

**Division of Health Planning and
Resource Development
February 2004**

**CON Review: HG-NIS-1203-030
Picayune Clinic LLC, DBA Crosby Memorial Hospital
Establishment of Diagnostic Cardiac Catheterization Services
Capital Expenditure: \$1,350,000
Location: Picayune, Pearl River County, Mississippi**

STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

Crosby Memorial Hospital (hereinafter called "Crosby") operates as an entity of Picayune Clinics, LLC. Picayune Clinic, LLC, (hereinafter called "Applicant"), is a manager-managed Mississippi for-profit limited liability company that presently consists of 29 physician members. All powers of the organization are vested in, and the business and affairs of the organization are managed by, a Board of Managers. The Board provides oversight to the administrator who is responsible for managing Crosby and the Chief Financial Officer.

The MSDH Division of Health Facilities Licensure and Certification authorizes Crosby to operate up to 95 acute care medical-surgical beds, but currently the hospital staffs only 60 of these 95 beds. The occupancy rates, average lengths of stay (ALOS), and the Medicaid utilization rates for the facilities for the past fiscal year are as follows:

| Crosby Memorial Hospital Utilization Data* | | | |
|---|-------------------------------|------------------------|--|
| Fiscal Year | Occupancy Rate (%) | ALOS (Days) | Medicaid Utilization Rate (%) |
| 2000 | 30.65 | 3.90 | 20.9 |
| 2001 | 22.51 | 3.33 | 30.8 |
| 2002 | 23.59 | 3.64 | 26.7 |

* Based on 95 licensed beds

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

B. Project Description

Applicant requests Certificate of Need (CON) authority to install a 384 square foot modular cardiac catheterization unit, attached to the outside of the existing Intensive Care Unit of Crosby, for the purpose of providing invasive diagnostic cardiac catheterization services. Applicant proposes to acquire, via a lease/purchase agreement, a modern single-plane cardiovascular imaging system with digital imaging capability. The proposed unit will provide only diagnostic cardiac catheterizations. The nearest cardiac catheterization service is located in Gulfport, some 60 miles from Picayune.

The total proposed capital expenditure of \$1,350,000 will be dedicated to the lease of the modular unit. No construction or renovation will be required to the hospital facility. Applicant proposes to employ three additional personnel at a first-year cost of \$145,000. Applicant

expects to obligate funds for the proposed project within 90 days of the issuance of a CON, and completion of the project within 180 days of obligation.

II. TYPE OF REVIEW REQUIRED

The Mississippi State Department of Health (MSDH) will review applications for a CON for the acquisition or otherwise control of diagnostic cardiac catheterization equipment and/or the offering of diagnostic cardiac catheterization services under the applicable statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code of 1972, as amended. The MSDH will also review applications for CON according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures and plans of the MSDH; and the specific criteria and standards listed below.

The acquisition or otherwise control of diagnostic cardiac catheterization equipment is reviewable if the equipment costs in excess of \$1,500,000. The offering of diagnostic cardiac catheterization services is reviewable if the proposed provider has not provided those services on a regular basis within the period of twelve (12) months prior to the time such services would be offered. Crosby has not offered diagnostic cardiac catheterization within the previous 12 months.

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 on March 4, 2004.

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

A. *State Health Plan* (SHP)

The *FY 2004 Mississippi State Health Plan* addresses policy statements, criteria, and standards which an applicant is required to meet before receiving CON authority to provide diagnostic cardiac catheterization services. The application submitted on behalf of Crosby Memorial Hospital is not in substantial compliance with applicable criteria and standards contained in the *Plan*.

SHP Criterion 1 - Need

The *FY2004 Mississippi State Health Plan* indicates that the applicant shall document a minimum population base of 100,000 in the CC/OHSPA where the proposed diagnostic cardiac catheterization equipment/service is to be located.

Applicant is proposed to be located in CC/OHSPA-7, which is made up of the following six counties: George, Hancock, Harrison, Jackson, Pearl River, and Stone. These six counties have a total 2005 projected population of 479,244*.

***Source:** Mississippi Population Projections for 2005, 2010, and 2015, Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, March, 2002, herein after referred to as "2005 Population Projections".

CC/OHSPA-7 contains five hospitals that have, or are proposing to have, cardiac catheterization services: Biloxi Regional Medical Center, Memorial Hospital at Gulfport, Ocean Springs Hospital, Singing River Hospital, and Crosby Memorial Hospital.

Market share analysis is a methodology utilized by the MSDH to determine the population base of an applicant when more than one provider of a service exists in a General Hospital Planning Area, or, in this case, a Cardiac Catherization/Open Heart Surgery Planning Area. Patient origin data, submitted to the Department by all hospitals for four two-week periods annually, are relied upon to determine the specific service area of a given hospital. This can be done by county and zip codes. A hospital's service area would be the counties in which 95 percent or more of the hospital's patients reside. Once the hospital's specific service area is identified, additional analysis is necessary to determine what other hospital may offer the same service. Then, the patient origin information is used to determine the percentage of patients who utilize potentially competing facilities. These percentages are then applied to the county population to allocate market share of the population for each hospital offering or proposing the same service.

