## DIVISION OF HEALTH PLANNING AND RESOURCE DEVELOPMENT (THURMAN) MAY 2004

CON Review: HG-RLS-0304-014 Forrest General Hospital Pharmacy Relocation/Renovation Capital Expenditure: \$2,582,900 LOCATION: HATTIESBURG, MISSISSIPPI

#### STAFF ANALYSIS

#### I. PROJECT SUMMARY

#### A. Applicant Information

Forrest General Hospital (FGH) is a five hundred-four (504) bed, general acute-care short term medical and surgical facility located in Hattiesburg, Mississippi. Forrest General Hospital is a not-for-profit, tax exempt institution owned by Forrest County, Mississippi. The hospital is governed by a seven-member Board of Trustees appointed by the Forrest County Board of Supervisors.. All citizens of Forrest County are eligible to serve on the hospital's Board of Trustees. Forrest General Hospital is accredited by the Joint Commission on Accreditation of HealthCare Organizations (JCAHO).

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

Forrest General Hospital							
Fiscal Year	Occupancy Rate (%)	ALOS (Days)	Medicaid* Utilization Rate (%)				
2001	72.08	4.57	18.8%				
2002	64.70	4.72	12.1%				
2003	61.24	4.59	29.2%				

Source: Division of Health Facilities Licensure and Certification, MSDH

#### B. PROJECT DESCRIPTION

Forrest General Hospital requests Certificate of Need (CON) authority for the relocation/renovation of its Pharmacy. Forrest General Hospital proposes to renovate and expand the existing Pharmacy Services within the hospital. The existing Pharmacy is located in the basement and will be relocated to an adjacent area of the basement, which became available when the new Dietary Department was relocated to the first floor.

The current Pharmacy has 4,039 square feet and the proposed renovation will have approximately 7,100 square feet of space. The renovated space will include:

Creating a more functional compounding area;

Creating a new order entry area;

Expansion of the bulk storage area;

Additional workspace for Pharmacy interns;

Creating a new narcotic storage area with better control measures;

Creating a more functional administrative suite and conference area; and Acquisition of a McKesson Robotic-Px automated pick-fill system.

There will be no fixed equipment acquisition for the project. However, the non-fixed equipment will include:

- 1. McKesson Robot-Px automated pick-fill system
- 2. Pharmacy casework
- 3. Pass through refrigerators
- 4. Hepa Filter mixing/chemotherapy hoods
- 5. Packaging equipment for unit dose

The renovated area will include 7,100 square feet of existing space. This space will provide for a new compounding area, order entry processing, bulk storage, narcotic storage, I.V./chemotherapy mixing, unit dose packaging, Pharmacy intern workplaces, administrative offices/conference room, and a new McKesson Robotic-Px automated pick-fill system.

There will be no change in range or type of services provided by this project. There will be no bed changes. An equipment list with description was included in the application. Also, there will be no significant change to the mechanical, plumbing and electrical system as the expansion/renovation will work off existing mechanical, plumbing and electrical systems.

The applicant states that the Pharmacy has been in its present location since 1978. All casework, with minor exception, is the original casework installed at that time. The IV hoods are various ages that range from 25 to 12 years old. Technology and ergonomics have advanced to the point that all existing equipment would need replacing. The existing system is a manual pick system of gathering medications. It takes three (3) employees approximately eight (8) hours to complete the present process. The new system is fully automated and will take one (1) employee eight (8) hours to complete the same amount of work.

The purpose of replacing the existing system is to serve the pharmaceutical needs of an ever-expanding patient population. According to the applicant, the new automated system will be safer, more efficient and less prone to error. This will provide a bar code medication system that applicant states will satisfy all requirements and expectations of Institution of Safe Medication Practices (ISMP) and Joint Commission on Accreditation of HealthCare Organizations (JCAHO). The existing equipment will not be used as backup. It will be scrapped with the Board of Trustees approval.

