STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

The University of Mississippi Medical Center (UMMC) is a state owned not-for-profit acute care teaching inpatient hospital with full emergency and outpatient services. The facility has a management service agreement with Quorum Health Resources of Nashville, Tennessee. The full authority and ultimate control of the hospital remains with the Board of Trustees of State Institutions of Higher Learning, with administrative authority delegated to the Chancellor and Vice Chancellor for Health Affairs of the University of Mississippi Medical Center. The facility is accredited through the Joint Commission on Accreditation of Healthcare Organizations.

The hospital is currently licensed to operate 664 medical/surgical beds, 21 adult psychiatric beds, 12 pediatric psychiatric beds, and 25 rehabilitation beds. The total licensed bed capacity is 722.

The occupancy rates, average lengths of stay (ALOS), and the Medicaid utilization rates for UMMC are as follows for the years 2006 through 2008:

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Occupancy Rate (%)</th>
<th>ALOS (Days)</th>
<th>Medicaid Utilization Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>60.81</td>
<td>6.42</td>
<td>51.72</td>
</tr>
<tr>
<td>2007</td>
<td>56.57</td>
<td>6.33</td>
<td>51.62</td>
</tr>
<tr>
<td>2008</td>
<td>61.38</td>
<td>6.57</td>
<td>50.97</td>
</tr>
</tbody>
</table>

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

The University of Mississippi Medical Center requests Certificate of Need (CON) authority for renovation of the adult emergency department (AED) on the campus of the existing hospital. The applicant states that the proposed project is located on the basement level of the acute wing of UMMC. The proposed project consists of renovation of the existing adult emergency department and expanding into space vacated by the current pediatric emergency department. The major components of the 26,000 square feet of renovation include four major trauma rooms, 12 acute care treatment rooms, and 17 fast track CDU treatment spaces for psych observation rooms. In addition to modernizing the facility to meet current standards of care, the proposed reconfiguration of the AED will improve patient flow, increase capacity, reduce patient wait times, and optimize utilization of resources within the department.

According to the applicant, the proposed project is necessary to meet UMMC’s mission as the state’s only in-state Level 1 Trauma hospital and will provide continued teaching capability to support the University of Mississippi Medical Center’s academic training mission. No major equipment (fixed or non-fixed) purchases and no additional inpatient rooms are planned for this proposed project.

The total proposed capital expenditure is $7,130,000 and of that amount, approximately 85.16 percent is for renovation, 8.81 percent for fees (architectural, consultant), and 6.03 percent for contingency reserve. The applicant proposes to finance this project through cash reserves.

The applicant indicates that the current schedule shows a projected bid date of August 15, 2010. If this date holds then UMMC can expect a contract within 15-30 days afterward for obligation of the proposed capital expenditure, and the proposed project will be complete April 3, 2011.

MSDH Division of Health Facilities Licensure and Certification finds the site plan for the proposed project to be acceptable for the stated activity.

II. **TYPE OF REVIEW REQUIRED**

The Mississippi State Department of Health reviews applications for construction, renovation, expansion, or capital improvement involving a capital expenditure in excess of $2,000,000, under the applicable statutory requirements of Section 41-7-191, subparagraph (1) (j) 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 December 7, 2009.
III. CONFORMANCE WITH THE STATE HEALTH PLAN AND OTHER ADOPTED CRITERIA AND STANDARDS

A. State Health Plan (SHP)

The FY 2010 State Health Plan contains criteria and standards which an applicant is required to meet before receiving CON authority for construction, renovation, expansion, or capital improvement involving a capital expenditure in excess of $2,000,000. The application is in substantial compliance with these criteria.

SHP Criterion 1 – Need

Projects which do not involve the addition of any acute care beds: The applicant shall document the need for the proposed project. Documentation may consist of, but is not limited to, citing of licensure or regulatory code deficiencies, institutional long-term plans (duly adopted by the governing board), recommendations made by consultant firms, and deficiencies cited by accreditation agencies (JCAHO, CAP, etc.). In addition, for projects which involve 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.

According to the applicant, renovation of the adult emergency department will allow UMMC to offer a higher quality of patient care in a Level 1 Trauma Center. This will be accomplished by modernizing the facility to meet current standards of care, reconfiguration to improve patient flow, and optimizing utilization of resources within the department.

This project will not involve additional beds or the offering of a new institutional health service.

University of Mississippi Medical Center participates in the statewide trauma system as the state’s only in-state Level 1 Trauma Center.

SHP Criterion 2 – Bed Service Transfer/Reallocation/Relocation

This project does not involve the transfer/reallocation or relocation of beds.