A market share analysis shows that the majority (94.48 percent) of Crosby's patients came from Pearl River County, with the remainder coming from Hancock County (2.71 percent), and Stone County (1.81 percent), during the period October 2002 through July 2003. (see Attachment 1). The analysis further shows that Crosby Memorial Hospital has a 2002-2003 population base of 53,178, far short of the 100,000 projected population base needed to satisfy this criterion.

SHP Criterion 2 - Minimum Procedures

The applicant projects the following utilization for the cardiac services at Crosby for the first three years:

| <u>Year</u> | <u>Catheterization</u> |
|-------------|------------------------|
| One | 120 |
| Two | 160 |
| Three | 312 |

Applicant submits that these projections were based on the *FY 2004 Mississippi State Health Plan* which demonstrates that the projected 2005 population for CC/OHSPA-7 is 479,244. This number represents 16.02 percent of the statewide projected 2005 population. Considering from this data that 16.02 percent of the state's cardiac catheterization procedures will be performed on residents of the CC/OHSPA-7, using data from 2002, one would expect 6,841 cardiac catheterization procedures for CC/OHSPA-7 during 2002. The actual number of cardiac catheterizations performed in CC/OHSPA-7 during 2002 were 4,512, or 10.6 percent of the population. Applicant concludes that CC/OHSPA-7 experienced an outflow of at least 2,329 cardiac patients that may be traveling not just to facilities in the state, but to other facilities out of state during 2002. Applicant expects to provide diagnostic cardiac catheterization services to those residents of the north-western sector of CC/OHSPA-7 who may be seeking such in either other service areas or out of state. The application contained at least four letters from Crosby medical staff attesting that in their estimation over 300 patients per year are transferred to facilities outside Pearl River County for such services.

SHP Criterion 3 - Impact on Existing Providers

Four facilities provide cardiac catheterization services within CC/OHSPA-7: Biloxi Regional, Memorial Hospital at Gulfport, Ocean Springs Hospital, and Singing River Hospital, none of which are within 45 miles of Crosby. Applicant concludes that, since no diagnostic cardiac catheterization providers exist within a 45-mile radius of the proposed facility, no adverse effect will occur on existing cardiac catheterization facilities should this proposal be approved.

These four facilities performed 4,820 and 5,108 cardiac catheterization procedures (both diagnostic and therapeutic) in FY 2001 and 2002, respectively, using six units each year. This equates to approximately 803 and 851 procedures per unit, per year for 2001 and 2002, respectively. Therefore, the applicant is in compliance with this criterion. The following table reflects the existing providers and the number of procedures performed during the past two fiscal years.

| Facility | Number of Cardiac Catheterization Procedures in CC/OHSPA-7 | |
|--------------------------------|--|--------------|
| | FY 2001 | FY 2002 |
| Biloxi Regional Medical Center | 210 | 170 |
| Memorial Hospital at Gulfport | 3,240 | 3,424 |
| Ocean Springs Hospital | 382 | 614 |
| Singing River Hospital | 988 | 900 |
| Total | 4,820 | 5,108 |

SHP Criterion 4 - Staffing Standards

Applicant believes that, based on the hospital's and its Board of Manager's history of recruiting and maintaining a quality group of health and allied health professionals, that adequate personnel will be available to provide quality care, including cardiac care, should this additional service be approved. The application contained an Agreement for Affiliation between Crosby and Forrest General Hospital Cardiovascular Center pertaining to Cardiac Emergency Program Networking, in which Crosby Memorial Hospital and Forrest General Hospital will network in training medical and nursing staff in the treatment of cardiac emergency patients.

SHP Criterion 5 - Staff Residency

Applicant affirms that a verbal agreement has been obtained with the Hattiesburg Clinic for the provision of cardiac evaluation, treatment, and follow-up services, as well as cardiac catheterization lab support. It is agreed that the Cardiologist providing these services will reside within Picayune or its immediate proximity.

SHP Criterion 6 - Recording and Maintenance of Data

Applicant affirms that Crosby will maintain the data required by this criterion and make it available to the Mississippi State Department of Health upon request.

SHP Criterion 7 - Referral Agreement

The application contained a Cardiac Emergency Network Agreement with Forrest General Hospital in Hattiesburg, Mississippi as well as a transfer agreement with that facility. Applicant affirms that this formal referral agreement will be in place and operational at the time of inception of the diagnostic cardiac catheterization laboratory.

