Hospital-Booneville Utilization Rates			
Fiscal Year	Occupancy Rate (%)	ALOS (Days)	Medicaid* Utilization Rate (%)
2002	24.42	5.80	4.19
2003	22.06	5.86	3.89
2004	20.54	5.72	3.08

Source: Division of Health Facilities Licensure and Certification, MDH

B. Project Description

Baptist Memorial Hospital-Booneville, Inc. requests Certificate of Need (CON) authority to offer part-time, portable extracorporeal shock wave lithotripsy (ESWL) services at the hospital. The applicant anticipates that United Medical Services, Inc. (UMS) will provide the mobile lithotripter for the service.

The lithotripter performs a non-invasive procedure to treat kidney stones by concentrating high energy shock waves on kidney calculi, breaking them into small particles. In turn, the particles are passed through the urinary tract system. Before the lithotripter is activated, trained staff uses radiographs, fluoroscopy, or ultrasound to produce images of the calculus, enabling physicians to better locate the stone(s).

The applicant states that offering the service at BMH-Booneville will provide convenience for both the patients who currently must travel to other locations for lithotripsy and for the referring physician. The applicant further states that lithotripsy access at the hospital will enhance scheduling both for patients and physicians, as well as being cost effective. The mobile lithotripsy unit will be moved into an operating room at the facility on a specific day to be determined by the referring physicians and the vendor. Initially, the unit will be available at the hospital for the equivalent of one day per month.

BMH-Booneville will use mobile lithotripsy equipment provided by UMS. On November 18, 1998, FLG Corporation, Evansville, Indiana, (which is now called United Medical Services, Inc.); received a determination of non-reviewability to operate in Mississippi. The anticipated equipment to be used by UMS is the Dornier Compact Delta Lithotripter. BMH-Booneville states that it will operate the mobile service on a part time basis, initially the equivalent to one full day per month. Furthermore, the applicant projects that it will provide 48 procedures the first full year of operation, 57 procedures the second year, and 63 procedures the third year. The Mississippi Department of Health, Division of Licensure and Certification has approved the hospital site for Renal ESWL services. The applicant states that no renovation will be needed for this project. There is no capital expenditure associated with this project.

II. TYPE OF REVIEW REQUESTED

The Mississippi Department of Health reviews applications for the provision of mobile renal ESWL services in accordance with Section 41-7-191, subparagraph (1) (d) (xiii) Mississippi Code 1972 Annotated, as amended, and duly adopted rules, procedures, plans, criteria, and standards of the Mississippi 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 September 6, 2005.

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

A. State Health Plan (SHP)

The *FY2005 State Health Plan* contains criteria and standards which the applicant is required to meet before receiving CON authority for provision of ESWL services. This application is in substantial compliance with applicable criteria and standards.

SHP Criterion 1 - Need: An applicant proposing to offer Renal ESWL services must project a minimum utilization of three procedures per month for 12 months per year (36 procedures per year).

a. Historical utilization of equipment: The applicant states that for the three most recent years, BMH-Booneville had an average of 81 patients per year who were assigned diagnoses of renal calculi. The hospital estimates that 80 percent of these patients are potential candidates for ESWL. The estimated number of ESWL cases from the group of

patients diagnosed at the hospital is 65. (80 percent X 81 cases = 64.8 potential cases for ESWL). To allow for a start-up period for the proposed service in the first year, an adjusted factor of 75 percent is applied and the estimate is further reduced to a conservative number of 48 cases (75 percent X 65 potential case = 48 actual cases).

b. Referrals from other facilities: The applicant proposes the use of a mobile ESWL route to provide renal lithotripsy services to qualified patients residing in the Booneville medical trade area and did not use patients that might be referred by other facilities in the need determination. The application did contain letters from several local physicians attesting that they see collectively between 144 and 200 renal calculi patients yearly. The applicant estimates that if one-third of the conservative estimate of 144 cases referred by local physicians were ESWL patients, the number would be 48 (144 referrals X 33.33 percent = 48 cases).

To confirm the estimate of the number of cases in the BMH-Booneville service area that might benefit from lithotripsy services, a forecasting model provided by Claritas was applied to the Prentiss County residents. Using a 36 percent market share for BMH-Booneville, the applicant confirmed the estimate of 48 ESWL procedures during the first full year of operation.

SHP Criterion 2 - Documentation of Medical Personnel

The applicant affirms that there will be board-certified general surgeons, a certified urologist, and a radiologist available 24 hours per day within the facility to provide emergency services as required. The board-certified radiologist will have experience in x-ray, CT, and ultrasound imaging.

