

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

**CON REVIEW HG-NIS-0305-004  
PHC-CLEVELAND, INC. D/B/A BOLIVAR MEDICAL CENTER  
ESTABLISHMENT OF DIAGNOSTIC CARDIAC CATHETERIZATION SERVICES  
AND THE ACQUISITION OF EQUIPMENT  
CAPITAL EXPENDITURE: \$340,921  
LOCATION: CLEVELAND, MISSISSIPPI**

**STAFF ANALYSIS**

**I. PROJECT SUMMARY**

A. Applicant Information

PHC-Cleveland, Inc. d/b/a Bolivar Medical Center (BMC) is a 165-bed general acute care, short-term medical and surgical facility. BMC is a for-profit hospital leased from Bolivar County Board of Supervisors by PHC-Cleveland, Inc., a Mississippi corporation wholly owned by Province Healthcare Company, located in Brentwood, Tennessee. BMC is governed by a nine (9) member Board of Trustees. BMC is also licensed for 35 long-term care beds and 12 distinct part sub-acute skilled nursing beds.

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

**Bolivar Medical Center  
Utilization Data**

<b>Fiscal Year</b>	<b>Occupancy Rate (%)</b>	<b>ALOS (Days)</b>	<b>Medicaid Utilization Rate (%)</b>
2001	38.24	3.94	44.72
2002	40.49	3.93	41.60
2003	39.52	4.42	45.22

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

B. Project Description

PHC-Cleveland, Inc. dba Bolivar Medical Center requests Certificate of Need (CON) authority to establish diagnostic cardiac catheterization services at its facility in Cleveland, Mississippi. The applicant asserts that the proposed diagnostic cardiac catheterization services will be located in the existing upgraded interventional radiology laboratory on the first floor of the hospital. The area consists of approximately 1,900 square feet of space that was renovated pursuant to CON #R-0506.

The Certificate of Need authorized Bolivar Medical Center to establish an interventional radiology laboratory and to purchase the Allura Single Plane Vascular System (digital subtraction angiography equipment), manufactured by Phillips Medical Systems. The applicant proposes to upgrade the Allura system to be utilized to perform diagnostic cardiac catheterization procedures. Also, the applicant purposes to purchase software upgrades necessary for the Allura unit to perform diagnostic cardiac catheterization procedures. The proposed upgrades consist of the following:

	<b>Vendor</b>
Allura Cardiac Upgrade	Phillips
Hemodynamic Monitoring	GE Medical System
Intra-aortic Balloon Pump	Datascope
Hemochron ACT Unit	Technidyne

According to BMC, all the above equipment has met FDA approval.

BMC asserts that the proposed project will require the addition of 3.3 FTE personnel at an estimated annual cost of \$175,068. However, no renovation or construction is necessary to implement the proposed project.

The total proposed capital expenditure is \$340,921, and of that amount, approximately 90.91 percent is for fixed equipment, and 9.09 percent for contingency reserve. The applicant indicates that the proposed capital expenditure will be funded by accumulated cash reserves from Bolivar Medical Center and Province Healthcare.

The applicant indicates that the capital expenditure will be obligated upon CON approval for the proposed project. BMC anticipates that the proposed services will begin within three months of CON approval.

## **II. TYPE OF REVIEW REQUIRED**

Projects which propose the establishment of cardiac catheterization services are reviewed in accordance with Section 41-7-191, subparagraphs (1) (d)(ii), and (f) 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 During the Course of Review" expires on June 6, 2005.

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

#### A. State Health Plan (SHP)

The *FY 2005 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 by PHC-Cleveland, Inc. dba Bolivar Medical Center is not in substantial compliance with these criteria.

##### **SHP Criterion 1 – Need**

**The applicant shall document a minimum population base of 100,000 in the cardiac catheterization/open-heart surgery planning area (CC/OHSPA) where the proposed diagnostic cardiac catheterization equipment/service is to be located.**

BMC is located in CC/OHSPA 2, which is made up of the following 13 counties: Bolivar, Carroll, Coahoma, DeSoto, Holmes, Humphreys, Leflore, Montgomery, Quitman, Sunflower, Tallahatchie, Tunica, and Washington. According to the 2005 Population Projections, these counties had a total 2005 projected population of 420,937. [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.”]

The *FY 2005 State Health Plan* provides that “At its discretion, the Department of Health may use market share analysis and other methodologies in the analysis of a CON application for the acquisition or otherwise control of cardiac catheterization equipment and/or the offering of cardiac catheterization services. The Department shall not rely upon market share analysis or other statistical evaluations if they are found inadequate to address access to care concerns.”