The capital expenditure for this project will be obligated within thirty (30) days of the approval of the Certificate of Need application and is expected to be completed within approximately thirty six (36) months of the date of initial approval.

#### II. TYPE OF REVIEW REQUIRED

Projects which propose the renovation/relocation and acquisition of non-medical equipment are reviewed in accordance with Section 41-7-191, subparagraphs (1)(j) and Section 41-7-173 (c) (ii), Mississippi Code of 1972, 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 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 June 3, 2004.

# III. CONFORMANCE WITH <u>THE STATE HEALTH PLAN</u> AND OTHER ADOPTED CRITERIA AND STANDARDS

## A. State Health Plan (SHP)

The FY 2004 State Health Plan contains criteria and standards which the applicant is required to meet before receiving CON authority for the renovation/relocation and acquisition of non-medical equipment. This application is in substantial compliance with the overall objectives of the *State Health Plan*. The need criteria is reflected in the General Review Criterion 5.

## 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 applicant states that this proposal has been approved by the hospital's Board of Trustees and is consistent with the hospital's long range plan.

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

The applicant submits that the first alternative to be considered was to do nothing. This was rejected because the current Pharmacy lacks adequate space, and the floor plan layout is not designed to meet the growing demands of the hospital's pharmaceutical services. The following alternatives were considered:

*Option A* - A new ancillary service building is being evaluated to more centrally locate off-site activities/functions closer to the hospital. Off-site activities/functions considered for the new building are: 1) Human Resources, Information Services, Public Safety, Employee Education, Finance and Patient Accounts.

This building would be located on the hospital's campus adjacent to the parking deck. This option was rejected because the Pharmacy would be located outside the hospital, which would impact the delivery of medications to patients in the hospital. Unit dose refill carts, "start-up medications" and "stat" medications would have to be delivered by a vehicle and would not be efficient or cost effective.

*Option B* – Recommended Site: The recommended site, adjacent to the existing Pharmacy, is optimal because of the following reasons:

- a. *Ease of Delivery* This location offers ease of medication delivery to all patient care areas since it will be located across the corridor from the service elevators. Likewise, it is adjacent to the Employee Outpatient Pharmacy.
- b. *Minimize Cost* The cost to renovate the space adjacent to the department is less than building an off-site facility, of which the Pharmacy services

would be a tenant.

c. *More Efficient* – The proposed renovated space is designed for more efficiencies by better workflow, ergonomically designed casework, more adequate bulk storage, a separate unit dose packing area and the McKesson Px automated pick/fill system. In addition, the transport distance to and from the service elevators is reduced.

The applicant believes that the proposed project is the best alternative to meet the growing needs of quality and efficiency in patient care.

Option C - Final Objectives: The proposed project is the best alternative to ensure Forrest General Hospital is able to provide appropriate pharmaceutical services. This will enable the hospital to continue to provide high-quality, technically superior healthcare at a reasonable cost to the residents of South Mississippi.

- 1. The renovation and expansion of the Pharmacy should have no impact on other health care providers within the region.
- 2. There are no training or research programs involved with this project.
- 3. Failure to implement this project would greatly impact the efficiency and quality of Pharmacy services rendered to patients.

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

The applicant has determined that this project is financially feasible. The three year operating projections reflects an operating expense of \$256,668,069 the first year, \$264,368,112 the second year, and \$275,299,155 the third year. Excess revenue over expenses are projected at \$2,078,008, \$2,140,346, and \$2,204,558 for the first three years, respectively.

According to FGH, the project has been determined to be financially feasible by the hospital's management staff. Economic viability of the proposed project is demonstrated in the financial analysis section, as well as the three-year Projected Operating Statement.