SHP Criterion 3 - Imaging Capabilities

BMH-Booneville provides whole-body CT scanning and ultrasound imaging at the hospital.

SHP Criterion 4 - Scope of Privileges

The applicant affirms that the governing body of BMH-Booneville will grant appropriate scope of privileges for access to their proposed lithotripter to any qualified physician who applies.

SHP Criterion 5 - Accessibility

The applicant affirms that the facility will offer a reasonable amount of indigent/charity care as described in the FY 2005 *Mississippi State Health Plan*, as well as service all residents of the area regardless of age, race, gender, or disability.

SHP Criterion 6 - Recording of Data

BMH-Booneville affirms that the facility will record and maintain the information required by this criterion and shall make the data available to the Mississippi Department of Health regarding the operation of the ESWL equipment. Also, the applicant states it will record

the source of payment for procedures and the total amounts charged during the fiscal year.

SHP Criterion 7 - Staffing

The facility has an active Radiology Department with full support services. In addition, the hospital has an established urological referral practice.

SHP Criterion 8 - Guidelines and Standards

The applicant affirms that all persons using the lithotripsy equipment will meet the applicable minimum standards for training and proficiency in the operation of renal ESWL equipment as outlined in the American Urological Association's guidelines.

SHP Criterion 9 - CON Exemption

The applicant provided information to indicate that the lithotripsy equipment vendor has CON approval as determined by the Mississippi Department of Health.

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

The long range plan for BMH-Booneville is to provide cost-effective and appropriate services as conveniently as possible for the patient and medical staff.

GR Criterion 3 - Availability of Alternatives

The applicant has determined that providing ESWL service part-time through a mobile lithotripsy equipment provider was the most cost-effective alternative.

GR Criterion 4 - Economic Viability

Three year operating projections reflect a net profit of \$42,174, \$53,888, and \$67,441 during the first, second, and third years of operation, respectively.

- a. **The proposed charges** for lithotripsy at BMH-Booneville will be the same as those of other Baptist hospitals operating in north Mississippi.
- b. **The projected level of utilization** is consistent with the minimum state requirement of three procedures per month for the first year of operation.
- c. **The proposal reflects that there is no capital expenditure** associated with this project.

GR Criterion 5 - Need for the Project

- a. **The need of the population served:** According to the Combined Four Quarter Patient Origin Study published by the Department, the primary service area of BMH-Booneville is Prentiss County, serving more than 75 percent of its population. The secondary service area includes sections of Alcorn and Tishomingo Counties.

Baptist Memorial Hospital-Booneville Establishment of Portable Lithotripsy Service Booneville, Mississippi Service Area		
<u>Residence</u>	<u>Percent Origin</u>	<u>Cumulative Percent</u>
Prentiss	76.25	76.45
Alcorn	9.65	81.10
Tishomingo	5.79	91.89

The applicant states that this proposal will make ESWL services more accessible to BMH-Booneville patients.

- b. **The only other facility providing ESWL services** in the primary and secondary service areas is Magnolia Regional Health Center in Alcorn County. This facility performed 26 kidney ESWL procedures during 2004. ESWL procedures performed in General Hospital Service Area 1 are listed below.

ESWL Procedures Performed in GHSA 1 (FY 2004)		
<u>Facility</u>	<u>County</u>	<u>FY 2004 ESWL Procedures</u>
Baptist Memorial Hospital-Golden Triangle	Lowndes	141
Baptist Memorial Hospital-North Mississippi	Lafayette	83
Baptist Memorial Hospital-Union County	Union	CON
Magnolia Regional Health Center	Alcorn	26
North Mississippi Medical Center	Lee	524
Oktibbeha County Hospital	Oktibbeha	110
Tri-Lakes Medical Center	Panola	CON

Source FY 2006 Mississippi State Health Plan

- c. This project is not expected to have any adverse impact on the health care system. Patients who are included as candidates for the lithotripsy service are currently being diagnosed at the hospital. The same mobile equipment that is providing the service in other BMH facilities in Mississippi will be positioned at BMH-Booneville, according to the applicant.
- d. The application contained letters of endorsement from five local physicians.

GR Criterion 6 - Access to Facility or Service

According to the applicant, neither BMH-Booneville nor UMS Inc. will have policies or procedures which exclude patients because of race, age, ethnicity, or ability to pay. The applicant promises to provide a reasonable amount of charity care as described in the *FY 2005 State Health Plan*.