The applicant maintains that Bolivar Medical Center’s proposed project is such a specific situation where market share analysis is inadequate to address access to care. The applicant submitted information with respect to the demographics of Bolivar Medical Center’s Service area to demonstrate the inappropriateness of market share analysis. Staff’s review of information revealed uniformity of demographics/population served by area providers. In addition, there are two existing providers (in Greenville and Clarksdale) of cardiac catheterization services within 36 miles of the proposed service. Because existing providers serve the population in Bolivar County and the proximity of these providers to that population, staff did not find market share analysis to be inadequate to address access to care concerns.

The applicant cites the State Health Plan in many instances regarding the use of a market share analysis. The Plan states, on page XI 71 that: “The goal of these revisions to the *State Health Plan* is to improve access to cardiac care and to encourage the establishment of additional cardiac catheterization and open-heart surgery programs within the state that can serve the poor, minorities, and the rural population in greater numbers.” The revisions (adopted in 1994) included the adoption of diagnostic cardiac catheterization with a caseload of 300 diagnostic catheterization procedures; a minimum population base of 100,000; the establishment of therapeutic cardiac catheterization services with a caseload of 450 diagnostic and therapeutic catheterization procedures; the establishment of open-heart surgery programs with a caseload of 150 open-heart surgeries; and a minimum utilization of

equipment/services at existing providers of 450 cardiac catheterizations, diagnostic and therapeutic, and when applicable, 150 open-heart surgeries. In 1993, there were 11 cardiac catheterization programs in the entire state, with one program per CC/OHSPA, except for CC/OSHPA 3 where there were 3 programs. The revisions to the *1994 State Health Plan* allowed the approval of 16 additional cardiac catheterization programs in the state, with 3 to 4 programs per CC/OSHPA, for a total of 27 programs statewide. The Department's use of market share analysis to evaluate applications furthers the goal set forth in the *State Health Plan*.

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. 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. A hospital's service area would be the counties in which 95 percent or more of the hospital's patients reside. Based upon the Market Share Analysis conducted by the Department for CC/OHSPA 2, the majority of the applicant's patients came from Bolivar County for the period of January 2004 - October 2004. The Market Share Analysis revealed that Bolivar Medical Center has an estimated population base of only 55,037 for the given period (See Attachment 2). This estimated population base falls far short of the minimum required population base of 100,000.

The applicant further asserts that one of the current providers of cardiac catheterization in CC/OHSPA 2 has not provided the service within the past 12 months, and consequently, will be required to reapply for a certificate of need to provide that service again.

Staff prepared a market share analysis excluding Greenwood Leflore Hospital from the table. This analysis revealed that Bolivar has an estimated population base of 76,027, with the exclusion of Greenwood Leflore Hospital (See Attachment 1). However, patient origin data indicate that patients from Carroll and Holmes counties used Greenwood Leflore Hospital, exclusively. These counties have a combined 2005 population projection of 33,321. Patients from Carroll and Holmes counties are more likely to use facilities in closer proximity than Bolivar County.

**SHP Criterion 2 - Minimum Procedures**

Bolivar Medical Center projects the following utilization for the cardiac services at the hospital for the first three years:

Year	Catheterization
One	721
Two	791
Three	849

### **SHP Criterion 3 - Impact on Existing Providers**

An applicant proposing to acquire or otherwise control diagnostic cardiac catheterization equipment and/or offer diagnostic cardiac catheterization services shall document that each existing unit which is (a) in the CC/OHSPA and (b) within 45 miles of the applicant, has been utilized for a minimum of 450 procedures (both diagnostic and therapeutic) per year for the two most recent years as reflected in data supplied to and /or verified by the Mississippi State Department of Health.

Bolivar Medical Center submits that there are two other providers within 45 miles of the proposed services in CC/OHSPA which offer cardiac catheterization services – Delta Regional Medical Center, Greenville, and Northwest Mississippi Regional Medical Center, Clarksdale. Both facilities performed in excess of 450 cardiac catheterization procedures during 2002, 2003, and 2004.

Greenwood Leflore Hospital, also approximately 45 miles away, did not provide cardiac catheterization services during the past 12 months (reporting 0 procedures for FY 2004). The applicant asserts that Greenwood Leflore ceased to provide cardiac catheterization services as of February 2003 and can no longer be considered a provider of diagnostic cardiac catheterization services in CC/OHSPA 2 without violating the Mississippi Certificate of Need law. In according with Section 41-7-191, subparagraph (2) (d) (ii) of the Mississippi Code 1972 Annotated as amended, a CON is required for the offering of cardiac catheterization services if the proposed provider has not provided the service within the past 12 months.

