# *PROPOSED*

# FY 2016
# MISSISSIPPI
# STATE HEALTH PLAN

Mississippi State Department of Health

# FY 2016

# MISSISSIPPI STATE HEALTH PLAN

Mississippi State Department of Health

Governor’s Letter of Approval

(To be Included)

## Governor
## State of Mississippi

**The Honorable Phil Bryant**

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The *FY 2016 State Health Plan* results from the comments and information supplied by various divisions of the Department of Health, other agencies of state government, health care provider associations, and interested members of the public. The *Plan* also reflects the direction and guidance of the Mississippi State Board of Health.

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- Health Information Management
- Print Shop

- Office of Health Protection
  - Preparedness and Response
  - Licensure
  - Communicable Disease
  - Environmental Health

- Office of Health Services
  - Child\Adolescent Health
  - Women’s Health

Office of the Governor

Mississippi Department of Human Services

Mississippi Department of Mental Health

Mississippi Department of Rehabilitation Services

Mississippi Department of Education

University of Mississippi Medical Center
- School of Medicine
- School of Dentistry
- School of Health Related Professions

Board of Trustees of State Institutions of Higher Learning

Mississippi State Board of Medical Licensure

Mississippi State Board of Nursing

Mississippi Dental Association

Mississippi Nurses' Association

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# HEALTH CARE SYSTEM

# CHAPTER 1

# INTRODUCTION

## Title 15 - Mississippi Department of Health

## Part VIII – Office of Health Policy and Planning

## Subpart 90 – Planning and Resource Development

# Chapter 01 Introduction

### 100 Legal Authority and Purpose

Section 41-7-171 et seq., Mississippi Code 1972 Annotated, as amended, established the Mississippi State Department of Health (MSDH) as the sole and official agency to administer and supervise all health planning responsibilities for the state, including development and publication *of* the *Mississippi State Health Plan.* The effective dates *of* the *Fiscal Year 2016 Mississippi State Health Plan* extend from December 2, 2015, through December 1, 2016, or until superseded by a later *Plan.*

The 2016 State Health Plan establishes criteria and standards for health-related activities which require Certificate of Need review in an effort to meet the priority health needs identified by the department. The priority health needs are as follows:

- Disease prevention, health protection, and health promotion;
- Health care for specific populations, such as mothers, babies, the elderly, the indigent, the uninsured, and minorities;
- Implementation of a statewide trauma system;
- Health needs of persons with mental illness, alcohol/drug abuse problems, mental retardation/developmental disabilities, and/or handicap;
- Availability of adequate health manpower throughout the state; and
- Enhance capacity for detention of a response to public health emergencies, including acts of bioterrorism.

Section 41-7-191, Mississippi Code 1972 Annotated, as amended, requires Certificate of Need (CON) approval for the establishment, relocation, or expansion of health care facilities. The statute also requires CON approval for the acquisition or control of major medical equipment and for the change of ownership of defined health care facilities unless the facilities meet specific requirements.

This *Plan* provides the service-specific CON criteria and standards developed and adopted by the MSDH for CON review of health-related activities requiring such review. The *Mississippi Certificate of Need Review Manual* provides additional general CON criteria by which the Department reviews all applications.

## 101 General Certificate of Need Policies

Mississippi's health planning and health regulatory activities have the following purposes:

- To improve the health of Mississippi residents;
- To increase the accessibility, acceptability, continuity, and quality of health services;
- To prevent unnecessary duplication of health resources; and
- To provide some cost containment.

The MSDH intends to approve an application for CON if it substantially complies with the projected need and with the applicable criteria and standards presented in this *Plan*, and to disapprove all CON applications which do not substantially comply with the projected need or with applicable criteria and standards presented in this *Plan*.

The MSDH intends to disapprove CON applications which fail to confirm that the applicant shall provide a reasonable amount of indigent care, or if the applicant's admission policies deny or discourage access to care by indigent patients. Furthermore, the MSDH intends to disapprove CON applications if such approval would have a significant adverse effect on the ability of an existing facility or service to provide indigent care. Finally, it is the intent of the Mississippi State Department of Health to strictly adhere to the criteria set forth in the *State Health Plan* and to ensure that any provider desiring to offer healthcare services covered by the Certificate of Need statutes undergoes review and is issued a Certificate of Need prior to offering such services.

The State Health Officer shall determine whether the amount of indigent care provided or proposed to be offered is "reasonable." The Department considers a reasonable amount of indigent care as that which is comparable to the amount of such care offered by other providers of the requested service within the same, or proximate, geographic area.

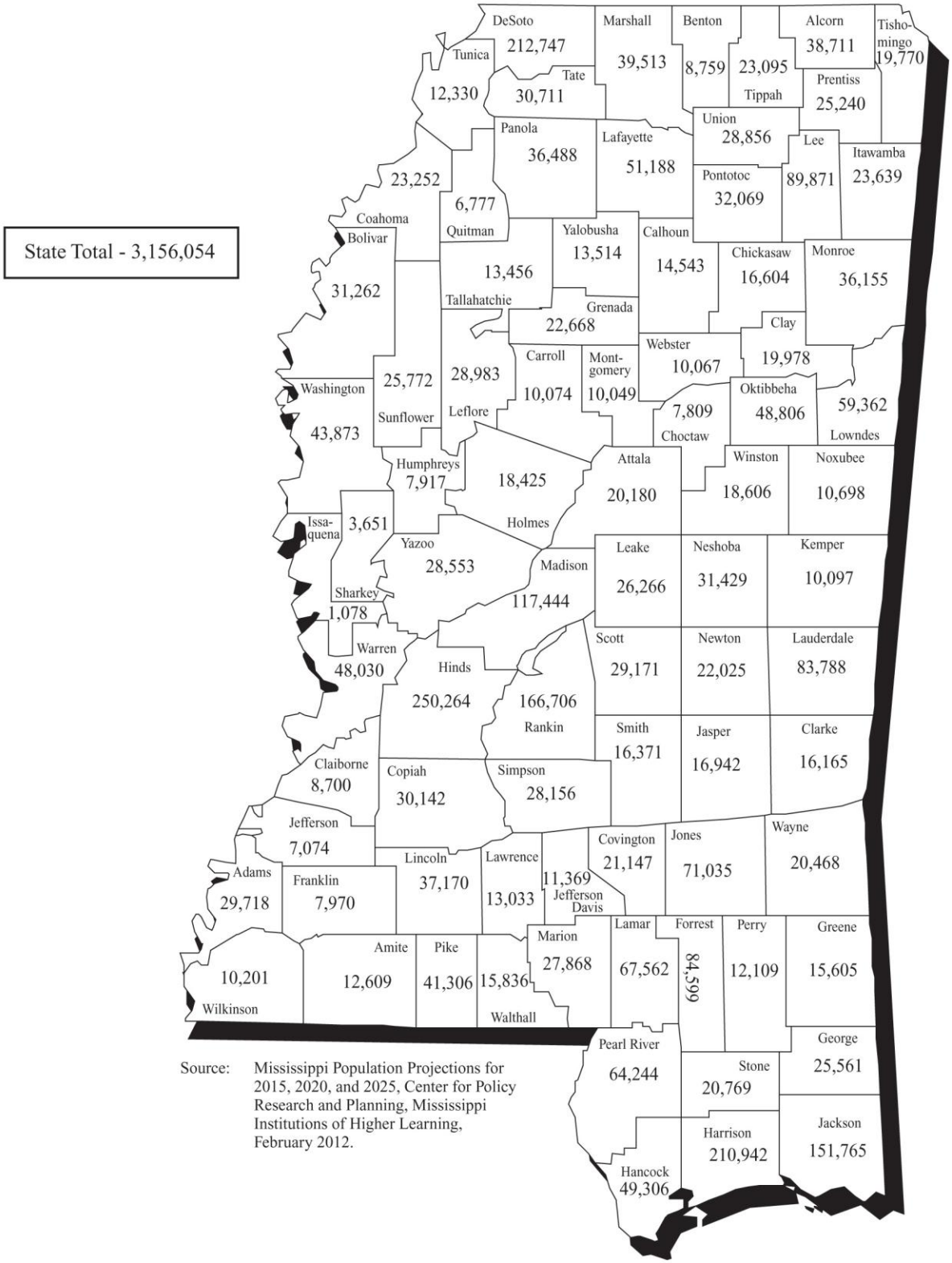
The MSDH may use a variety of statistical methodologies including, but not limited to, market share analysis or patient origin data to determine substantial compliance with projected need and with applicable criteria and standards in this *Plan*.

## 102 Population for Planning

Population projections used in this *Plan* were calculated by the Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, as published in *MISSISSIPPI, Population Projections for 2015, 2020, and 2025*, February 2012. This plan is based on 2020 population projections.

Map 1-1 depicts the state's 2020 estimated population by county. Mississippi population projections for the years 2020 and 2025 can be obtained from the State Institutions of Higher Learning at www.ihl.state.ms.us. (1) Select University Research Center; 2) Economics; and 3) Miss Population Projections)

**Map 1-1**
**Population Projections**
**2020**




Source: Mississippi Population Projections for 2015, 2020, and 2025, Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, February 2012.

## 103 Health Personnel

High quality health care services depend on the availability of competent health personnel in sufficient numbers to meet the population's needs. Mississippi is traditionally a medically underserved state, particularly in sparsely populated rural areas and areas containing large numbers of poor people, elderly people, and minorities. This section discusses some of the areas of greatest need for health care personnel, focusing on physicians, dentists, and nurses.

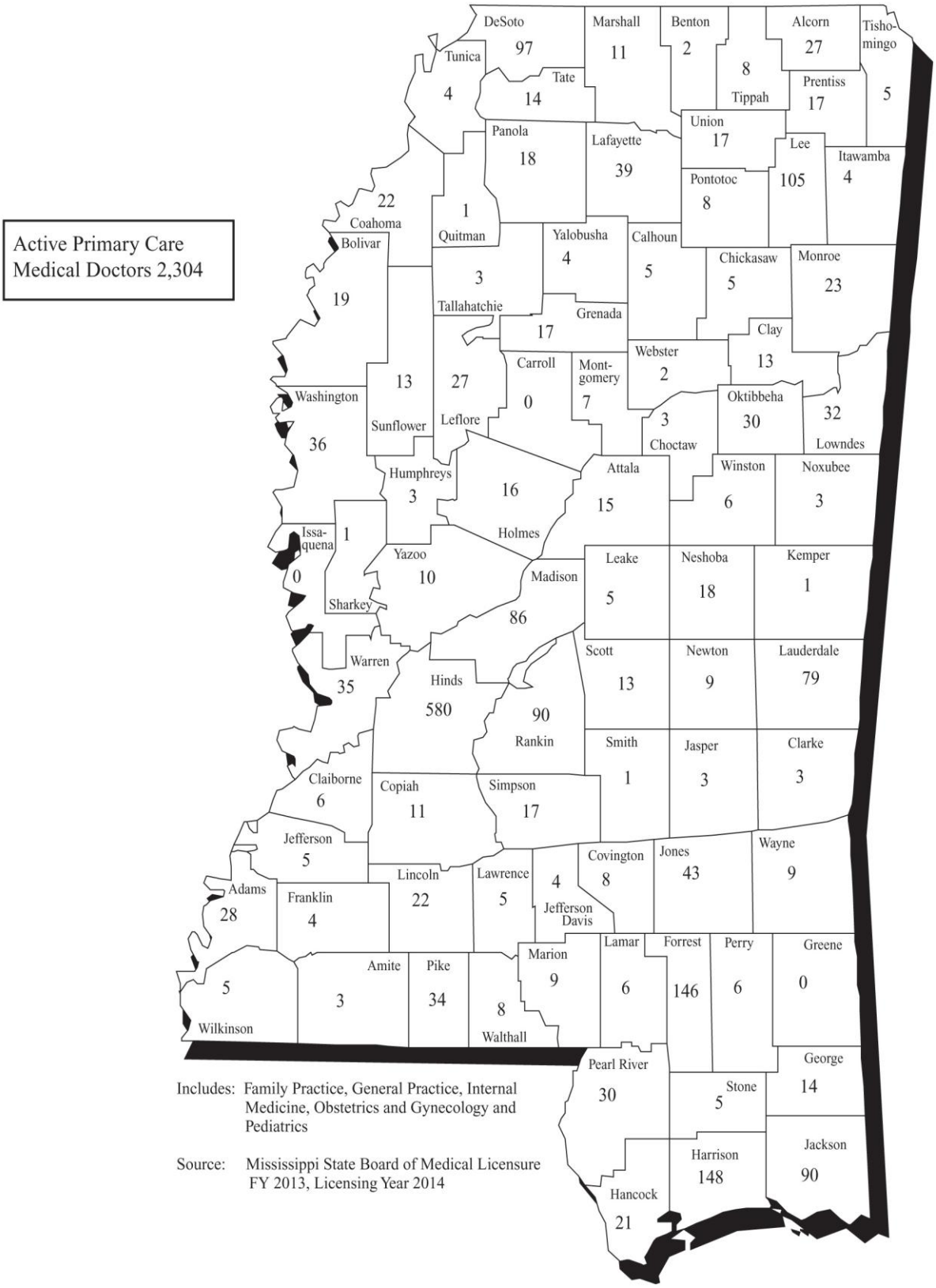
### 103.01 Physicians

Mississippi had 5,666 active medical doctors, 379 osteopaths, and 66 podiatrists licensed by the Board of Medical Licensure for FY 2014 (licensing year 2015) for a total of 6,111 active licensed physicians practicing in the state. This number represents an increase of 69 physicians, or more than 1.01 percent, from FY 2013 (licensing year 2014).

Approximately 2,348 (41 percent) of the state's active medical doctors are primary care physicians, representing a ratio of one primary care physician for every 1,344 persons, based on 2020 projected population. The primary care physicians included 770 family practitioners, 83 general practitioners, 730 internal medicine physicians, 333 obstetrical and gynecological physicians, and 432 pediatricians. Map 1-2 depicts the total number of primary care medical doctors by county.

According to the Health Resources and Services Administration's Office of Shortage Designation, Mississippi has a total of 108 primary care health professional shortage area (HPSA) designations. Seventy-seven of the designations are single county designations. The United States Department of Health and Human Services defines a primary care health professional shortage area (HPSA) as a geographic area that has a ratio in excess of 3,500 persons per primary care physician and insufficient access to those physicians within a 30 minute traveling radius. Also, areas with 3,000 to 3,500 persons per primary care physician that have unusually high needs for primary care services and have insufficient access to primary care doctors within a 30 minute traveling radius, can also be designated as a primary care HPSA.

**Map 1 -2**
**Active Primary Care Medical Doctors by County of Residence**
**FY 2013**



## 103.02 Dentists

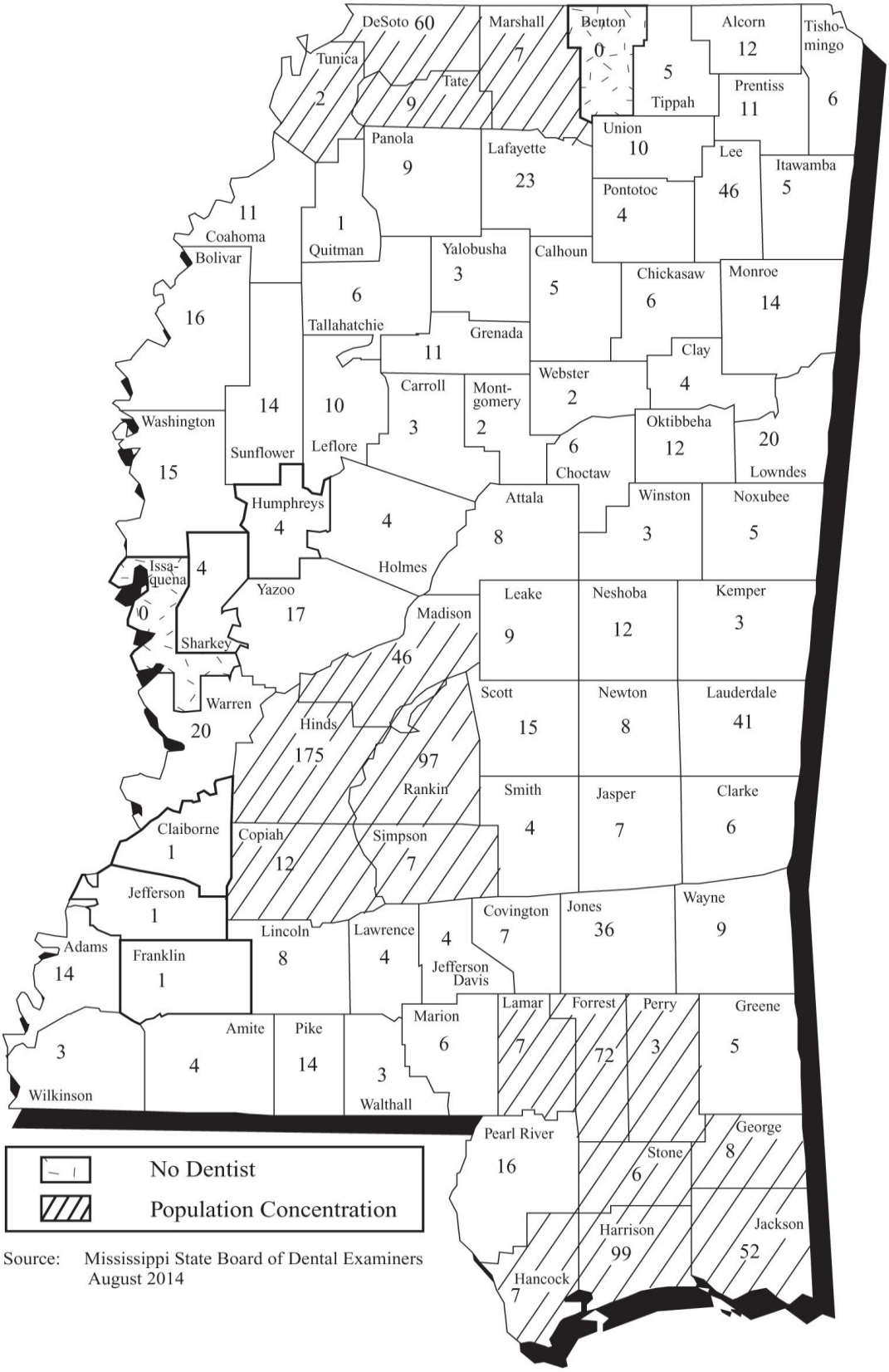
The Mississippi State Board of Dental Examiners reported 1,071 licensed (1,041 “active” and 30 “inactive”) dentists in the state as of August 2015, with 64 new dentists licensed during calendar year 2014. Based on Mississippi's 2020 projected population of 3,156,054, the state has one active dentist for every 2,947 persons.

The more populated areas of Mississippi are sufficiently supplied with dentists; however, many rural areas still face tremendous shortages. According to the Health Resources and Services Administration’s Office of Shortage Designation (HRSA/OSD), Mississippi currently has a total of 109 dental health professional shortage area (HPSA) designations. Seventy-nine of the designations are single county designations.

Mississippi's two major population centers contain the most active dentists. The Jackson area had a total of 331 active dentists in the summer of 2015, with 180 in Hinds County, 99 in Rankin County, and 52 in Madison County. The Gulf Coast region had the second largest count at 167, with 105 in Harrison County, 55 in Jackson County, and 7 in Hancock County. Combined, these two metropolitan areas contained 41.88 percent of the state's total supply of active dentists.

On the opposite end of the spectrum, four counties— Claiborne, Franklin, Jefferson, and Quitman—had only one active dentist each and two counties—Benton, and Issaquena—had no active dentist. Map 1-3 depicts the number of dentists per county and indicates the number of in-state, active, licensed dentists who have mailing addresses in the state.

## Map 1-3
## Active Dentists by County




Source: Mississippi State Board of Dental Examiners
August 2014

## 103.03 Nurses

### Registered Nurses

The Mississippi Board of Nursing reported 45,269 registered nurses (RNs) licensed in FY 2015 with (33,305) who worked full or 5,286 part-time in nursing careers. That included 22,126 in hospitals; 3,841 in community, public, or home health; 2,111 in physicians' offices; 12,407in nursing homes; and the remainder in other nursing careers. RNs by degree in FY 2015 included, 1,403 diploma, 22,182 associates, 1,386 baccalaureate non-nursing, 14,062 baccalaureate nursing, 758 masters non-nursing, 3,396 masters nursing, and 47 doctorate degrees.

### Advanced Practice Registered Nurses

Advanced practice registered nurse (APRN) includes any person licensed to practice nursing in Mississippi and certified by the Board of Nursing to practice in an expanded role as an advanced practice registered nurse including nurse midwives and certified registered nurse anesthetists. For FY 2015 there were 3,880 RNs certified as APRNs, with 1,961 family nurse practitioners; 820 certified registered nurse anesthetist; and 124 in adult acute care. The remainder practiced in such specialties as adult and family mental health, gerontology, midwifery, neonatal, pediatric, women's health care and family planning.

### Licensed Practical Nurses

The Board of Nursing reported 13,751 licensed practical nurses (LPNs) licensed in FY 2015 with 9,234 who worked full or 1,598 part-time in nursing careers. That included 4,245 in nursing homes; 1,548 in hospitals; 2,301 as office nurses; 1,003 in community, public, or home health; and the remainder in other nursing careers. There were 4,487 LPNs certified for an expanded role in FY 2015, including 4,638 in intravenous therapy, 43 in hemodialysis, and 108 in both expanded roles.

## Office of Nursing Workforce Redevelopment

The Mississippi Nursing Organization Liaison Committee (NOLC), a committee of the Mississippi Nurses Association composed of representation from 25 nursing organizations, has worked proactively to address nursing workforce issues related to anticipated changes in nursing and the health care delivery system. Through the efforts of the NOLC, the Mississippi Legislature passed the Nursing Workforce Redevelopment Act during the 1996 Session. The Act authorized the Mississippi Board of Nursing to establish an entity that would be responsible for addressing changes impacting the nursing workforce.

Currently, with funding from the legislature and the Mississippi Development Authority, Office of Nursing Workforce Redevelopment (ONWR) is working with the Mississippi Council of Deans and Directors of Schools of Nursing, the Mississippi Nurses Association and the Mississippi Organization of Nurse Executives to address issues vital to nursing. These issues include faculty shortages, barriers to nursing education, recruitment into nursing, scholarship funding, the image of nursing, service/education collaboratives, retention of nursing service employees, and leadership

training for nurses. More information is available by calling ONW or visiting www.monw.org.

### 103.04 Physical Therapy Practitioners

Physical therapy (PT) practitioners provide preventive, diagnostic, and rehabilitative services to restore function or prevent disability from disease, trauma, injury, loss of a limb, or lack of use of a body part to individuals of all ages.

The Mississippi State Board of Physical Therapy reported 1,893 licensed physical therapists in Mississippi as of April 10, 2015 with 1,552 residing in the state. Eight percent of the Mississippi resident physical therapists practitioners live in Hinds County, five percent in Harrison County, and ten percent in Madison County, for a total of 22 percent in three counties. Mississippi ranks 39th in the United States for the ratio of therapists per 100,000 population. The Board also reported 1102 licensed physical therapist assistants, with 979 practicing in the state.

### 103.05 Occupational Therapist

Occupational therapy (OT) is a health and rehabilitation profession that serves people of all ages who are physically, psychologically, or developmentally disabled. Their functions range from diagnosis to treatment, including the design and construction of various special and self-help devices. OTs direct their patients in activities designed to help them learn skills necessary to perform daily tasks, diminish or correct pathology, and promote and maintain health.

The MSDH reported 990 licensed occupational therapists and 530 licensed occupational therapy assistants on its Mississippi roster as of April 8, 2015, with 884 of the OTs and 476 of the OTAs residing in the state.

### 103.06 Emergency Medical Personnel

The training of emergency medical personnel includes ambulance operators and emergency medical technicians (EMTs) of both advanced and basic levels. Mississippi requires all ambulance drivers to have EMS driver certification (EMS-D). To qualify, an individual must complete an approved driver training program that involves driving tasks, vehicle dynamics, vehicle preventative maintenance, driver perception, night driving, and information on different driving maneuvers. This training offers both academic and clinical (practical hands on) experiences for the prospective ambulance driver. In FY 2014, Mississippi issued 339 EMS driver certifications or recertification.

Additionally, all emergency medical technicians – both advanced level and basic level – must complete a National Highway Safety and Traffic Administration training program for the respective level. This training provides extensive academic and clinical hours for the prospective students. Upon completion, students must pass the National Registry for Emergency Medical Technicians test and receive their national certification before applying for the Mississippi certification. For FY 2014, the MSDH Bureau of Emergency Medical Services reported issuing a total of 1,036 EMT certifications or recertifications; and 858 Paramedics.

The Legislature authorized the MSDH Bureau of Emergency Medical Services (BEMS) to certify Mississippi's medical first responders beginning July 1, 2004. In fiscal year 2014, BEMS has certified 14 medical first responders.

## 104 Outline of the State Health Plan

The *State Health Plan* describes existing services, evaluates the need for additional services in various aspects of health care, and provides Certificate of Need (CON) criteria and standards for each service requiring CON review. These services include: long-term care, including care for the aged and the mentally retarded; mental health care, including psychiatric, chemical dependency, and long-term residential treatment facilities; perinatal care; acute care, including various types of diagnostic and therapeutic services; ambulatory care, including outpatient services and freestanding ambulatory surgical centers; comprehensive medical rehabilitation; home health services; and end stage renal disease facilities.

The Glossary contains definitions of terms and phrases used in this *Plan*.

# HEALTH FACILITIES AND SERVICES/CERTIFICATE OF NEED CRITERIA AND STANDARDS

# CHAPTER 2

# LONG-TERM CARE

# Chapter 02 Long-Term Care

"Long-term care" simply means assistance provided to a person who has chronic conditions that reduce their ability to function independently. Many people with severe limitations in their ability to care for themselves are able to remain at home or in supportive housing because they have sufficient assistance from family, friends, or community services.

Mississippi's long-term care (nursing home and home health) patients are primarily disabled elderly people, who make up 20 percent of the 2025 projected population above age 65. Projections place the number of people in this age group at approximately 642,506 by 2025, with more than 186,327 disabled in at least one essential activity of daily living.

The risk of becoming frail, disabled, and dependent rises dramatically with age. While the average length of life has increased, people are often living longer with some very disabling chronic conditions which the present medical system can "manage" but not cure. So while the lives of many people have been prolonged through advances in medicine and public health, the quality of an older person's life often suffers. Aged individuals may become dependent on medical technology and professional care providers for years - not just weeks or months.

## 100 Options for Long-Term Care

Several programs for individuals with infirmities serve, if properly used, can delay or avoid institutionalization. These programs, although not reviewable through Certificate of Need authority, drastically affect the demand for skilled nursing beds.

Community services play a vital role in helping the elderly maintain some degree of independence. Examples of community-based elder-care include adult day care, senior centers, transportation, meals on wheels or meals at community locations, and home health services. More information concerning such services can be obtained by contacting the Mississippi Department of Human Services, Division of Aging and Adult Services.

## 101 Housing for the Elderly

Many elderly or infirmed people do not need skilled nursing care on a daily basis, but simply safe, affordable housing and some assistance with the activities of daily living. Such housing can take many forms.

"Board and care homes" are residences providing rooms (often semi-private), shared common areas, meals, protective oversight, and help with bathing, dressing, grooming, and other daily needs. In Mississippi, these facilities are licensed as personal care homes: Personal Care Home - Residential Living and Personal Care Home - Assisted Living. Both of these facilities provide residents a sheltered environment and assistance with the activities of daily living. Additionally, Personal Care Homes - Assisted Living may provide additional supplemental medical services that include the provision of certain routine health maintenance and emergency response services. In December of 2012, the state had 174 licensed personal care homes, with a total of 5,545 licensed beds. Personal care facilities presently are not reviewable under Certificate of Need authority.

"Retirement communities" or "senior housing facilities" have become common around the state. These communities usually provide apartments for independent living, with services such as transportation, weekly or bi-weekly housekeeping, and one to three meals daily in a common dining room. Many of these facilities include a licensed personal care home where the resident may move when he or she is no longer physically or mentally able to remain in their own apartment. Most facilities do not require an initial fee and do not sign a lifetime contract with their residents. They generally offer only independent living and personal care - most do not include a skilled nursing home as a part of the retirement community. Table 8-1 shows the distribution of personal care facilities by Long-Term Care Planning Districts.

**Table 2-1**
**Personal Care Home Licensed Beds, Occupancy Rates and Average Daily Census**
**2012**

| District I | | | |
|---|---|---|---|
| **County** | **Licensed Beds** | **Occupancy Rate %** | **Average Daily Census** |
| Attala | 30 | N/A | N/A |
| Bolivar | 146 | 70.03 | 96.44 |
| Carroll | 0 | 0.00 | 0.00 |
| Coahoma | 36 | 32.35 | 11.64 |
| DeSoto | 409 | 59.03 | 241.45 |
| Grenada | 63 | 80.52 | 50.72 |
| Holmes | 16 | 87.26 | 13.96 |
| Humphreys | 0 | 0.00 | 0.00 |
| Leflore | 74 | 86.62 | 64.10 |
| Montgomery | 0 | 0.00 | 0.00 |
| Panola | 54 | 89.28 | 48.21 |
| Quitman | 0 | 0.00 | 0.00 |
| Sunflower | 52 | 91.57 | 43.46 |
| Tallahatchie | 0 | 0.00 | 0.00 |
| Tate | 70 | N/A | N/A |
| Tunica | 0 | 0.00 | 0.00 |
| Washington | 129 | 72.02 | 74.18 |
| Yalobusha | 0 | 0.00 | 0.00 |
| **District Total** | **1,079** | **66.87** | **644.16** |

| District II | | | |
|---|---|---|---|
| **County** | **Licensed Beds** | **Occupancy Rate %** | **Average Daily Census** |
| Alcorn | 69 | 75.05 | 51.78 |
| Benton | N/A | N/A | N/A |
| Calhoun | 20 | 64.13 | 12.83 |
| Chickasaw | 18 | 76.40 | 13.75 |
| Choctaw | 14 | 89.64 | 12.55 |
| Clay | 21 | 84.34 | 17.71 |
| Itawamba | 140 | 69.25 | 96.95 |
| Lafayette | 145 | 61.40 | 89.02 |
| Lee | 391 | 79.77 | 311.91 |
| Lowndes | 150 | 75.97 | 113.96 |
| Marshall | 46 | 67.65 | 31.12 |
| Monroe | 83 | 88.84 | 73.73 |
| Noxubee | 25 | 73.10 | 18.28 |
| Oktibbeha | 54 | 87.27 | 31.42 |
| Pontotoc | 40 | N/A | N/A |
| Prentiss | 74 | 63.35 | 25.34 |
| Tippah | 0 | 0.00 | 0.00 |
| Tishomingo | 117 | 88.71 | 81.61 |
| Union | 84 | 87.49 | 55.99 |
| Webster | 13 | N/A | N/A |
| Winston | 31 | 87.24 | 27.04 |
| **District Total** | **1,535** | **65.98** | **1,064.99** |

**Table 2-1 (Continued)**
**Personal Care Home Licensed Beds, Occupancy Rates and Average Daily Census**
**2012**

| District III | | | |
|---|---|---|---|
| **County** | **Licensed Beds** | **Occupancy Rate %** | **Average Daily Census** |
| Adams | 46 | 94.74 | 43.58 |
| Amite | 0 | 0.00 | 0.00 |
| Claiborne | 5 | N/A | N/A |
| Copiah | 0 | 0.00 | 0.00 |
| Franklin | 0 | 0.00 | 0.00 |
| Hinds | 410 | 92.73 | 254.99 |
| Issaquena | 0 | 0.00 | 0.00 |
| Jefferson | 0 | 0.00 | 0.00 |
| Lawrence | 12 | 64.21 | 7.7 |
| Lincoln | 23 | 31.25 | 7.22 |
| Madison | 442 | 80.38 | 347.22 |
| Pike | 98 | 63.45 | 62.18 |
| Rankin | 260 | 77.00 | 113.97 |
| Sharkey | 0 | 0.00 | 0.00 |
| Simpson | 51 | 58.98 | 17.69 |
| Walthall | 0 | 0.00 | 0.00 |
| Warren | 73 | 81.18 | 59.27 |
| Wilkinson | 0 | 0.00 | 0.00 |
| Yazoo | 0 | 0.00 | 0.00 |
| **District Total** | **1,420** | **64.39** | **913.82** |
| **State Total** | | | |

| District IV | | | |
|---|---|---|---|
| **County** | **Licensed Beds** | **Occupancy Rate %** | **Average Daily Census** |
| Clarke | 45 | 46.06 | 20.72 |
| Covington | 36 | 76.81 | 27.65 |
| Forrest | 181 | 62.43 | 79.29 |
| George | 87 | 70.97 | 51.10 |
| Greene | 0 | 0.00 | 0.00 |
| Hancock | 12 | 81.26 | 8.13 |
| Harrison | 370 | 50.21 | 160.66 |
| Jackson | 76 | 93.43 | 48.58 |
| Jasper | 48 | 45.08 | 21.64 |
| Jeff Davis | 0 | 0.00 | 0.00 |
| Jones | 189 | 63.25 | 101.54 |
| Kemper | 0 | 0.00 | 0.00 |
| Lamar | 163 | 72.07 | 117.48 |
| Lauderdale | 220 | 75.62 | 138.38 |
| Leake | 15 | 100.00 | 15.00 |
| Marion | 8 | N/A | N/A |
| Neshoba | 44 | 83.58 | 10.03 |
| Newton | 53 | 67.58 | 35.82 |
| Pearl River | 66 | 67.94 | 8.15 |
| Perry | 39 | 90.37 | 35.25 |
| Scott | 28 | 79.44 | 22.24 |
| Smith | 0 | 0.00 | 0.00 |
| Stone | 16 | N/A | N/A |
| Wayne | 49 | 66.47 | 32.57 |
| **District Total** | **1,745** | **68.03** | **934.23** |
| | **5,779** | **65.41** | **3,557.20** |

Note: State total occupancy rate of 65.41% is based on 4,537 beds.