GR Criterion 7 - Information Requirement

BMH-Booneville will record and maintain the following information and make it available to the Department as requested:

- a. Utilization data, e.g., number of indigent, Medicare, and charity admissions and inpatient days of care;
- b. Age, race, sex, zip code and county of origin of patients;
- c. Cost/charges per patient day and/or cost/charge per procedure, if applicable; and
- d. Any other data pertaining directly or indirectly to the utilization of services by medically indigent, Medicaid, or charity patients which may be required, i.e. discharge diagnosis, service provided, etc.

GR Criterion 8 - Relationship to Existing Health Care System

The proposed services will add to the continuum of care available to residents of northeast Mississippi. BMH-Booneville is part of the Baptist Memorial Care Corporation. According to the applicant, the entire Baptist System participates in the effective delivery of care throughout the region and the cost of care is contained when services are appropriately distributed.

GR Criterion 9 - Available of Resources

- a. UMS, the owner of the mobile lithotripter equipment, will provide a registered nurse and an X-ray technician. The nurse will hold a Mississippi license and the x-ray tech will be ARRT registered and Mississippi licensed, according to the applicant.
- b. The current medical staff which includes a board-certified urologist has expressed support for the ESL capability, according to the applicant.
- c. BMH-Booneville currently has adequate staffing to provide pre-procedure testing, preparation, and recovery, according to the applicant.
- d. The Baptist Memorial Health Care Corporation will render sufficient support and management resources to complete this project, according to the applicant. No capital investment is required.

GR Criterion 10 - Relationship to Ancillary or Support Services

Lithotripsy services will be provided through BMH-Booneville's outpatient services under the direction of a qualified registered nurse. The patient will be prepared for treatment and returned to the outpatient area after completing the procedure. The hospital's case

management/utilization review department will arrange pre-certification with the patient's payor as required, according to the applicant.

GR Criterion 11- Relationship with Health Professional Training Programs

As part of the Baptist Memorial Health Care System, BMH-Booneville participates in a number of health professional training programs. Patients receiving lithotripsy treatment may be observed by students in educational programs with appropriate consultation and consent, according to the applicant.

GR Criterion 16 - Quality of Care

The applicant states that BMH-Booneville is accredited by the Joint Commission on Accreditation of Healthcare Organization.

IV. FINANCIAL FEASIBILITY

A. Capital Expenditure

The applicant indicates that no capital expenditure is associated with this project.

B. Method of Financing

This project requires no financing.

C. Effects on Operating Cost

The applicant projects the following expenses, utilization and results from the first three years of operation.

Baptist Memorial Hospital-Booneville Establishment of a Portable Lithotripsy Service Booneville, Mississippi Three-Year Projected Operating Statement			
Expenses	Year 1	Year 2	Year 3
Salaries & Benefits-Professional Fees	\$ 3,090	\$ 3,853	\$ 4,471
Supplies (Supplies, Lab Rx)	15,936	19,870	23,060
Rent/Equipment Lease	63,000	77,250	84,750
Other Expenses	14,400	17,955	20,837
Total Operating Expense	\$ 96,426	\$ 118,928	\$ 133,118
Gross Patient Revenue	336,000	418,950	486,203
Contractual Adjustments	-197,400	-246,134	-285,644
Net Patient Service Revenue	\$ 138,600	\$ 172,816	\$ 200,559
Net Operating Revenue	\$ 42,174	\$ 53,888	\$ 67,441
Procedures	48	57	63
Cost per Procedure	\$ 2,009	\$ 2,086	\$ 2,113
Charge per Procedure	\$ 7,000	\$ 7,350	\$ 7,718

D. Cost to Medicaid/Medicare

Baptist Memorial Hospital-Booneville Establishment of Portable Lithotripsy Service Reimbursement by Payor-First Year		
Payor	Percent by Payor	First Year Net Revenue
Medicare	6.0	\$ 8,316
Medicaid	30.3	\$ 41,996
Private Pay	63.7	\$ 88,288
Total	100.0	\$138,600

Source: BMH-Booneville Portable Lithotripsy Services (ESWL) Application

V. RECOMMENDATION OF OTHER AFFECTED AGENCIES

The Division of Medicaid was provided a copy of this application for review, but provided no comments.

VI. CONCLUSION AND RECOMMENDATION

This project submitted on behalf of Baptist Memorial Hospital-Booneville for the establishment of renal ESWL lithotripsy service utilizing an existing mobile lithotripsy equipment vendor is in substantial compliance with the criteria and standards for the provision of such services as contained in the *FY 2005 State Health Plan*; Chapter 8 of the *Mississippi Certificate of Need Review Manual, 2000*, revised; and all adopted rules, procedures, and plans of the Mississippi Department of Health.

The Division of Health Planning and Resource Development recommends approval of this application.