Staff recognizes that based on data reported in the facility's Application for Renewal of Hospital License for Calendar Year 2005, Greenwood Leflore Hospital has not provided cardiac catheterization services in the past 12 months as evidenced by reporting 0 procedures for 2004. However, it should be noted that although Greenwood has not operated the cardiac catheterization program within the past 12 months, on April 13, 2005, the Mississippi Board of Health issued an approval of a cardiologist at Greenwood Leflore Hospital through the State 30 J-1 VISA Waiver Program. One of the stated purposes of the new cardiologist was to run the Cath Lab at the hospital.

The following table shows the current providers located in CC/OHSPA 2 and their utilization for the past two fiscal years are as follows:

**CC/OHSP 2**  
**Number of Cardiac Catheterization Procedures\***

<b>Providers</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>
Baptist Memorial Hospital- DeSoto, Southaven	2,353	5,643*	<b>1,745</b>
Delta Regional Medical Center, Greenville	2,661	3,060	<b>2,480</b>
Greenwood Leflore Hospital, Greenwood	106	31	<b>0</b>
Northwest Ms Regional Medical Center, Clarksdale	1,530	488	<b>1,618</b>

**Sources:** *FY 2005 State Health Plan* and Application for Renewal of Hospital License for Calendar Year 2005 and FY 2004 Annual Hospital Report.

\*Includes diagnostic procedures and PTCAs.

The applicant asserts that the proposed project's availability at the BMC will allow for appropriate patient accessibility from the defined service area and strengthen the Mississippi delivery system to those under-served, poor, and realistically most in need.

**SHP Criterion 4 - Staffing Standards**

According to the applicant, Province Healthcare Company, Inc. operates 20 acute care hospitals in non-urban areas of the United States. Of those 20 hospitals, 10 provide cardiac catheterization services. With a huge reserve of experience on which to draw, the applicant believes that Bolivar Medical Center is well positioned to assume its responsibilities in this area of health care. BMC believes that it has the ability and support to administer the proposed services, provide sufficiently trained and experienced professional staff and evaluate the performance of the diagnostic cardiac catheterization program.

**SHP Criterion 5 - Staff Residency**

BMC confirms that the medical staff performing diagnostic cardiac catheterization procedures at Bolivar Medical Center will reside within 45 minutes normal driving time of the hospital.

**SHP Criterion 6 - Recording and Maintenance of Data**

The hospital affirms that it will comply with this criterion as required.

**SHP Criterion 7 - Referral Agreement**

Bolivar Medical Center's proposed application contains transfer agreements between BMC and the following hospitals: University of Mississippi Medical Center, Regional Medical Center at Memphis, and Delta Regional Medical Center; all of which provide cardiac services

(including open-heart surgery). The application contains a copy of each of the referral agreements for the proposed project.

#### **SHP Criterion 8 - Patient Selection**

BMC asserts that each patient will be reviewed to ensure that he or she meets the inclusion/exclusion criteria that are established by the hospital for patient selection.

#### **SHP Criterion 9 - Regulatory Approval**

By this application, Bolivar Medical Center requests approval for the addition of a diagnostic cardiac catheterization program.

### **B. General Review (GR) Criteria**

Chapter 8 of the *Mississippi Certificate of Need Review Manual*, revised May 13, 2000, addresses general criteria by which all CON applications are reviewed. This project is not in substantial compliance with applicable criteria.

#### **GR Criterion 1 - Consistency with the State Health Plan**

The proposed project is not in compliance with all applicable criteria as contained in the *FY 2005 State Health Plan*.

#### **GR Criterion 2 - Long Range Plan**

BMC asserts that the provision of diagnostic cardiac catheterization services by Bolivar Medical Center comports with its goal to provide quality, efficient health care to all residents of the community and the planning area and is compatible with its long range plans.

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

According to the applicant, the proposed project is compatible with the hospital's long range plans to provide its patients access to quality care; therefore, the hospital rejected the alternative of doing nothing.

The applicant indicates that BMC could also continue to rely on other providers to provide this diagnostic service. However, because of the population demographics of the hospital's service area, which consists primarily of medically under served persons, racial minorities, the poor, Medicaid recipients, and persons from rural areas, the reality is that those persons in need of diagnostic cardiac catheterization services often have difficulty seeking out such care outside of the community where they live.