Source: *2012 Report on Institutions for the Aged or Infirm, December 2013;* MSDH, Bureau of Health Facilities Licensure and Certification

Another type of retirement center, called a "continuing care retirement community" (CCRC) includes three stages: independent living in a private apartment, a personal care facility, and a skilled nursing home. Residents of this type of facility enter into a contract whereby the residents pay a substantial fee upon entering the CCRC and the facility agrees to provide care for the remainder of the residents' lives. Table 2-2 shows the distribution of CCRCs within the state.

**Table 2-2**
**Continuing Care Retirement Community (CCRC)**

| County | Facility | Licensed CCRC Beds | LTCPD* |
|---|---|---|---|
| Hancock | Woodland Village | 33 | IV |
| Lee | Cedars Health Center* | 140 | II |
| Lowndes | Trinity Healthcare* | 60 | II |
| Madison | The Arbor Skilled Nursing Facility | 60 | III |
| Madison | St Catherine's Village* | 120 | III |
| Pike | Camellia Estates | 30 | III |
| Rankin | Brandon Court Nursing Home | 40 | III |
| Rankin | Wisteria Gardens | 52 | III |
| Stone | Stone County Nursing and Rehab Center | 39 | IV |
| **Total** | | **574** | |

*Trinity Healthcare, Cedars Health Center and St. Catherine's Village were exempt from CON Review.
LTCPD-Long-Term Care Planning District

Source: Mississippi State Department of Health, Division of Licensure and Certification; and Division of Health Planning and Resource Development

## 102 Nursing Facilities

As of June 2014, Mississippi has 187 public or proprietary skilled nursing homes, with a total of 16,575 licensed beds. Two entities have received CON approval for the construction of 81 additional nursing home beds, and 23 facilities have voluntarily de-licensed a total of 575 nursing home beds which are being held in abeyance by MSDH. This count of licensed nursing home beds excludes 120 beds operated by the Mississippi Band of Choctaw Indians; 719 licensed beds operated by the Department of Mental Health; a total of 574 beds in continuing care retirement communities (CCRCs); 600 operated by the Mississippi State Veteran's Affairs Board, and 60 beds (which are dedicated to serving patients with special rehabilitative needs, including spinal cord and closed-head injuries) operated by Mississippi Methodist Rehabilitation Center. These beds are not subject to Certificate of Need review and are designated to serve specific populations.

Map 2-1 shows the general Long-Term Care Planning Districts and Table 2-3 presents the projected nursing home bed need for 2016 by planning district. Both the map and table appear in the criteria and standards section of this chapter. For 2020 projections see Appendix.

## 103 Long-Term Care Beds for Individuals with Mental Retardation and Other Developmental Disabilities

Mississippi has 2,816 licensed beds classified as ICF/MR (intermediate care facility for the mentally retarded). The Department of Mental Health (MDMH) operates five comprehensive regional centers that contain 2,072 active licensed and staffed beds. Five proprietary facilities operate 669 beds and one non-profit facility operates the remaining 95 beds. The residents of the MDMH's regional centers, although they have mental retardation/developmental disabilities, also have severe physical disabilities that result in their requiring care at the nursing home level. Regular nursing facilities are not equipped to serve these individuals. Map 2-2 shows the MR/DD Long-Term Care Planning Districts and Table 2-4 presents the MR/DD nursing home bed need by Planning District. Both the map and table appear in the criteria and standards section of this chapter.

# CERTIFICATE OF NEED

# CRITERIA AND STANDARDS
# FOR
# NURSING HOME BEDS

## 104 Certificate of Need Criteria and Standards for Nursing Home Beds

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 104.01 Policy Statement Regarding Certificate of Need Applications for the Offering of Nursing Home Care Services

1. Legislation

   a. The 1990 Mississippi Legislature imposed a permanent moratorium which prohibits the MSDH from granting approval for or issuing a Certificate of Need to any person proposing the new construction of, addition to, expansion of, or conversion of vacant hospital beds to provide skilled or intermediate nursing home care, except as specifically authorized by statute.

   b. Effective July 1, 1990, any health care facility defined as a psychiatric hospital, skilled nursing facility, intermediate care facility, intermediate care facility for the mentally retarded, or psychiatric residential treatment facility that is owned by the State of Mississippi and under the direction and control of the State Department of Mental Health is exempted from the requirement of the issuance of a Certificate of Need under Section 41-7-171 et seq., for projects which involve new construction, renovation, expansion, addition of new beds, or conversion of beds from one category to another in any such defined health care facility.

   c. The 1999 Mississippi Legislature temporarily lifted the 1990 moratorium to allow a 60-bed nursing facility to be added to each of 26 counties with the greatest need between the years 2000 and 2003. The Legislature also permitted CONs for 60 nursing facility beds for individuals with Alzheimer's disease in the northern, central, and southern parts of each of the Long-Term Care Planning Districts, for a total of 240 additional beds.

   d. Effective April 12, 2002, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need.

   e. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

f. A health care facility that has ceased to operate for a period of 60 months (five years) or more shall require a Certificate of Need prior to reopening.

g. Long-Term Care Planning Districts (LTCPD): The MSDH shall determine the need for additional nursing home care beds based on the LTCPDs as outlined on Map 2-1. The MSDH shall calculate the statistical need for beds in each LTCPD independently of all other LTCPDs.

2. Bed Need: The need for nursing home care beds is established at:

   0.5 beds per 1,000 population aged 64 and under
   10 beds per 1,000 population aged 65-74
   36 beds per 1,000 population aged 75-84
   135 beds per 1,000 population aged 85 and older

3. Population Projections: The MSDH shall use population projections as presented in Table 2-3 when calculating bed need. These population projections are the most recent projections prepared by the Center for Policy Research and Planning of the Institutions of Higher Learning.

4. Bed Inventory: The MSDH shall review the need for additional nursing home beds using the most recent information available regarding the inventory of such beds.

5. Size of Facility: The MSDH shall not approve construction of a new or replacement nursing home care facility for less than 60 beds. However, the number of beds authorized to be licensed in a new or replacement facility may be less than 60 beds.

6. Definition of CCRC: The Glossary of this *Plan* presents the MSDH's definition of a "continuing care retirement community" for the purposes of planning and CON decisions.

7. Medicare Participation: The MSDH strongly encourages all nursing homes participating in the Medicaid program to also become certified for participation in the Medicare program.

8. Alzheimer's/Dementia Care Unit: The MSDH encourages all nursing home owners to consider the establishment of an Alzheimer's/Dementia Care Unit as an integral part of their nursing care program.

### 104.02 Certificate of Need Criteria and Standards for Nursing Home Care Beds

If the legislative moratorium were removed or partially lifted, the MSDH would review applications for the offering of nursing home care under the statutory requirements of Sections 41-7-173 (h) subparagraphs (iv) and (vi), 41-7-191, and 41-7-193, Mississippi Code of 1972, as amended. The MSDH will also review applications for Certificate of Need according to the applicable policy statements contained in this *Plan*; 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.

Certificate of Need review is required for the offering of nursing home care services, as defined, if the capital expenditure exceeds $2,000,000; if the licensed bed capacity is increased through the conversion or addition of beds; or if nursing home care services have not been provided on a regular basis by the proposed provider of such services within the period of twelve (12) months prior to the time such services would be offered. Certificate of Need review is required for the construction, development, or otherwise establishment of new nursing home care beds regardless of capital expenditure.

1. **Need Criterion: The applicant shall document a need for nursing home care beds using the need methodology as presented herein: The Long-Term Care Planning District wherein the proposed facility will be located must show a need using the following ratio:**

   **0.5 beds per 1,000 population aged 64 and under**
   **10 beds per 1,000 population aged 65-74**
   **36 beds per 1,000 population aged 75-84**
   **135 beds per 1,000 population aged 85 and older**

2. The applicant shall document the number of beds that will be constructed, converted, and/or licensed as offering nursing home care services.

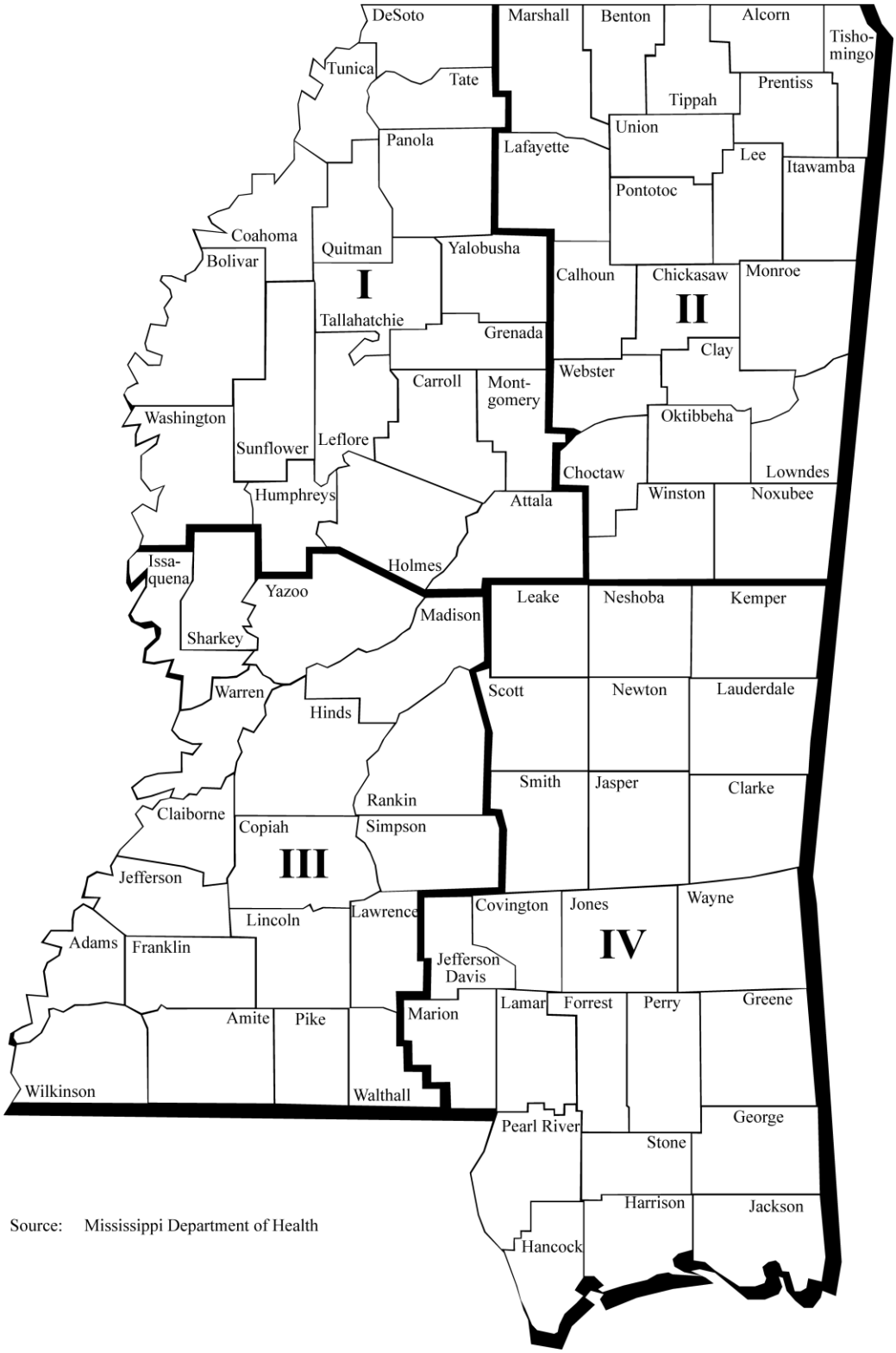
3. The MSDH should consider the area of statistical need as one criterion when awarding Certificates of Need in the case of competing applications.

4. Any applicant applying for nursing home beds who proposes to establish an Alzheimer's/Dementia Care Unit shall affirm that the applicant shall fully comply with all licensure regulations of the MSDH for said Alzheimer's/Dementia Care Unit.

### 104.03 Certificate of Need Criteria and Standards for Nursing Home Beds As Part of a Continuing Care Retirement Community (CCRC)

Entities desiring to establish nursing home beds as part of a CCRC shall meet all applicable requirements, as determined by the MSDH, of the policy statements and general CON criteria and standards in the *Mississippi Certificate of Need Review Manua*l and the CON criteria and standards for nursing home beds established in this *State Health Plan*.

**Map 2-1**
**Long-Term Care Planning Districts**




Source: Mississippi Department of Health

**Table 2-3**
**2016 Projected Nursing Home Bed Need[1]**

| State of Mississippi | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Long-Term Care Planning District** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| District I | 494,838 | 247 | 44,913 | 449 | 25,546 | 920 | 13,807 | 1,864 | 3,480 | 177 | 3,076 | 227 |
| District II | 501,539 | 251 | 51,488 | 515 | 33,024 | 1,189 | 18,381 | 2,481 | 4,436 | 48 | 3,825 | 563 |
| District III | 726,616 | 363 | 66,984 | 670 | 39,091 | 1,407 | 21,846 | 2,949 | 5,328 | 52 | 4,518 | 758 |
| District IV | 878,279 | 439 | 89,637 | 896 | 60,338 | 2,172 | 31,819 | 4,296 | 7,803 | 298 | 5,156 / 182 | 2,167 |
| **State Total** | **2,601,272** | **1,301** | **253,022** | **2,530** | **157,999** | **5,688** | **85,853** | **11,590** | **21,047** | **575** | **16,575 / 182** | **3,715** |

[1] Data may not equal totals due to rounding

**Note**: Licensed beds do not include 719 beds operated by the Department of Mental Health, 120 beds operated by the Mississippi Band of Choctaw Indians, 600 beds operated by the Mississippi Veteran's Affairs Board, 60 beds operated by the Mississippi Methodist Rehabilitation Center for the treatment of patients with special disabilities, including persons with spinal cord and closed-head injuries and ventilator-dependent patients, or 574 beds licensed to continuing care retirement communities (CCRC).

Sources: Mississippi State Department of Health, Division of Licensure and Certification; and Division of Health Planning and Resource Development Calculations, 2013

Population Projections: *Mississippi Population Projections 2016, 2020, and 2025*. Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, September 2008

**Table 2-3 (continued)**
**2016 Projected Nursing Home Bed Need**

| District I | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Attala | 16,237 | 8.12 | 1,843 | 18.43 | 1,331 | 47.92 | 804 | 108.54 | 183 | 0 | 120 | 63 |
| Bolivar | 30,972 | 15.49 | 3,129 | 31.29 | 1,566 | 56.38 | 904 | 122.04 | 225 | 60 | 290 | -125 |
| Carroll | 7,865 | 3.93 | 1,166 | 11.66 | 661 | 23.80 | 344 | 46.44 | 86 | 0 | 60 | 26 |
| Coahoma | 21,973 | 10.99 | 2,146 | 21.46 | 1,287 | 46.33 | 741 | 100.04 | 179 | 8 | 170 | 1 |
| DeSoto | 172,781 | 86.39 | 13,826 | 138.26 | 6,690 | 240.84 | 3,162 | 426.87 | 892 | 0 | 320 | 572 |
| Grenada | 19,430 | 9.72 | 2,062 | 20.62 | 1,366 | 49.18 | 792 | 106.92 | 186 | 10 | 237 | -61 |
| Holmes | 16,915 | 8.46 | 1,269 | 12.69 | 869 | 31.28 | 470 | 63.45 | 116 | 10 | 128 | -22 |
| Humphreys | 7,840 | 3.92 | 739 | 7.39 | 477 | 17.17 | 271 | 36.59 | 65 | 0 | 60 | 5 |
| Leflore | 28,992 | 14.50 | 2,253 | 22.53 | 1,353 | 48.71 | 802 | 108.27 | 194 | 8 | 402 | -216 |
| Montgomery | 8,923 | 4.46 | 1,071 | 10.71 | 782 | 28.15 | 488 | 65.88 | 109 | 0 | 120 | -11 |
| Panola | 31,041 | 15.52 | 2,779 | 27.79 | 1,737 | 62.53 | 945 | 127.58 | 233 | 0 | 190 | 43 |
| Quitman | 6,602 | 3.30 | 561 | 5.61 | 385 | 13.86 | 217 | 29.30 | 52 | 0 | 60 | -8 |
| Sunflower | 24,677 | 12.34 | 1,821 | 18.21 | 1,026 | 36.94 | 579 | 78.17 | 146 | 2 | 242 | -98 |
| Tallahatchie | 10,472 | 5.24 | 1,196 | 11.96 | 771 | 27.76 | 433 | 58.46 | 103 | 21 | 77 | 5 |
| Tate | 24,165 | 12.08 | 2,389 | 23.89 | 1,343 | 48.35 | 698 | 94.23 | 179 | 0 | 120 | 59 |
| Tunica | 10,375 | 5.19 | 857 | 8.57 | 416 | 14.98 | 216 | 29.16 | 58 | 0 | 60 | -2 |
| Washington | 43,986 | 21.99 | 4,533 | 45.33 | 2,589 | 93.20 | 1,433 | 193.46 | 354 | 58 | 298 | -2 |
| Yalobusha | 11,592 | 5.80 | 1,273 | 12.73 | 897 | 32.29 | 508 | 68.58 | 119 | 0 | 122 | -3 |
| **District Total** | **494,838** | **247.42** | **44,913** | **449.13** | **25,546** | **919.66** | **13,807** | **1,863.95** | **3,480** | **177** | **3,076** | **227** |

## Table 2-3 (continued)
## 2016 Projected Nursing Home Bed Need

| District II | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Alcorn | 30,092 | 15.05 | 3,739 | 37.39 | 2,358 | 84.89 | 1,314 | 177.39 | 315 | 0 | 264 | 51 |
| Benton | 6,522 | 3.26 | 764 | 7.64 | 539 | 19.40 | 318 | 42.93 | 73 | 0 | 60 | 13 |
| Calhoun | 11,176 | 5.59 | 1,411 | 13.98 | 992 | 35.71 | 613 | 82.76 | 138 | 0 | 155 | -17 |
| Chickasaw | 15,127 | 7.56 | 1,584 | 15.84 | 1,067 | 38.41 | 585 | 78.98 | 141 | 0 | 139 | 2 |
| Choctaw | 7,234 | 3.62 | 916 | 9.16 | 615 | 22.14 | 358 | 48.33 | 83 | 13 | 47 | 23 |
| Clay | 16,851 | 8.43 | 1,769 | 17.69 | 1,156 | 41.62 | 670 | 90.45 | 158 | 20 | 140 | -2 |
| Itawamba | 19,131 | 9.57 | 2,108 | 21.08 | 1,337 | 48.13 | 713 | 96.26 | 175 | 0 | 196 | -21 |
| Lafayette | 38,065 | 19.03 | 2,788 | 27.88 | 1,847 | 66.49 | 1,050 | 141.75 | 255 | 0 | 180 | 75 |
| Lee | 71,191 | 35.60 | 6,989 | 69.89 | 4,186 | 150.70 | 2,210 | 298.35 | 555 | 0 | 347 | 208 |
| Lowndes | 48,761 | 24.38 | 5,246 | 52.46 | 3,043 | 109.55 | 1,712 | 231.12 | 418 | 0 | 320 | 98 |
| Marshall | 31,766 | 15.88 | 3,172 | 31.72 | 1,806 | 65.02 | 947 | 127.85 | 240 | 0 | 180 | 60 |
| Monroe | 30,305 | 15.15 | 3,568 | 35.68 | 2,380 | 85.68 | 1,304 | 176.04 | 313 | 0 | 332 | -19 |
| Noxubee | 9,543 | 4.77 | 924 | 9.24 | 571 | 20.56 | 324 | 43.74 | 78 | 0 | 60 | 18 |
| Oktibbeha | 38,822 | 19.41 | 2,853 | 28.53 | 1,779 | 64.04 | 986 | 133.11 | 245 | 0 | 179 | 66 |
| Pontotoc | 26,636 | 13.32 | 2,514 | 25.14 | 1,586 | 57.10 | 927 | 125.15 | 221 | 0 | 164 | 57 |
| Prentiss | 20,832 | 10.42 | 2,385 | 23.85 | 1,632 | 58.75 | 903 | 121.91 | 215 | 0 | 144 | 71 |
| Tippah | 17,693 | 8.85 | 1,836 | 18.36 | 1,272 | 45.79 | 696 | 93.96 | 167 | 0 | 240 | -73 |
| Tishomingo | 14,959 | 7.48 | 1,978 | 19.78 | 1,427 | 51.37 | 791 | 106.79 | 185 | 15 | 163 | 7 |
| Union | 23,708 | 11.85 | 2,380 | 23.80 | 1,551 | 55.84 | 866 | 116.91 | 208 | 0 | 180 | 28 |
| Webster | 7,537 | 3.77 | 840 | 8.40 | 635 | 22.86 | 377 | 50.90 | 86 | 0 | 155 | -69 |
| Winston | 15,588 | 7.79 | 1,724 | 17.24 | 1,245 | 44.82 | 717 | 96.80 | 167 | 0 | 180 | -13 |
| **District Total** | **501,539** | **250.77** | **51,488** | **514.88** | **33,024** | **1,188.86** | **18,381** | **2,481.44** | **4,436** | **48** | **3,825** | **563** |

## Table 2-3 (continued)
## 2016 Projected Nursing Home Bed Need

| District III | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| County | Population 0 - 64 | Bed Need (0.5/1,000) | Population 65 - 74 | Bed Need (10/1,000) | Population 75 - 84 | Bed Need (36/1,000) | Population 85+ | Bed Need (135/1,000) | Total Bed Need | # Beds in Abeyance | Licensed/CON Approved Beds | Difference |
| Adams | 24,016 | 12.01 | 2,976 | 29.76 | 2,121 | 76.36 | 1,212 | 163.62 | 282 | 20 | 234 | 28 |
| Amite | 10,855 | 5.43 | 1,365 | 13.65 | 864 | 31.10 | 488 | 65.88 | 116 | 0 | 80 | 36 |
| Claiborne | 9,784 | 4.89 | 720 | 7.20 | 483 | 17.39 | 254 | 34.29 | 64 | 18 | 59 | -13 |
| Copiah | 25,509 | 12.75 | 2,445 | 24.45 | 1,510 | 54.36 | 889 | 120.02 | 212 | 0 | 180 | 32 |
| Franklin | 6,842 | 3.42 | 707 | 7.07 | 524 | 18.86 | 306 | 41.31 | 71 | 0 | 60 | 11 |
| Hinds | 214,492 | 107.25 | 19,287 | 192.87 | 10,646 | 383.26 | 6,060 | 818.10 | 1,501 | 14 | 1,399 | 88 |
| Issaquena | 1,213 | 0.61 | 114 | 1.14 | 76 | 2.74 | 36 | 4.86 | 9 | 0 | 0 | 9 |
| Jefferson | 7,625 | 3.81 | 629 | 6.29 | 404 | 14.54 | 216 | 29.16 | 54 | 0 | 60 | -6 |
| Lawrence | 11,157 | 5.58 | 1,090 | 10.90 | 774 | 27.86 | 402 | 54.27 | 99 | 0 | 60 | 39 |
| Lincoln | 29,652 | 14.83 | 3,082 | 30.82 | 2,007 | 72.25 | 1,189 | 160.52 | 278 | 0 | 320 | -42 |
| Madison | 95,478 | 47.74 | 6,929 | 69.29 | 4,009 | 144.32 | 2,272 | 306.72 | 568 | 0 | 275 | 293 |
| Pike | 33,661 | 16.83 | 3,378 | 33.78 | 2,231 | 18.86 | 1,337 | 180.50 | 250 | 0 | 285 | -35 |
| Rankin | 141,980 | 70.99 | 12,963 | 129.63 | 6,613 | 238.07 | 3,372 | 455.22 | 894 | 0 | 410 | 484 |
| Sharkey | 4,343 | 2.17 | 474 | 4.74 | 278 | 10.01 | 155 | 20.93 | 38 | 0 | 54 | -16 |
| Simpson | 23,271 | 11.64 | 2,334 | 23.34 | 1,478 | 53.21 | 825 | 111.38 | 200 | 0 | 180 | 20 |
| Walthall | 12,828 | 6.41 | 1,291 | 12.91 | 883 | 31.79 | 490 | 66.15 | 117 | 0 | 137 | -20 |
| Warren | 40,882 | 20.44 | 4,439 | 44.39 | 2,391 | 86.08 | 1,301 | 175.64 | 327 | 0 | 380 | -53 |
| Wilkinson | 8,729 | 4.36 | 745 | 7.45 | 527 | 18.97 | 290 | 39.15 | 70 | 0 | 105 | -35 |
| Yazoo | 24,299 | 12.15 | 2,016 | 20.16 | 1,272 | 45.79 | 752 | 101.52 | 180 | 0 | 240 | -60 |
| **District Total** | **726,616** | **363.31** | **66,984** | **669.84** | **39,091** | **1,407.28** | **21,846** | **2,949.21** | **5,328** | **52** | **4,518** | **758** |

## Table 2-3 (continued)
## 2016 Projected Nursing Home Bed Need

| District IV | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Clarke | 13,753 | 6.88 | 1,694 | 16.94 | 1,103 | 39.71 | 635 | 85.73 | 149 | 0 | 120 | 29 |
| Covington | 18,635 | 9.32 | 1,797 | 17.97 | 1,230 | 44.28 | 662 | 89.37 | 161 | 0 | 120 | 41 |
| Forrest | 73,011 | 36.51 | 5,776 | 57.76 | 3,854 | 138.74 | 2,222 | 299.97 | 533 | 100 | 386 | 47 |
| George | 22,197 | 11.10 | 2,010 | 20.10 | 1,196 | 43.06 | 575 | 77.63 | 152 | 0 | 79 / 41 | 32 |
| Greene | 11,092 | 5.55 | 1,181 | 11.81 | 732 | 26.35 | 372 | 50.22 | 94 | 0 | 120 | -26 |
| Hancock | 38,538 | 19.27 | 5,383 | 53.83 | 3,474 | 125.06 | 1,722 | 232.47 | 431 | 29 | 140 | 262 |
| Harrison | 156,487 | 78.24 | 16,375 | 163.75 | 10,732 | 386.35 | 5,566 | 751.41 | 1,380 | 60 | 742 | 578 |
| Jackson | 116,634 | 58.32 | 12,751 | 127.51 | 7,711 | 277.60 | 3,694 | 498.69 | 962 | 0 | 528 | 434 |
| Jasper | 15,096 | 7.55 | 1,617 | 16.17 | 1,198 | 43.13 | 648 | 87.48 | 154 | 0 | 110 | 44 |
| Jeff Davis | 10,233 | 5.12 | 1,270 | 12.70 | 900 | 32.40 | 489 | 66.02 | 116 | 0 | 60 | 56 |
| Jones | 57,584 | 28.79 | 5,922 | 59.22 | 4,426 | 159.34 | 2,439 | 329.27 | 577 | 10 | 418 | 149 |
| Kemper | 8,187 | 4.09 | 905 | 9.05 | 723 | 26.03 | 398 | 53.73 | 93 | | 60 | 33 |
| Lamar | 49,368 | 24.68 | 3,720 | 37.20 | 2,265 | 81.54 | 1,141 | 154.04 | 297 | 3 | 177 | 117 |
| Lauderdale | 63,908 | 31.95 | 6,569 | 65.69 | 4,989 | 179.60 | 2,865 | 386.78 | 664 | 47 | 525 / 21 | 71 |
| Leake | 21,019 | 10.51 | 1,914 | 19.14 | 1,417 | 51.01 | 806 | 108.81 | 189 | 0 | 143 | 46 |
| Marion | 21,667 | 10.83 | 2,195 | 21.95 | 1,627 | 58.57 | 946 | 127.71 | 219 | 0 | 297 | -78 |
| Neshoba | 27,048 | 13.52 | 2,602 | 26.02 | 1,941 | 69.88 | 1,096 | 147.96 | 257 | 3 | 217 | 37 |
| Newton | 19,259 | 9.63 | 1,954 | 19.54 | 1,520 | 54.72 | 852 | 115.02 | 199 | 0 | 180 | 19 |
| Pearl River | 53,238 | 26.62 | 5,559 | 55.59 | 3,535 | 127.26 | 1,770 | 238.95 | 448 | 6 | 240 / 120 | 82 |
| Perry | 10,382 | 5.19 | 1,157 | 11.57 | 766 | 27.58 | 368 | 49.68 | 94 | 0 | 60 | 34 |
| Scott | 24,341 | 12.17 | 2,489 | 24.89 | 1,724 | 62.06 | 903 | 121.91 | 221 | 0 | 140 | 81 |
| Smith | 13,067 | 6.53 | 1,493 | 14.93 | 1,113 | 40.07 | 583 | 78.71 | 140 | 0 | 121 | 19 |
| Stone | 15,666 | 7.83 | 1,425 | 14.25 | 885 | 31.86 | 425 | 57.38 | 111 | 40 | 83 | -12 |
| Wayne | 17,869 | 8.93 | 1,879 | 18.79 | 1,277 | 45.97 | 642 | 86.67 | 160 | 0 | 90 | 70 |
| **District Total** | **878,279** | **439.14** | **89,637** | **896.37** | **60,338** | **2,172.17** | **31,819** | **4,295.57** | **7,803** | **298** | **5,156 / 182** | **2,167** |

## 105 Policy Statement Regarding Certificate of Need Applications for a Pediatric Skilled Nursing Facility

1. The 1993 Mississippi Legislature authorized the Department of Health to issue a Certificate of Need for the construction of a pediatric skilled nursing facility not to exceed 60 new beds.

2. A pediatric skilled nursing facility is defined as an institution or a distinct part of an institution that is primarily engaged in providing to inpatients skilled nursing care and related services for persons under 21 years of age who require medical, nursing care, or rehabilitation services for the rehabilitation of injured, disabled, or sick persons.

3. The MSDH will review applications for the construction of pediatric skilled nursing facility beds using the general CON review criteria and standards contained in the *Mississippi Certificate of Need Review Manual*, criteria and standards for nursing homes and MR/DD facilities contained in the *State Health Plan*, and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

4. Effective April 12, 2002, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need under the authority of Section 41-7-191(1)(c).

5. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

## 106 Certificate of Need Criteria and Standards for Nursing Home Care Services for Mentally Retarded and other Developmentally Disabled Individuals

### 106.01 Policy Statement Regarding Certificate of Need Applications for the Offering of Nursing Home Care Services for Mentally Retarded and Other Developmentally Disabled Individuals

1. Legislation

   a. The 1990 Mississippi Legislature imposed a permanent moratorium which prohibits the MSDH from granting approval for or issuing a CON to any person proposing the new construction, addition to, or expansion of an intermediate care facility for the mentally retarded (ICF/MR).

   b. Effective July 1, 1990, any health care facility defined as a psychiatric hospital, skilled nursing facility, intermediate care facility, intermediate care facility for the mentally retarded, or psychiatric residential treatment facility which is owned by the State of Mississippi and under the direction and control of the State Department of Mental Health is exempted from the requirement of the issuance of

a Certificate of Need under Section 41-7-171 et seq., for projects which involve new construction, renovation, expansion, addition of new beds, or conversion of beds from one category to another in any such defined health care facility.

c. Effective April 12, 2002, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need.

d. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

2. MR/DD Long-Term Care Planning Districts (MR/DD LTCPD): The need for additional MR/DD nursing home care beds shall be based on the MR/DD LTCPDs as outlined on Map 2-2.

3. Bed Need: The need for MR/DD nursing home care beds is established at one bed per 1,000 population less than 65 years of age.

4. Population Projections: The MSDH shall use population projections as presented in Table 2-4 when calculating bed need.

5. Bed Limit: No MR/DD LTCPD shall be approved for more than its proportioned share of needed MR/DD nursing home care beds. No application shall be approved which would over-bed the state as a whole.

6. Bed Inventory: The MSDH shall review the need for additional MR/DD nursing home care beds utilizing the most recent information available regarding the inventory of such beds.

### 106.02 Certificate of Need Criteria and Standards for Nursing Home Beds for Mentally Retarded and Other Developmentally Disabled Individuals

If the legislative moratorium were removed or partially lifted, the Mississippi State Department of Health would review applications for MR/DD nursing home care beds under the statutory requirements of Sections 41-7-173 (h) subparagraph (viii), 41-7-191, and 41-7-193, Mississippi Code 1972, as amended. The MSDH will also review applications for Certificate of Need according to the applicable policy statements contained in this *Plan;* the general criteria as listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

Certificate of Need review is required for the offering of MR/DD nursing home care services, as defined, if the capital expenditure exceeds $2,000,000; if the licensed bed capacity is increased through the conversion or addition of beds; or if MR/DD nursing home care services have not been provided on a regular basis by the proposed provider of such services within the period of twelve (12) months prior to the time such services would be offered. Certificate of

Need review is required for the construction, development, or otherwise establishment of new MR/DD nursing home care beds regardless of capital expenditure.