#### **GR Criterion 5 - Need for the Project**

The current Pharmacy was renovated in 1978 and only minor casework revisions have been made since that date. The existing square footage is 4,039. Due to new procedures and equipment for maintaining a state-of-the-art Pharmacy, additional space and equipment is required. The new design of the Pharmacy will increase its productivity. The receiving of supplies and medications, bulk storage, bulk packaging, sterile preparation, chemotherapy preparation and order entry will all be increased in size. The workflow of these new areas is shown in the schematic floor plan. In addition, a new McKesson automated Robotic-Px pick-fill system will be purchased. The new design will allow the applicant to more effectively process 1,600 orders, 1,500 IV's, and 10,000 doses of medications each day. The applicant submits the following doses filled by month and the projected utilization for succeeding three (3) years, and method used for projection:

MONTH	2001	2002	2003
January	402,121	446,985	448,065
February	376,608	392,283	416,932
March	418,242	424,751	427,050
April	394,246	436,236	391,173
May	411,560	448,281	407,588
June	398,399	430,101	386,185
July	393,780	446,675	397,374
August	426,864	424,401	403,527
September	402,266	460,287	453,506
October	395,793	408,599	421,075
November	380,898	404,198	412,348
December	351,911	416,241	413,722
Total	4,752,688	5,139,038	4,978,545

Average increase per year from 2001 to 2003 is 2.5%. Projected utilization based on above calculation:

	Total Number					
2004	5,103,008					
2005	5,230,583					
2006	5,361,348					

Forrest General Hospital serves all of the population, including: low income, racial and ethnic minorities, women, and handicapped persons. The hospital is located in an area which is proximal to this group of people and they are familiar with the facility. The application affirms that the hospital provides health care services to any individual who comes to it in need of such services regardless of age, creed, sex, race, or ability to pay.

Utilization of the services						
Women	63%					
Elderly *	95%					
Minorities	25%					
Handicapped **						

\* Age 50 and Above

\*\* Data Not Available

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

The applicant states that the hospital maintains no institutional barriers to medically underserved populations receiving medical care or other clinical services. The percentage of under-served populations receiving care at Forrest General Hospital reasonably reflects their percentages in the service area populations. All demographic groups in the service area will benefit from the Intensive Care and Coronary Units' new and renovated space and ease of access that will be available.

Percentage	Medicaid Utilization
20.7%	Medicaid
22.6%	Medicaid
23.6%	Medicaid

Forrest General Hospital states that it complies with all applicable Federal regulations regarding community service, access by under-served groups, access by handicapped persons, and the provision of uncompensated care. Forrest General Hospital serves Medicare, Medicaid and medically indigent patients and will continue to provide health services to these groups.

Applicant provided the following dollar amount and percentage to medically indigent patients for 2001, 2002, and 2003:

Fiscal Year	Gr	oss Patient Revenue	Charity	Percent
2000	\$	364,076,000	\$ 8,887,945	2.4%
2001	\$	403,044,183	\$ 11,222,216	2.8%
2002	\$	467,065,990	\$ 24,602,272	5.3%
2003	\$	512,791,236	\$ 13,698,366	2.7%

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

The applicant affirms that it will record and maintain the required utilization data and make it available to the Mississippi State Department of Health as required by the Department.

# GR Criterion 8 - Relationship to Existing Health Care Service

This project does not involve the offering of new health care services and therefore should not effect existing health care providers.

#### **GR Criterion 15 - Available Resources**

The applicant currently maintains a full complement of professional and support staff for the provision of Pharmacy services. Forrest General has documented in the application that it has the health management and financial resources necessary to carry forward with this project.

### **GR** Criterion 16 - Relationship to Ancillary or Support Services

There will be no increase or decrease in the use of ancillary or support services as a result of this project. This project does not involve the offering of new health care services.

## GR Criterion 17 - Quality of Care

FGH is in compliance with the <u>Minimum Standards of Operation for Mississippi Hospitals</u>, according to the Division of Health Facilities Licensure and Certification. FGH is accredited by the Joint Commission on Accreditation of Health Care Organizations, and is licensed and certified by the Mississippi State Department of Health and certified for participation in the Medicare and Medicaid programs.