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

Based on the applicant's three year projections, this project will be economically viable the first three years of operation, with net incomes of \$432,526, \$513,845, and \$594,415 the first, second, and third years, respectively.

BMC projects the cost per procedure to be \$1,383 for year one, \$1,313 for year two, and \$1,255 for year three. The charge per procedure is projected to be \$2,104 for the first three years of operation for the proposed project.

Proposed charges appear to be reasonable and projected levels of utilization appear to be reasonable compared to other facilities. However, staff questions whether the project can reach projections without encroaching on the viability of other providers in the area, given the utilization of existing facilities in the area and the applicant's low population base.

#### **GR Criterion 5 - Need for Services**

According to the applicant, all residents of the area, including low income persons, racial and ethnic minorities, women, handicapped persons, and other under served groups, and the elderly, have access to the services provided at BMC and will continue to have access to the proposed diagnostic heart catheterization services at Bolivar County Medical Center.

BMC asserts that it has demonstrated it serves a poor, primarily minority, traditionally underserved population base. It is because the hospital serves this type of patient that its need to identify patients with heart disease by providing this highly successful diagnostic procedure is so very great. The applicant believes that unless this additional access point is placed in this rural area of the state to increase access to those most in need of being identified as having heart disease, residents of the central Mississippi Delta area will continue to go without appropriate care, will continue to be underserved, will continue to experience disabling heart disease and to die at higher rates than white males and others who historically do have access to appropriate health care.

Based on a Market Share Analysis prepared by the MSDH, Bolivar Medical Center has a market share population of 76,027 in CC/OHSPA 2 (with the exclusion of Greenwood Leflore). In addition, the three existing providers in CC/OHSPA 2 performed a total of 5,843 cardiac catheterization procedures during FY 2004. Based on a projected population base of 420,937, staff estimates that the cardiac catheterization use rate for CC/OHSPA 2 is 13.88 per 1,000. Based on the estimated use rate of 13.88 per 1,000 and a population base of 55,037, Bolivar Medical Center could generate 764 procedures, while reducing utilization at Delta Regional Medical Center and Northwest Mississippi Regional Medical Center by approximately one-half. With the exclusion of Greenwood Leflore Hospital, at a population base of 76,027, the applicant could possibly generate an estimated 1,055, again by reducing the number of procedures performed at Delta Regional and Northwest (See Attachments 3 and 4). Therefore, staff contends that the application represents a duplication of a health service.

This application contains 15 affidavits from physicians indicating the number of patients they will refer, and three (3) letters of support from community leaders and businesses for the proposed project.

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

The applicant asserts that all residents of the hospital's cardiac service area, CC/OHSPA 2 and the state, including Medicaid recipients, charity/medically indigent patients, racial and ethnic minorities, women, handicapped persons, and the elderly, have access to the services provided at BMC and will have access to the proposed diagnostic heart catheterization service. BMC submits that it offers services to patients in need of care without regard to race,



age, creed, sex or ethnic origin, in full compliance with applicable state and federal regulations.

The applicant indicates that the following percentages of gross patient revenue were provided to medically indigent patients for the last three years:

Fiscal Year	Percentage of Gross Patient Revenue
2001	6.89%
2002	7.03%
2003	8.46%

The applicant projects that approximately five (5) percent of its patients will be medically indigent for the proposed project.

**GR Criterion 7 - Information Requirement**

Bolivar Medical Center affirms that it will record and maintain the requested information and make it available to the Mississippi State Department of Health within 15 days of request.

**GR Criterion 8 - Relationship to Existing Health Care System**

The applicant contends that the offering of diagnostic cardiac catheterization services at an additional site in CC/OHSPA 2 will be an asset to the community and the existing health care system of the area.

The applicant believes that the proposed project will have no adverse impact on any of the existing providers in the service area.

The Department received a detailed letter from an attorney representing Greenwood Leflore Hospital, Greenwood, and Northwest Mississippi Regional Medical Center, Clarksdale, opposing the project.

**GR Criterion 9 - Availability of Resources**

Bolivar Medical Center asserts that the proposed project will require the hiring of only 3.3 FTE additional registered nurses at an estimated additional annual cost of \$175,068.

According to BMC, special efforts will be made to work with the area educational institutions to recruit skilled personnel for the project. In addition, normal recruiting practices will be employed to fill the available positions with applicants best suited for those positions.