SHP Criterion 8 - Patient Selection

Applicant states that patient selection criteria will be formally established by the applicant using standards and criteria established by the American College of Cardiology and after formal review by the Medical Executive Committee. Professional and medical staff will establish and implement protocols and procedures to ensure that high-risk or unstable patients will not be catheterized at Crosby.

SHP Criterion 9 - Regulatory Approval

Applicant requests approval for the addition of a diagnostic cardiac laboratory which will be located at Crosby Memorial Hospital through the submission of this application.

B. General Review (GR) Criteria

Chapter 8, *Mississippi Certificate of Need Review Manual*, revised 2000, contains general criteria by which all applications for Certificate of Need are reviewed. This project is not in substantial compliance with applicable criteria.

GR Criterion 2 - Long Range Plan

The applicant's long-range plans are to enhance a quality healthcare product by bringing additional medical services to the local community. The addition of a cardiac catheterization lab to Crosby will take the hospital a step closer to becoming a comprehensive health care provider for Pearl River County's growing patient population.

GR Criterion 3 - Availability of Alternatives

Applicant affirms that no less costly or more effective alternative than the one proposed exist. The cardiac patients from Pearl River County must travel a minimum of 60 miles to the nearest alternative cardiac catheterization services, which requires unnecessary cost in additional time and expense to the patient and/or the patient's family seeking such services.

GR Criterion 4 - Economic Viability

Applicant projects net income/(loss) of \$(249,400), \$(119,950) and \$169,929 for the first three years of operation, respectively. The project appears to be economically viable after the projected two year loss.

Costs and charges appear to be low, comparable to the charges established by other facilities in the planning area and the state, especially during start-up.

GR Criterion 5 - Need for Project

Applicant has not demonstrated adequate hospital population base to justify the initiation of diagnostic cardiac catheterization services at Crosby Memorial Hospital as required by the FY 2004 State Health Plan. CC/OHSPA-7 has a 2005 projected population of 479,244 and contains four cardiac catheterization providers, for a population ratio of 119,811 per provider. A fifth provider would cause each provider to have a population base of only 95,649 persons, much lower than the 100,000 population base required by the *State Health Plan*; therefore a fifth cardiac catheterization laboratory is not needed and approval of such application would

constitute a duplication of cardiac catheterization services.

GR Criterion 6 - Access to the Facility or Service

Applicant asserts that the hospital provides services to the residents in the service area without regard to race, ethnicity, sex, age, religion, or handicap. The applicant further states that due to its location, the proposed catheterization laboratory will be very accessible to the total population of Pearl River County. The applicant provided 1.2 percent of care to medically indigent patients in 2001 and 1.18 percent in FY 2002.

GR Criterion 7 - Information Requirement

Applicant 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 business days of request.

GR Criterion 8 - Relationship to Existing Health Care Systems

Applicant submits that this project involves an enhancement to the services the hospital already provides to the community. The development of the proposed diagnostic cardiac catheterization service is crucial to ensuring ease of access to and continuity of care, efficient and rapid delivery of health care services, and convenience to residents in the service area.

GR Criterion 9 - Availability of Resources

Applicant states that it has the plans and resources to provide all required staff, including physicians, nursing, allied health, support staff, and financing to initiate this project. The application contains affiliation agreements among Hattiesburg Clinic, Forrest General Hospital, and Crosby.

IV. FINANCIAL FEASIBILITY

A. Expenditure Summary

| | |
|---|--------------------|
| Lease Cost | \$ 1,350,000 |
| Total Proposed Capital Expenditure | \$1,350,000 |

The total capital expenditure will be allocated to the lease of a modular diagnostic cardiac catheterization unit that will be parked adjacent to the existing intensive care unit.

B. Method of Financing

The proposed capital expenditure of \$1,350,000 will be financed through accumulated cash reserve of the applicant.

C. Effect on Operating Cost

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

| <u>Revenue</u> | <u>Year 1</u> | <u>Year 2</u> | <u>Year 3</u> |
|---------------------------------|--------------------------|--------------------------|--------------------------|
| Projected Number of Procedures | 120 | 180 | 312 |
| Charge Per Procedure | \$ 5,000 | \$ 5,000 | \$ 5,000 |
| Gross Revenue | \$ 600,000 | \$ 900,000 | \$ 1,560,000 |
| Contractual Discounts | <u>(308,400)</u> | <u>(462,600)</u> | <u>(801,840)</u> |
| Total Revenue | <u>\$ 291,600</u> | <u>\$ 437,400</u> | <u>\$ 758,160</u> |
| <u>Expenses</u> | | | |
| Cost per Procedure | \$ 4,508 | \$ 3,096 | \$ 1,885 |
| Salaries and Benefits | \$ 145,000 | \$ 149,350 | \$ 153,831 |
| Lease Cost | 372,000 | 372,000 | 372,000 |
| Bad Debt Adjustment | <u>24,000</u> | <u>36,000</u> | <u>62,400</u> |
| Total Expenses | <u>\$ 541,000</u> | <u>\$ 557,350</u> | <u>\$ 588,231</u> |
| Net Projected Income (Loss) | \$ (249,400) | \$ (119,950) | \$ 169,929 |