1. **Need Criterion: The applicant shall document a need for MR/DD nursing home care beds using the need methodology as presented below. The applicant shall document in the application the following:**

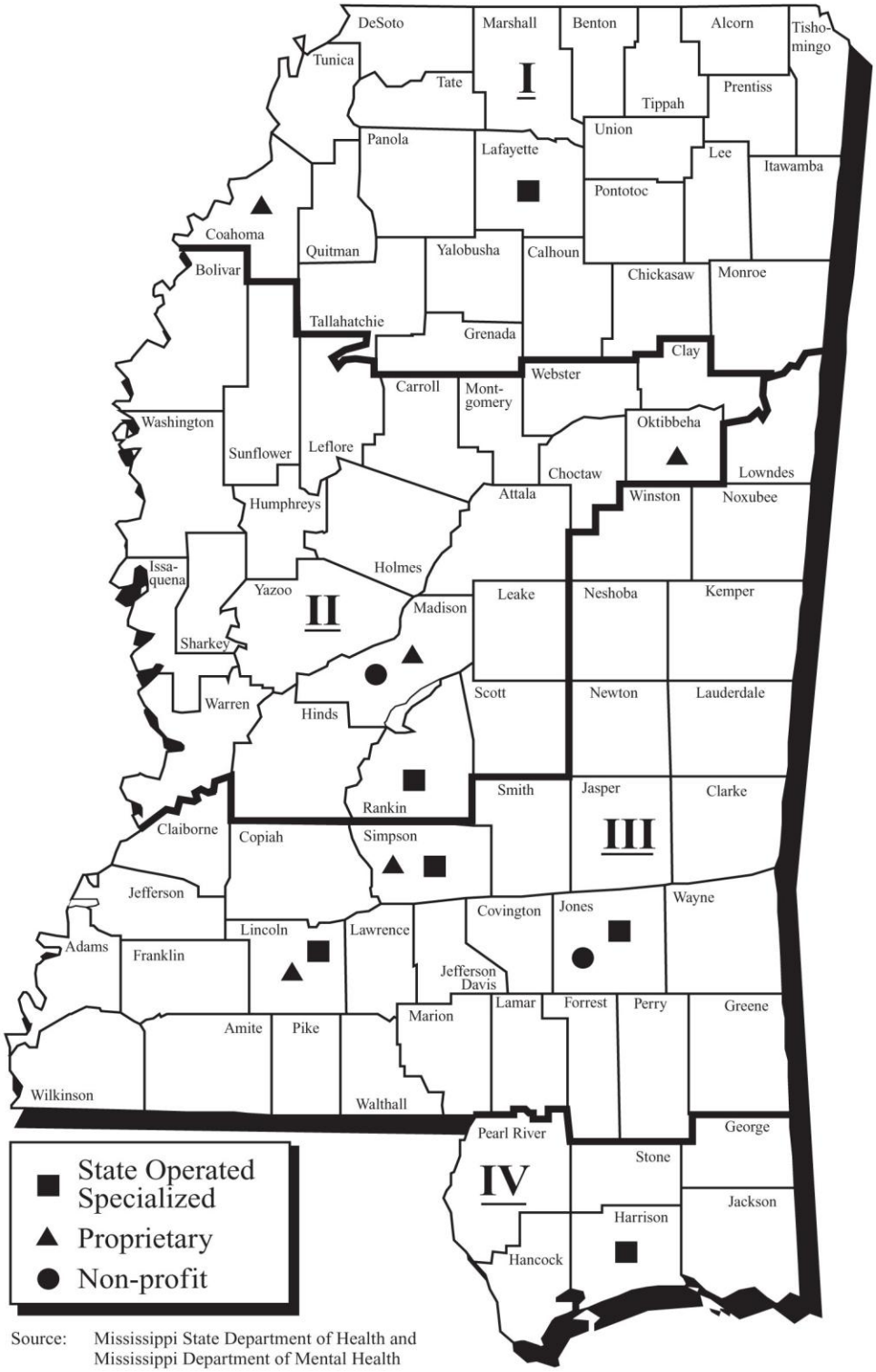
    a. **using the ratio of one bed per 1,000 population under 65 years of age, the state as a whole must show a need; and**

    b. **the MR/DD Long-Term Care Planning District (LTCPD) where the proposed facility/beds/services are to be located must show a need.**

2. The applicant shall document the number of beds that will be constructed/converted and/or licensed as offering MR/DD nursing home care services.

3. The MSDH shall give priority consideration to those CON applications proposing the offering of MR/DD nursing home care services in facilities which are 15 beds or less in size.

**Map 2-2**
**Mentally Retarded/Developmentally Disabled Long-Term Care**
**Planning Districts and Location of Existing Facilities**
**(ICF/MR – Licensed)**




Source: Mississippi State Department of Health and Mississippi Department of Mental Health

**Table 2-4**
**2016 Projected MR/DD Nursing Home Bed Need**
**(1 Bed per 1,000 Population Aged 65 and Under)**

| | 2015 Projected Pop. <65 | 2012 Licensed Beds | Projected MR/DD Bed Need [1] | Difference [1] |
|---|---|---|---|---|
| **Mississippi** | **2,601,272** | **2,816** | **2,601** | **-215** |
| **District I** | **665,634** | **617** | **666** | **49** |
| Alcorn | 30,092 | | 30 | 30 |
| Benton | 6,522 | | 7 | 7 |
| Calhoun | 11,176 | | 11 | 11 |
| Chickasaw | 15,127 | | 15 | 15 |
| Coahoma | 21,973 | 132 | 22 | -110 |
| DeSoto | 172,781 | | 173 | 173 |
| Grenada | 19,430 | | 19 | 19 |
| Itawamba | 19,131 | | 19 | 19 |
| Lafayette | 38,065 | 485 | 38 | -447 |
| Lee | 71,191 | | 71 | 71 |
| Marshall | 31,766 | | 32 | 32 |
| Monroe | 30,305 | | 30 | 30 |
| Panola | 31,041 | | 31 | 31 |
| Pontotoc | 26,636 | | 27 | 27 |
| Prentiss | 20,832 | | 21 | 21 |
| Quitman | 6,602 | | 7 | 7 |
| Tallahatchie | 10,472 | | 10 | 10 |
| Tate | 24,165 | | 24 | 24 |
| Tippah | 17,693 | | 18 | 18 |
| Tishomingo | 14,959 | | 15 | 15 |
| Tunica | 10,375 | | 10 | 10 |
| Union | 23,708 | | 24 | 24 |
| Yalobusha | 11,592 | | 12 | 12 |

[1] Data may not equal totals due to rounding.

**Table 2-4 (continued)**
**2016 Projected MR/DD Nursing Home Bed Need**
**(1 Bed per 1,000 Population Aged 65 and Under)**

| | 2015 Projected Pop. <65 | 2012 Licensed Beds | Projected MR/DD Bed Need [1] | Difference [1] |
|---|---|---|---|---|
| **District II** | **873,659** | **707** | **874** | **167** |
| Attala | 16,237 | | 16 | 16 |
| Bolivar | 30,972 | | 31 | 31 |
| Carroll | 7,865 | | 8 | 8 |
| Choctaw | 7,234 | | 7 | 7 |
| Clay | 16,851 | | 17 | 17 |
| Hinds | 214,492 | | 214 | 214 |
| Holmes | 16,915 | | 17 | 17 |
| Humphreys | 7,840 | | 8 | 8 |
| Issaquena | 1,213 | | 1 | 1 |
| Leake | 21,019 | | 21 | 21 |
| Leflore | 28,992 | | 29 | 29 |
| Lowndes | 48,761 | | 49 | 49 |
| Madison | 95,478 | 152 | 95 | -57 |
| Montgomery | 8,923 | | 9 | 9 |
| Oktibbeha | 38,822 | 140 | 39 | -101 |
| Rankin | 141,980 | 415 | 142 | -273 |
| Scott | 24,341 | | 24 | 24 |
| Sharkey | 4,343 | | 4 | 4 |
| Sunflower | 24,677 | | 25 | 25 |
| Warren | 40,882 | | 41 | 41 |
| Washington | 43,986 | | 44 | 44 |
| Webster | 7,537 | | 8 | 8 |
| Yazoo | 24,299 | | 24 | 24 |

[1] Data may not equal totals due to rounding.

**Table 2-4 (continued)**
**2016 Projected MR/DD Nursing Home Bed Need**
**(1 Bed per 1,000 Population Aged 65 and Under)**

| | 2015 Projected Pop. <65 | 2012 Licensed Beds | Projected MR/DD Bed Need [1] | Difference [1] |
|---|---|---|---|---|
| **District III** | **659,219** | **1,252** | **659** | **-593** |
| Adams | 24,016 | | 24 | 24 |
| Amite | 10,855 | | 11 | 11 |
| Claiborne | 9,784 | | 10 | 10 |
| Clarke | 13,753 | | 14 | 14 |
| Copiah | 25,509 | | 26 | 26 |
| Covington | 18,635 | | 19 | 19 |
| Forrest | 73,011 | | 73 | 73 |
| Franklin | 6,842 | | 7 | 7 |
| Greene | 11,092 | | 11 | 11 |
| Jasper | 15,096 | | 15 | 15 |
| Jefferson | 7,625 | | 8 | 8 |
| Jefferson Davis | 10,233 | | 10 | 10 |
| Jones | 57,584 | 757 | 58 | -699 |
| Kemper | 8,187 | | 8 | 8 |
| Lamar | 49,368 | | 49 | 49 |
| Lauderdale | 63,908 | | 64 | 64 |
| Lawrence | 11,157 | | 11 | 11 |
| Lincoln | 29,652 | 172 | 30 | -142 |
| Marion | 21,667 | | 22 | 22 |
| Neshoba | 27,048 | | 27 | 27 |
| Newton | 19,259 | | 19 | 19 |
| Noxubee | 9,543 | | 10 | 10 |
| Perry | 10,382 | | 10 | 10 |
| Pike | 33,661 | | 34 | 34 |
| Simpson | 23,271 | 323 | 23 | -300 |
| Smith | 13,067 | | 13 | 13 |
| Walthall | 12,828 | | 13 | 13 |
| Wayne | 17,869 | | 18 | 18 |
| Wilkinson | 8,729 | | 9 | 9 |
| Winston | 15,588 | | 16 | 16 |

[1] Data may not equal totals due to rounding.

**Table 2-4 (continued)**
**2016 Projected MR/DD Nursing Home Bed Need**
**(1 Bed per 1,000 Population aged 65 and Under)**

| | 2015 Projected Pop. <65 | 2012 Licensed Beds | Projected MR/DD Bed Need [1] | Difference 1 |
|---|---|---|---|---|
| **District IV** | **402,760** | **240** | **403** | **163** |
| George | 22,197 | | 22 | 22 |
| Hancock | 38,538 | | 39 | 39 |
| Harrison | 156,487 | 240 | 156 | -84 |
| Jackson | 116,634 | | 117 | 117 |
| Pearl River | 53,238 | | 53 | 53 |
| Stone | 15,666 | | 16 | 16 |

[1] Data may not equal totals due to rounding.

# CHAPTER 3

# MENTAL HEALTH

# Chapter 03 Mental Health

This chapter addresses mental illness, alcoholism, drug abuse, and developmental disabilities. These conditions result in social problems of such magnitude that mental health ranks as one of the state's priority health issues. The Mississippi Department of Mental Health, regional community Mental Health-Mental Retardation Centers, and licensed private sector facilities provide most of the state's mental health services. Unless otherwise specified, information in this chapter is limited to the programs and services of private non-governmental entities.

## 100 Mississippi Department of Mental Health

State law designates the Mississippi Department of Mental Health (MDMH) as the agency to coordinate and administer the delivery of public mental health services, alcohol/drug abuse services, and services for persons with intellectual/developmental disabilities throughout the state, as well as community-based day programs for individuals with Alzheimer's disease and other dementia. Responsibilities of MDMH include: (a) state-level planning and expansion of all types of mental health, mental retardation, and substance abuse services, (b) standard-setting and support for community mental health/mental retardation and alcohol/drug abuse programs, (c) state liaison with mental health training and educational institutions, (d) operation of the state's psychiatric facilities, and (e) operation of the state's facilities for individuals with intellectual/developmental disabilities.

Regional community mental health-mental retardation centers provide a major component of the state's mental health services. Fourteen centers currently operate in the state's mental health service areas, and most centers have satellite offices in other counties. Each center must meet federal and state program and performance standards. The major objectives of the regional community mental health centers include: (a) providing accessible services to all citizens with mental and emotional problems; (b) reducing the number of initial admissions to the state hospitals; and (c) preventing re-admissions through supportive aftercare services. These centers are a vital element in the plan to provide an integrated system of mental health services to all residents of Mississippi.

## 101 Mental Health Needs in Mississippi

The prevalence of mental illness, although difficult to assess, serves as a good indicator of the volume of need for mental health services in a given population. The negative social stigma associated with the term "mental illness" also obstructs efforts to measure the true incidence/ prevalence of most types of mental illness and behavior disorders and the need for mental health services.

Using the methodology updated by the federal Center for Mental Health Services (CMHS) for estimated prevalence of serious mental illness among adults (*Federal Register*, June 24, 1999) and U.S. Bureau of the Census 2013 population estimates, the MDMH estimates the prevalence of serious mental illness among adults in Mississippi, ages 18 years and above, as 5.4 percent or 120,332 individuals. The same methodology estimates the national prevalence for the same age group also as 5.4 percent.

In Fiscal Year 2014, a total of 70,334 adults received mental health services through the public community mental health system, including the regional community mental health centers and the state psychiatric hospitals. (Note: Totals might include some duplication across community and hospital services.)

### 101.01 Mental Health Needs of Children/Adolescents

Precise data concerning the size of the country's population of children and adolescents with emotional or mental disorders remain difficult to obtain. The methodology issued by the national Center of Mental Health Services (*Federal Register*, July 17,1998) estimates the number of children and adolescents (9-17 years of age) with serious emotional disturbance to be 369,698 for the year 2013. The methodology adjusts for socio-economic differences across states. Given Mississippi's relatively high poverty rate when compared to other states, (29.1% of ages 5-17 in poverty, based on 2013 federal poverty rates), the estimated prevalence ranges for the state, as follows:

1. Mississippi's estimated prevalence of serious emotional disturbance in children and adolescents (ages 9 to 17) is between 11 and 13 percent, or 40,667– 58,061 children.

2. Mississippi's estimated prevalence of the more severely impaired group of children and adolescents (estimated at five to seven percent of the national population), aged 9-17 is between seven and nine percent, or 25,879 – 33,273 Mississippi children.

In Fiscal Year 2014, the public community mental health system served 34,194 children and adolescents with serious emotional disturbance. (Mississippi State Plan for Community Mental Health Services Implementation Report, FY 2014) (Note: Totals might include some duplication across community mental health centers and other nonprofit programs).

### 101.02 National Survey on Drug Use and Health for Mississippi

According to statistics cited in SAMHSA's *2007-08 National Survey on Drug Use and Health* state estimates (most available data), seven percent of Mississippians 12 years or older were past-month illicit drug users. Past-month marijuana use among Mississippians 12 years and older was four percent. Approximately 38.4 percent of Mississippians were past-month alcohol users. Past month binge alcohol use among Mississippians was 19.87 percent.

## 101.03 Developmental Disabilities

The nationally-accepted prevalence rate estimate used by the Administration on Developmental Disabilities for estimating the state rate is 1.8 percent of the general population. By applying the 1.8 percent prevalence rate to Mississippi's 2020 population projections, the results equal 56,808 individuals who may have a developmental disability. The intellectual and/or developmental disability bed need determinations can be found in Chapter 2 of this *Plan.*

## 102 Adult Psychiatric Services (State-Operated and Private)

Mississippi's four state-operated hospitals and nine crisis intervention centers provide the majority of inpatient psychiatric care and services throughout the state. In FY 2014, the Mississippi State Hospital at Whitfield reported a total of 360 active psychiatric licensed beds; East Mississippi State Hospital at Meridian reported 120 active psychiatric licensed beds, North Mississippi State Hospital in Tupelo reported 50 active licensed beds, and South Mississippi State Hospital in Purvis reported 50 licensed beds. The four facilities reported that 3,020 adults received psychiatric services at the hospitals in FY 2014, 1,174 at Mississippi State Hospital at Whitfield, 694 at East Mississippi State Hospital, 520 at North Mississippi State Hospital, and 632 at South

Mississippi State Hospital. Additionally, a total of 4,007 adults were served through the nine crisis centers in FY 2014.

Even though many private facilities have low occupancy rates, the state institutions provide the majority of inpatient care for the medically indigent. Medically indigent patients have difficulty gaining access to private psychiatric facilities in their respective communities. To help address the problem, the Legislature provided funding for seven state crisis intervention centers as satellites to existing facilities operated by the Department of Mental Health (DMH). Centers are operational in Brookhaven, Corinth, Newton, Laurel, Cleveland, and Batesville. The Department of Mental Health contracted with Life Help (Region VI community mental health center) to operate the crisis center in Grenada beginning September 1, 2009. This pilot program began with the purpose of studying the potential for increased efficiencies and improved access to services by individuals without their being involuntarily committed.

All of the centers include 16 beds and one isolation bed. The role of these centers in the regional system is to provide stabilization and treatment services to persons who have been committed to a psychiatric hospital and for whom a bed is not available. Beginning July 1, 2010, DMH transitioned five of the remaining state-operated crisis centers (now called Crisis Stabilization Units) to a regional community mental health center located in Batesville, Brookhaven, Cleveland, Corinth and Laurel. Central Mississippi Residential Center will continue to operate the unit in Newton. The Gulfport center is operated by Gulf Coast Mental Health and partially funded by a grant from DMH. Timber Hills Mental Health Services operates the Brookhaven CSU; Life Help operates the CSUs located in Grenada and Cleveland; and Pine Belt Mental Resources operates the Laurel CSU. In FY 2013, the CSUs served 3,731 adults. Life Help assumed operation of the Cleveland Crisis Stabilization Unit.

Mississippi has 14 hospital-based and two freestanding adult psychiatric facilities, with a capacity of 588 licensed beds for adult psychiatric patients (plus 2 held in abeyance by the MSDH and 20 CON approved) distributed throughout the state. The criteria and standards section of this chapter provides a full description of the services that private facilities must provide. Map 3-1 shows the location of inpatient facilities in Mississippi serving adult acute psychiatric patients; Table 3-2 shows utilization statistics.

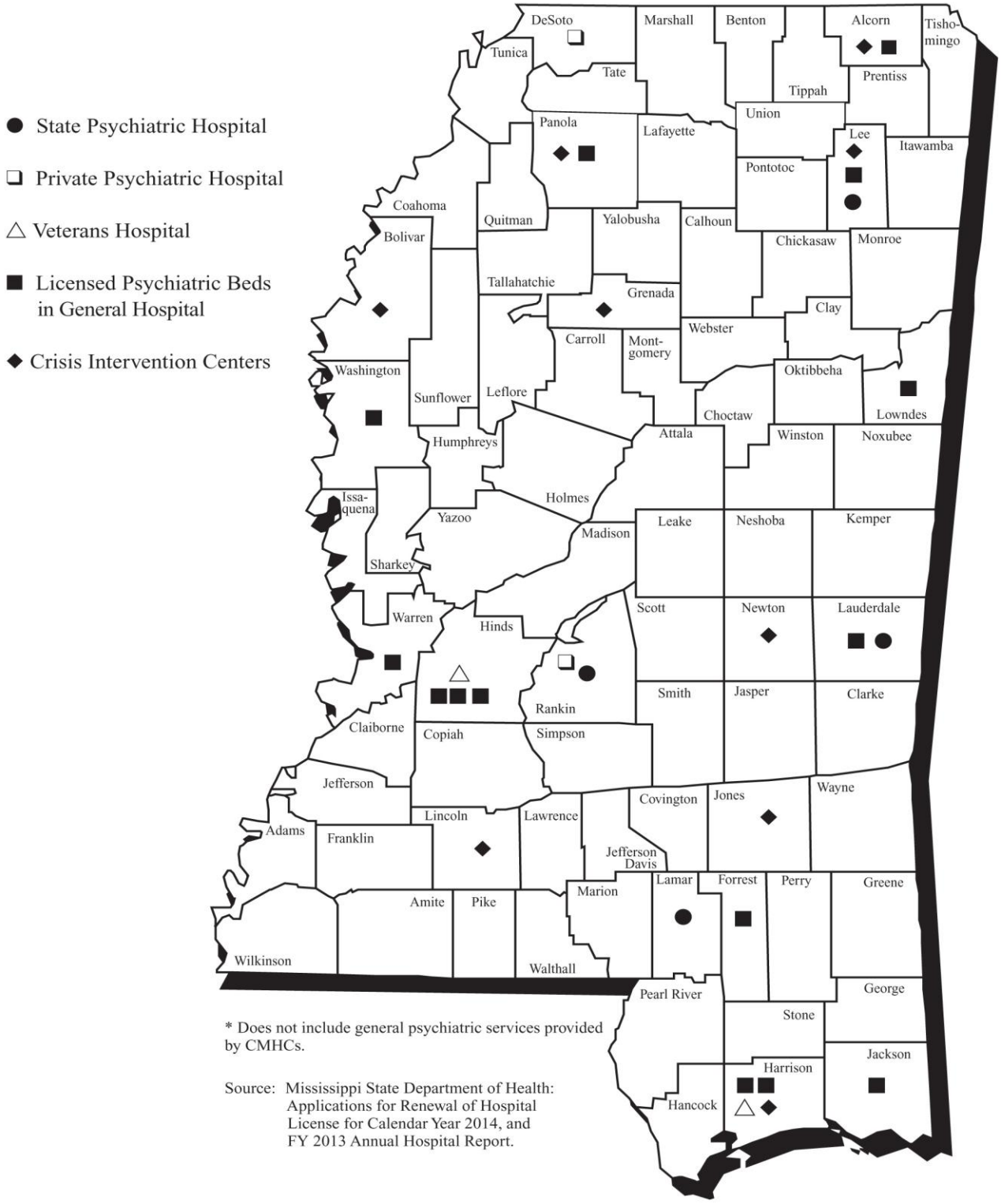
**Table 3-1**
**Acute Adult Psychiatric Bed Utilization**
**FY 2013**

| Facility | County | Licensed/CON[a]/ Abeyance[b] Beds | | Inpatient Days | Occupancy Rate (%) | ALOS |
|---|---|---|---|---|---|---|
| Alliance Health Center | Lauderdale | 38 | | 13,912 | 100.30 | 8.99 |
| Baptist Memo. Hospital-Golden Triangle | Lowndes | 22 | | 6,704 | 83.49 | 6.30 |
| Biloxi Regional Medical Center | Harrison | 45 | | 9,923 | 60.41 | 6.49 |
| Brentwood Behavioral Health Care * | Rankin | 31 | 2[b] | 5,308 | 46.91 | 8.69 |
| Central Miss Medical Center** | Hinds | 47 | | 8,819 | 51.41 | 4.73 |
| Delta Regional Medical Center- West | Washington | 9 | | 2,099 | 63.90 | 4.02 |
| Forrest General Hospital | Forrest | 64 | | 11,267 | 48.23 | 4.65 |
| Magnolia Regional Health Center | Alcorn | 19 | | 4,044 | 58.31 | 6.40 |
| Memorial Hospital at Gulfport | Harrison | 59 | | 4,925 | 22.87 | 7.00 |
| North Miss Medical Center | Lee | 33 | | 8,111 | 67.34 | 6.77 |
| Parkwood Behavorial HS-Olive Branch*** | DeSoto | 22 | 20[a] | 9,183 | 114.36 | 9.67 |
| River Region Health System | Warren | 40 | | 5,157 | 35.32 | 6.18 |
| Singing River Hospital | Jackson | 30 | | 3,718 | 33.95 | 5.52 |
| St. Dominic Hospital | Hinds | 83 | | 14,714 | 48.57 | 5.29 |
| Tri-Lakes Medical Center * | Panola | 25 | | 6,374 | 69.85 | 6.23 |
| University Hospital & Clinics | Hinds | 21 | | 5,866 | 76.53 | 6.30 |
| **Total Adult Psychiatric Beds** | | **588** | **20[a]/2[b]** | **120,124** | **55.97** | **6.22** |

[a] CON approved
[b] Beds held in abeyance by the MSDH
*Tri-Lakes Medical Center leases 25 beds from Brentwood Behavioral Health Center. 10 beds were CON approved July 2010 and became licensed/operational 09/01/2010. During FY 2011, Brentwood further reduced its adult bed capacity from 50 to 31 to create room for additional child/adolescent beds.
**Central Mississippi Medical Center received CON authority in February 2013 to expand its adult psychiatric unit bed capacity from 29 to 47 beds.
***Parkwood Behavorial HS-Olive Branch received CON authority in April 2013 to add 20 Adult Psychiatric Beds to its existing 22 beds.
Garden Park Medical Center received CON authority in March 2014 for the provision of Post Traumatic Stress Disorder Services and Addition of Nine Psychiatric Beds
East MS State Hospital placed 212 Adult Psychiatric Beds in abeyance as of 12/31/14

Sources: Applications for Renewal of Hospital License for Calendar Year 2015 and FY 2014 Annual Hospital Report; and Division of Health Planning and Resource Development Computations

**Map 3-1**
**Operational and Proposed Inpatient Facilities**
**Serving Adult Acute Psychiatric Patients***




* Does not include general psychiatric services provided by CMHCs.

Source: Mississippi State Department of Health: Applications for Renewal of Hospital License for Calendar Year 2014, and FY 2013 Annual Hospital Report.

## 103 Child/Adolescent Psychiatric Services

Three private and five hospital-based facilities, with a total of 239 licensed beds, provide acute psychiatric inpatient services for children and adolescents. Map 3-2 shows the location of inpatient facilities that serve adolescent acute psychiatric patients; Table 3-2 gives utilization statistics. The criteria and standards section of this chapter provides a further description of the programs that inpatient facilities offering child/adolescent psychiatric services must provide. The Mississippi State Legislature has placed a moratorium on the approval of new Medicaid-certified child/adolescent beds within the state.

The Department of Mental Health operates a separately-licensed 60-bed facility (Oak Circle Center) at Mississippi State Hospital to provide short-term inpatient psychiatric treatment for children and adolescents between the ages of four and 17. East Mississippi State Hospital operates a 50-bed psychiatric and chemical dependency treatment unit for adolescent males.

**Table 3-2**
**Acute Adolescent Psychiatric Bed Utilization**
**FY 2013**

| Facility | County | Licensed/CON[a]/ Abeyance[b] Beds | | Inpatient Days | Occupancy Rate(%) | ALOS |
|---|---|---|---|---|---|---|
| Alliance Health Center | Lauderdale | 30 | | 8,468 | 77.33 | 12.89 |
| Biloxi Regional Medical Center * | Harrison | 11 | | N/A | N/A | N/A |
| Brentwood Behavioral Health Care ** | Rankin | 74 | | 21,829 | 80.82 | 10.68 |
| Diamond Grove Center ** | Winston | 25 | | 7,658 | 83.92 | 11.36 |
| Forrest General Hospital | Forrest | 16 | | 4,920 | 84.25 | 6.15 |
| Memorial Hospital at Gulfport | Harrison | 30 | | 4,761 | 43.48 | 6.27 |
| Parkwood Behavioral HS-Oliva Branch | DeSoto | 52 | | 12,277 | 64.68 | 10.16 |
| River Region Health System | Warren | 0 | 20[a] | N/A | N/A | N/A |
| University Hospital & Clinics | Hinds | 12 | | 2,017 | 46.05 | 9.22 |
| **Total Adolescent Psychiatric Beds** | | **250** | **20[a]** | **61,930** | **67.87** | **9.73** |

[a] CON approved
[b] Beds held in abeyance by the MSDH
* Biloxi Regional Medical Center has 11 licensed adolescent psychiatric beds; however, data was not available for the unit.
**Diamond Grove Center transferred 15 CON approved beds to Brentwood Behavioral Health Center in February 2011 and they are a part of the 74 licensed beds at Brentwood Behavioral Health Center.

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; and Division of Health Planning and Resource Development Computations

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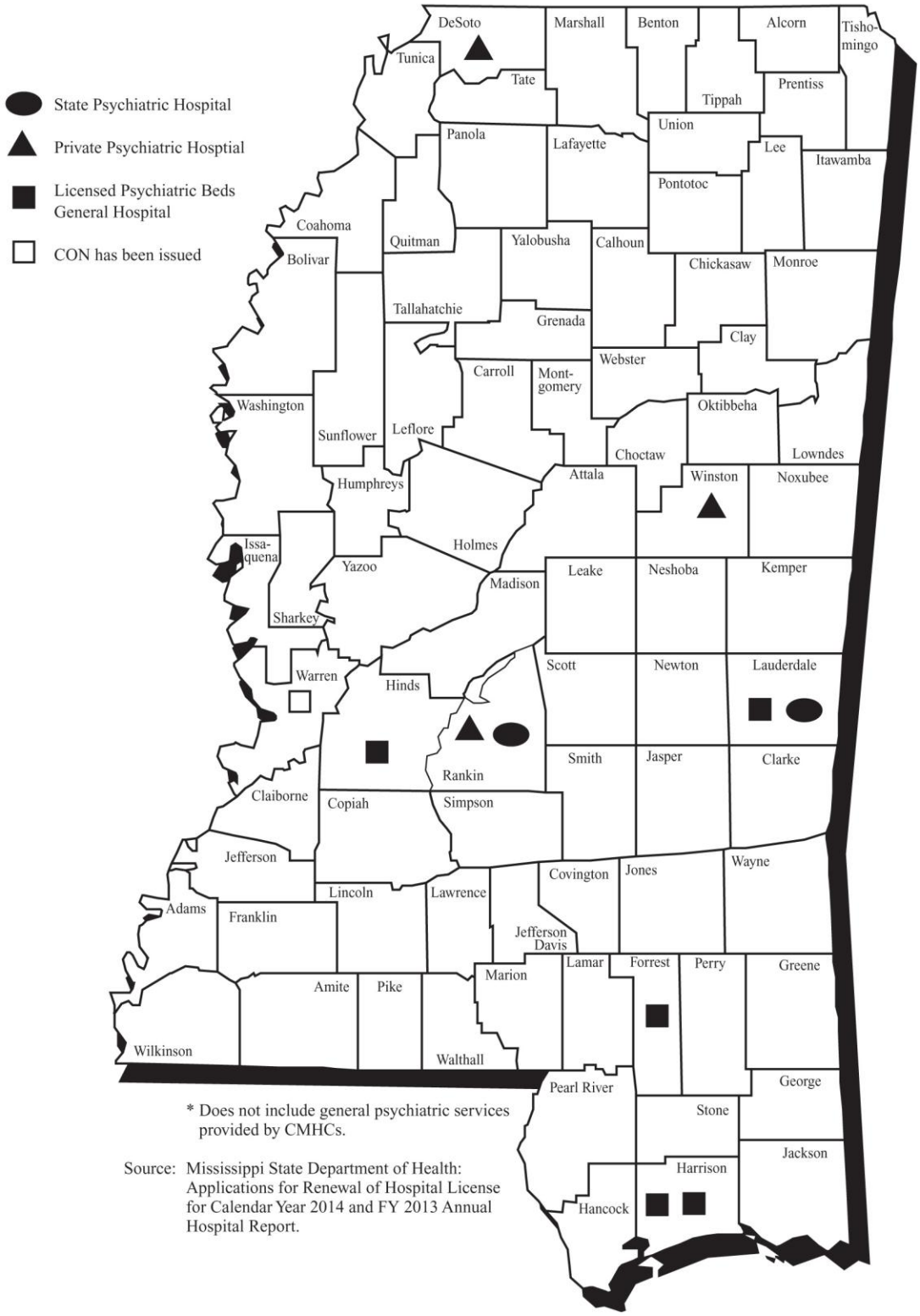
**Map 3-2**
**Operational and Proposed Inpatient Facilities**
**Serving Adolescent Acute Psychiatric Patients***




* Does not include general psychiatric services provided by CMHCs.

Source: Mississippi State Department of Health: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report.

## 104 Psychiatric Residential Treatment Facilities

Psychiatric Residential Treatment Facilities (PRTF) serve emotionally disturbed children and adolescents who are not in an acute phase of illness that requires the services of a psychiatric hospital, but who need restorative residential treatment services. "Emotionally disturbed" in this context means a condition exhibiting certain characteristics over a long period of time and to a marked degree. The criteria and standards section of this chapter describes these facilities more fully. Table 3-3 shows six facilities are in operation with a total of 298 PRTF beds. Map 3-3 presents the location of the private psychiatric residential treatment facilities throughout the state. Children and adolescents who need psychiatric residential treatment beyond the scope of these residential treatment centers are served in acute psychiatric facilities or sent out of the state to other residential treatment facilities.