**GR Criterion 16 - Quality of Care**

BMC is in compliance with the *Minimum Standards of Operation for Mississippi Hospitals*, according to the Division of Health Facilities Licensure and Certification.

**IV. FINANCIAL FEASIBILITY**

A. Capital Expenditure Summary

Fixed Equipment	\$309,928
Contingency Reserve	\$ 30,993
<b>Total Proposed Capital Expenditure</b>	<b>\$340,921</b>

The above capital expenditure is proposed for acquisition of fixed equipment and contingency reserve.

B. Method of Financing

According to the applicant, the proposed capital expenditure will be funded with accumulated cash reserves from Bolivar Medical Center and Province Healthcare.

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:

<b>Expenses</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Salaries/Benefits	\$175,068	\$180,320	\$185,730
Supplies	12,000	13,390	14,854
General/Admin.	393,754	405,567	417,734
Other Indirect	180,868	186,294	191,883
Depreciation	68,184	68,184	68,184
<b>Total Expenses</b>	<b>\$829,874</b>	<b>\$853,755</b>	<b>\$878,385</b>
Gross patient Rev.	\$ 6,000,000	\$ 6,500,000	\$ 7,000,000
Deductions	\$(4,737,600)	\$(5,132,400)	\$(5,527,200)
Net Patient Rev.	\$ 1,262,400	\$ 1,367,600	\$ 1,472,800
<b>Net Income</b>	<b>\$ 432,526</b>	<b>\$ 513,845</b>	<b>\$ 594,415</b>
No. of Procedures	600	650	700
Cost/Procedure	\$1,383	\$1,313	\$1,255
Charge/Procedure	\$10,000	\$10,000	\$10,000

D. Cost to Medicaid/Medicare

Patient Mix by Type of Payor	Utilization Percentage	First Year Cost
Medicaid	31	\$ 257,261
Medicare	41	\$ 340,248
Other Payor*	28	\$ 232,365
<b>Total</b>	<b>100</b>	<b>\$ 829,874</b>

\*The applicant projects 1.8 percent of gross patient revenues to be provided to charity, 6.5 percent to bad debt, and 1.7 percent to be provided to medically indigent patients.

V. **RECOMMENDATIONS OF OTHER AFFECTED AGENCIES**

The Division of Medicaid was provided a copy of this application for review. The Division of Medicaid estimates the increased annual cost to Medicaid to be \$25,674 for inpatient services. Outpatient services will be paid as outlined in Medicaid's State Plan.

VI. **CONCLUSION AND RECOMMENDATION**

The project is not in substantial compliance with the criteria and standards for establishment of diagnostic cardiac catheterization services, as contained in the *FY 2005 State Health Plan*, and the *Mississippi Certificate of Need Review Manual*, revised 2000. Specifically, the application does not meet the minimum population base of 100,000 in the CC/OHSPA where it is to be located. Staff also questions whether the applicant can reach projections without encroaching on the viability of other providers in the planning area.

The Division of Health Planning and Resource Development recommends disapproval of this application submitted by PHC-Cleveland, Inc. dba Bolivar Medical Center for the establishment of diagnostic cardiac catheterization services.

Attachment 1

Market Share of Hospitals in CC/OHSPA 2 with Existing or Proposed Cath Labs

County	Pop	BMH - DeSoto		Bolivar MC		Delta RMC		NWMS RMC		TOTAL	
		%	#	%	#	%	#	%	#	%	#
Bolivar	39,945	0.20	79	86.27	34,459	7.71	3,080	5.83	2,327	100.00	
Carroll	11,385	-	-	-	-	-	-	-	-	-	
Coahoma	30,491	0.71	218	0.34	104	0.43	132	98.51	30,037	100.00	
DeSoto	127,388	99.64	126,934	-	-	-	-	0.36	454	100.00	
Holmes	21,936	-	-	-	-	-	-	-	-	-	
Humphreys	10,798	-	-	-	-	100.00	10,798	-	-	100.00	
Leflore	37,883	-	-	42.50	16,100	46.25	17,521	11.25	4,262	100.00	
Montgomery	12,381	-	-	-	-	100.00	12,381	-	-	100.00	
Quitman	9,721	1.39	135	-	-	1.74	169	96.87	9,417	100.00	
Sunflower	33,792	0.45	151	71.10	24,027	24.98	8,442	3.47	1,172	100.00	
Tallahatchie	14,657	2.49	365	3.53	517	1.56	228	92.43	13,547	100.00	
Tunica	9,695	60.02	5,819	-	-	-	-	39.98	3,876	100.00	
Washington	60,865	-	-	1.35	820	98.40	59,893	0.25	153	100.00	
<b>TOTALS</b>	<b>420,937</b>		<b>133,701</b>		<b>76,027</b>		<b>112,643</b>		<b>65,245</b>		

Source: January 2004 - October 2004 Aggregate Patient Origin Studies, MSDH.