D. Cost to Medicaid/Medicare

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

| <u>Payor</u> | <u>Utilization Percentage</u> | <u>First Year Cost*</u> |
|--------------|-----------------------------------|-----------------------------|
| Medicaid | 20.2 | \$121,200 |
| Medicare | 52.7 | 316,200 |
| Other Payor* | <u>27.1</u> | <u>162,600</u> |
| TOTAL | <u>100.0</u> | <u>\$ 600,000</u> |

Note: Estimated by staff.

V. **RECOMMENDATIONS OF OTHER AFFECTED AGENCIES**

The Division of Medicaid was provided a copy of this application for comment. The Division of Medicaid estimates the increased annual cost to Medicaid to be \$16,293 for inpatient hospital services. Outpatient services will be paid as outlined in the State Plan.

VI. **CONCLUSION AND RECOMMENDATION**

This project is not in substantial compliance with criteria and standards for establishment of diagnostic cardiac catheterization services, as contained in the *FY 2004 State Health Plan*;

the Mississippi Certificate of Need Review Manual, revised 2000; and all adopted rules, procedures, and plans of the Mississippi State Department of Health. CC/OHSPA-7 has a 2005 projected population of 479,244 and contains four cardiac catheterization providers, for a population ratio of 119,811 per provider. A fifth provider would cause each provider to have a population base of only 95,649 persons, lower than the 100,000 population base required by the *State Health Plan*; therefore a fifth cardiac catheterization laboratory is not needed and approval of such application would constitute a duplication of cardiac catheterization services.

Market share analysis of the hospitals in CC/OHSPA-7 with existing or proposed diagnostic and/or therapeutic cardiac catheterization laboratories indicate that Crosby Memorial Hospital has a market share of only 53,178, far short of the 100,000 population share required in the *State Health Plan*. See Attachment 1.

The Division of Health Planning and Resource Development recommends disapproval of this application submitted by Picayune Clinic, LLC dba Crosby Memorial Hospital for the establishment of diagnostic cardiac catheterization services.

**Attachment 1
 Crosby Memorial Hospital
 Market Share of Hospitals in CC/OHSPA-7 with Existing or Proposed Cath Labs**

| CC/OHSPA-7 | | Biloxi Regional | | Memorial Hosp. | | Ocean Springs | | Singing River | | Crosby Memorial | |
|---------------|----------------|-----------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|-----------------|---------------|
| <u>County</u> | <u>Pop</u> | <u>%</u> | <u>#</u> | <u>%</u> | <u>#</u> | <u>%</u> | <u>#</u> | <u>%</u> | <u>#</u> | <u>%</u> | <u>#</u> |
| George | 21,029 | 2.33 | 490 | 1.16 | 244 | 22.09 | 4,645 | 74.42 | 15,650 | - | - |
| Hancock | 48,906 | 4.26 | 2,083 | 89.92 | 43,976 | 1.55 | 758 | 1.55 | 758 | 2.71 | 1,325 |
| Harrison | 196,833 | 23.25 | 45,764 | 68.41 | 134,653 | 7.32 | 14,408 | 1.01 | 1,988 | - | - |
| Jackson | 142,645 | 7.51 | 10,713 | 1.62 | 2,310 | 38.51 | 54,933 | 52.35 | 74,675 | - | - |
| Pearl River | 54,590 | 0.24 | 131 | 4.80 | 2,620 | 0.24 | 131 | 0.24 | 131 | 94.48 | 51,577 |
| Stone | 15,241 | 16.36 | 2,493 | 72.73 | 11,085 | 5.45 | 831 | 3.63 | 532 | 1.81 | 276 |
| TOTALS | 479,244 | | 61,674 | | 194,888 | | 75,706 | | 93,734 | | 53,178 |

Source: October 2002 - July 2003 Aggregate Patient Origin Studies, MSDH.

Note: Market share analysis is a methodology utilized by the Mississippi State Department of Health to determine the population base of an applicant when more than one provider of a service exists in a General Hospital Planning Area. Patient origin data, submitted to the Department by all hospitals for four two-week periods annually, are relied upon to determine the specific service area of a given hospital. This can be done by county and zip codes. A hospital's service area would be the counties in which 95 percent or more of the hospital's patients reside. Once the hospital's specific service area is identified, additional analysis is necessary to determine what other hospital may offer the same service. Then, the patient origin information is used to determine the percentage of patients who utilize potentially competing facilities. These percentages are then applied to the county population to allocate market share of the population for each hospital offering or proposing the same service.