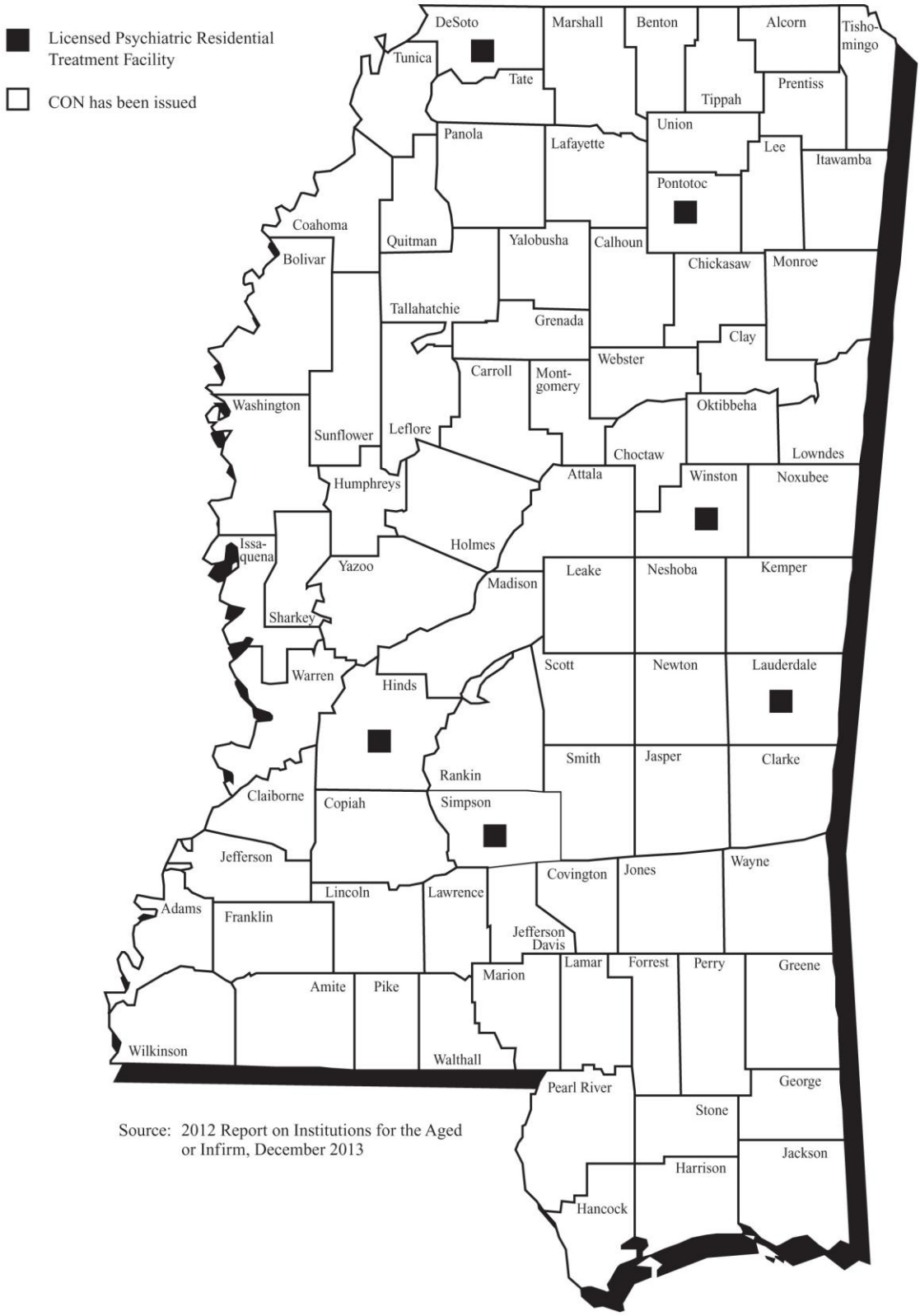
**Table 3-3**
**Private Psychiatric Residential Treatment Facility (PRTF)**
**Utilization**
**FY 2012**

| Facility | County | Licensed/CON[a] Approved Beds | | Inpatient Days | Occupancy Rate (%) | Average Daily Census |
|---|---|---|---|---|---|---|
| Parkwood BHS | DeSoto | 40 | | 10,647 | 72.73 | 29.09 |
| Cares Center | Hinds | 60 | | 21,414 | 97.51 | 58.51 |
| The Crossing | Lauderdale | 60 | | 21,927 | 99.85 | 59.91 |
| Millcreek of Pontotoc | Pontotoc | 51 | | 18,411 | 98.63 | 50.30 |
| Millcreek PRTF | Simpson | 57 | | 19,903 | 95.40 | 54.38 |
| Diamond Grove Center | Winston | 30 | | 10,844 | 98.76 | 29.63 |
| **Total PRTF Beds** | | **298** | | **103,146** | **94.57** | **281.82** |

[a] CON approved
Source: Mississippi State Department of Health, 2012 Report on Institutions for the Aged or Infirm, and Division of Health Planning and Resource Development

The DMH operates a specialized 32 bed treatment facility (ICF/MR) in Brookhaven for youth with an intellectual and/or developmental disability who are 13 years, but less than 21 years of age. A similar facility, licensed as a psychiatric residential treatment facility, is located in Harrison County for youth who have also been diagnosed with a mental disorder. Adolescents appropriate for admission are 13 years, but less than 21 years of age, who present with an Axis I diagnosis of a severe emotional disturbance and need psychiatric residential care.

**Map 3-3**
**Private Psychiatric Residential Treatment Facilities**



## 105 Alcohol and Drug Abuse Services

### 105.01 Alcohol and Drug Abuse

Alcohol and other drug problems cause pervasive effects: biological, psychological, and social consequences for the abuser; psychological and social effects on family members and others; increased risk of injury and death to self, family members, and others (especially by accidents, fires, or violence); and derivative social and economic consequences for society at large.

The location of facilities with alcohol and drug abuse programs is shown on Maps 3-4 and 3-5. Ten general hospitals and two freestanding facilities in Mississippi offer private alcohol and drug abuse treatment programs. Tables 3-4 and 3-5 show the utilization of these facilities for adult and adolescent chemical dependency services, respectively. The state hospitals at Whitfield and Meridian and the Veterans Administration Hospitals in Jackson and Gulfport provide inpatient alcohol and drug abuse services. Also, there are four facilities with programs designed for targeted populations: 1) the State Penitentiary at Parchman; 2) the Center for Independent Learning in Jackson; 3) the Mississippi Band of Choctaw Indians reservation treatment program; and 4) the Alcohol Services Center in Jackson. Additionally, each of the 15 regional community mental health centers provide a variety of alcohol and drug services, including residential and transitional treatment programs. A total of 38 such residential programs for adults and adolescents are scattered throughout the state. The Mississippi State Legislature has placed a moratorium on the approval of new Medicaid-certified child/adolescent chemical dependency beds within the state.

**Table 3-4**
**Adult Chemical Dependency Unit**
**Bed Utilization**
**FY 2013**

| Facility | County | Licensed/CON[a] Approved Beds | | Average Daily Census | Occupancy Rate (%) | ALOS |
|---|---|---|---|---|---|---|
| Alliance Health Center | Lauderdale | 8 | | 10.06 | 126.13 | 5.39 |
| Baptist Memorial Hospital - Golden Triangle | Lowndes | 8 | 13[a] | 2.39 | 29.93 | 4.48 |
| Brentwood Behavorial Healthcare * | Rankin | 0 | | 0.00 | 0.00 | 0.00 |
| Delta Regional Medical Center | Washington | 7 | | 1.06 | 15.23 | 5.07 |
| Forrest General Hospital ** | Forrest | 8 | | 1.20 | 15.03 | 3.30 |
| Mississippi Baptist Medical Center * | Hinds | 77 | | 0.66 | 0.86 | 8.58 |
| North Miss Medical Center | Lee | 33 | | 1.16 | 3.54 | 4.50 |
| Parkwood Behavioral Health System | DeSoto | 14 | | 4.85 | 34.72 | 7.30 |
| River Region Health System | Warren | 28 | | 14.77 | 52.89 | 9.94 |
| South Central Regional Medical Center | Jones | 10 | | 6.68 | 66.96 | 4.58 |
| St. Dominic Hospital | Hinds | 35 | | N/A | N/A | N/A |
| Tri-Lakes Medical Center * | Panola | 10 | | 5.41 | 54.22 | 5.33 |
| **Total Adult CDU Beds** | | **238** | **13[a]** | **48.24** | **20.32** | **6.37** |

*Brentwood Behavioral Healthcare of Rankin County will lease four beds from Mississippi Baptist Medical Center (MBMC). MBMC's licensed bed count will decrease from 77 to 73. Tri-Lakes MC now leases10 of the 23 beds from MBMC. MBMC has 13 beds that are not in use.
** Forrest General Hospital received a CON to convert 24 adult CDU beds to adult psychiatric beds April 2010.

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; Division of Health Planning and Resource Development.

As a note to Table 3-4, The Oxford Center was CON approved on May 31, 2012 and began leasing 35 adult chemical dependency beds from Mississippi Baptist Medical Center effective 10/01/2012.

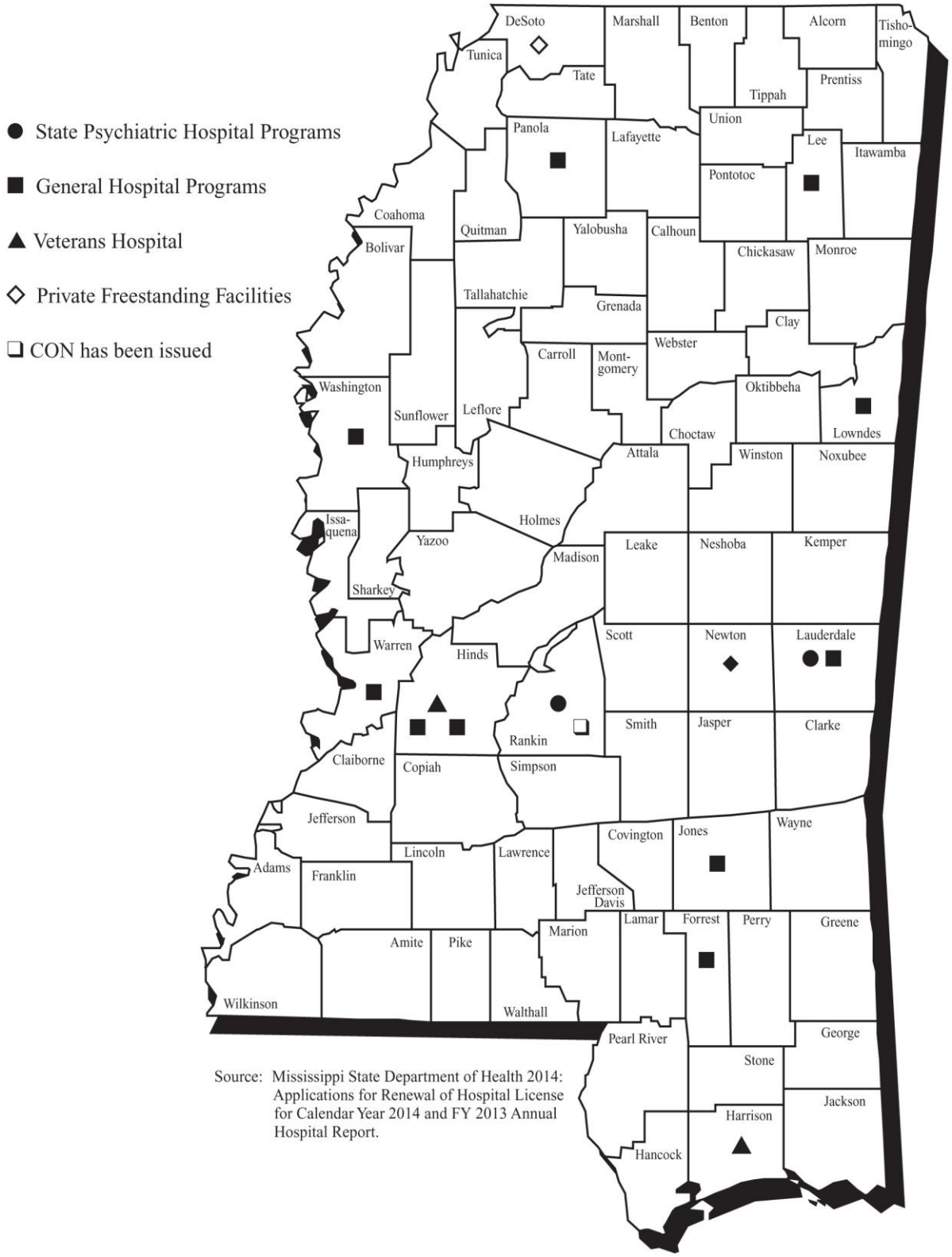
**Table 3-5**
**Adolescent Chemical Dependency Unit**
**Bed Utilization**
**FY 2013**

| Facilities | County | Licensed/CON Approved Beds | Average Daily Census | Occupancy Rate (%) * | ALOS |
|---|---|---|---|---|---|
| Memorial Hospital at Gulfport | Harrison | 20 | 2.23 | 11.21 | 9.14 |
| Mississippi Baptist Medical Center * | Hinds | 20 | N/A | N/A | N/A |
| River Region Health System * | Warren | 12 | N/A | N/A | N/A |
| **Total Adolescent CDU Beds *** | | **52** | **2.23** | **4.30** | **9.14** |

* Mississippi Baptist Medical Center and River Region Health System have 20 and 12 licensed adolescent CDU beds, respectively; however, data was not available for the units. Occupancy rate is based on 20 beds instead of 52 beds.

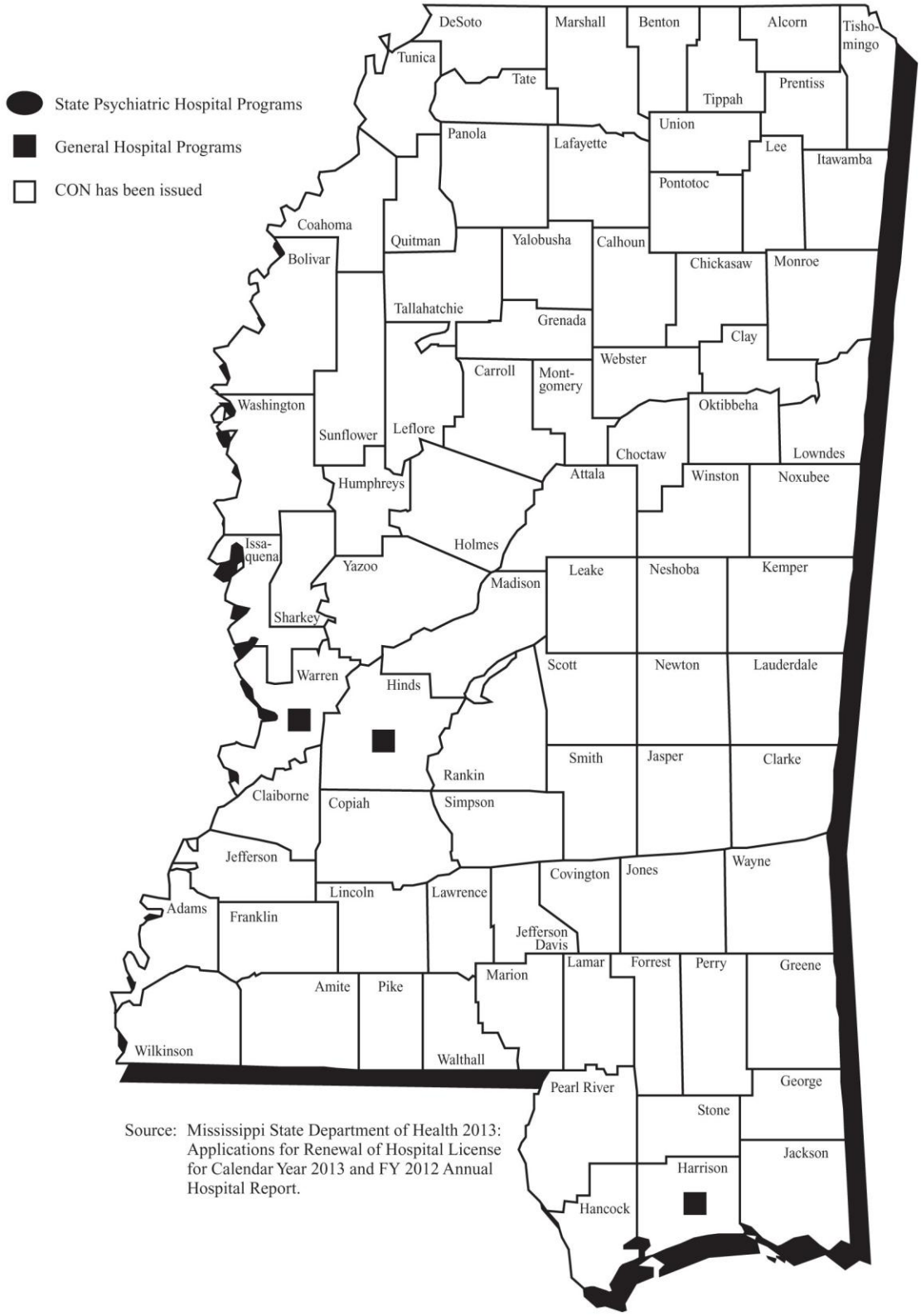
Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; Division of Health Planning and Resource Development.

**Map 3-4**
**Operational and Proposed Adult Chemical Dependency Programs and Facilities**




Source: Mississippi State Department of Health 2014: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report.

**Map 3-5**
**Operational and Proposed Adolescent Chemical Dependency Programs and Facilities**




Source: Mississippi State Department of Health 2013: Applications for Renewal of Hospital License for Calendar Year 2013 and FY 2012 Annual Hospital Report.

# CERTIFICATE OF NEED
# CRITERIA AND STANDARDS
# FOR
# ACUTE PSYCHIATRIC,
# CHEMICAL DEPENDENCY,
# AND
# PSYCHIATRIC RESIDENTIAL
# TREATMENT FACILITY BEDS/SERVICES

## 106 Certificate of Need Criteria and Standards for Acute Psychiatric, Chemical Dependency, and Psychiatric Residential Treatment Facility Beds/Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 106.01 Policy Statement Regarding Certificate of Need Applications for Acute Psychiatric, Chemical Dependency, and Psychiatric Residential Treatment Facility Beds/Services

1. An applicant must provide a "reasonable amount" of indigent/charity care as described in Chapter I of this *Plan*.

2. Mental Health Planning Areas: The Department of Health shall use the state as a whole to determine the need for acute psychiatric beds/services, chemical dependency beds/ services, and psychiatric residential treatment beds/services. Tables 3-6, 3-7, and 3-8 give the statistical need for each category of beds.

3. Public Sector Beds: Due to the public sector status of the acute psychiatric, chemical dependency, and psychiatric residential treatment facility beds operated directly by the Mississippi Department of Mental Health (MDMH), the number of licensed beds operated by the MDMH shall not be counted in the bed inventory used to determine statistical need for additional acute psychiatric, chemical dependency, and psychiatric residential treatment facility beds.

4. Comments from Department of Mental Health: The Mississippi State Department of Health shall solicit and take into consideration comments received from the Mississippi Department of Mental Health regarding any CON application for the establishment or expansion of inpatient acute psychiatric, chemical dependency, and/or psychiatric residential treatment facility beds.

5. Separation of Adults and Children/Adolescents: Child and adolescent patients under 18 years of age must receive treatment in units which are programmatically and physically distinct from adult (18+ years of age) patient units. A single facility may house adults as well as adolescents and children if both physical design and staffing ratios provide for separation.

6. Separation of Males and Females: Facilities must separate males and females age 13 and over for living purposes (e.g., separate rooms and rooms located at separate ends of the halls, etc.).

7. Patients with Co-Occurring Disorders: It is frequently impossible for a provider to totally predict or control short-term deviation in the number of patients with mixed

psychiatric/ addictive etiology to their illnesses. Therefore, the Department will allow deviations of up to 25 percent of the total licensed beds as "swing-beds" to accommodate patients having diagnoses of both psychiatric and substance abuse disorders. However, the provider must demonstrate to the Division of Licensure and Certification that the "swing-bed" program meets all applicable licensure and certification regulations for each service offered, i.e., acute psychiatric, chemical dependency, and psychiatric residential treatment facility services, before providing such "swing-bed" services.

8. Comprehensive Program of Treatment: Any new mental health beds approved must provide a comprehensive program of treatment that includes, but is not limited to, inpatient, outpatient, and follow-up services, and in the case of children and adolescents, includes an educational component. The facility may provide outpatient and appropriate follow-up services directly or through contractual arrangements with existing providers of these services.

9. Medicaid Participation: An applicant proposing to offer acute psychiatric, chemical dependency, and/or psychiatric residential treatment facility services or to establish, expand, and/or convert beds under any of the provisions set forth in this section or in the service specific criteria and standards shall affirm in the application that:

   a. the applicant shall seek Medicaid certification for the facility/program at such time as the facility/program becomes eligible for such certification; and

   b. the applicant shall serve a reasonable number of Medicaid patients when the facility/program becomes eligible for reimbursement under the Medicaid Program. The application shall affirm that the facility will provide the MSDH with information regarding services to Medicaid patients.

10. Licensing and Certification: All acute psychiatric, chemical dependency treatment, co-occurring disorders beds /services, and psychiatric residential treatment facility beds/services must meet all applicable licensing and certification regulations of the Division of Health Facilities Licensure and Certification. If licensure and certification regulations do not exist at the time the application is approved, the program shall comply with such regulations following their effective date.

11. Psychiatric Residential Treatment Facility: A psychiatric residential treatment facility (PRTF) is a non-hospital establishment with permanent licensed facilities that provides a twenty-four (24) hour program of care by qualified therapists including, but not limited to, duly licensed mental health professionals, psychiatrists, psychologists, psychotherapists, and licensed certified social workers, for emotionally disturbed children and adolescents referred to such facility by a court, local school district, or the Department of Human Services, who are not in an acute phase of illness requiring the services of a psychiatric hospital and who are in need of such restorative treatment services. For purposes of this paragraph, the term "emotionally disturbed" means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance:

   a. an inability to learn which cannot be explained by intellectual, sensory, or health factors;

b. an inability to build or maintain satisfactory relationships with peers and teachers;

c. inappropriate types of behavior or feelings under normal circumstances;

d. a general pervasive mood of unhappiness or depression; or

e. a tendency to develop physical symptoms or fears associated with personal or school problems.

An establishment furnishing primarily domiciliary care is not within this definition.

12. Certified Educational Programs: Educational programs certified by the Department of Education shall be available for all school age patients. Also, sufficient areas suitable to meet the recreational needs of the patients are required.

13. Preference in CON Decisions: Applications proposing the conversion of existing acute care hospital beds to acute psychiatric and chemical dependency beds shall receive preference in CON decisions provided the application meets all other criteria and standards under which it is reviewed.

14. Dedicated Beds for Children's Services: It has been determined that there is a need for specialized beds dedicated for the treatment of children less than 14 years of age. Therefore, of the beds determined to be needed for child/adolescent acute psychiatric services and psychiatric residential treatment facility services, 25 beds under each category, for a total of 50 beds statewide, shall be reserved exclusively for programs dedicated to children under the age of 14.

15. Effective April 12, 2002, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need under the authority of Section 41-7-191(1)(c).

16. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

17. A health care facility has ceased to operate for a period of 60 months or more shall require a Certificate of Need prior to reopening.

### 106.02 General Certificate of Need Criteria and Standards for Acute Psychiatric, Chemical Dependency, and/or Psychiatric Residential Treatment Facility Beds/Services

The Mississippi State Department of Health will review applications for a Certificate of Need for the establishment, offering, or expansion of acute psychiatric, chemical dependency treatment, and/or psychiatric residential treatment beds/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 Certificate of Need according to the

policies in this *Plan*; the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the general and service specific criteria and standards listed below.

The offering of acute psychiatric, chemical dependency treatment, and/or psychiatric residential treatment facility services is reviewable if the proposed provider has not offered those services on a regular basis within the period of twelve (12) months prior to the time such services would be offered. The construction, development, or other establishment of a new health care facility to provide acute psychiatric, chemical dependency treatment, and/or psychiatric residential treatment services requires CON review regardless of capital expenditure.

1. **Need Criterion:**

   a. **New/Existing Acute Psychiatric, Chemical Dependency, and/or Psychiatric Residential Treatment Facility Beds/Services**: The applicant shall document a need for acute psychiatric, chemical dependency, and/or psychiatric residential treatment facility beds using the appropriate bed need methodology as presented in this section under the service specific criteria and standards.

   b. Projects which do not involve the addition of acute psychiatric, chemical dependency, and/or psychiatric residential treatment facility 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.).

   c. **Projects which involve the addition of beds**: The applicant shall document the need for the proposed project. Exception: Notwithstanding the service specific statistical bed need requirements as stated in "a" above, the Department may approve additional beds for facilities which have maintained an occupancy rate of at least 80 percent for the most recent 12-month licensure reporting period or at least 70 percent for the most recent two (2) years.

   d. **Child Psychiatry Fellowship Program**: Notwithstanding the service specific statistical bed need requirements as stated in "a" above, the Department may approve a 15-bed acute child psychiatric unit at the University of Mississippi Medical Center for children aged 4-12 to provide a training site for psychiatric residents.

   e. **Establishment or Addition of Programs for the Exclusive Treatment of Adults for Primary Psychiatric Diagnosis of Post Traumatic Stress Disorder (PTSD)**: Notwithstanding the service specific statistical bed need requirements as stated in "a" above, the Department may approve service and/or beds for the exclusive treatment of adults eighteen years of age and older with a primary psychiatric diagnosis of PTSD. The applicant shall document the need for the proposed project and justify the number of inpatient beds to be dedicated for such purpose.

2. The application shall affirm that the applicant will record and maintain, at a minimum, the following information regarding charity care and care to the medically indigent and

make such information available to the Mississippi State Department of Health within 15 business days of request:

a. source of patient referral;

b. utilization data, e.g., number of indigent admissions, number of charity admissions, and inpatient days of care;

c. demographic/patient origin data;

d. cost/charges data; and

e. any other data pertaining directly or indirectly to the utilization of services by medically indigent or charity patients which the Department may request.

3. A CON applicant desiring to provide or to expand chemical dependency, psychiatric, and/or psychiatric residential treatment facility services shall provide copies of signed memoranda of understanding with Community Mental Health Centers and other appropriate facilities within their patient service area regarding the referral and admission of charity and medically indigent patients.

4. Applicants should also provide letters of comment from the Community Mental Health Centers, appropriate physicians, community and political leaders, and other interested groups that may be affected by the provision of such care.

5. The application shall document that within the scope of its available services, neither the facility nor its participating staff shall have policies or procedures which would exclude patients because of race, color, age, sex, ethnicity, or ability to pay.

The application shall document that the applicant will provide a reasonable amount of charity/indigent care as provided for in Chapter I of this *Plan*.

## 106.03 Service Specific Certificate of Need Criteria and Standards for Acute Psychiatric, Chemical Dependency, and/or Psychiatric Residential Treatment Facility Beds/Services

### 106.03.01 Acute Psychiatric Beds for Adults

1. The Mississippi State Department of Health shall base statistical need for adult acute psychiatric beds on a ratio of **0.21 beds per 1,000 population aged 18 and older for 2020** in the state as a whole as projected by the Division of Health Planning and Resource Development. Table 3-6 presents the statistical need for adult psychiatric beds.

2. The applicant shall provide information regarding the proposed size of the facility/unit. Acute psychiatric beds for adults may be located in either freestanding or hospital-based facilities. Freestanding facilities should not be larger than 60 beds. Hospital units should not be larger than 30 beds. Patients treated in adult facilities and units should be 18 years of age or older.

3. The applicant shall provide documentation regarding the staffing of the facility. Staff providing treatment should be specially trained for the provision of psychiatric and psychological services. The staff should include both psychiatrists and psychologists and should provide a multi-discipline psychosocial medical approach to treatment.

### 106.03.02 Acute Psychiatric Beds for Children and Adolescents

1. The Mississippi State Department of Health shall base statistical need for child/adolescent acute psychiatric beds on a ratio of **0.55 beds per 1,000 population aged 7 to 17 for 2020** in the state as a whole as projected by the Division of Health Planning and Resource Development. Table 3-6 presents the statistical need for child/adolescent psychiatric beds. Of the specified beds needed, 25 beds are hereby set aside exclusively for the treatment of children less than 14 years of age.

2. The applicant shall provide information regarding the proposed size of the facility/unit. Acute psychiatric beds for children and adolescents may be located in freestanding or hospital-based units and facilities. A facility should not be larger than 60 beds. All units, whether hospital-based or freestanding, should provide a homelike environment. Ideally, a facility should provide cottage-style living units housing eight to ten patients. Because of the special needs of children and adolescents, facilities or units which are not physically attached to a general hospital are preferred. For the purposes of this *Plan*, an adolescent is defined as a minor who is at least 14 years old but less than 18 years old, and a child is defined as a minor who is at least 7 years old but less than 14 years old.

3. The applicant shall provide documentation regarding the staffing of the facility. Staff should be specially trained to meet the needs of adolescents and children. Staff should include both psychiatrists and psychologists and should provide a multi-discipline psychosocial medical approach to treatment. The treatment program must involve parents and/or significant others. Aftercare services must also be provided.

4. The applicant shall describe the structural design of the facility in providing for the separation of children and adolescents. In facilities where both children and adolescents are housed, the facility should attempt to provide separate areas for each age grouping.

### 106.03.03 Chemical Dependency Beds for Adults

1. The Mississippi State Department of Health shall base statistical need for adult chemical dependency beds on a ratio of **0.14 beds per 1,000 population aged 18 and older for 2020** in the state as a whole as projected by the Division of Health Planning and Resource Development. Table 3-7 presents the statistical need for adult chemical dependency beds.

2. The applicant shall provide information regarding the proposed size of the facility/unit. Chemical dependency treatment programs may be located in either freestanding or hospital-based facilities. Facilities should not be larger than 75 beds, and individual units should not be larger than 30 beds. The bed count also includes

detoxification beds. Staff should have specialized training in the area of alcohol and substance abuse treatment, and a multi-discipline psychosocial medical treatment approach which involves the family and significant others should be employed.

3. The applicant shall describe the aftercare or follow-up services proposed for individuals leaving the chemical dependency program. Chemical dependency treatment programs should include extensive aftercare and follow-up services.

4. The applicant shall specify the type of clients to be treated at the proposed facility. Freestanding chemical dependency facilities and hospital-based units should provide services to substance abusers as well as alcohol abusers.

### 106.03.04 Chemical Dependency Beds for Children and Adolescents

1. The Mississippi State Department of Health shall base statistical need for child/adolescent chemical dependency beds on a ratio of **0.44 beds per 1,000 population aged 12 to 17 for 2020** in the state as a whole as projected by the Division of Health Planning and Resource Development. Table 3-7 presents the statistical need for child/adolescent chemical dependency beds.

2. The applicant shall provide information regarding the proposed size of the facility/unit. Chemical dependency beds may be located in either freestanding or hospital-based facilities. Because of the unique needs of the child and adolescent population, facilities shall not be larger than 60 beds. Units shall not be larger than 20 beds. The bed count of a facility or unit will include detoxification beds.

   Facilities or units, whether hospital-based or freestanding, should provide a home-like environment. Ideally, facilities should provide cottage-style living units housing eight to ten patients. Because of the special needs of children and adolescents, facilities or units which are not physically attached to a general hospital are preferred.

3. The applicant shall provide documentation regarding the staffing of the facility. Staff should be specially trained to meet the needs of adolescents and children. Staff should include both psychiatrists and psychologists and should provide a multi-discipline psychosocial medical approach to treatment. The treatment program must involve parents and significant others. Aftercare services must also be provided.

4. The applicant shall describe the structural design of the facility in providing for the separation of the children and adolescents. Child and adolescent patients shall be separated from adult patients for treatment and living purposes.

5. The applicant shall describe the aftercare or follow-up services proposed for individuals leaving the chemical dependency program. Extensive aftercare and follow-up services involving the family and significant others should be provided to clients after discharge from the inpatient program. Chemical dependency facilities and units should provide services to substance abusers as well as alcohol abusers.

### 106.03.05 Psychiatric Residential Treatment Facility Beds/Services

1. The Mississippi State Department of Health shall base statistical need for psychiatric residential treatment beds on a ratio of **0.5 beds per 1,000 population aged 5 to 21 for 2020** in the state as a whole as projected by the Division of Health Planning and Resource Development. Table 3-8 presents the statistical need for psychiatric residential treatment facility beds.

2. The application shall state the age group that the applicant will serve in the psychiatric residential treatment facility and the number of beds dedicated to each age group (5 to 13, 14 to 17, and 18 to 21).

3. The applicant shall describe the structural design of the facility for the provision of services to children less than 14 years of age. Of the beds needed for psychiatric residential treatment facility services, 25 beds are hereby set aside exclusively for the treatment of children less than 14 years of age. An applicant proposing to provide psychiatric residential treatment facility services to children less than 14 years of age shall make provision for the treatment of these patients in units which are programmatically and physically distinct from the units occupied by patients older than 13 years of age. A facility may house both categories of patients if both the physical design and staffing ratios provide for separation.

4. This criterion does not preclude more than 25 psychiatric residential treatment facility beds being authorized for the treatment of patients less than 14 years of age. However, the Department shall not approve more psychiatric residential treatment facility beds statewide than specifically authorized by legislation (Miss. Code Ann. § 41-7-191 et. seq). This authorization is limited to 334 beds for the entire state. (Note: the 298 licensed and CON approved beds indicated in Table 3-8 were the result of both CON approval and legislative actions).

5. The applicant shall provide information regarding the proposed size of the facility/unit. A psychiatric residential treatment facility should provide services in a homelike environment. Ideally, a facility should provide cottage-style living units not exceeding 15 beds. A psychiatric residential treatment facility should not be larger than 60 beds.

6. The applicant shall provide documentation regarding the staffing of the facility. Staff should be specially trained to meet the treatment needs of the age category of patients being served. Staff should include both psychiatrists and psychologists and should provide a multi-discipline psychosocial medical approach to treatment. The treatment program must involve parents and/or significant others. Aftercare/follow-up services must also be provided.