SHP Criterion 3 – Uncompensated Care

The applicant submits the following percentages of historical/projected gross patient revenue provided or to be provided to the medically indigent/charity care patients for the past two years and for the first two years of this project:
Gross Patient Revenue
Amount

<table>
<thead>
<tr>
<th></th>
<th>Medically Indigent (%)</th>
<th>Charity Care (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical Year 2007</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>Historical Year 2008</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Projected Year 1</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Projected Year 2</td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

The applicant asserts that emergency care is provided regardless of the patient’s ability to pay.

**SHP Criterion 4 – Cost of Project**

According to the applicant, the proposed project is the only Level 1 Trauma emergency department in Mississippi. Therefore, there is no data for comparison for this proposed project.

a. Cost per square foot: This project involves renovation of the adult emergency department which involves renovating the basement area of the acute wing into a modern emergency department on the University of Mississippi Medical Center campus.

   The proposed renovation project shall cost approximately $274.23 per square foot.

b. The proposed project does not involve the purchase of fixed or non-fixed equipment.

**SHP Criterion 5 – Floor Area and Space Requirements**

The applicant indicates that the total project will be 26,000 square feet of renovated space. The applicant asserts that this project was developed by a cross section of clinical staff, administration, physicians, and design professionals. University of Mississippi Medical Center’s reference guide for the proposed project: America Institute of Architects (AIA) Guidelines for Design and Construction of Hospital and Health Care Facilities.

**SHP Criterion 6 –Renovation versus Replacement**

According to the applicant, emergency services are a key component of modern healthcare. Previous studies analyzed the construction of new facilities, but due to the location of the current infrastructure, renovation was a more desirable option. This was the justification for its decision.
SHP Criterion 7 – Need for Service

The applicant states that each year there are approximately 60,000 visits to UMMC’s adult emergency department. The current adult emergency department is grossly undersized and poorly designed to accommodate today’s needs in both patient acuity and visit volumes.

According to UMMC, the proposed solution includes renovating the existing adult emergency department by expanding into space vacated by the current pediatric emergency department and administrative areas. In addition, the applicant believes the proposed reconfiguration of the adult emergency department will improve patient flow, increase capacity, reduce patient wait times, and optimize utilization of resources within the department,

Note: All projects are reviewed under the Plan in effect at the time the application is received. This application was received September 9, 2009, and the 2010 State Health Plan had an effective date of September 1, 2009.

B. General Review (GR) Criteria

Chapter 8 of the Mississippi Certificate of Need Review Manual, Revised September, 2009; addresses general criteria by which all CON applications are reviewed. This application is in substantial compliance with general review criteria.

GR Criterion 3 – Availability of Alternatives

As previously mentioned, the applicant asserts that the emergency services are a key component of modern healthcare. Previous studies analyzed the construction of new facilities, but due to the location of the current infrastructure, renovation was more desirable. The applicant believes the proposed project will improve the health care system by providing a more effective and efficient emergency department with the increased space dedicated to exam rooms, treatment rooms, and patient waiting areas. The expanded and redesigned emergency department will allow similar services to be located together while remaining adjacent to radiological and surgical services.

GR Criterion 4 - Economic Viability

The application contains a statement signed by the Director of Finance, CPA of UMMC, attesting to the viability of this project. The project is being funded by the hospital’s cash reserves.

GR Criterion 5 - Need for the Project

The applicant states that each year there are approximately 60,000 visits to UMMC’s adult emergency department. The current adult emergency department, according to the applicant, is grossly undersized and poorly designed to accommodate today’s needs in both patient acuity and visit volumes.

The applicant asserts that all populations will be served regardless of their ability to pay. The emergency services provided to the public will not change with this project. Only its location within UMMC will change. All necessary notification, signage, and to the media will be used
to communicate to the public its new location. No additional services are being proposed.

The applicant states that all available space will be used for new patient care areas. This is the only Level 1 emergency department located in the state of Mississippi.

The application received six (6) letters of support for the proposed project. The Department received no letters of opposition concerning the proposed project.

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

a. **Medically Underserved Population**: The University of Mississippi Medical Center asserts that it serves 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. The applicant believes that the proposed project will improve the health care system by providing a more effective and efficient emergency department.

b. **Performance in Meeting Federal Obligations**: The applicant states that the hospital has no existing obligations under any federal regulation requiring provision of uncompensated care, community service, or access by minority/handicapped persons.

c. **Unmet Needs to be Served by Applicant**: The University of Mississippi Medical Center states that the hospital is a disproportionate share facility and qualifies for Medicaid UPL payments. The hospital does not restrict access by medically indigent patients.