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Attachment 2

Market Share of Hospitals in CC/OHSPA 2 with Existing or Proposed Cath Labs

County	Pop	BMH - DeSoto		Bolivar MC		Delta RMC		Greenwood LH		NWMS RMC		TOTAL	
		%	#	%	#	%	#	%	#	%	#	%	#
Bolivar	39,945	0.19	77	84.06	33,578	7.51	3,001	2.55	1,020	5.68	2,268	100.00	100.00
Carroll	11,385	-	-	-	-	-	-	100.00	11,385	-	-	100.00	100.00
Coahoma	30,491	0.71	216	0.34	104	0.43	131	0.56	171	97.96	29,869	100.00	100.00
DeSoto	127,388	99.64	126,934	-	-	-	-	-	-	0.36	454	100.00	100.00
Holmes	21,936	-	-	-	-	-	-	100.00	21,936	-	-	100.00	100.00
Humphreys	10,798	-	-	-	-	15.85	1,712	84.15	9,086	-	-	100.00	100.00
Leflore	37,883	-	-	0.56	213	0.61	232	98.68	37,382	0.15	56	100.00	100.00
Montgomery	12,381	-	-	-	-	1.38	171	98.62	12,210	-	-	100.00	100.00
Quitman	9,721	1.37	133	-	-	1.71	166	1.71	166	95.21	9,255	100.00	100.00
Sunflower	33,792	0.37	126	59.10	19,969	20.76	7,016	16.89	5,707	2.88	974	100.00	100.00
Tallahatchie	14,657	1.74	255	2.47	361	1.09	159	30.09	4,411	64.61	9,470	100.00	100.00
Tunica	9,695	60.02	5,819	-	-	-	-	-	-	39.98	3,876	100.00	100.00
Washington	60,865	-	-	1.33	811	97.32	59,235	1.10	668	0.25	151	100.00	100.00
<b>TOTALS</b>	<b>420,937</b>		<b>133,560</b>		<b>55,037</b>		<b>71,824</b>		<b>104,143</b>		<b>56,374</b>		

Source: January 2004 - October 2004 Aggregate Patient Origin Studies, MSDH.

Attachment 3



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County	2005 Population Projection	Proj Proc Based on Statewide Rate (18.71)	BMH - DeSoto		Bolivar MC		Delta RMC		Greenwood		NWMS RMC		NWMS RMC
			Market Share	Market Share	Market Share	Market Share	LH Market Share	Market Share	Market Share	Market Share	Market Share	Market Share	
Bolivar	39,945	747	0.19	84.06	7.51	2.55	5.68	1	628	56	19	42	
Carroll	11,385	213				100.00		0	0	0	213	0	
Coahoma	30,491	570	0.71	0.34	0.43	0.56	97.96	4	2	2	3	559	
DeSoto	127,388	2,383	99.64				0.36	2,375	0	0	0	9	
Holmes	21,936	410				100.00		0	0	0	410	0	
Humphreys	10,798	202			15.85	84.15		0	0	32	170	0	
Leflore	37,883	709		0.56	0.61	98.68	0.15	0	4	4	699	1	
Montgomery	12,381	232			1.38	98.62		0	0	3	228	0	
Quitman	9,721	182	1.37		1.71	1.71	95.21	2	0	3	3	173	
Sunflower	33,792	632	0.37	59.10	20.76	16.89	2.88	2	374	131	107	18	
Tallahatchie	14,657	274	1.74	2.47	1.09	30.09	64.61	5	7	3	83	177	
Tunica	9,695	181	60.02				39.98	109	0	0	0	73	
Washington	60,865	1,139		1.33	97.32	1.10	0.25	0	15	1,108	13	3	
	<b>420,937</b>	<b>7,876</b>					<b>Projected:</b>	<b>2,499</b>	<b>1,030</b>	<b>1,344</b>	<b>1,949</b>	<b>1,055</b>	
							<b>FY 2004 Actual:</b>	<b>1,745</b>	<b>0</b>	<b>2,480</b>	<b>0</b>	<b>1,618</b>	