**Table 3-6**
**Statewide Acute Psychiatric Bed Need**
**2020**

| Bed Category and Ratio | 2020 Projected Population | Projected Bed Need | Licensed/CON Approved/Abeyance Beds | Difference |
|---|---|---|---|---|
| Adult Psychiatric: 0.21 beds per 1,000 population aged 18+ | 2,389,142 | 502 | 610 | -108 |
| Child/Adolescent Psychiatric: 0.55 beds per 1,000 population aged 7 to 17 | 461,382 | 254 | 270 | -16 |

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; and Division of Health Planning and Resource Development calculations, October 2014

**Table 3-7**
**Statewide Chemical Dependency Bed Need**
**2020**

| Bed Category and Ratio | 2020 Projected Population | Projected Bed Need | Licensed/CON Approved Beds | Difference |
|---|---|---|---|---|
| Adult Chemical Dependency: 0.14 beds per 1,000 population aged 18+ | 2,389,142 | 334 | 251 | 83 |
| Child/Adolescent Chemical Dependency: 0.44 beds per 1,000 population aged 12 to 17 | 251,695 | 111 | 52 | 59 |

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; Division of Health Planning and Resource Development calculations, October 2014

**Table 3-8**
**Statewide Psychiatric Residential**
**Treatment Facility Bed Need**
**2020**

| Age Cohort | Bed Ratio per 1,000 Population | 2020 Projected Population | Projected Bed Need | Licensed/CON Approved Beds | Difference |
|---|---|---|---|---|---|
| 5 to 21 | 0.50 | 712,045 | 356 | 298 | 58 |

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; and Division of Health Planning and Resource Development calculations, October 2014

## 107 Private Distinct-Part Geriatric Psychiatric Services

During 2012, 37 Mississippi hospitals operated certified distinct-part geriatric psychiatric units (Geropsych DPU) with a total of 467 beds. Geropsych units receive Medicare certification as a distinct-part psychiatric unit but are licensed as short-term acute hospital beds. These Geropsych units served a total of 87,329 inpatient days of psychiatric services to 7,492 patients aged 55 and older.

The industry standard formula for determining Geropsych DPU bed need is 0.5 beds per 1,000 population aged 55 and over. The Office of Policy Research and Planning, Mississippi Institute of Higher Learning, projects that Mississippi will have 937,596 persons aged 55 and older by 2020. This population will need a total of 469 Geropsych DPU beds. The optimum unit size of a Geropsych unit is 12 to 24 beds. Table 3-9 shows the state's 37 distinct-part geriatric psychiatric units. County population projections can be found in Chapter 1 of this *Plan*.

The following facilities received approval through a Determination of Reviewability for the establishment of a Geriatric Psychiatric Distinct Part (Geriatric-Psychiatric DPU or Gero-psych) Unit/Service:

- Anderson Regional Medical Center-South Campus (16-Beds) - Approved on 08/31/2012
- Pioneer Community Hospital of Choctaw (10-Beds) - Approved 03/08/2013
- Highland Community Hospital, Picayune, Mississippi (10 Bed) - Approved 07/29/2013

## Table 3-9
## Geriatric Psychiatric Bed Utilization
## FY 2013

| Facility | County | Certified Beds | Inpatient Days | Occupancy Rate (%) | Discharges | ALOS | Discharge Days |
|---|---|---|---|---|---|---|---|
| **State Total** | | **467** | **82,520** | **48.41** | **6,918** | **11.89** | **82,275** |
| **General Hospital Service Area 1** | | **54** | **7,038** | **35.71** | **600** | **11.97** | **7,179** |
| Alliance Healthcare System | Marshall | 20 | 1,374 | 18.82 | 134 | 10.43 | 1,397 |
| North Oak Regional Medical Center | Tate | 12 | 1,807 | 41.26 | 140 | 12.80 | 1,792 |
| Tri-Lakes Medical Center | Panola | 22 | 3,857 | 48.03 | 326 | 12.24 | 3,990 |
| **General Hospital Service Area 2** | | **15** | **2,995** | **54.70** | **229** | **12.66** | **2,899** |
| Baptist Memorial Hospital - Booneville | Prentiss | 15 | 2,995 | 54.70 | 229 | 12.66 | 2,899 |
| **General Hospital Service Area 3** | | **59** | **10,142** | **47.10** | **823** | **12.01** | **9,882** |
| Bolivar Medical Center | Bolivar | 12 | 1,763 | 40.25 | 153 | 11.33 | 1,733 |
| Delta Regional Medical Center West Campus | Washington | 14 | 2,238 | 43.80 | 209 | 10.82 | 2,262 |
| Greenwood Leflore Hospital | Leflore | 15 | 1,834 | 33.50 | 157 | 11.75 | 1,845 |
| North Sunflower County Hospital | Sunflower | 10 | 2,619 | 71.75 | 208 | 12.10 | 2,516 |
| Quitman County Hospital | Quitman | 8 | 1,688 | 57.81 | 96 | 15.90 | 1,526 |
| **General Hospital Service Area 4** | | **65** | **9,398** | **39.61** | **777** | **12.06** | **9,368** |
| Calhoun Health Services | Calhoun | 9 | 1,148 | 34.95 | 93 | 12.56 | 1,168 |
| Pioneer Community Hospital of Aberdeen | Monroe | 10 | 1,940 | 53.16 | 140 | 13.21 | 1,850 |
| Pioneer Community Hospital of Choctaw | Newton | 0 | N/A | 36.70 | N/A | 12.10 | N/A |
| Trace Regional Hospital | Chickasaw | 18 | 2,294 | 34.92 | 188 | 12.20 | 2,293 |
| University of MS Medical Center Grenada | Grenada | 14 | 1,667 | 32.62 | 176 | 9.62 | 1,693 |
| Winston Medical Center | Winston | 14 | 2,349 | 45.97 | 180 | 13.13 | 2,364 |
| **General Hospital Service Area 5** | | **125** | **23,900** | **52.38** | **2,073** | **11.53** | **23,900** |
| Central Mississippi Medical Center **(closed Jan. 2013)** | Hinds | 0 | 1,030 | 62.88 | 218 | 4.72 | 1,030 |
| Claiborne County Hospital | Claiborne | 10 | 1,981 | 54.27 | 185 | 11.34 | 1,981 |
| Crossgates River Oaks Hospital | Rankin | 20 | 5,351 | 73.30 | 441 | 12.10 | 5,351 |
| Mississippi Baptist Medical Center | Hinds | 24 | 3,496 | 39.91 | 266 | 13.05 | 3,496 |
| Montfort Jones Memorial Hospital | Attala | 11 | 1,947 | 48.49 | 143 | 13.59 | 1,947 |
| Patients' Choice Medical Center of Smith County | Smith | 10 | 2,293 | 62.82 | 147 | 14.67 | 2,293 |
| River Region Health System | Warren | 20 | 1,886 | 25.84 | 204 | 9.41 | 1,886 |
| S.E. Lackey Critical Access Hospital | Scott | 10 | 1,888 | 51.73 | 155 | 14.00 | 1,888 |
| Sharkey - Issaquena Community Hospital | Sharkey | 10 | 1,568 | 42.96 | 150 | 10.45 | 1,568 |
| Simpson General Hospital | Simpson | 10 | 2,460 | 67.40 | 164 | 14.55 | 2,460 |
| **General Hospital Service Area 6** | | **47** | **7,353** | **42.86** | **587** | **12.53** | **7,353** |
| Alliance Health Center | Lauderdale | 12 | 1,507 | 38.41 | 120 | 12.78 | 1,507 |
| Anderson Regional Medical Center South | Lauderdale | 16 | 2,010 | 34.42 | 158 | 12.47 | 2,010 |
| Neshoba General Hospital - Philadelphia | Neshoba | 10 | 1,973 | N/A | 171 | N/A | 1,973 |
| Pioneer Community Hospital of Newton | Newton | 9 | 1,863 | N/A | 138 | N/A | 1,863 |
| **General Hospital Service Area 7** | | **40** | **9,885** | **67.71** | **814** | **12.14** | **9,885** |
| Franklin County Memorial Hospital | Franklin | 10 | 2,176 | 59.62 | 181 | 12 | 2,176 |
| Jefferson County Hospital | Jefferson | 18 | 5,987 | 91.13 | 426 | 13.26 | 5,987 |
| Natchez Regional Medical Center | Adams | 12 | 1,722 | 39.32 | 207 | 10.23 | 1,722 |
| **General Hospital Service Area 8** | | **38** | **5,630** | **40.59** | **454** | **12.40** | **5,630** |
| Covington County Hospital | Covington | 10 | 1,570 | 43.01 | 122 | 12.92 | 1,570 |
| Jeff Davis Community Hospital | Jeff Davis | 10 | 1,780 | 48.77 | 130 | 13.72 | 1,780 |
| South Central Medical Center | Jones | 18 | 2,280 | 34.7 | 202 | 9.97 | 2,280 |
| **General Hospital Service Area 9** | | **24** | **6,179** | **70.54** | **561** | **11.01** | **6,179** |
| Biloxi Regional Medical Center | Harrison | 12 | 3,193 | 72.9 | 251 | 12.42 | 3,193 |
| Garden Park Medical Center | Harrison | 12 | 2,986 | 68.17 | 310 | 9.66 | 2,986 |

*George County Hospital's 10 Geriatric Psychiatric Beds closed as of March 3, 2011.

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; and Division of Health Planning and Resource Development calculations, October 2014.

# CHAPTER 4

# PERINATAL CARE

# Chapter 4 Perinatal Care

## 100 Natality Statistics

Mississippi experienced 38,618 live births in 2012; 48.2 percent of these (18,611) were white non-Hispanic, 39.4 percent (15,232) were black non-Hispanic, 2.0 percent were other non-Hispanic and 3.1 percent (1,210) were Hispanic. A physician attended 97.3 percent of all in-hospital live births delivered in 2012 (37,569). Nurse midwife deliveries accounted for 811 live births.

More than 99 percent of the live births occurred to women 15 to 44 years age. Births to unmarried women made up 54.7 percent (21,128) of all live births in 2012; of these, 59.5 percent (12,580) were to black women and 30.3 percent (6,396) were to white women and 3.2 percent (670) were to Hispanic women. Mothers under the age of 15 gave birth to 90 children; 68.9 percent (62) were black and 31.1 percent (28) were white and one was Hispanic.

The birth rate in 2012 was 12.9 live births per 1,000 population; the fertility rate was 64.1 live births per 1,000 women aged 15-44 years.

Mississippi reported 376 fetal deaths in 2012. The black fetal death ratio, which is the number of deaths per live births to mothers in the specified age group, was more than two times that of whites, with a ratio of 14.0 per 1,000 live births compared to 6.5 for whites. Mothers aged 35-39, had the highest fetal death ratio at 20.7 per 1,000 live births, followed by mothers aged, 25-29 with a ratio of 15.9. The MSDH requires the reporting of fetal deaths with gestation of 20 or more weeks or fetal weight of 350 grams or more. The MSDH does not report fetal death rates for an age group if there are less than 100 births.

There were 16 maternal deaths reported during 2012. Maternal mortality refers to deaths resulting from complications of pregnancies, childbirth, or the puerperium within 42 days of delivery.

## 101 Infant Mortality

Infant mortality remains a critical concern in Mississippi. There was a slight decline in the infant mortality rate to 8.8 in 2012 from 9.4 in 2011. Table 4-1 shows the infant mortality rate, neonatal, and post-neonatal mortality for blacks all substantially above the rates for whites and Hispanics. (Note: 2012 vital statics data is the most recent currently available.)

**Table 4-1**
**2012 Mortality Rates (deaths per 1,000 live births)**

| Category | Overall State Rate | White Rate | Black Rate | Hispanic Rate |
|---|---|---|---|---|
| Total Infant Mortality (age under one year) | 8.8 | 5.4 | 12.4 | 0.0 |
| Neonatal Mortality (age under 28 days) | 5.5 | 3.2 | 17.2 | 0.0 |
| Postneonatal Mortality (age 28 days to one year) | 3.3 | 7.2 | 8.6 | 0.0 |

Table 4-2 presents Mississippi's infant mortality rates from 2001 to 2012, along with the rates for Region IV and for the United States. Map 4-1 shows the five-year average infant mortality rate by county for the period 2007 to 2012.

**Table 4-2**
**Infant Mortality Rates**
**Mississippi, Region IV and USA – All Races**
**2001– 2012**

| Year | Mississippi | Region IV | USA |
|---|---|---|---|
| 2011 | 9.4 | N/A | N/A |
| 2010 | 9.6 | N/A | N/A |
| 2009 | 10.0 | N/A | N/A |
| 2008 | 9.9 | 7.8 | 6.6 |
| 2007 | 10.0 | 8.0 | 6.8 |
| 2006 | 10.5 | 8.1 | 6.7 |
| 2005 | 11.4 | 8.1 | 6.9 |
| 2004 | 9.7 | 8.1 | 6.8 |
| 2003 | 10.7 | 8.2 | 6.9 |
| 2002 | 10.4 | 8.4 | 7.0 |
| 2001 | 10.4 | 8.2 | 6.8 |
| 2000 | 10.5 | 8.3 | 6.9 |

N/A – Not Available
Source: Office of Health Informatics, Mississippi State Department of Health, 2011
RNDMU – Region IV Network for Utilization Data Management and Utilization (no longer operational)

Many factors contribute to Mississippi's high infant mortality rate including: the high incidence of preterm birth, teenage pregnancy, low birthweight, low levels of acquired education, low socioeconomic status, lack of access for planned delivery services, and lack of adequate perinatal and acute medical care.

More than 98 percent of expectant mothers received some level of prenatal care in 2012. More than 84 percent (32,706) of the mothers who began prenatal care in the first trimester; 11.7 percent (4,532) began in the second trimester, and 1.8 percent (678) during the third trimester. Only one percent (233) of expectant mothers received no prenatal care prior to delivery; and it was unknown whether 141 mothers (0.4 percent) received any prenatal care. White mothers usually receive initial prenatal care much earlier in pregnancy than do black mothers.

In 2012, 11.9 percent of births were low birthweight (less than 5.5 pounds – 2,500 grams) and 17.1 percent were premature (gestational age less than 37 weeks). These indicators differ markedly by maternal race: 8.6 percent of white births were low birthweight compared to 16.2 percent for blacks. The low birthweight rate for Hispanics was 5.8 percent. The premature birth rate was 14.2 percent for Hispanics, 14.1 percent for whites and 20.6 percent for blacks.

A total of 4,868 Mississippi teenagers gave birth in 2012 — 12.6 percent of the state's 38,618 live births. Until 2008 births to teenagers have increased each year since 2005, and the 2012 number represents a 10.8 percent decrease from the 5,459 births to teenagers in 2011. Teen pregnancy is one of the major reasons for school drop-out. Teenage mothers are (a) more likely to be single parents; (b) less likely to get prenatal care before the second trimester; (c) at higher risk of having low birthweight babies; (d) more likely to receive public assistance; (e) at greater risk to commit abuse or neglect; and (f) more likely to have children who will themselves become teen parents. In 2012, 13.1 percent of the births to teenagers were low birthweight, and 19.1 percent were premature.

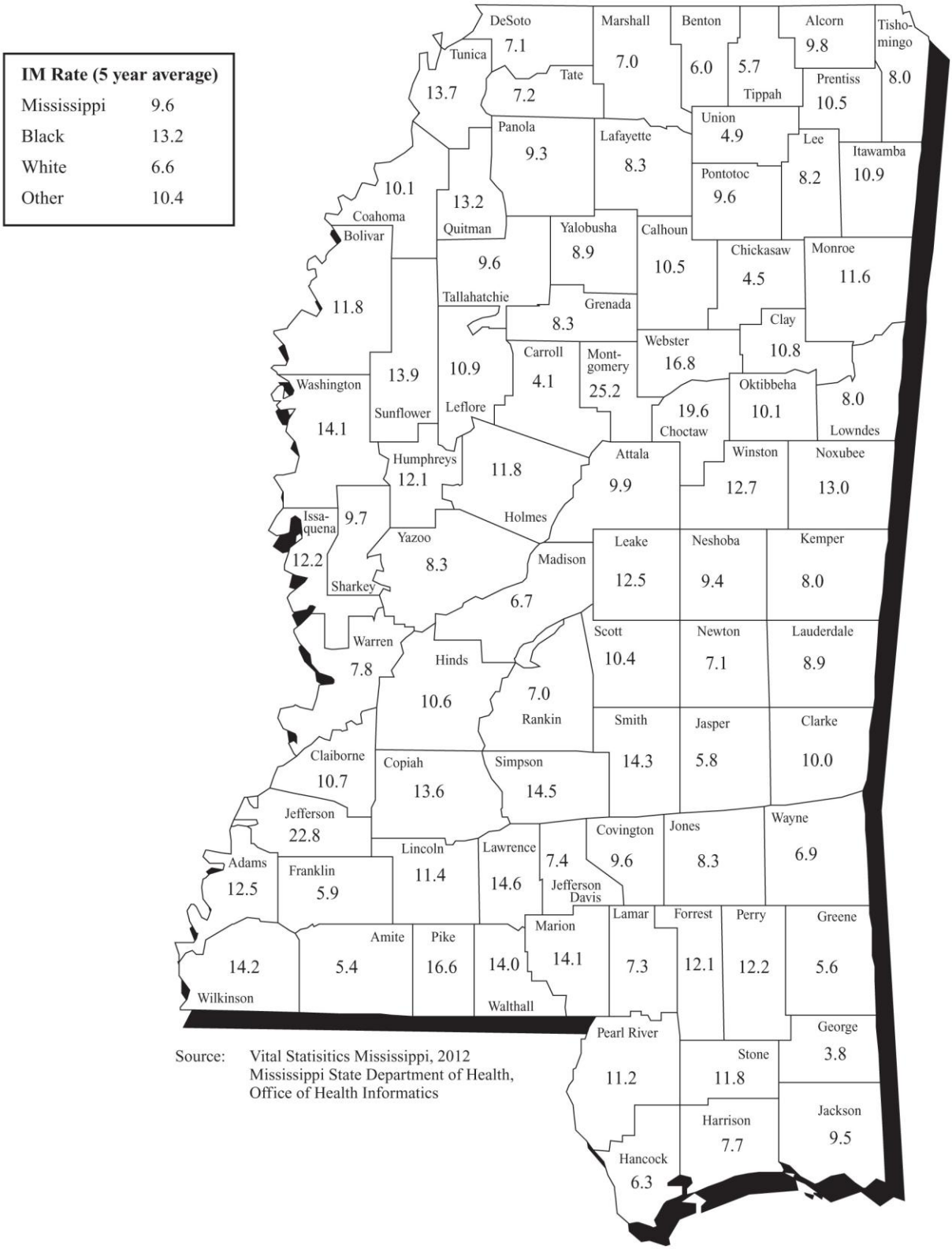
Of the 38,618 total births in 2012, 29,801 were associated with "at risk" mothers (77.2 percent). “At risk" factors include mothers who are and/or have:

- under 17 years of age or above 35 years of age;
- unmarried;
- completed fewer than eight years of school;
- had fewer than five prenatal visits;
- begun prenatal care in the third trimester;
- had previous terminations of pregnancy; and/or
- a short inter-pregnancy interval (prior delivery within 11 months of conception for the current pregnancy).

## 102 Physical Facilities for Perinatal Care

The 46 hospitals that experienced live births reported 37,184 deliveries. Two of these hospitals reported more than 2,000 obstetrical deliveries each in Fiscal Year 2013, accounting for 4,542 deliveries or 12.2 percent of the state's total hospital deliveries: the University Hospital and Health Systems, with 2,343 deliveries and Forrest General Hospital, with 2,199. These hospitals with a large number of deliveries are strategically located in central and south Mississippi. Table 4-2 shows the Perinatal Planning Areas.

**Map 4-1**
**Infant Mortality Rates by County of Residence**
**2008 to 2012 (Five – Year Average)**




Source: Vital Statisitics Mississippi, 2012
Mississippi State Department of Health,
Office of Health Informatics

**Table 4-3**
**Utilization Data for Hospitals with Obstetrical Deliveries**
**FY 2012 and FY 2013**

| Facility | County | Number of Deliveries 2012 | Number of Deliveries 2013 |
|---|---|---|---|
| University Hospital & Clinics | Hinds | 2,476 | 2,343 |
| Forrest General Hospital | Forrest | 2,223 | 2,199 |
| North Mississippi Medical Center | Lee | 2,116 | 1,980 |
| Baptist Memorial Hospital-DeSoto | DeSoto | 2,050 | 1,891 |
| River Oaks Hospital | Rankin | 1,842 | 1,684 |
| St. Dominic-Jackson Memorial Hospital | Hinds | 1,345 | 1,507 |
| Wesley Medical Center | Lamar | 1,495 | 1,426 |
| Woman's Hospital at River Oaks | Rankin | 1,467 | 1,313 |
| Memorial Hospital at Gulfport | Harrison | 1,435 | 1,289 |
| Anderson Regional Medical Center | Lauderdale | 1,238 | 1,270 |
| Baptist Memorial Hospital - Union County | Union | 1,106 | 1,161 |
| Mississippi Baptist Medical Center | Hinds | 1,268 | 1,158 |
| Rush Foundation Hospital | Lauderdale | 853 | 1,050 |
| Baptist Memorial Hospital-Golden Triangle | Lowndes | 900 | 943 |
| Oktibbeha County Hospital | Oktibbeha | 958 | 929 |
| Baptist Memorial Hospital - North Miss | Lafayette | 893 | 917 |
| South Central Regional Medical Center | Jones | 837 | 893 |
| Northwest Mississippi Regional Medical Center | Coahoma | 852 | 836 |
| Ocean Springs Hospital | Jackson | 868 | 834 |
| Delta Regional Medical Center-Main Campus | Washington | 890 | 819 |
| Biloxi Regional Medical Center | Harrison | 757 | 814 |
| Southwest Mississippi Regional Medical Center | Pike | 879 | 743 |
| River Region Health System | Warren | 691 | 706 |
| Central Mississippi Medical Center | Hinds | 764 | 658 |
| King's Daughters Medical Center-Brookhaven | Lincoln | 643 | 648 |
| Magnolia Regional Health Center | Alcorn | 542 | 635 |
| Singing River Hospital | Jackson | 577 | 616 |
| Greenwood Leflore Hospital | Leflore | 627 | 589 |

**Table 4-3 (continued)**
**Utilization Data for Hospitals with Obstetrical Deliveries**
**FY 2012 and FY 2013**

| Facility | County | Number of Deliveries 2012 | Number of Deliveries 2013 |
|---|---|---|---|
| Gilmore Memorial Regional Medical Center | Monroe | 561 | 577 |
| Garden Park Medical Center | Harrison | 465 | 505 |
| Natchez Community Hospital | Adams | 499 | 483 |
| Bolivar Medical Center | Bolivar | 441 | 461 |
| Madison River Oaks Medical Center | Madison | 415 | 430 |
| Natchez Regional Medical Center | Adams | 459 | 425 |
| University of MS Medical Center Grenada | Grenada | 406 | 406 |
| North Miss Medical Center-West Point | Clay | 362 | 347 |
| Highland Community Hospital | Pearl River | 292 | 314 |
| Magee General Hospital | Simpson | 307 | 294 |
| South Sunflower County Hospital | Sunflower | 197 | 299 |
| Tri-Lakes Medical Center | Panola | 196 | 203 |
| Hancock Medical Center | Hancock | 189 | 201 |
| Wayne General Hospital | Wayne | 226 | 196 |
| George County General Hospital | George | 176 | 186 |
| King's Daughters-Yazoo City | Yazoo | 4 | 3 |
| Baptist Medical Center Leake | Leake | 2 | 2 |
| John C Stennis Memorial Hospital | Kemper | 0 | 1 |
| Anderson Regional Medical Center South | Lauderdale | 0 | 0 |
| Marion General Hospital | Marion | 0 | 0 |
| Scott Regional Hospital | Scott | 0 | 0 |
| Leake Memorial Hospital | Leake | 0 | 0 |
| Laird Hospital | Newton | 0 | 0 |
| Covington County Hospital | Covington | 0 | 0 |
| Alliance Health Care System | | 0 | 0 |
| Gulf Coast Medcial Center | Harrison | 0 | 0 |
| Holmes County Hospital and Clinics | Holmes | 0 | 0 |
| Baptist Memorial Hospital Booneville | Prentiss | 0 | 0 |
| Jefferson Davis Community Hospital | Jeff Davis | 1 | 0 |
| Neshoba County General Hospital | Neshoba | 0 | 0 |
| Newton Regional Hospital | Newton | 0 | 0 |
| Patients Choice Medical Center | Claiborne | 0 | 0 |
| S.E. Lackey Memorial Hospital | Scott | 0 | 0 |
| Stone County Hospital | Marion | 0 | 0 |
| **Total** | | **37,790** | **37,184** |

Sources: Applications for Renewal of Hospital License for Calendar Years 2013 and 2014 and Fiscal Years 2012 and 2013 Annual Hospital Report, Mississippi State Department of Health

# CERTIFICATE OF NEED

# CRITERIA AND STANDARDS FOR OBSTETRICAL SERVICES

## 103 Certificate of Need Criteria and Standards for Obstetrical Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 103.01 Policy Statement Regarding Certificate of Need Applications for the Offering of Obstetrical Services

1. An applicant is required to provide a reasonable amount of indigent/charity care as described in Chapter 1 of this *Plan*.

2. Perinatal Planning Areas (PPA): The MSDH shall determine the need for obstetrical services using the Perinatal Planning Areas as outlined on Map 4-2 at the end of this chapter.

3. Travel Time: Obstetrical services should be available within one (1) hour normal travel time of 95 percent of the population in rural areas and within 30 minutes normal travel time in urban areas.

4. Preference in CON Decisions: The MSDH shall give preference in CON decisions to applications that propose to improve existing services and to reduce costs through consolidation of two basic obstetrical services into a larger, more efficient service over the addition of new services or the expansion of single service providers.

5. Patient Education: Obstetrical service providers shall offer an array of family planning and related maternal and child health education programs that are readily accessible to current and prospective patients.

Levels of Care: All hospitals providing obstetric and newborn services will be designated a perinatal level of care by MSDH, based upon its functional capabilities to provide risk-appropriate care for pregnant women and neonates. The levels of care will be divided into four levels defined in accordance with the 2012 policy statement by the American Academy of Pediatrics, (PEDIATRICS Vol. 130, No. 3, September, 2012) and maternal standards set forth by the American College of Obstetricians and Gynecologists with modifications approved by MSDH. The levels are:

Level I- Basic Care, Well newborn nursery
Level II- Specialty Care, Special care nursery
Level III- Sub-specialty Care, Neonatal Intensive Care Unit
Level IV- Regional Care

Details of the levels are outlined in section 105.03 of the State Health Plan.

6. An applicant proposing to offer obstetrical services shall be equipped to provide perinatal services in accordance with the guidelines contained in the *Minimum Standards of Operation for Mississippi Hospitals* § 130, Obstetrics and Newborn Nursery. All hospitals offering obstetric and newborn care shall conform to the practice guidelines of the American Academy of Pediatrics, Policy Statement, Levels of Care and professional standards established in the Guidelines for the Operations of Perinatal Units.

7. An applicant proposing to offer obstetrical services shall agree to provide an amount of care to Medicaid mothers/babies comparable to the average percentage of Medicaid care offered by other providers of the requested service within the same, or most proximate, geographic area.

### 103.02 Certificate of Need Criteria and Standards for Obstetrical Services

The Mississippi State Department of Health will review applications for a Certificate of Need to establish obstetric services under the 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The establishment or expansion of Level I- basic or Level II- specialty perinatal services shall require approval under the Certificate of Need statute if the $2,000,000 capital expenditure threshold is crossed. Any hospital proposing to establish or expand existing services to become a Level III-subspecialty or Level IV-regional perinatal center shall require approval under the Certificate of Need statute.

Provision for individual units should be consistent with the regionalized perinatal care system involved. Those facilities desiring to provide obstetric services shall meet the Basic facility minimum standards as listed under *Guidelines for the Operation of Perinatal Units* found at the end of this chapter.

1. Need Criterion:

   **The application shall demonstrate how the applicant can reasonably expect to deliver a minimum of 150 babies the first full year of operation and 250 babies by the second full year. In this demonstration, the applicant shall document the number of deliveries performed in the proposed perinatal planning area (as described in Section 103.01, policy statement 2, by hospital.**

2. The application shall document that the facility will provide one of the three types of perinatal services: Basic, Specialty, or Subspecialty.

3. The facility shall provide full-time nursing staff in the labor and delivery area on all shifts. Nursing personnel assigned to nursery areas in Basic Perinatal Centers shall be under the direct supervision of a qualified registered nurse with extra training such as Neonatal Resuscitation Program (NRP) certification and the S.T.A.B.L.E program.

4. Any facility proposing the offering of obstetrical services shall have written policies delineating responsibility for immediate newborn care, resuscitation, transfer to higher-level of care, selection and maintenance of necessary equipment, and training of personnel in proper techniques.

5. The application shall document that the nurse, anesthesia, neonatal resuscitation, and obstetric personnel required for emergency cesarean delivery shall be in the hospital or readily available at all times.

6. The application shall document that the proposed services will be available within one (1) hour normal driving time of 95 percent of the population in rural areas and within 30 minutes normal driving time in urban areas.

7. The applicant shall affirm that the hospital will have protocols for the transfer of medical care of the neonate in both routine and emergency circumstances.

8. The application shall affirm that the applicant will record and maintain, at a minimum, the following information regarding charity care and care to the medically indigent and make it available to the Mississippi State Department of Health within 15 business days of request:

    a. source of patient referral;

    b. utilization data, e.g., number of indigent admissions, number of charity admissions, and inpatient days of care;

    c. demographic/patient origin data;

    d. cost/charges data; and

    e. Any other data pertaining directly or indirectly to the utilization of services by medically indigent or charity patients which the Department may request.

9. The applicant shall document that within the scope of its available services, neither the facility nor its participating staff shall have policies or procedures which would exclude patients because of race, age, sex, ethnicity, or ability to pay.

# CERTIFICATE OF NEED

# CRITERIA AND STANDARDS
# FOR
# NEONATAL SPECIAL CARE SERVICES

## 104 Certificate of Need Criteria and Standards for Neonatal Special Care Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 104.01 Policy Statement Regarding Certificate of Need Applications for the Offering of Neonatal Special Care Services

1. An applicant is required to provide a reasonable amount of indigent/charity care as described in Chapter 1 of this *Plan*.

2. Perinatal Planning Areas (PPA): The MSDH shall determine the need for neonatal special care services using the Perinatal Planning Areas as outlined on Map 4-2 at the end of this chapter.

3. Bed Limit: The total number of neonatal special care beds is not to exceed eight (8) per 1,000 live births in a specified PPA as defined below:

    a. Two (2) intensive care beds per 1,000 live births; and

    b. Six (6) intermediate care beds per 1,000 live births.

4. Size of Facility: A single neonatal special care unit (Subspecialty) Level 3 or greater facility should contain a minimum of 15 beds.

5. Levels of Care: The MSDH shall determine the perinatal level of care designation of the facility based upon its functional capabilities to provide risk-appropriate care for pregnant women and neonates. Facilities shall be designated as one of four levels of care as outlined in Section 105.03 of the State Health Plan.

    Level I- Basic Care, Well newborn nursery
    Level II- Specialty Care, Special care nursery
    Level III- Sub-specialty Care, Neonatal Intensive Care Unit
    Level IV- Regional Care

6. An applicant proposing to offer neonatal special care services shall agree to provide an amount of care to Medicaid babies comparable to the average percentage of Medicaid care offered by the other providers of the requested services.

## 104.02 Certificate of Need Criteria and Standards for Neonatal Special Care Services

The Mississippi State Department of Health will review applications for a Certificate of Need to establish neonatal special care services under the 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

All neonatal intensive care units providing subspecialty care are reviewable under the Certificate of Need law based upon the addition/conversion of hospital beds required to establish such units.

Those facilities desiring to provide neonatal special care services shall meet the capacity and levels of neonatal care for the specified facility (Specialty, Subspecialty or Regional) as outlined by the American Academy of Pediatrics, Policy Statement, Levels of Neonatal Care (PEDIATRICS Vol. 130, No. 3, September, 2012).

1. **Need Criterion: The application shall demonstrate that the Perinatal Planning Area (PPA) wherein the proposed services are to be offered had a minimum of 3,600 deliveries for the most recent 12-month reporting period. The MSDH shall determine the need for neonatal special care services based upon the following:**

    a. **Two (2) neonatal intensive (subspecialty) care bed per 1,000 live births in a specified Perinatal Planning Area for the most recent 12-month reporting period; and**

    b. **Six (6) neonatal intermediate (specialty) care beds per 1,000 live births in a specified Perinatal Planning Area for the most recent 12-month reporting period.**

    Neonatal intensive care beds can only be housed within a hospital designated as a Level III facility. Neonatal intermediate or specialty care beds can be housed within either a Level II, Level III or Level IV facility.

    Projects for existing providers of neonatal special care services which seek to expand capacity by the addition or conversion of neonatal special care beds: The applicant shall document the need for the proposed project. The applicant shall demonstrate that the facility in question has maintained an occupancy rate for neonatal special care services of at least 70 percent for the most recent two (2) years or 80 percent neonatal special care services occupancy rate for the most recent year, notwithstanding the neonatal special care bed need outlined in Table 4-4 below. The applicant may be approved for such additional or conversion of neonatal special care beds to meet projected demand balanced with optimum utilization rate for the Perinatal Planning Area.

2. A single neonatal special care unit (Subspecialty or Regional) that is Level 3 or greater should contain minimum of 15 beds (neonatal intensive care and/or neonatal intermediate care). An adjustment downward may be considered for a specialty unit; when travel time to an alternate unit is a serious hardship due to geographic remoteness.

3. The application shall document that the proposed services will be available within one (1) hour normal driving time of 95 percent of the population in rural areas and within 30 minutes normal driving time in urban areas.

4. The application shall document that the applicant has established referral networks to transfer infants requiring more sophisticated care than is available in less specialized facilities.

5. The application shall affirm that the applicant will record and maintain, at a minimum, the following information regarding charity care and care to the medically indigent and make it available to the Mississippi State Department of Health within 15 business days of request:

    a. source of patient referral;

    b. utilization data e.g., number of indigent admissions, number of charity admissions, and inpatient days of care;

    c. demographic/patient origin data;

    d. cost/charges data; and

    e. any other data pertaining directly or indirectly to the utilization of services by medically indigent or charity patients which the Department may request.