**GR Criterion 7 - Information Requirement**

The applicant asserts 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**

University of Mississippi Medical Center states that it is the only Level 1 Trauma hospital in the state of Mississippi. The current population accesses the emergency department via self-referrals, EMS, physician referrals, and hospital to hospital transfers.

The applicant believes that failure to implement the proposed project will cause the current adult emergency department to continue to be congested. Patient wait times will increase and patient satisfaction will decrease, which could deter patients from seeking needed emergency medical care.

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.
GR Criterion 9 - Availability of Resources

University of Mississippi Medical Center asserts that this is a renovation/replacement project for existing emergency services. The current emergency department is staffed appropriately and sufficient coverage is available for any visit volume changes.

GR Criterion 14 - Construction Projects

a. **Cost Estimate**: The application contains a cost estimate prepared by Charles R. Alexander, AIA and Calvin Sibley, AIA, Dale/Morris Architects.

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. The project does not involve new construction.

e. **Cost per Square Foot**: The proposed project involves approximately 26,000 square feet of renovated space at an estimated cost of $274.23 per square foot (See Attachment 1). The *Means Construction Cost Data, 2009* does not compare costs for renovation.

GR Criterion 16 - Quality of Care

The University of Mississippi Medical Center 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 on Accreditation of Health Care Organizations and quality is monitored and reviewed by the hospital’s Performance Improvement and Risk Management Departments.
IV. FINANCIAL FEASIBILITY

A. Capital Expenditure Summary

The total estimated capital expenditure is allocated as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Construction Cost -- New</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b. Construction Cost -- Renovation</td>
<td>$6,070,174</td>
<td>85.16%</td>
</tr>
<tr>
<td>c. Capital Improvements</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>d. Total Fixed Equipment Cost</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>e. Total Non-Fixed Equipment Cost</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>f. Land Cost</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>g. Site Preparation Cost</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>h. Fees (Architectural, Consultant, etc.)</td>
<td>628,856</td>
<td>8.81%</td>
</tr>
<tr>
<td>i. Contingency Reserve</td>
<td>430,970</td>
<td>6.03%</td>
</tr>
<tr>
<td>j. Capitalized Interest</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>k. Other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Proposed Capital Expenditure</strong></td>
<td><strong>$7,130,000</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The above capital expenditure is proposed for renovation of UMMC adult emergency department. The proposed project involves approximately 26,000 square feet of renovated space at an estimated cost of $274.23 per square foot (See Attachment 1). The Means Construction Cost Data, 2009, does not compare costs of renovation projects.

B. Method of Financing

The applicant proposes to finance this project through University of Mississippi Medical Center’s cash reserves.

C. Effect on Operating Cost

The University of Mississippi Medical Center states that the proposed project will not result in significant changes in revenues or expenses. It is merely a renovation project of existing space to move existing services on UMMC’s campus. The applicant asserts that the only effect on operating cost will be $356,500 depreciation cost per year for the proposed project.

D. Cost to Medicaid/Medicare

As stated above, the proposed project will not result in significant changes in revenues or expenses. It is merely a renovation and replacement project for existing adult emergency services on UMMC campus. The project is being financed from University of Mississippi Medical Center’s cash reserves.
V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES

The Division of Medicaid estimates that the increased annual cost to Medicaid for the proposed project will be $83,593 in inpatient hospital services and that outpatient services will be paid as outlined in the Medicaid State Plan. The Division of Medicaid does not oppose this project.

VI. CONCLUSION AND RECOMMENDATION

This project is in substantial compliance with the criteria and standards for the construction, renovation, expansion, capital improvements, replacement of health care facilities, and addition of hospital beds as contained in the FY 2010 State Health Plan; the Mississippi Certificate of Need Review Manual, Revised September 1, 2009; 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 University of Mississippi Medical Center for renovation of the existing adult emergency service department.
### Computation of Renovation Cost*

<table>
<thead>
<tr>
<th>Cost Component</th>
<th>Total</th>
<th>Renovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Construction Cost</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Renovation Cost</td>
<td>$6,070,174</td>
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</tr>
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<td>Total Non-Fixed Equipment Cost</td>
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<td>0</td>
</tr>
<tr>
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<td>$628,856</td>
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<tr>
<td>Contingency Reserve</td>
<td>$430,970</td>
<td>$430,970</td>
</tr>
<tr>
<td>Capitalized Interest</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Proposed Capital Expenditure</strong></td>
<td><strong>$7,130,000</strong></td>
<td><strong>$7,130,000</strong></td>
</tr>
</tbody>
</table>

Square Footage: 26,000

| Allocation Percent                      | 100%       |
| Costs Less Land, Non-Fixed Eqt. & Other | $7,130,000 |

*Source: Mississippi Certificate of Need Review Manual, Revised February 23, 2008*