## IV. FINANCIAL FEASIBILITY

## A. Capital Expenditure Summary

FGH submitted the following capital expenditure summary:

Total Expenditure	\$	2,582,900.00
Contingency Reserve	<u>\$</u>	99,000.00
Fees	\$	83,900.00
Total Non-Fixed Equipment	\$	1,300,000.00
Renovation Cost	\$	1,100,000.00

The proposed capital expenditure is for Pharmacy Relocation/Renovation. The average cost of new construction per square foot for this project is \$180.69.

The applicant submitted the following depreciation schedule:

DESCRIPTION	COST		METHOD OF DEPRECIATI ON	USEFUL LIFE	ANNUAL DEPRECIATION EXPENSE		
Renovation	\$	1,100,000	S/L	30 Years	\$	36,667	
Non-Fixed Equipment	\$	1,300,000	S/L	7 Years	\$	185,714	
Fees	\$	83,900	S/L	20 Years	\$	4,195	
Contingency Reserve	\$	99,000	S/L	20 Years	\$	4,950	
Total	\$	2,582,900			\$	231,526	

# B. Method of Financing

The applicant proposes to finance this project with cash reserves. No additional debt is projected.

# C. Effect on Operating Cost

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

EXPENSES		YEAR 1		YEAR 2		YEAR 3
Salaries & Wages	\$	100,967,843.00	\$	103,996,878.00	\$	107,116,785.00
Benefits	\$	20,822,680.00	\$	21,447,360.00	\$	22,090,781.00
Professional Fees	\$	25,674,861.00	\$	26,445,107.00	\$	27,238,460.00
Supplies & Other	\$	89,363,745.00	\$	92,044,657.00	\$	94,805,997.00
Depreciation (Existing)	\$	16,137,265.00	\$	16,628,329.00	\$	17,134,125.00
Interest Expense	\$	3,470,149.00	\$	3,574,255.00	\$	3,681,481.00
Depreciation (New)	\$	231,526.00	\$	231,526.00	\$	231,526.00
TOTAL EXPENSES	<u>\$</u>	256,668,069.00	<u>\$</u>	264,368,112.00	<u>\$</u>	272,299,155.00
NET PAT. SVC. REVENUE	\$	248,520,077.00	\$	255,975,680.00	\$	263,654,950.00
OTHER OPERATING REV.	\$	10,226,000.00	\$	10,532,780.00	\$	10,848,763.00
TOTAL OPERATING REV.	<u>\$</u>	258,746,077.00	<u>\$</u>	266,508,460.00	<u>\$</u>	274,503,713.00
EXCESS OPERATING REV.	<u>\$</u>	2,078,008.00	\$	2,140,348.00	\$	2,204,558.00

According to the applicant, the only additional expense that will be added as a result of this project will be depreciation of \$231,526.

#### D. Cost to Medicaid/Medicare

Based on the additional expense (depreciation) of this project, staff estimates the cost to third party payors to be as follows:

Patient Mix by Type Payor	Utilization Percentage	First Year Expenses
Medicaid	16.5%	\$ 38,202
Medicare	43.7%	\$ 101,176
Blue Cross	12.5%	\$ 28,941
Private Pay	14.0%	\$ 32,414
Self Pay	13.3%	\$ 30,793
TOTAL	<u>100.0%</u>	\$ 231,526

Bad Debt Patients 8.1%, and Charity Care Patients 2.5%

## V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES

The Division of Medicaid (DOM) was provided a copy of this application for review. The DOM estimates the increased annual cost to Medicaid to be \$38,037 for inpatient hospital services. Any portion which may relate to outpatient services will be paid as outlined in the State Plan.

# VI. CONCLUSION AND RECOMMENDATION

This project is in substantial compliance with criteria and standards contained in the <u>2004 State</u> <u>Health Plan</u>; the <u>Certificate of Need Review Manual</u>, revised 2000; 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 Forrest General Hospital for the Pharmacy Renovation/Relocation Project.