6. The applicant shall document that within the scope of its available services, neither the facility nor its participating staff shall have policies or procedures which would exclude patients because of race, age, sex, ethnicity, or ability to pay.

### 104.03 Neonatal Special Care Services Bed Need Methodology

The determination of need for neonatal special care beds/services in each Perinatal Planning Area will be based on eight (8) beds per 1,000 live births as defined below.

1. Two (2) neonatal intensive care beds per 1,000 live births in the most recent 12-month reporting period.

2. Six (6) neonatal intermediate care beds per 1,000 live births in the most recent 12-month reporting period.

**Table 4-4**
**Neonatal Special Care Bed Need**
**2014**

| Perinatal Planning Areas | Number Live Births[1] | Neonatal Intensive Care Bed Need | Neonatal Intermediate Care Bed Need |
|---|---|---|---|
| PPA I | 3,374 | 7 | 20 |
| PPA II | 4,725 | 9 | 28 |
| PPA III | 2,068 | 4 | 12 |
| PPA IV | 2,797 | 6 | 17 |
| PPA V | 10,197 | 20 | 61 |
| PPA VI | 2,241 | 4 | 13 |
| PPA VII | 2,418 | 5 | 15 |
| PPA VIII | 4,792 | 10 | 29 |
| PPA IX | 5,175 | 10 | 31 |
| **State Total** | **37,787** | **76** | **227** |

[1] 2012 Occurrence Data. Number of beds based upon births rounded to the nearest 1,000.
Sources: Mississippi State Department of Health, Division of Licensure and Certification; and Division of Health Planning and Resource Development Calculations, 2014

Source: Bureau of Public Health Statistics

# GUIDELINES FOR THE

# OPERATION OF PERINATAL UNITS

# (OBSTETRICS AND NEWBORN NURSERY)

## 105 Guidelines for the Operation of Perinatal Units (Obstetrics and Newborn Nursery)

### 105.01 Organization

Obstetrics and newborn nursery services shall be under the direction of a member of the staff of physicians who has been duly appointed for this service and who has experience in maternity and newborn care.

There shall be a qualified professional registered nurse responsible at all times for the nursing care of maternity patients and newborn infants.

Provisions shall be made for pre-employment and annual health examinations for all personnel on this service.

Physical facilities for perinatal care in hospitals shall be conducive to care that meets the normal physiologic and psychosocial needs of mothers, neonates and their families. The facilities provide for deviations from the norm consistent with professionally recognized standards/guidelines.

The perinatal service should have facilities for the following components:

1. Antepartum care and testing
2. Fetal diagnostic services
3. Admission/observation/waiting
4. Labor
5. Delivery/cesarean birth
6. Newborn nursery
7. Newborn special care unit (Level II- Specialty)
8. Newborn Intensive Care Unit (Level III Subspecialty and Level IV –Regional care only
9. Recovery and postpartum care
10. Visitation

### 105.02 Staffing

The facility must be staffed to meet its patient care commitments based upon its designated level of care, consistent with the American Academy of Pediatrics, Policy Statement, Levels of Care and professional guidelines. Hospitals with Neonatal Intensive Care Units providing subspecialty care must include appropriately trained personnel (neonatologists, neonatal nurses, and respiratory therapists) and equipment to provide life support for as long as necessary.

## 105.03 Perinatal Levels of Care

### Level 1- Basic Care, Well Newborn Nursery

#### Neonatal Guidelines

1. Provide neonatal resuscitation at every delivery.
2. Evaluate and provide postnatal care to stable term newborn infants.
3. Stabilize and provide care for infants born at 35-37 weeks gestation who remain physiologically stable.
4. Stabilize newborn infants who are ill and those born at <35 weeks gestation until transfer to the appropriate higher level of care.
5. Maintain a staff of providers including pediatricians, family physicians, nurse practitioners with newborn training, registered nurses with newborn training including being current with Neonatal Resuscitation Program Certification and S.T.A.B.L.E.

#### Maternal Guidelines

1. Surveillance and care of all patients admitted to the obstetric service, with an established triage system for identifying high-risk patients who should be transferred to a facility that provides specialty or sub-specialty care.
2. Capability to begin an emergency cesarean delivery within 30 minutes of the decision to do so.
3. Mothers that are stable and likely to deliver before 35 weeks gestation or have a fetus that is likely to require specialty services and mothers who themselves are likely to require specialty services should be transferred prior to delivery, when possible.
4. Proper detection and supportive care of known maternal conditions and unanticipated maternal-fetal problems that occur during labor and delivery.
5. Care of postpartum conditions.
6. Maintain a staff of providers certified to perform normal and operative vaginal deliveries and cesarean sections including obstetricians and family physicians with advanced training in obstetrics, providers certified to perform normal vaginal deliveries including certified nurse midwives, and registered nurses with training in labor and delivery, post partum care or inpatient obstetrics.

#### Hospital Resources

1. Availability of anesthesia, radiology, ultrasound, blood bank and laboratory services available on a 24-hour basis.
2. Consultation and transfer agreement with specialty and/or subspecialty perinatal centers.
3. Parent-sibling-neonate visitation.
4. Data collection and retrieval.

5. Quality improvement programs, maximizing patient safety.

**Level II- Specialty Care, Special Care Nursery**

**Neonatal Guidelines**

1. Performance of all basic care services as described above.
2. Provide care for infants born ≥ 32 weeks and weighing ≥ 1500g who have physiologic immaturity or who are moderately ill with problems that are expected to resolve rapidly and are not anticipated to need subspecialty services on an urgent basis.
3. Provide care for infants convalescing after intensive care.
4. Provide mechanical ventilation for brief duration (<24h) or continuous positive airway pressure or both.
5. Stabilize infants born before 32 wk gestation and weighing less than 1500g until transfer to a Level III or Level IV neonatal intensive care facility.
6. Maintain a staff of providers including those listed in Basic Care plus pediatric hospitalists, neonatologist, and neonatal nurse practitioners.
7. Referral to a higher level of care for all infants when needed for pediatric surgical or medical subspecialty intervention.
8. Level II nurseries must have equipment (eg, portable x-ray machine, blood gas analyzer) and personal (eg, physicians, specialized nurses, respiratory therapists, radiology technicians and laboratory technicians) to provide ongoing care of admitted infants as well as to address emergencies.

**Maternal Guidelines**

1. Perform all basic maternal services listed above.
2. Mothers that are stable and likely to deliver before 32 weeks gestation or have a neonate that is likely to require sub-specialty services, or mothers who themselves are likely to require sub-specialty services should be transferred prior to delivery, when possible.
3. Access to maternal fetal medicine consultation and antenatal diagnosis technology including fetal ultrasound.

**Level III- Sub-specialty Care/Neonatal Intensive Care Unit**

**Neonatal Guidelines**

1. Provision of all Level I and Level II services.
2. Level III NICUs are defined by having continuously available personnel (neonatologists, neonatal nurses, and respiratory therapists) and equipment to provide life support for as long as necessary.

3. Provide comprehensive care for infants born < 32 weeks gestation and weighing <1500 grams and infants born at all gestational ages and birth weights with critical illness.

4. Provide prompt and readily available access to a full range of pediatric medical subspecialists, pediatric surgical specialists, pediatric anesthesiologists or anesthesiologists with experience in neonatal surgical care and pediatric ophthalmologists, on site or by prearranged consultative agreements.

5. Provide a full range of respiratory support and physiologic monitoring that may include conventional and/or high-frequency ventilation and inhaled nitric oxide.

6. Perform advanced imaging with interpretation on an urgent basis, including computed tomography, MRI and echocardiography.

7. Social and family support including social services and pastoral care.

8. If geographic constraints for land transportation exist, the level III facility should ensure availability of rotor and fixed-wing transport services to transfer infants requiring subspecialty intervention from other regions and facilities.

9. Consultation and transfer agreements with both lower level referring hospitals and regional centers, including back-transport agreements.

10. Prompt diagnosis and appropriate referral of all conditions requiring surgical intervention. Major surgery should be performed by pediatric surgical specialists (including anesthesiologists with pediatric expertise) on–site within the hospital or at a closely related institution, ideally in close geographic proximity if possible. Level III facilities should be able to offer complete care, management, and evaluation for high risk neonates 24 hours a day. A neonatologist should be available either in-house or on-call with the capacity to be in-house in a timely manner, 24 hours a day.

11. Level III facilities should maintain a sufficient volume of infants <1500grams to meet professionally accepted guidelines to achieve adequate experience and expertise.

12. Enrollment in the Vermont Oxford Network to report and monitor data regarding outcomes of infants born <32 weeks and weighing <1500 grams.

13. Participation in and evaluation of quality improvement initiatives.

**Maternal Guidelines**

1. Manage complex maternal and fetal illnesses before, during and after delivery.

2. Maintain access to consultation and referral to Maternal-Fetal Medicine specialists

**Level IV- Regional Care**

**Neonatal Guidelines**

1. All level III capabilities listed above.

2. Located within an institution with the capability to provide surgical repair of complex congenital or acquired conditions.

3. Maintain a full range of pediatric medical subspecialists, pediatric surgical subspecialists and pediatric anesthesiologists at the site.

4. Facilitate transport and provide outreach education including community taught NRP and S.T.A.B.L.E. classes.

**Maternal Guidelines**

1. All level III capabilities listed above.

2. Maintain a full range of surgical and medical specialists including Maternal-Fetal Medicine specialists at the site.

3. Facilitate maternal transport and provide outreach education.

## 105.04 Perinatal Care Services

**Antepartum Care**

There should be policies for the care of pregnant patients with obstetric, medical, or surgical complications and for maternal transfer.

**Intra-partum Services: Labor and Delivery**

Intra-partum care should be both personalized and comprehensive for the mother and fetus. There should be written policies and procedures in regard to:

1. Assessment
2. Admission
3. Medical records (including complete prenatal history and physical)
4. Consent forms
5. Management of labor including assessment of fetal well-being:
    a. Term patient
    b. Preterm patients
    c. Premature rupture of membranes
    d. Preeclampsia/eclampsia
    e. Third trimester hemorrhage

f. Pregnancy Induced Hypertension (PIH)

6. Patient receiving oxytocics or tocolytics
7. Patients with stillbirths and miscarriages
8. Pain control during labor and delivery
9. Management of delivery
10. Emergency cesarean delivery (capability within 30 minutes)
11. Assessment of fetal maturity prior to repeat cesarean delivery or induction of labor
12. Vaginal birth after cesarean delivery
13. Assessment and care of neonate in the delivery room
14. Infection control in the obstetric and newborn areas
15. A delivery room shall be kept that will indicate:
    a. The name of the patient
    b. Date of delivery
    c. Sex of infant
    d. Apgar
    e. Weight
    f. Name of physician
    g. Name of person assisting
    h. What complications, if any, occurred
    i. Type of anesthesia used
    j. Name of person administering anesthesia
16. Maternal transfer
17. immediate postpartum/recovery care
18. Housekeeping

**Newborn Care**

There shall be policies and procedures for providing care of the neonate including:

1. Immediate stabilization period
2. Neonate identification and security
3. Assessment of neonatal risks
4. Cord blood, Coombs, and serology testing
5. Eye care
6. Subsequent care
7. Administration of Vitamin K
8. Neonatal screening

9. Circumcision
10. Parent education
11. Visitation
12. Admission of neonates born outside of facility
13. Housekeeping
14. Care of or stabilization and transfer of high-risk neonates

**Postpartum Care**

There shall be policies and procedures for postpartum care of mother:

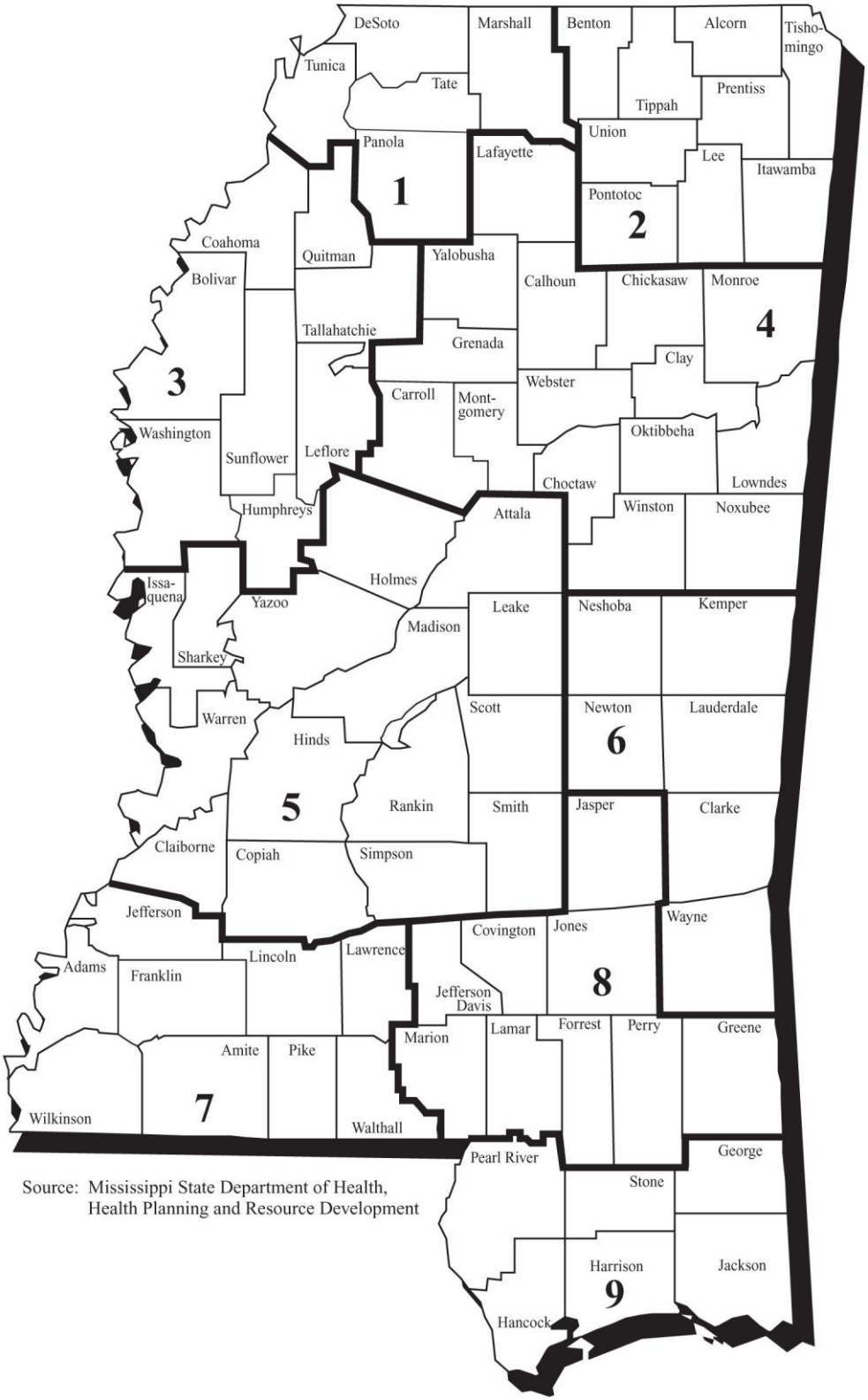
1. Assessment
2. Subsequent care (bed rest, ambulation, diet, care of the vulva, care of the bowel and bladder functions, bathing, care of the breasts, temperature elevation)
3. Postpartum sterilization
4. Immunization: RHIG and Rubella
5. Discharge planning

**105.05 Hospital Evaluation and Level of Care Designation**

All hospitals offering obstetric and newborn services will be evaluated at regular intervals and designated a level of care by the Mississippi State Health Department.

Source: Guidelines for Perinatal Care, Second, Fourth, and Sixth Editions, American Academy of Pediatrics and the American College of Obstetricians and Gynecologists, 1988, 1992, and 2007.

**Map 4-2**
**Perinatal Planning Areas**




Source: Mississippi State Department of Health,
Health Planning and Resource Development

# CHAPTER 5

# ACUTE CARE FACILITIES AND SERVICES

# Chapter 5 Acute Care

Mississippi had 96 non-federal medical/surgical hospitals in FY 2013, with a total of 10,948 licensed acute care beds (plus 286 beds held in abeyance by the MSDH). This total includes one OB/GYN hospital but excludes one rehabilitation hospital with acute care beds and Delta Regional Medical Center-West Campus which is licensed as an acute care hospital but is used primarily for other purposes. This total also excludes long term acute care (LTAC), rehabilitation, psychiatric, chemical dependency, and other special purpose beds. In addition, numerous facilities provide specific health care services on an outpatient basis. Some of these facilities are freestanding; others are closely affiliated with hospitals. Such facilities offer an increasingly wider range of services, many of which were once available only in inpatient acute care settings. Examples include diagnostic imaging, therapeutic radiation, and ambulatory surgery.

## 100 General Medical/Surgical Hospitals

The 96 acute care medical/surgical hospitals reported 9,753 beds set up and staffed during 2013, or 89.08 percent of the total licensed bed capacity. Based on beds set up and staffed, the hospitals experienced an overall occupancy rate of 45.74 percent and an average length of stay of 4.67 days. When calculating the occupancy rate using total licensed bed capacity, the overall occupancy rate drops to 40.74 percent. Using these statistics and 2020 projected population totals, Mississippi had a licensed bed capacity to population ratio of 3.47 per 1,000 and an occupied bed to population ratio of 1.46 per 1,000. Table 5-1 shows the licensed Mississippi hospital beds by service areas.

These statistics indicate an average daily census in Mississippi hospitals of 4,460.91, leaving approximately 6,487.09 unused licensed beds on any given day. Seventy-five of the state's hospitals reported occupancy rates of less than 40 percent during FY 2013.

Mississippi requires Certificate of Need (CON) review for all projects that increase the bed complement of a health care facility or exceed a capital expenditure threshold of $2 million. The law requires CON review regardless of capital expenditure for the construction, development, or other establishment of a new health care facility, including a replacement facility; the relocation of a health care facility or any portion of the facility which does not involve a capital expenditure and is more than 5,280 feet from the main entrance of the facility; and a change of ownership of an existing health care facility, unless the MSDH receives proper notification at least 30 days in advance. A health care facility that has ceased to treat patients for a period of 60 months or more must receive CON approval prior to reopening. A CON is required for major medical equipment purchase if the capital expenditure exceeds $1.5 million and is not a replacement of existing medical equipment.

A statewide glut of licensed acute care beds complicates planning for community hospital services. There are far more hospital beds than needed. The average use of licensed beds has been less than 50 percent in recent years. With few exceptions, the surplus is statewide. The continued presence of surplus hospital beds in all planning districts, and in nearly all counties with acute care hospitals, raises a number of basic planning questions:

- Does the “carrying cost” of maintaining unused beds raise operating cost unnecessarily?
- Do the surpluses, and any associated economic burdens, retard the introduction of new and more cost effective practices and services?

- Do existing services providers maintain unwarranted surpluses to shield themselves from competition, as argued by some potential competitors?
- Should the space allocated to surplus beds be converted to other uses, particularly if doing so would avoid construction of new space, or facilities, to accommodate growing outpatient caseloads?
- Do the large surpluses mask need for additional services and capacity in some regions and reduce the sensitivity and responsiveness of planners and regulators to these legitimate community needs?
- Do the continuing surpluses, and the view of them by stakeholders and other interested parties, create an environment that invites policy intervention by legislators and other responsible parties?

These questions are unusually difficult to answer definitively. That they arise not infrequently suggest the importance of reducing excess capacity where it is possible to do so and is not likely to result in problematic consequences. The Department urges each hospital to voluntarily reduce the licensed bed capacity to equal its average daily census plus a confidence factor that will assure that an unused hospital bed will be available on any given day.

**Table 5-1**
**Licensed Short-Term Acute Care Hospital Beds by Service Area**
**FY 2013**

| Facility | Licensed Beds | Abeyance Beds | Average Daily Census | Occupancy Rate | Average Length of Stay |
|---|---|---|---|---|---|
| **General Hospital Service Area 1** | **562** | **18** | **238.50** | **42.55** | **4.57** |
| Alliance Healthcare System - Holly Springs | 40 | 0 | 8.41 | 21.03 | 5.72 |
| Baptist Memorial Hospital - DeSoto | 309 | 0 | 192.44 | 62.28 | 4.55 |
| Methodist Healthcare Olive Branch Hospital* | 60 | 0 | 0.65 | 1.08 | 3.06 |
| North Oak Regional Medical Center - Senatobia | 76 | 0 | 13.40 | 17.63 | 4.99 |
| Tri-Lakes Medical Center - Batesville | 77 | 18 | 24.26 | 31.50 | 4.22 |
| **General Hospital Service Area 2** | **1,095** | **25** | **489.20** | **44.68** | **4.96** |
| Baptist Memorial Hospital - Booneville | 114 | 0 | 25.23 | 22.13 | 6.20 |
| Baptist Memorial Hospital - Union County | 153 | 0 | 30.55 | 19.97 | 3.06 |
| Iuka Hospital - Iuka | 48 | 0 | 5.75 | 11.99 | 3.11 |
| Magnolia Regional Health Center - Corinth | 181 | 0 | 86.41 | 47.74 | 4.43 |
| North Miss Medical Center - Tupelo | 554 | 0 | 333.31 | 60.16 | 5.46 |
| Pontotoc Health Services - Pontotoc | 25 | 0 | 2.71 | 10.83 | 3.08 |
| Tippah County Hospital - Ripley | 20 | 25 | 5.24 | 26.19 | 3.75 |
| **General Hospital Service Area 3** | **896** | **0** | **283.90** | **31.69** | **4.38** |
| Bolivar Medical Center - Cleveland | 165 | 0 | 39.37 | 23.86 | 4.11 |
| Delta Regional Medical Center (Main) - Greenville | 227 | 0 | 95.08 | 41.89 | 4.80 |
| Greenwood Leflore Hospital - Greenwood | 188 | 0 | 70.11 | 37.29 | 4.42 |
| North Sunflower County Hospital | 35 | 0 | 13.62 | 38.91 | 5.59 |
| Northwest Miss Regional Medical Center-Clarksdale | 181 | 0 | 45.72 | 25.26 | 3.99 |
| Patient's Choice Medical Center of Humphreys County* | 0 | 0 | 0.00 | 0 | 0 |
| Quitman County Hospital - Marks | 33 | 0 | 8.93 | 27.07 | 5.55 |
| South Sunflower County Hospital | 49 | 0 | 9.06 | 18.48 | 2.65 |
| Tallahatchie General Hospital & ECF | 18 | 0 | 2.02 | 11.20 | 3.16 |
| **General Hospital Service Area 4** | **1,244** | **24** | **367.89** | **29.57** | **4.37** |
| Baptist Memorial Hospital - North Miss - Oxford | 204 | 0 | 97.97 | 48.03 | 4.67 |
| Baptist Memorial Hospital-Golden Triangle | 285 | 0 | 83.09 | 29.15 | 4.12 |
| Calhoun Health Services - Calhoun City | 30 | 0 | 6.17 | 20.57 | 5.96 |
| Gilmore Memorial Hospital, Inc. | 95 | 0 | 30.77 | 32.39 | 3.92 |
| Grenada Lake Medical Center | 156 | 0 | 32.94 | 21.12 | 4.11 |
| Kilmichael Hospital | 19 | 0 | 1.23 | 6.49 | 3.60 |
| North Mississippi Medical Center-West Point | 60 | 0 | 20.87 | 34.78 | 3.68 |
| Noxubee General Critical Access Hospital | 25 | 0 | 7.82 | 31.29 | 3.51 |
| Oktibbeha County Hospital Regional Medical Center | 96 | 0 | 27.57 | 28.72 | 3.98 |
| Pioneer Community Hospital of Aberdeen | 35 | 0 | 7.56 | 21.60 | 6.27 |
| Pioneer Community Hospital of Choctaw | 25 | 0 | 3.92 | 15.66 | 5.50 |
| Trace Regional Hospital | 84 | 0 | 10.13 | 12.06 | 6.45 |
| Tyler Holmes Memorial Hospital | 25 | 0 | 5.47 | 21.90 | 3.43 |
| Webster Health Services | 38 | 0 | 16.50 | 43.42 | 5.05 |
| Winston Medical Center | 41 | 24 | 12.93 | 31.53 | 7.17 |
| Yalobusha General Hospital | 26 | 0 | 2.95 | 11.35 | 3.46 |

**Table 5-1 (continued)**
**Licensed Short-Term Acute Care Hospital Beds by Service Area**
**FY 2013**

| Facilities | Licensed Beds | Abeyance Beds | Average Daily Census | Occupancy Rate | Average Length of Stay |
|---|---|---|---|---|---|
| **General Hospital Service Area 5** | **3,167** | **56** | **1,515.17** | **47.84** | **5.02** |
| Baptist Medical Center Leake | 25 | 0 | 6.03 | 24.12 | 3.39 |
| Central Mississippi Medical Center | 415 | 0 | 74.74 | 18.01 | 4.73 |
| Claiborne County Hospital | 32 | 0 | 10.38 | 32.44 | 5.83 |
| Crossgates River Oaks Hospital | 149 | 0 | 54.49 | 36.57 | 5.61 |
| Hardy Wilson Memorial Hospital | 25 | 10 | 15.28 | 61.13 | 7.24 |
| Holmes County Hospital and Clinics | 25 | 10 | 1.87 | 7.46 | 2.07 |
| King's Daughters Hospital-Yazoo City | 25 | 0 | 8.63 | 34.53 | 3.80 |
| Madison River Oaks Medical Center | 67 | 0 | 16.96 | 25.31 | 3.21 |
| Magee General Hospital | 64 | 0 | 16.75 | 26.16 | 4.27 |
| Mississippi Baptist Medical Center | 541 | 0 | 292.78 | 54.12 | 5.52 |
| Montfort Jones Memorial Hospital | 35 | 36 | 16.48 | 47.08 | 4.73 |
| Patients' Choice Medical Center of Smith County | 29 | 0 | 6.28 | 21.66 | 14.61 |
| River Oaks Hospital | 160 | 0 | 56.76 | 35.48 | 3.63 |
| River Region Health System | 261 | 0 | 106.13 | 40.66 | 5.30 |
| S.E. Lackey Critical Access Hospital | 35 | 0 | 23.48 | 67.08 | 4.99 |
| Scott Regional Hospital | 25 | 0 | 5.18 | 20.71 | 3.29 |
| Sharkey - Issaquena Community Hospital | 29 | 0 | 7.52 | 25.94 | 5.01 |
| Simpson General Hospital | 35 | 0 | 10.57 | 30.21 | 5.76 |
| St. Dominic-Jackson Memorial Hospital | 417 | 0 | 311.93 | 74.80 | 4.20 |
| University Hospital & Health System | 664 | 0 | 455.75 | 68.64 | 6.16 |
| Woman's Hospital at River Oaks | 109 | 0 | 17.16 | 15.75 | 3.36 |
| **General Hospital Service Area 6** | **869** | **90** | **299.00** | **34.41** | **4.87** |
| Alliance Health Center | 78 | 0 | 4.13 | 5.29 | 12.78 |
| Alliance Laird Hospital - Union | 25 | 0 | 3.36 | 13.46 | 2.88 |
| Anderson Regional Medical Center - Meridian | 260 | 71 | 141.87 | 54.57 | 5.03 |
| Anderson Regional Medical Center South* | 49 | 0 | 5.51 | 11.24 | 12.47 |
| H.C. Watkins Memorial Hospital, Inc. - Quitman | 25 | 0 | 2.78 | 11.10 | 3.90 |
| John C. Stennis Memorial Hospital | 25 | 0 | 1.25 | 5.02 | 3.15 |
| Neshoba General Hospital - Philadelphia | 82 | 0 | 17.19 | 20.97 | 4.11 |
| Pioneer Community Hospital of Newton | 30 | 19 | 10.14 | 33.79 | 5.00 |
| Rush Foundation Hospital - Meridian | 215 | 0 | 87.10 | 40.51 | 4.67 |
| Wayne General Hospital - Waynesboro | 80 | 0 | 25.66 | 32.08 | 4.80 |
| **General Hospital Service Area 7** | **719** | **0** | **252.17** | **35.07** | **4.11** |
| Beacham Memorial Hospital | 37 | 0 | 12.44 | 33.62 | 6.81 |
| Field Memorial Community Hospital | 25 | 0 | 4.68 | 18.72 | 3.36 |
| Franklin County Memorial Hospital | 35 | 0 | 7.45 | 21.28 | 7.72 |
| Jefferson County Hospital | 30 | 0 | 17.98 | 59.94 | 10.27 |
| King's Daughters Medical Center - Brookhaven | 122 | 0 | 37.22 | 30.51 | 2.84 |
| Lawrence County Hospital | 25 | 0 | 3.83 | 15.31 | 3.49 |
| Natchez Community Hospital | 101 | 0 | 44.04 | 43.61 | 4.37 |
| Natchez Regional Medical Center | 159 | 0 | 33.26 | 20.92 | 4.83 |
| Southwest Miss Regional Medical Center | 160 | 0 | 88.31 | 55.20 | 3.75 |
| Walthall County General Hospital | 25 | 0 | 2.96 | 11.84 | 3.16 |

**Table 5-1 (continued)**
**Licensed Short-Term Acute Care Hospital Beds by Service Area**
**FY 2013**

| Facility | Licensed Beds | Abeyance Beds | Average Daily Census | Occupancy Rate | Average Length of Stay |
|---|---|---|---|---|---|
| **General Hospital Service Area 8** | **1,046** | **38** | **495.93** | **47.41** | **4.61** |
| Covington County Hospital | 35 | 0 | 9.19 | 26.27 | 5.63 |
| Forrest General Hospital | 400 | 0 | 265.64 | 66.41 | 4.43 |
| Greene County Hospital | 3 | 0 | 0.27 | 9.04 | 4.95 |
| Jasper General Hospital | 16 | 0 | 0.09 | 0.58 | 6.80 |
| Jeff Davis Community Hospital - Prentiss | 35 | 0 | 7.29 | 20.83 | 7.13 |
| Marion General Hospital | 49 | 30 | 9.63 | 19.65 | 4.23 |
| Perry County General Hospital | 22 | 8 | 2.09 | 9.51 | 3.47 |
| South Central Regional Medical Center | 275 | 0 | 91.90 | 33.42 | 4.66 |
| Wesley Medical Center | 211 | 0 | 109.82 | 52.05 | 4.93 |
| **General Hospital Service Area 9** | **1,350** | 35 | **518.50** | **38.41** | **4.22** |
| Biloxi Regional Medical Center* | 153 | 0 | 71.10 | 46.47 | 4.57 |
| Garden Park Medical Center | 130 | 0 | 45.48 | 34.99 | 4.07 |
| George County Hospital | 48 | 0 | 13.70 | 28.53 | 3.53 |
| Hancock Medical Center | 86 | 0 | 17.14 | 19.93 | 3.30 |
| Highland Community Hospital - Picayune | 60 | 35 | 17.59 | 29.32 | 3.11 |
| Memorial Hospital at Gulfport | 303 | 0 | 149.10 | 49.21 | 4.50 |
| Ocean Springs Hospital | 136 | 0 | 101.90 | 74.93 | 4.43 |
| Pearl River Hospital & Nursing Home - Poplarville | 24 | 0 | 1.23 | 5.14 | 2.91 |
| Singing River Hospital | 385 | 0 | 97.92 | 25.43 | 4.11 |
| Stone County Hospital | 25 | 0 | 3.33 | 13.30 | 2.89 |
| **TOTAL** | **10,948** | **286** | **4,460.91** | **40.75** | **4.67** |

Note: *Methodist Health Care Olive Branch opened in FY 2013.
*Patients Choice Medical Center of Humphreys County closed in FY 2013.
* Riley Memorial Hospital –Meridian changed their name to Anderson Regional Medical Center-South.

Occupancy rate is calculated based on total number of licensed beds and excludes beds in abeyance. As a result, the occupancy rate may not equal the occupancy rate published in the *2013 Mississippi Hospital Report.*

Source: Application for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; Division of Health Planning and Resource Development, Office of Health Policy and Planning

## 101 Hospital Outpatient Services

The following table shows the number of visits to hospital emergency rooms and hospital outpatient clinics in FY 2013. These statistics represent an increase over 2012's total of 4,862,405 visits to hospital emergency rooms and outpatient clinics.

**Table 5-2**
**Selected Data for Hospital-Based or Affiliated Outpatient Clinics**
**by General Hospital Service Area**
**FY 2013**

| General Hospital Service Area | Number with Emergency Department | Number of Emergency Room Visits | Number of Hospitals with Organized Outpatient | Number of Outpatient Clinic Visits | Total Outpatient Visits |
|---|---|---|---|---|---|
| **Mississippi** | **87** | **1,829,621** | **80** | **3,047,718** | **4,877,339** |
| 1 | 5 | 93,074 | 5 | 49,966 | 143,040 |
| 2 | 7 | 183,518 | 7 | 324,675 | 508,193 |
| 3 | 8 | 147,599 | 6 | 226,228 | 373,827 |
| 4 | 14 | 226,534 | 13 | 413,246 | 639,780 |
| 5 | 19 | 429,815 | 20 | 671,353 | 1,101,168 |
| 6 | 8 | 107,138 | 7 | 149,759 | 256,897 |
| 7 | 9 | 124,762 | 7 | 147,034 | 271,796 |
| 8 | 8 | 190,551 | 6 | 187,829 | 378,380 |
| 9 | 9 | 326,630 | 9 | 877,628 | 1,204,258 |

Source: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report, Mississippi State Department of Health

# ACUTE CARE

## 102 Certificate of Need Criteria and Standards for General Acute Care Facilities

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 102.01 Policy Statement Regarding Certificate of Need Applications for General Acute Care Hospitals and General Acute Care Beds

1. Acute Care Hospital Need Methodology: With the exception of psychiatric, chemical dependency, and rehabilitation hospitals, the Mississippi State Department of Health (MSDH) will use the following methodologies to project the need for general acute care hospitals:

   a. **Counties Without a Hospital** - The MSDH shall determine hospital need by multiplying the state's average annual occupied beds (1.41 in FY 2013) per 1,000 population by the estimated 2020 county population to determine the number of beds the population could utilize. A hospital with a maximum of 100 beds may be considered for approval if: (a) the number of beds needed is 100 or more; (b) there is strong community support for a hospital; and (c) a hospital can be determined to be economically feasible.

   b. **Counties With Existing Hospitals** - The MSDH shall use the following formula to determine the need for an additional hospital in a county with an existing hospital:

   $$\mathbf{ADC + K(\sqrt{ADC})}$$

   **Where: ADC = Average Daily Census**

   **K = Confidence Factor of 2.57**

   The formula is calculated for each facility within a given General Hospital Service Area (GHSA); then beds available and beds needed under the statistical application of the formula are totaled and subtracted to determine bed need or excess within each GHSA. Map 5-1 delineates the GHSAs. The MSDH may consider approval of a hospital with a maximum of 100 beds if: (a) the number of beds needed is 100 or more; (b) there is strong community support for a hospital; and (c) a hospital can be determined to be economically feasible.

   c. **Counties Located in an Underdeveloped General Hospital Service Area and With a Rapidly Growing Population -** Notwithstanding the need formula in b above, any county with a population in excess of 140,000 people; projecting a population growth rate in excess of ten (10) percent over the next ten (10) year period; and its General Hospital Service Area does not presently exceed a factor of three (beds per 1,000 population); may

be considered for a new acute care hospital not to exceed one hundred (100) beds, in that county.

Further, any person proposing a new hospital under criterion 1c above must meet the following conditions:

1) Provide an amount of indigent care in excess of the average of the hospitals in the General Hospital Service Area as determined by the State Health Officer;

2) Provide an amount of Medicaid care in excess of the average of the hospitals in the General Hospital Service Area as determined by the State Health Officer; and

3) If the proposed hospital will be located in a county adjacent to a county or counties without a hospital, the applicant must establish outpatient services in the adjacent county or counties without a hospital;

4) Fully participate in the Trauma Care System at a level to be determined by the Department for a reasonable number of years to be determined by the State Health Officer. Fully participate means play in the Trauma Care System as provided in the Mississippi Trauma Care System Regulations and the new hospital shall not choose or elect to pay a fee not to participate or participate at a level lower than the level specified in the CON; and

5) The new hospital must also participate as a network provider in the State and School Employees' Health Insurance Plan as defined in Mississippi Code Section 25-15-3 and 25-15-9.

2. Need in Counties Without a Hospital: Six counties in Mississippi do not have a hospital: Amite, Benton, Carroll, Issaquena, Itawamba, and Tunica. Most of these counties do not have a sufficient population base to indicate a potential need for the establishment of a hospital, and all appear to receive sufficient inpatient acute care services from hospitals in adjoining counties.

3. Expedited Review: The MSDH may consider an expedited review for Certificate of Need applications that address only license code deficiencies, project cost overruns, and relocation of facilities or services.

4. Capital Expenditure: For the purposes of Certificate of Need review, transactions which are separated in time but planned to be undertaken within 12 months of each other and which are components of an overall long-range plan to meet patient care objectives shall be reviewed in their entirety without regard to their timing. For the purposes of this policy, the governing board of the facility must have duly adopted the long-range plan at least 12 months prior to the submission of the CON application.

5. No health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need.

6. If a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the

delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

7. A health care facility that has ceased to operate for a period of 60 months or more shall require a Certificate of Need prior to reopening.

### 102.02 Certificate of Need Criteria and Standards for the Establishment of a General Acute Care Hospital

The Mississippi State Department of Health (MSDH) will review applications for a Certificate of Need to construct, develop, or otherwise establish a new hospital 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 Certificate of Need 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.

1. **Need Criterion: The applicant shall document a need for a general acute care hospital using the appropriate need methodology as presented in this section of the *Plan.* In addition, the applicant must meet the other conditions set forth in the need methodology**.

2. The application shall document that the applicant will provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this *Plan*.

### 102.03 Certificate of Need Criteria and Standards for Construction, Renovation, Expansion, Capital Improvements, Replacement of Health Care Facilities, and Addition of Hospital Beds

The Mississippi State Department of Health (MSDH) will review applications for a Certificate of Need for the addition of beds to a health care facility and projects for construction, renovation, expansion, or capital improvement involving a capital expenditure in excess of $2,000,000 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 Certificate of Need 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 construction, development, or other establishment of a new health care facility, the replacement and/or relocation of a health care facility or portion thereof, and changes of ownership of existing health care facilities are reviewable regardless of capital expenditure.

3. **<u>Need Criterion:</u>**

   a. **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.

b. **Projects which involve the addition of beds**: The applicant shall document the need for the proposed project. In addition to the documentation required as stated in Need Criterion (1)(a), the applicant shall document that the facility in question has maintained an occupancy rate of at least 60 percent for the most recent two (2) years or has maintained an occupancy rate of at least 70 percent for the most recent two (2) years according to the below formula:

# Observation patient days*/365/ licensed beds + Inpatient Occupancy rate

*An observation patient is a patient that has NOT been admitted as an inpatient, but occupies an acute care bed (observation bed) and is provided observation services in a licensed, acute care hospital. Hospitals shall follow strict guidelines set forth by The Centers for Medicare & Medicaid Services, health insurance companies, and others in reporting observation bed data to the Department. For definitions that correspond with the above referenced item, please refer to the Glossary included in the Plan.

4. Bed Service Transfer/Reallocation/Relocation: Applications proposing the transfer, reallocation, and/or relocation of a specific category or sub-category of bed/service from another facility as part of a renovation, expansion, or replacement project shall document that the applicant will meet all regulatory/licensure requirements for the type of bed/service being transferred/reallocated/relocated.

5. Charity/Indigent Care: The application shall affirm that the applicant will provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this *Plan*.

6. The application shall demonstrate that the cost of the proposed project, including equipment, is reasonable in comparison with the cost of similar projects in the state.

   a. The applicant shall document that the cost per square foot (per bed if applicable) does not exceed the median construction costs, as determined by the MSDH, for similar projects in the state within the most recent 12-month period by more than 15 percent. The Glossary of this *Plan* provides the formulas to be used by MSDH staff in calculating the cost per square foot for construction and/or construction/renovation projects.

   b. If equipment costs for the project exceed the median costs for equipment of similar quality by more than 15 percent, the applicant shall provide justification for the excessive costs. The median costs shall be based on projects submitted during the most recent six-month period and/or estimated prices provided by acceptable vendors.

7. The applicant shall specify the floor areas and space requirements, including the following factors:

   a. The gross square footage of the proposed project in comparison to state and national norms for similar projects.

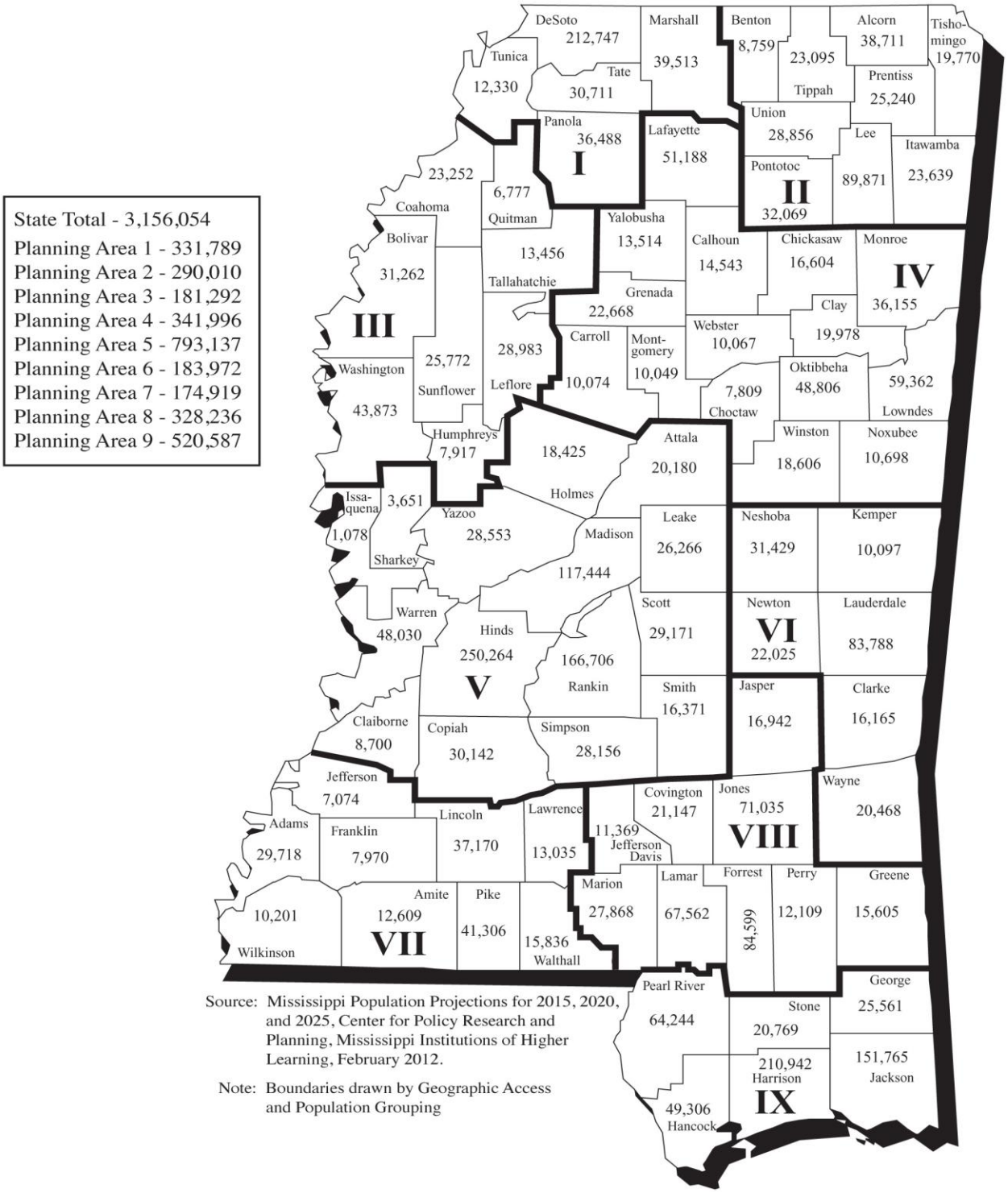
   b. The architectural design of the existing facility if it places restraints on the proposed project.

c. Special considerations due to local conditions.

8. If the cost of the proposed renovation or expansion project exceeds 85 percent of the cost of a replacement facility, the applicant shall document their justification for rejecting the option of replacing said facility.

9. The applicant shall document the need for a specific service (i.e. perinatal, ambulatory care, psychiatric, etc.) using the appropriate service specific criteria as presented in this and other sections of the *Plan*.

# Map 5-1
# General Hospital Service Areas
# 2020 Population Projections




Source: Mississippi Population Projections for 2015, 2020, and 2025, Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, February 2012.

Note: Boundaries drawn by Geographic Access and Population Grouping

# LONG-TERM ACUTE CARE HOSPITALS/BEDS

## 103 Long-Term Acute Care Hospitals

A long-term acute care (LTAC) hospital is a free-standing, Medicare-certified acute care hospital with an average length of inpatient stay greater than 25 days that is primarily engaged in providing chronic or long-term medical care to patients who do not require more than three hours of rehabilitation or comprehensive rehabilitation per day. As of April 2014, ten long-term acute care hospitals were in operation. The following table lists specific LTAC information.

**Table 5-3**
**Long-Term Acute Care Hospitals**
**2013**

| Facility | Location | Authorized Beds | Licensed Beds | Occupancy Rate | Discharges | ALOS |
|---|---|---|---|---|---|---|
| **General Hospital Service Area 1** | | **0** | **0** | **0.00** | **0** | **0.00** |
| NONE | | | | | | |
| **General Hospital Service Area 2** | | **0** | **0** | **0.00** | **0** | **0.00** |
| NONE | | | | | | |
| **General Hospital Service Area 3** | | **80** | **79** | **58.14** | **624** | **26.32** |
| Alliance Specialty Hospital Greenville* | - Greenville | 40 | 39 | 52.98 | 267 | 28.22 |
| Greenwood AMG Specialty Hospital* | - Greenwood | 40 | 40 | 63.16 | 357 | 24.90 |
| **General Hospital Service Area 4** | | **0** | **0** | **0.00** | **0** | **0.00** |
| NONE | | | | | | |
| **General Hospital Service Area 5** | | **149** | **149** | **79.73** | **1,591** | **26.96** |
| Mississippi Hospital for Restorative Care | - Jackson | 25 | 25 | 83.15 | 221 | 32.91 |
| Promise Hospital of Vicksburg | - Vicksburg | 35 | 35 | 74.50 | 377 | 24.84 |
| Regency Hospital of Jackson | - Jackson | 36 | 36 | 74.64 | 368 | 26.65 |
| Select Specialty Hospital of Jackson | - Jackson | 53 | 53 | 85.03 | 625 | 26.32 |
| **General Hospital Service Area 6** | | **89** | **89** | **86.49** | **982** | **28.54** |
| Regency Hospital of Meridian | - Meridian | 40 | 40 | 75.51 | 386 | 27.80 |
| Specialty Hospital of Meridian | - Meridian | 49 | 49 | 95.44 | 596 | 29.03 |
| **General Hospital Service Area 7** | | **0** | **0** | **0.00** | **0** | **0.00** |
| NONE | | | | | | |
| **General Hospital Service Area 8** | | **33** | **33** | **77.05** | **378** | **25.42** |
| Regency Hospital of Southern Mississippi | - Hattiesburg | 33 | 33 | 77.05 | 378 | 25.42 |
| **General Hospital Service Area 9** | | **80** | **61** | **43.70** | **361** | **25.61** |
| Select Specialty Hospital-Gulfport | - Gulfport | 80 | 61 | 43.70 | 361 | 25.61 |
| **TOTAL** | | **431** | **411** | **71.48** | **3,936** | **26.98** |

NOTE: There are currently no LTAC Hospitals located in GHSA 1, 2, 4, and 7.

*Delta Regional Medical Center changed their name to Alliance Specialty Hospital of Greenville.
*Long Term Acute Hospital of Greenwood changed their name to Greenwood AMG Specialty Hospital.

Source: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report, Mississippi State Department of Health

## 104 Certificate of Need Criteria and Standards for Long-Term Acute Care Hospitals/Beds

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 104.01 Policy Statement Regarding Certificate of Need Applications for Long-Term Acute Care Hospitals and Long-Term Acute Care Hospital Beds

1. Restorative Care Admissions: Restorative care admissions shall be identified as patients with one or more of the following conditions or disabilities:

    a. Neurological Disorders

        i. Head Injury

        ii. Spinal Cord Trauma

        iii. Perinatal Central Nervous System Insult

        iv. Neoplastic Compromise

        v. Brain Stem Trauma

        vi. Cerebral Vascular Accident

        vii. Chemical Brain Injuries

    b. Central Nervous System Disorders

        i. Motor Neuron Diseases

        ii. Post Polio Status

        iii. Developmental Anomalies

        iv. Neuromuscular Diseases (e.g. Multiple Sclerosis)

        v. Phrenic Nerve Dysfunction

        vi. Amyotrophic Lateral Sclerosis

c. Cardio-Pulmonary Disorders

i. Obstructive Diseases

ii. Adult Respiratory Distress Syndrome

iii. Congestive Heart Failure

iv. Respiratory Insufficiency

v. Respiratory Failure

vi. Restrictive Diseases

vii. Broncho-Pulmonary Dysplasia

viii. Post Myocardial Infarction

ix. Central Hypoventilation

d. Pulmonary Cases

i. Presently Ventilator-Dependent/Weanable

ii. Totally Ventilator-Dependent/Not Weanable

iii. Requires assisted or partial ventilator support

iv. Tracheostomy that requires supplemental oxygen and bronchial hygiene

2. Bed Licensure: All beds designated as long-term care hospital beds shall be licensed as general acute care.

3. Average Length of Stay: Patients' average length of stay in a long-term care hospital must be 25 days or more.

4. Size of Facility: Establishment of a long-term care hospital shall not be for less than 20 beds.

5. Long-Term Medical Care: A long-term acute care hospital shall provide chronic or long-term medical care to patients who do not require more than three (3) hours of rehabilitation or comprehensive rehabilitation per day.

6. Transfer Agreement: A long-term acute care hospital shall have a transfer agreement with an acute care medical center and a comprehensive medical rehabilitation facility.

7. Effective July 1, 1994, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need under the authority of Section 41-7-191(1)(c), unless there is a projected need for such beds in the planning district in which the facility is located.

## 104.02 Certificate of Need Criteria and Standards for the Establishment of a Long-Term Acute Care Hospital and Addition of Long-Term Acute Care Hospital Beds

The Mississippi State Department of Health will review applications for a Certificate of Need for the construction, development, or otherwise establishment of a long-term acute care hospital and bed additions 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

1. **Need Criterion: The applicant shall document a need for the proposed project. Documentation shall consist of the following:**

    a. **minimum of 450 clinically appropriate restorative care admissions with an average length of stay of 25 days; and**

    b. **a projection of financial feasibility by the end of the third year of operation.**

2. The applicant shall document that any beds which are constructed/converted will be licensed as general acute care beds offering long-term acute care hospital services.

3. Applicants proposing the transfer/reallocation/relocation of a specific category or sub-category of bed/service from another facility as part of a renovation, expansion, or replacement project shall document that they will meet all regulatory and licensure requirements for the type of bed/service proposed for transfer/reallocation/relocation.

4. The application shall affirm that the applicant will provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this *Plan*.

5. The application shall demonstrate that the cost of the proposed project, including equipment, is reasonable in comparison with the cost of similar projects in the state. The applicant shall document that the cost per square foot (per bed if applicable) does not exceed the median construction costs, as determined by the MSDH, for similar projects in the state within the most recent 12-month period by more than 15 percent. The Glossary of this *Plan* provides the formulas MSDH staff shall use to calculate the cost per square foot of space for construction and/or construction-renovation projects.

6. The applicant shall specify the floor areas and space requirements, including the following factors:

    a. The gross square footage of the proposed project in comparison to state and national norms for similar projects.

    b. The architectural design of the existing facility if it places restraints on the proposed project.

    c. Special considerations due to local conditions.

7. The applicant shall provide copies of transfer agreements entered into with an acute care medical center and a comprehensive medical rehabilitation facility.

# SWING-BED SERVICES

## 105 Swing-Bed Programs and Extended Care Services

Federal law allows hospitals of up to 100 beds to use designated beds as “swing beds” to alternate between acute and extended care. Patients occupy swing-beds for a few days to several weeks. Hospitals must meet several requirements for certification as swing-beds under Medicare and Medicaid. Federal certification requirements focus on eligibility, skilled nursing facility services, and coverage requirements. Eligibility criteria include rural location, fewer than 100 beds, a Certificate of Need, and no waiver of the 24-hour nursing requirement.

In addition to meeting acute care standards, swing-bed hospitals must also meet six standards for nursing facility services. These standards involve patients' rights, dental services, specialized rehabilitative services, social services, patient activities, and discharge planning. Swing-bed hospitals have the same Medicare coverage requirements and coinsurance provisions as nursing facilities. Many patients, particularly elderly patients, no longer need acute hospital care but are not well enough to go home. Swing-beds enable the hospital to provide nursing care, rehabilitation, and social services with a goal of returning patients to their homes. Many of these patients would become nursing home residents without the extended period of care received in a swing-bed.

Swing-beds provide a link between inpatient acute care and home or community-based services in a continuum of care for the elderly and others with long-term needs. If return to the community is not possible, the swing-bed hospital assists the patient and family with nursing home placement. The swing-bed concept may help alleviate the problem of low utilization in small rural hospitals and provide a new source of revenue with few additional expenses. Additionally, swing-beds allow hospitals to better utilize staff during periods of low occupancy in acute care beds.

### 105.01 Swing-Bed Utilization

The fifty-six Mississippi hospitals and one specialty hospital participated in the swing bed program. During Fiscal Year 2013, they reported 7,072 discharges from their swing beds, with 106,850 patient days of care and an average length of stay of 14.35 days. The number of days of care provided in swing beds was equivalent to approximately 258 nursing home beds.

The swing-bed program offers a viable alternative to placement in a nursing home for short-term convalescence. During the year, only about 15.26 percent of the patients who were discharged from a swing-bed went to a nursing home; 66.52 percent went home, 35.16 percent were referred to home health, 9.5 percent was readmitted to a hospital; and 1.6 percent were referred to a personal care home.

**Table 5-4**
**Swing Bed Utilization**
**FY 2013**

| Facility | Licensed Beds | Discharges | ALOS | Average Daily Census |
|---|---|---|---|---|
| **General Hospital Service Area 1** | **4** | **24** | **7.58** | **0.50** |
| Alliance Health Care System | 4 | 24 | 7.58 | 0.50 |
| **General Hospital Service Area 2** | **67** | **679** | **10.15** | **18.32** |
| Baptist Memorial Hospital-Booneville | 10 | 246 | 9.61 | 5.93 |
| Baptist Memorial Hospital-Union County | 12 | 129 | 6.95 | 2.53 |
| North MS Medical Center-Iuka | 10 | 104 | 12.33 | 3.51 |
| Pontotoc Health Services | 25 | 160 | 12.43 | 5.41 |
| Tippah County Hospital | 10 | 40 | 8.95 | 0.93 |
| **General Hospital Service Area 3** | **61** | **701** | **8.59** | **22.72** |
| Bolivar Medical Center | 12 | 170 | 9.66 | 4.47 |
| North Sunflower Medical Center | 15 | 311 | 10.74 | 9.14 |
| Patients Choice Med. Ctr. of Humphreys County* | 0 | 0 | 0.00 | 0.00 |
| Quitman County Hospital | 25 | 86 | 12.08 | 4.62 |
| Tallahatchie General Hospital & ECF | 9 | 134 | 0.00 | 4.49 |
| **General Hospital Service Area 4** | **184** | **1,470** | **12.84** | **63.97** |
| Calhoun Health Services | 10 | 64 | 19.56 | 3.28 |
| Gilmore Memorial Regional Medical Center | 16 | 169 | 7.21 | 3.36 |
| Kilmichael Hospital | 10 | 1 | 5.00 | 0.01 |
| North Mississippi Medical Center-West Point | 10 | 223 | 8.66 | 5.30 |
| Noxubee General Critical Access Hospital | 25 | 174 | 10.46 | 5.84 |
| Oktibbeha County Hospital | 10 | 2 | 11.00 | 0.06 |
| Pioneer Community Hospital of Aberdeen | 25 | 185 | 15.92 | 19.73 |
| Pioneer Community Hospital of Choctaw | 25 | 70 | 13.17 | 2.46 |
| Trace Regional Hospital | 10 | 35 | 11.66 | 1.12 |
| Tyler Holmes Memorial Hospital | 10 | 124 | 14.33 | 4.91 |
| Webster Health Services | 10 | 210 | 12.95 | 7.13 |
| Winston Medical Center | 10 | 69 | 10.94 | 2.49 |
| Yalobusha General Hospital | 13 | 144 | 21.51 | 8.28 |
| **General Hospital Service Area 5** | **186** | **1,325** | **14.04** | **50.58** |
| Hardy Wilson Memorial Hospital | 25 | 191 | 17.38 | 9.12 |
| King's Daughters Hospital-Yazoo City | 25 | 159 | 11.33 | 4.85 |
| Baptist Medical Center Leake | 10 | 156 | 13.84 | 6.05 |
| Magee General Hospital | 12 | 140 | 14.71 | 5.64 |
| Monfort Jones Memorial Hospital | 10 | 90 | 11.74 | 2.88 |
| Claiborne County Hospital | 4 | 69 | 12.06 | 2.39 |
| S.E. Lackey Critical Access Hospital | 15 | 160 | 15.09 | 6.39 |
| Scott Regional Hospital | 25 | 97 | 15.13 | 4.08 |
| Sharkey-Issaquena Community Hospital | 10 | 89 | 9.47 | 2.33 |
| Simpson General Hospital | 25 | 130 | 15.51 | 5.16 |
| Holmes County Hospital & Clinics | 25 | 44 | 14.41 | 1.70 |

**Table 5-4 (Continued)**
**Swing Bed Utilization**
**FY 2013**

| Facility | Licensed Beds | Discharges | ALOS | Average Daily Census |
|---|---|---|---|---|
| **General Hospital Service Area 6** | **141** | **1,220** | **16.37** | **54.62** |
| Alliance-Laird Hospital | 25 | 193 | 12.53 | 6.62 |
| Anderson Regional Medical Center South | 25 | 297 | 16.82 | 13.97 |
| H.C. Watkins Memorial Hospital | 25 | 198 | 21.29 | 11.99 |
| John C Stennis Memorial Hospital | 25 | 188 | 12.88 | 6.61 |
| Neshoba County General Hospital | 10 | 12 | 16.83 | 0.52 |
| Pioneer Community Hospital-Netwon | 21 | 138 | 14.57 | 5.36 |
| Wayne General Hospital | 10 | 194 | 19.11 | 9.55 |
| **General Hospital Service Area 7** | **85** | **599** | **18.69** | **28.75** |
| Beacham Memorial Hospital | 15 | 99 | 15.90 | 4.13 |
| Field Memorial Community Hospital | 10 | 123 | 14.24 | 4.89 |
| Franklin County Memorial Hospital | 25 | 177 | 30.45 | 12.74 |
| Lawerence County Hospital | 25 | 113 | 12.14 | 4.01 |
| Walthall County General Hospital | 10 | 87 | 12.72 | 2.99 |
| **General Hospital Service Area 8** | **121** | **736** | **17.23** | **34.88** |
| Covington County Medical Center | 10 | 205 | 16.32 | 9.33 |
| Greene County Hospital | 3 | 42 | 19.21 | 2.39 |
| Jasper General Hospital | 12 | 119 | 20.99 | 6.24 |
| Jeff Davis Community Hospital | 25 | 90 | 14.76 | 3.63 |
| Marion General Hospital | 49 | 192 | 19.21 | 10.37 |
| Perry County General Hospital | 22 | 88 | 11.56 | 2.93 |
| **Ganeral Hospital Service Area 9** | **59** | **318** | **22.14** | **18.38** |
| George County Hospital | 10 | 1 | 25.00 | 0.07 |
| Pearl River County Hospital | 24 | 117 | 23.54 | 7.55 |
| Stone County Hospital | 25 | 200 | 21.30 | 10.77 |
| **State Total** | **908** | **7,072** | **14.35** | **292.74** |

Source: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report, Mississippi State Department of Health

### 105.02 Certificate of Need Criteria and Standards for Swing-Bed Services

The Mississippi State Department of Health will review applications for a Certificate of Need (CON) to establish swing-bed 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.

1. **Need Criterion: The application shall document that the hospital will meet all federal regulations regarding the swing-bed concept**. However, a hospital may have more licensed beds or a higher average daily census (ADC) than the maximum number specified in federal regulations for participation in the swing-bed program.
2. The applicant shall provide a copy of the Resolution adopted by its governing board approving the proposed participation.
3. If the applicant proposes to operate and staff more than the maximum number of beds specified in federal regulations for participation in the swing-bed program, the application shall give written assurance that only private pay patients will receive swing-bed services.
4. The application shall affirm that upon receiving CON approval and meeting all federal requirements for participation in the swing-bed program, the applicant shall render services provided under the swing-bed concept to any patient eligible for Medicare (Title XVIII of the Social Security Act) who is certified by a physician to need such services.
5. The application shall affirm that upon receiving CON approval and meeting all federal requirements for participation in the swing-bed program, the applicant shall not permit any patient who is eligible for both Medicaid and Medicare or is eligible only for Medicaid to stay in the swing-beds of a hospital for more than 30 days per admission unless the hospital receives prior approval for such patient from the Division of Medicaid.
6. The application shall affirm that if the hospital has more licensed beds or a higher average daily census than the maximum number specified in federal regulations for participation in the swing-bed program, the applicant will develop a procedure to ensure that, before a patient is allowed to stay in the swing-beds of the hospital, there are no vacant nursing home beds available within a 50-mile radius (geographic area) of the hospital. The applicant shall also affirm that if the hospital has a patient staying in the swing-beds of the hospital and the hospital receives notice from a nursing home located within a 50-mile radius that there is a vacant bed available for that patient, the hospital shall transfer the swing-bed patient to the nursing home within five days, exclusive of holidays and weekends, unless the patient's physician certifies that the transfer is not medically appropriate.
7. The applicant shall provide copies of transfer agreements entered into with each nursing facility within the applicant's geographic area.
8. An applicant subject to the conditions stated in Criterion #5 shall affirm in the application that they will be subject to suspension from participation in the swing-bed program for a reasonable period of time by the Department of Health if the Department, after a hearing complying with due process, determines that the hospital has failed to comply with any of those requirements.

# THERAPEUTIC RADIATION SERVICES

## 106 Therapeutic Radiation Services

Therapeutic radiology (also called radiation oncology, megavoltage radiotherapy, or radiation therapy) is the treatment of cancer and other diseases with radiation. Radiation therapy uses high energy light beams (x-ray or gamma rays) or charged particles (electron beams or photon beams) to damage critical biological molecules in tumor cells. Radiation in various forms is used to kill cancer cells by preventing them from multiplying. Therapeutic radiation may be used to cure or control cancer, or to alleviate some of the symptoms associated with cancer (palliative care).

In radiation therapy, a non-invasive treatment can be given repetitively over several weeks to months and can be aimed specifically at the area where treatment is needed, minimizing side effects for uninvolved normal tissues. This repetitive treatment is called fractionation because a small fraction of the total dose is given each treatment. Radiotherapy can only be performed with linear accelerator (linac) technology. Conventionally administrated external beam radiation therapy gives a uniform dose of radiation to the entire region of the body affected by the tumor. Only a small variation of the dose is delivered to various parts of the tumor. Radiotherapy may not be as effective as stereotactic radiosurgery, which can give higher doses of radiation to the tumor itself.

Another type of radiation therapy used in Mississippi is brachytherapy. Unlike the external beam therapy, in which high-energy beams are generated by a machine and directed at a tumor from outside the body, brachytherapy involves placing a radioactive material directly into the body. Brachytherapy radiation implantation was performed on 1,018 patients in 18 of the state's hospitals during FY 2013.

## 107 Stereotactic Radiosurgery

Despite its name, stereotactic radiosurgery is a non-surgical procedure that uses highly focused x-rays (or in some cases, gamma rays) to treat certain types of tumors, inoperable lesions, and as a post-operative treatment to eliminate any leftover tumor tissue. Stereotactic radiosurgery treatment involves the delivery of a single high-dose – or in some cases, smaller multiple doses – of radiation beams that converge on the specific area of the brain where the tumor or other abnormality resides.

Stereotactic radiosurgery was once limited to the GammaKnife® for treating intra-cranial lesions and functional issues. With the introduction of CyberKnife® and other LINAC-based radiosurgery systems, there has been rapid growth in total-body radiosurgery. The modified LINAC radiosurgery modality is now being used to treat lung, liver, pancreas, prostate, and other body areas. Some modified full-body LINAC models use full-body frames as a guiding tool and others do not. Therefore, the term "stereotactic radiosurgery" will refer to radiosurgery regardless of whether a full-body frame is used or not. A full course of radiosurgery requires only one to five treatments versus 30 to 40 for radiotherapy.

Three basic types of stereotactic radiosurgery are in common use, each of which uses different instruments and sources of radiation:

**Cobalt 60 Based (Gamma Knife),** which uses 201 beams of highly focused gamma rays. Because of its incredible accuracy, the Gamma Knife is ideal for treating small to medium size lesions.

**Linear accelerator (LINAC) based** machines, prevalent throughout the world, deliver high-energy x-ray photons or electrons in curving paths around the patient's head. The linear accelerator can perform radiosurgery on larger tumors in a single session or during multiple sessions (fractionated stereotactic radiotherapy). Multiple manufacturers make linear accelerator machines, which have names such as: Axess®, Clinac®, Cyberknife®, Novalis®, Peacock®, TomoTherapy®, Trilogy®, or X-Knife®. According to Accuray, the CyberKnife® is the world's only robotic radiosurgery system designed to treat tumors anywhere in the body non-invasively and with sub-millimeter accuracy.

**Particle beam (photon) or cyclotron** based machines are in limited use in North America.

Table 5-5 presents the facilities offering megavoltage therapeutic radiation therapy.

## 108 Diagnostic Imaging Services

Diagnostic imaging equipment and services, except for magnetic resonance imaging, positron emission tomography, and invasive digital angiography, are reviewable under the state's Certificate of Need law only when the capital expenditure for the acquisition of the equipment and related costs exceeds $1.5 million. The provision of invasive diagnostic imaging services, i.e., invasive digital angiography, positron emission tomography, and the provision of magnetic resonance imaging services require a Certificate of Need if the proposed provider has not offered the services on a regular basis within 12 months prior to the time the services would be offered, regardless of the capital expenditure.

Equipment in this category includes, but is not limited to: ultrasound, diagnostic nuclear medicine, digital radiography, angiography equipment, computed tomographic scanning equipment, magnetic resonance imaging equipment, and positron emission tomography.

**Table 5-5**
**Facilities Reporting Megavoltage Therapeutic Radiation Services**
**by General Hospital Service Area**
**FY 2012 and FY 2013**

| Facility | Number and Type of Unit | Number of Treatments (Visits) | |
|---|---|---|---|
| | | 2012 | 2013 |
| **General Hospital Service Area 1** | | **10,152** | **8,393** |
| Baptist Memorial Hospital - DeSoto** | 21 - Lin-Acc (6-18MV) | 10,152 | 8,393 |
| **General Hospital Service Area 2** | | **16,796** | **14,423** |
| Magnolia Regional Health Center | 1 - Lin-Acc (6-18MV) | 4,535 | 3,916 |
| North Miss Medical Center | 2 - Lin-Acc (6MV & 18MV) | 12,261 | 10,507 |
| **General Hospital Service Area 3** | | **13,480** | **10,386** |
| Bethesda Cancer Center[1] | 1 - Lin-Acc (6MV) | 2,477 | 2,412 |
| Greenwood Leflore Hospital | 1 - Lin-Acc (6-18MV) | - | - |
| Delta Cancer Institute[1] | 2 - Lin-Acc (6-18MV) | 4,731 | 4,294 |
| North Central Regional Cancer Center[1] | 1 - Lin-Acc (6MV) | 6,272 | 3,680 |
| **General Hospital Service Area 4** | | **28,754** | **37,711** |
| Baptist Memorial Hospital - Golden Triangle | 1 - Lin-Acc (6 - 18MV) | 15,792 | 22,242 |
| Baptist Cancer Institute - North Miss | 1 Lin-Acc (6-18MV) | 11,083 | 13,605 |
| Cancer Care at Premier Health Complex[1] | 1 - Lin-Acc (6 - 18MV) | 1,879 | 1,864 |
| **General Hospital Service Area 5** | | **60,149** | **71,619** |
| Cancer Center of Vicksburg[1] | 1 - Lin-Acc (6-15MV) | 5,079 | 5,588 |
| Central Miss Medical Center | 2 - Lin-Acc (6MV & 18MV) | 9,115 | 9,137 |
| Miss Baptist Medical Center | 2 - Lin-Acc (6-18MV, 6*) | 23,157 | 34,590 |
| St. Dominic Hospital | 2 - Lin-Acc (6MV & 18MV) | 11,489 | 11,944 |
| University Hospital & Clinics*** | 3 - Lin-Acc (6-18MV) | 11,309 | 10,360 |
| **General Hospital Service Area 6** | | **9,671** | **8,410** |
| Anderson Regional Cancer Center | 2 - Lin-Acc (6 - 25MV, 4 -10MV) | 9,671 | 8,410 |
| **General Hospital Service Area 7** | | **9,442** | **10,017** |
| Caring River Cancer Center[1] | 1 - Lin-Acc (6-18MV) | 4,107 | 4,833 |
| Southwest Miss Regional Medical Center | 1 - Lin-Acc (6-18MV) | 5,335 | 5,184 |
| **General Hospital Service Area 8** | | **18,286** | **17,938** |
| Forrest General Hospital | 2 - Lin-Acc (6-15MV) | 14,282 | 14,447 |
| E+ Oncologics Mississippi, LLC[1] **** | 1 - Lin-Acc (6 & 10MV) | 4,004 | 3,491 |
| **General Hospital Service Area 9** | | **13,513** | **14,601** |
| Biloxi Radiation Oncology Center[1] | 1 - Lin-Acc (6MV) | - | - |
| Cedar Lake Oncology Center[1] | 1 Lin-Acc (6 & 18MV) | 2,699 | 1,821 |
| Memorial Hospital at Gulfport | 2 - Lin-Acc (6*, 6-18MV) | 4,631 | 7,349 |
| Singing River Hospital | 1 - Lin-Acc (6-18MV) | 6,183 | 5,431 |
| **State Total** | | **180,243** | **193,498** |

[1] Indicates freestanding clinics.
* 6 MV is a Robotic Cyberknife
South Central Mississippi Cancer Center changed their name to E+ Oncologics Mississippi, LLC July 2012 .
**Baptist MH-DeSoto - CON Approved Aug. 2013 for an additional linear accelerator.
***University Hosp & Clinics – Determination of Reviewability Ruling July 2010 for an additional linear accelerator.
****E+Oncologics MS, LLC changed their name to Laurel Cancer Care effective 10/2014.
Sources: Applications for Renewal of Hospital License for Calendar Years 2013 and 2014; and Fiscal Years 2012 and 2013 Annual Hospital Reports.

## 109 Certificate of Need Criteria and Standards for Therapeutic Radiation Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 109.01 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of Therapeutic Radiation Equipment, and/or the Offering of Therapeutic Radiation Services (other than Stereotactic Radiosurgery)

1. Service Areas: The Mississippi State Department of Health shall determine the need for therapeutic radiation services/units/equipment by using the General Hospital Service Areas as presented in this chapter of the *Plan*. The MSDH shall determine the need for therapeutic radiation services/units/equipment within a given service area independently of all other service areas. Map 5-1 shows the General Hospital Service Areas.

2. Equipment to Population Ratio: The need for therapeutic radiation units (as defined) is determined to be one unit per 142,592 population (see methodology in this section of the *Plan*). The MSDH will consider out-of-state population in determining need only when the applicant submits adequate documentation acceptable to the Mississippi State Department of Health, such as valid patient origin studies.

3. Limitation of New Services: When the therapeutic radiation unit-to-population ratio reaches one to 142,592 in a given general hospital service area, no new therapeutic radiation services may be approved unless the utilization of all the existing machines in a given hospital service area averaged 8,000 treatments or 320 patients per year for the two most recent consecutive years as reported on the "Renewal of Hospital License and Annual Hospital Report." For the purposes of this policy Cesium-137 teletherapy units, Cobalt-60 teletherapy units designed for use at less than 80 cm SSD (source to skin distance), old betatrons and van de Graaf Generators, unsuitable for modern clinical use, shall not be counted in the inventory of therapeutic radiation units located in a hospital service area.

4. Expansion of Existing Services: The MSDH may consider a CON application for the acquisition or otherwise control of an additional therapeutic radiation unit by an existing provider of such services when the applicant's existing equipment has exceeded the expected level of patient service, i.e., 320 patients per year or 8,000 treatments per year for the two most recent consecutive years as reported on the facility's "Renewal of Hospital License and Annual Hospital Report."

5. Equipment Designated for Backup: Therapeutic radiation equipment designated by an applicant as "backup" equipment shall not be counted in the inventory for CON purposes.

Any treatments performed on the "backup" equipment shall be attributed to the primary equipment for CON purposes.

6. Definition of a Treatment: For health planning and CON purposes a patient "treatment" is defined as one individual receiving radiation therapy during a visit to a facility which provides megavoltage radiation therapy regardless of the complexity of the treatment or the number of "fields" treated during the visit.

7. Use of Equipment or Provision of Service: Before the equipment or service can be utilized or provided, the applicant desiring to provide the therapeutic radiation equipment or service shall have CON approval or written evidence that the equipment or service is exempt from CON approval, as determined by the Mississippi State Department of Health.

## 109.02 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Therapeutic Radiation Equipment and/or the Offering of Therapeutic Radiation Services (other than Stereotactic Radiosurgery)

The Mississippi State Department of Health will review Certificate of Need applications for the acquisition or otherwise control of therapeutic radiation equipment and/or the offering of therapeutic radiation 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of therapeutic radiation equipment is reviewable if the equipment cost exceeds $1,500,000. The offering of therapeutic radiation 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.

**1. Need Criterion: The applicant shall document a need for therapeutic radiation equipment/service by complying with any one of the following methodologies:**

**a. the need methodology as presented in this section of the *Plan*;**

**b. demonstrating that all existing machines in the service area in question have averaged 8,000 treatments per year or all machines have treated an average of 320 patients per year for the two most recent consecutive years; or**

**c. demonstrating that the applicant's existing therapeutic equipment has exceeded the expected level of patients service, i.e., 320 patients per year/unit, or 8,000 treatments per year/unit for the most recent 24-month period.**

2. The applicant must document that access to diagnostic X-ray, CT scan, and ultrasound services is readily available within 15 minutes normal driving time of the therapeutic radiation unit's location.

3. An applicant shall document the following:

a. The service will have, at a minimum, the following full-time dedicated staff:

i. One board-certified radiation oncologist-in-chief

ii. One dosimetrist

iii. One certified radiation therapy technologist certified by the American Registry of Radiation Technologists

iv. One registered nurse

b. The service will have, at a minimum, access to a radiation physicist certified or eligible for certification by the American Board of Radiology.

**Note**: One individual may act in several capacities. However, the application shall affirm that when a staff person acts in more than one capacity, that staff person shall meet, at a minimum, the requirements for each of the positions they fill.

4. The applicant shall affirm that access will be available as needed to brachytherapy staff, treatment aides, social workers, dietitians, and physical therapists.

5. Applicants shall document that all physicians who are responsible for therapeutic radiation services in a facility, including the radiation oncologist-in-chief, shall reside within 60 minutes normal driving time of the facility.

6. The application shall affirm that the applicant will have access to a modern simulator capable of precisely producing the geometric relationships of the treatment equipment to a patient. This simulator must produce high quality diagnostic radiographs. The applicant shall also affirm that the following conditions will be met as regards the use of the simulator:

   a. If the simulator is located at a site other than where the therapeutic radiation equipment is located, protocols will be established which will guarantee that the radiation oncologist who performs the patient's simulation will also be the same radiation oncologist who performs the treatments on the patient.

   b. If the simulator uses fluoroscopy, protocols will be established to ensure that the personnel performing the fluoroscopy have received appropriate training in the required techniques related to simulation procedures.

      **Note**: X-rays produced by diagnostic X-ray equipment and photon beams produced by megavoltage therapy units are unsuitable for precise imaging of anatomic structures within the treatment volume and do not adequately substitute for a simulator.

7. The application shall affirm that the applicant will have access to a computerized treatment planning system with the capability of simulation of multiple external beams, display isodose distributions in more than one plane, and perform dose calculations for brachytherapy implants.

   **Note**: It is highly desirable that the system have the capability of performing CT based treatment planning.

8. The applicant shall affirm that all treatments will be under the control of a board certified or board eligible radiation oncologist.

9. The applicant shall affirm that the proposed site, plans, and equipment shall receive approval from the MSDH Division of Radiological Health before service begins.

10. The application shall affirm that the applicant will establish a quality assurance program for the service, as follows:

    a. The therapeutic radiation program shall meet, at a minimum, the physical aspects of quality assurance guidelines established by the American College of Radiology (ACR) within 12 months of initiation of the service.

    b. The service shall establish a quality assurance program which meets, at a minimum, the standards established by the American College of Radiology.

11. The applicant shall affirm understanding and agreement that failure to comply with criterion #10 (a) and (b) may result in revocation of the CON (after due process) and subsequent termination of authority to provide therapeutic radiation services.

### *109.02.01 Therapeutic Radiation Equipment/Service Need Methodology*

1. Treatment/Patient Load: A realistic treatment/patient load for a therapeutic radiation unit is 8,000 treatments or 320 patients per year.

2. Incidence of Cancer: The American Cancer Society (ACS) estimates that Mississippi will experience 15,740 new cancer cases in 2014 (excluding basal and squamous cell skin cancers and in-situ carcinomas except urinary bladder cancer). Based on a population of 3,156,054 (year 2020) as estimated by the Center for Policy Research and Planning, the cancer rate of Mississippi is 4.99 cases per 1,000 population.

3. Patients to Receive Treatment: The number of cancer patients expected to receive therapeutic radiation treatment is set at 45 percent.

4. Population to Equipment Ratio: Using the above stated data, a population of 100,000 will generate 499 new cancer cases each year. Assuming that 45 percent will receive radiation therapy, a population of 142,592 will generate approximately 320 patients who will require radiation therapy. Therefore, a population of 142,592 will generate a need for one therapeutic radiation unit.

### *109.02.02 Therapeutic Radiation Equipment Need Determination Formula*

1. Project annual number of cancer patients.

   General Hospital Service Area Population X $\frac{\text{4.99 cases*}}{\text{1,000 population}}$ = New Cancer Cases

   *Mississippi cancer incidence rate

2. Project the annual number of radiation therapy patients.

   New Cancer Cases X 45% = Patients Who Will Likely Require Radiation Therapy

3. Estimate number of treatments to be performed annually.

   Radiation Therapy Patients X 25 Treatments per Patient (Avg.) = Estimated Number of Treatments

4. Project number of megavoltage radiation therapy units needed.

   Est. # of Treatments = Projected Number of Units Needed
   8,000 Treatments per Unit

5. Determine unmet need (if any) Projected Number of Units Needed — Number of Existing Units = Number of Units Required (Excess)

**109.03 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of Stereotactic Radiosurgery Equipment and/or the Offering of Stereotactic Radiosurgery.**

1. Service Areas: The Mississippi State Department of Health shall determine the need for stereotactic radiosurgery services/units/equipment by using the actual stereotactic radiosurgery provider's service area.

2. Equipment to Population Ratio: The need for stereotactic radiosurgery units is determined to be the same as for radiotherapy, for 2020, a population of 142,592. The therapeutic radiation need determination formula is outlined in Section 109.02.02 above.

3. Accessibility: Nothing contained in these CON criteria and standards shall preclude the University of Mississippi School of Medicine from acquiring and operating stereotactic radiosurgery equipment, provided the acquisition and use of such equipment is justified by the School's teaching and/or research mission. However, the requirements listed under the section regarding the granting of "appropriate scope of privileges for access to the stereotactic radiosurgery equipment to any qualified physician" must be met.

4. Expansion of Existing Services: The MSDH may consider a CON application for the acquisition or otherwise control of an additional stereotactic radiosurgery unit by an existing provider of such services when the applicant's existing equipment has exceeded the expected level of patient service, i.e., 900 treatments per year for the two most recent consecutive years as reported on the facility's "Renewal of Hospital License and Annual Hospital Report."

5. Facilities requesting approval to add stereotactic radiosurgery services should have an established neurosurgery program and must be able to demonstrate previous radiosurgery service experience.

6. All stereotactic radiosurgery services should have written procedures and policies for discharge planning and follow-up care for the patient and family as part of the institution's overall discharge planning program.

7. All stereotactic radiosurgery services should have established protocols for referring physicians to assure adequate post-operative diagnostic evaluation for radiosurgery patients.

8. The total cost of providing stereotactic radiosurgery services projected by prospective providers should be comparable to the cost of other similar services provided in the state.

9. The usual and customary charge to the patient for stereotactic radiosurgery should be commensurate with cost.

### 109.04 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Stereotactic Radiosurgery Equipment and/or the Offering of Stereotactic Radiosurgery

The Mississippi State Department of Health will review Certificate of Need applications for the acquisition or otherwise control of stereotactic radiosurgery equipment and/or the offering of stereotactic radiosurgery 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manua*l; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of stereotactic radiosurgery equipment is reviewable if the equipment cost exceeds $1,500,000. The offering of stereotactic radiosurgery 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.

1. **Need Criterion: The applicant shall document a need for stereotactic radiosurgery equipment/service by reasonably projecting that the proposed new service will perform at least 900 stereotactic radiosurgery treatments in the third year of operation. No additional new stereotactic radiosurgery services should be approved unless the number of stereotactic radiosurgery treatments performed with existing units in the state average 900 treatments or more per year.**

2. Staffing:

   a. The radiosurgery programs must be established under the medical direction of two co-directors, one with specialty training and board certification in neurosurgery and the other with specialty training and board certification in radiation oncology, with experience in all phases of stereotactic radiosurgery.

   b. In addition to the medical co-directors, all stereotactic radiosurgery programs should have a radiation physicist who is certified in radiology, or who holds an advanced degree in physics with two to three years experience working under the direction of a radiation oncologist, and a registered nurse present for each stereotactic radiosurgery performed.

   c. The applicant shall document that the governing body of the entity offering stereotactic radiosurgery services will grant an appropriate scope of privileges for access to the stereotactic radiosurgery equipment to any qualified physician who applies for privileges. For the purpose of this criterion, "Qualified Physician" means a doctor of medicine or osteopathic medicine licensed by the State of Mississippi who possesses training in stereotactic radiosurgery and other qualifications established by the governing body.

3. Equipment:

   a. Facilities providing stereotactic radiosurgery services should have dosimetry and calibration equipment and a computer with the appropriate software for performing stereotactic radiosurgery.

   b. The facility providing stereotactic radiosurgery services should also have access to magnetic resonance imaging, computed tomography, and angiography services

# DIAGNOSTIC IMAGING SERVICES

## 110 Computed Tomographic (CT) Scanning

Should the capital expenditure for the acquisition of fixed or mobile CT scanning services, equipment, and related costs exceed $1.5 million, the CON proposal will be reviewed under the general review criteria outlined in the most recent *Certificate of Need Review Manual* adopted by the Mississippi State Department of Health and the following utilization standards:

- A proposed unit must be able to generate a minimum of 2,000 HECTs (See Table 5-6 for HECT conversion table) by the second year of operation.

- Providers desiring CT capability must be properly utilizing 20,000 general radiographic imaging procedures per year.

**Table 5-6**
**Head Equivalent Conversion Table (HECT)**

| Type of Scan | Yearly Number of Patients | Conversion Factor | HECTs* |
|---|---|---|---|
| Head without Contrast | 500 | 1.00 | 500 |
| Head with Contrast | 500 | 1.25 | 625 |
| Head with and without Contrast | 200 | 1.75 | 350 |
| Body without Contrast | 100 | 1.50 | 150 |
| Body with Contrast | 200 | 1.75 | 350 |
| Body with and without Contrast | 300 | 2.75 | 825 |

* Formula: Yearly Number of Patients X Conversion Factor = HECTs

### 110.01 Magnetic Resonance Imaging (MRI)

Magnetic resonance imaging (MRI) is a diagnostic imaging technique that employs magnetic and radio-frequency fields to produce images of the body non-invasively. Magnetic resonance imaging is similar to CT scanning in that it produces cross-sectional and digital images without potentially harmful ionizing radiation, producing an image not distorted by bone mass. The equipment and its operational specifications continue to be refined.

One hundred and four facilities (hospitals and free-standing) in Mississippi operated fixed or mobile based MRI units in FY 2013. These facilities performed a total of 258,189 MRI procedures during the year. Table 5-7 presents the location, type (fixed or mobile and number of units per facility), and utilization of MRI equipment throughout the state in 2012 and 2013.

## Table 5-7
## Location and Number of MRI Procedures by General Hospital Service Area
## FY 2012 and FY 2013

| | Type of Providers | City | County | Type of Equipment | Number of MRI Procedures | | Days/Hours of Operation |
|---|---|---|---|---|---|---|---|
| | | | | | 2012 | 2013 | 2013 |
| **General Hospital Service Area 1** | | | | | **15,818** | **15,316** | |
| Baptist Memorial Hospital - DeSoto | H | Southaven | DeSoto | F(3) | 7,388 | 7,021 | Sun.-Sat., 252 Hrs. |
| Methodist Diagnostic Center* | FS | Olive Branch | DeSoto | F | 2,054 | 1,601 | M-F, 50 Hrs. |
| Methodist Diagnostic Center* | FS | Southaven | DeSoto | F | 2,340 | 2,418 | M-F, 60 Hrs. |
| Methodist Healthcare Olive Branch Hospital | H | Southaven | DeSoto | F | - | 54 | |
| Desoto Imaging Specialists | FS | Southaven | DeSoto | F | 3,141 | 3,562 | M-F, 60 Hrs. |
| Superior MRI Services fka P&L Contracting [1] | MP | Batesville | Panola | M | 86 | - | N/A |
| Tri-Lakes Medical Center | H | Batesville | Panola | M | 809 | 660 | Tu. F, & Sat., 24 Hrs. |
| **General Hospital Service Area 2** | | | | | **35,133** | **32,523** | |
| Baptist Memorial Hospital - Booneville | H | Booneville | Prentiss | F | 972 | 974 | M-F, 40 Hrs |
| Baptist Memorial Hospital - Union | H | New Albany | Union | F | 2,800 | 2,446 | Mon-Sat., 168 Hrs. |
| Imaging Center of Gloster Creek Village | FS | Tupelo | Lee | F | 3,351 | 3,061 | M-F, 55 Hrs. |
| Magnolia Regional Health Center | H | Corinth | Alcorn | F(2) | 6,965 | 6,345 | M-Su, M-F- 110 Hrs. |
| Medical Imaging at Barnes Crossing | FS | Tupelo | Lee | F | 3,412 | 3,293 | M-F, 50 Hrs. |
| Medical Imaging at Crossover Road | FS | Tupelo | Lee | F | 2,101 | 2,023 | M-F, 40 Hrs. |
| North Miss. Medical Center | H | Tupelo | Lee | F(4) | 14,110 | 13,034 | M-Su. & M-F, 240 Hrs. |
| North Miss. Medical Center - Iuka | H | Iuka | Tishomingo | M | 1,133 | 1,048 | M-F, 40 Hrs. |
| North Mississippi Sports Medicine | FS | Tupelo | Lee | F | 289 | 299 | M-F, 40 Hrs. |
| **General Hospital Service Area 3** | | | | | **10,434** | **9,874** | |
| Bolivar Medical Center | H | Cleveland | Bolivar | M | 1,129 | 982 | M-F, 40 Hrs. |
| Delta Regional Med. Center-Main Campus | H | Greenville | Washington | F | 2,618 | 2,838 | M-F, 40 Hrs. |
| Greenwood Leflore Hospital | H | Greenwood | Leflore | F | 3,878 | 3,441 | M-F, 50+ Hrs. |
| Northwest Miss. Regional Medical Center** | H | Clarksdale | Coahoma | F | 1,789 | 1,492 | M-F, 40 Hrs. |
| South Sunflower County Hospital | H | Indianola | Sunflower | M | 528 | 472 | W., 4 Hrs. |
| Superior- North Sunflower Medical Center [1] | MP | Ruleville | Sunflower | M | 401 | 464 | M, W., 8 Hrs. |
| Tallahatchie General Hospital | H | Indianola | Sunflower | M | 91 | 185 | M, 4 Hrs. |
| **General Hospital Service Area 4** | | | | | **26,234** | **27,201** | |
| Baptist Memorial Hospital - Golden Triangle | H | Columbus | Lowndes | F(2) | 4,535 | 4,910 | M-F, 110 Hrs. |
| Baptist Memorial Hospital - North MS | H | Oxford | Lafayette | F | 2,158 | 2,624 | Sun.-Sat., 140+ Hrs. |
| Calhoun Health Services | H | Calhoun City | Calhoun | M | 286 | 293 | M. & Thr., 10 Hrs. |
| Gilmore Memorial Hospital, Inc. | H | Amory | Monroe | F | 1,211 | 1,114 | M-F, 40 Hrs. |
| Imaging Center of Columbus | FS | Columbus | Lowndes | F(2) | 5,331 | 6,051 | M-F, 80+ Hrs. |
| Imaging Ctr. of Excellence Institute - MSU | FS | Starkville | Oktibbeha | F | 1,544 | 1,452 | M-F, 40 Hrs. |
| North Miss. Medical Center - Eupora | H | Eupora | Webster | M | 907 | 795 | M-F, 40 Hrs. |
| North Miss. Medical Center - West Point | H | West Point | Clay | M | 843 | 684 | M-F, 40 Hrs. |
| Oktibbeha County Hospital | H | Starkville | Oktibbeha | F | 2,451 | 2,446 | M-F, 40 Hrs. |
| Pioneer Community Hospital | H | Aberdeen | Monroe | M | 431 | 451 | M,T & W, F, 20 Hrs. |
| Oxford Diagnostic Center | FS | Oxford | Lafayette | F | 2,981 | 3,257 | M-F, 78 Hrs. |
| Trace Regional Hospital | H | Houston | Chickasaw | M | 463 | 464 | Tu.-F, 16 Hrs. |
| Tyler Holmes Memorial Hospital | H | Winona | Montgomery | M | 322 | 272 | W, 4 Hrs. |
| University of MS Medical Center - Grenada* | H | Grenada | Grenada | F | 2,505 | 2,219 | M-F, 40 Hrs. |
| Yalobusha Hospital | H | Water Valley | Yalobusha | M | 266 | 169 | M, 3.5 Hrs. |

F – Fixed Unit
M – Mobile Unit
Type of Providers: H-Hospital, FS-Freestanding, and MP-Mobile Provider

*Carvel Imaging Center changed their name to Methodist Diagnostic Center.
**Northwest MS Regional MC was CON Approved June 2012 to convert from a mobile unit to a fixed unit.
*Grenada Lake Medical Center changed name to University of MS Medical Center – Grenada
* Methodist Diagnostic Center located in Olive Branch, MS closed in August 2013 and MRI unit has withdrawn from service.

[1] Superior fka P&LContracting,, Inc. is the approved service provider.
[2] Scott Medical Imaging is the approved service provider.

## Table 5-7 (continued)
## Location and Number of MRI Procedures by General Hospital Service Area
## FY 2012 and FY 2013

| Facility | Type of Providers | City | County | Type of Equipment | Number of MRI Procedures | | Days/Hours of Operation |
|---|---|---|---|---|---|---|---|
| | | | | | 2012 | 2013 | 2013 |
| **General Hospital Service Area 5** | | | | | **80,397** | **81,165** | |
| Baptist Medical Center - Leake, Inc. | H | Carthage | Leake | M | 238 | 205 | Tu., 4 Hrs. |
| Central MS Diagnostics | FS | Jackson | Hinds | F | 1,814 | 1,545 | M-F, 45 Hrs. |
| Central MS Medical Center | H | Jackson | Hinds | F(2) | 3,323 | 4,031 | M-F, 90+ Hrs. |
| Crossgates River Oaks Hospital | H | Brandon | Rankin | F | 1,546 | 858 | M-S, 56 Hrs. |
| Hardy Wilson Hospital | H | Hazlehurst | Copiah | M | 498 | 452 | M, Th.,& Fri. 12 Hrs. |
| King's Daughters Medical Center | H | Yazoo City | Yazoo | M | 613 | 517 | T, 4 Hrs |
| Kosciusko Medical Clinic [3] | FS | Kosciusko | Attala | F | 2,702 | 2,736 | M-F, 40+ Hrs. |
| Madison Medical Imaging, LLC | FS | Madison | Madison | F | 2,197 | 2,011 | M-F, 40 Hrs. |
| Madison Radiological Group, LLC | FS | Madison | Madison | F | 2,427 | 2,357 | M-F, 40 Hrs. |
| Madison River Oaks Hospital | H | Madison | Madison | M | CON | 19 | M, 4 Hrs |
| Magee General Hospital | H | Magee | Simpson | F | 1,039 | 989 | M-F, 40 Hrs. |
| Miss. Baptist Medical Center | H | Jackson | Hinds | F(2) | 7,944 | 7,918 | M-Sat., M-F, 104 Hrs. |
| Miss. Diagnostic Imaging Center | FS | Flowood | Rankin | F(2) | 2,850 | 3,549 | M-F, 45 Hrs. |
| Miss. Sports Medicine & Orthopedic | FS | Jackson | Hinds | F(2) | 5,487 | 6,218 | M-F, 90 Hrs. |
| Monfort Jones Memorial Hospital [3] | H | Kosciusko | Attala | - | 108 | 68 | M, F 30 Hrs. |
| Open MRI of Jackson | FS | Flowood | Rankin | F | 1,216 | 1,345 | M-F, 45 Hrs. |
| Ridgeland Diagnostic Center | FS | Ridgeland | Madison | M | 480 | 571 | T, W, & Th. 12 Hrs. |
| River Oaks Hospital | H | Flowood | Rankin | F | 4,695 | 2,796 | M-F, 50 Hrs. |
| River Region Health System | H | Vicksburg | Warren | F | 2,777 | 2,562 | M-F, 60 Hrs. |
| SE Lackey Memorial Hospital | H | Forrest | Scott | M | 595 | 661 | M, W, & Th, 24 Hrs. |
| Scott Regional Hospital | H | Morton | Scott | M | 129 | 227 | F, 4 Hrs. |
| Sharkey/Issaquena Hospital | H | Rolling Fork | Sharkey | M | 170 | 145 | Tues., 2.5 hrs. |
| Southern Diagnostic Imaging | FS | Flowood | Rankin | F | 5,907 | 5,637 | M-F, 85 Hrs. |
| SMI-Madison Specialty Clinic [2] | MP | Canton | Madison | M | 280 | 203 | Tu. & Th., 8 Hrs. |
| SMI-Simpson General Hospital [2] | MP | Mendenhall | Simpson | M | 146 | 0 | Th., 4 Hrs. |
| St. Dominic Hospital | H | Jackson | Hinds | F(4)/M(1) | 15,747 | 16,393 | M-Sun., 216 Hrs. |
| University Hospital & Health System | H | Jackson | Hinds | F(5) | 14,156 | 16,000 | M-F, Sat.-Sun. 516 Hrs. |
| Holmes County Hospital & Clinics | H | Lexington | Holmes | M | 331 | 322 | M, 6 Hrs. |
| Vicksburg Diagnostic Imaging | FS | Vicksburg | Warren | M | 982 | 830 | M-F, 40 Hrs. |
| **General Hospital Service Area 6** | | | | | **13,721** | **15,447** | |
| Anderson Regional Medical Center* | H | Meridian | Lauderdale | F*(3) | 2,640 | 4,682 | M-F, 40 Hrs. |
| H. C. Watkins Memorial Hospital | H | Quitman | Clarke | M | 231 | 180 | Tu. & Thr., 16 Hrs. |
| Imaging Center of Meridian, LLC | FS | Meridian | Lauderdale | M | 2,817 | 2,755 | M-F, 45 Hrs. |
| John C Stennis Memorial Hospital | H | DeKalb | Kemper | M | - | 35 | M-F, 45 Hrs. |
| Laird Hospital | H | Union | Newton | M | 700 | 563 | M,W, & F, 20 Hrs. |
| Neshoba County General Hospital | H | Philadelphia | Neshoba | M | 1,703 | 1,361 | M-F., 40Hrs. |
| Pioneer Community Hospital of Newton | H | Newton | Newton | M | 188 | 148 | M, 4 Hrs. |
| Regional Medical Support Center, Inc. [4] | FS | Meridian | Lauderdale | F(3) | - | - | N/A |
| Rush Medical Group [5] | FS | Meridian | Lauderdale | F(2) | 5,169 | 5,467 | M-F, 130 Hrs. |
| Wayne County Hospital | H | Waynesboro | Wayne | M | 273 | 256 | M, 4 hrs. |

F – Fixed Unit
M – Mobile Unit
Type of Providers: H-Hospital, FS-Freestanding, and MP-Mobile Provider

* Anderson RMC (ARMC) – See Page 44 for details.
[2] Scott Medical Imaging is the approved service provider.
[3] Monfont Jones Memorial Hospital shares a fixed unit with Kosciusko Medical Clinic.
[4] Regional Medical Support Center, Inc. (RMSC) performed MRIs for Anderson Regional Medical Center, Anderson Regional Medical Center-South Campus (fka Riley Memorial Hospital), & Rush Foundation Hospital. Regional Medical Support Center, Inc. performed scans for Anderson Regional Medical Center until October 24, 2010. RMSC dissolved July 2012.
[5] Rush Medical Group performs MRIs for Rush Foundation Hospital.
-John C. Stennis Memorial Hospital was CON Approved April 2013 to provide mobile MRI Services in Dekalb, Kemper County, MS.

## Table 5-7(continued)
## Location and Number of MRI Procedures by General Hospital Service Area
## FY 2012 and FY 2013

| Facility | Type of Providers | City | County | Type of Equipment | Number of MRI Procedures | | Days/Hours of Operation |
|---|---|---|---|---|---|---|---|
| | | | | | 2012 | 2013 | 2013 |
| **General Hospital Service Area 7** | | | | | **11,135** | **10,455** | |
| King's Daughters Medical Center | H | Brookhaven | Lincoln | F | 2,079 | 2,190 | M-F, 80 Hrs. |
| Open Air of Miss Lou-Natchez Reg. M.C. | H | Natchez | Adams | F(2) | 2,842 | 2,106 | M-F, 80 Hrs. |
| Natchez Regional Medical Center | MP | Natchez | Adams | F(2) | 3,029 | 2,616 | N/A |
| SMI-Lawrence County Hospital [2] | MP | Monticello | Lawrence | M | 133 | 133 | Thr. 4 Hrs. |
| SMI - Walthall County Hospital [2] | MP | Tylertown | Walthall | M | 159 | 121 | W, 4 Hrs. |
| Southwest MS Regional Medical Center | H | McComb | Pike | F | 2,893 | 3,289 | M-F, 40 Hrs. |
| **General Hospital Service Area 8** | | | | | **35,425** | **31,673** | |
| Forrest General Hospital | H | Hattiesburg | Forrest | F(2) | 5,908 | 5,172 | M-Sun., 170 Hrs. |
| Hattiesburg Clinic, P.A. | FS | Hattiesburg | Forrest | F(4) | 11,189 | 11,180 | Sat & Sun 180 & M-F 80 Hrs. |
| Jefferson Davis Comm. Hospital [6] | MP | Prentiss | Jeff Davis | M | 187 | 132 | Th., 4 Hrs. |
| Open Air MRI of Laurel | FS | Laurel | Jones | F | 3,868 | 3,681 | M-F, 50 Hrs. |
| SMI - Marion General Hospital [2] | MP | Columbia | Marion | M | 338 | 316 | Tu., 4 Hrs. |
| South Central Regional Medical Center | H | Laurel | Jones | F | 2,012 | 1,998 | M-F, 50 Hrs. |
| Southern Bone & Joint Specialist, PA | FS | Hattiesburg | Forrest | F(2) | 6,528 | 6,266 | M-Sat., 140 Hrs. |
| Southern Neurologic and Spinal Institute* | FS | Hattiesburg | Forrest | F | 2,318 | N/A | M-F, 40 Hrs. |
| Wesley Medical Center | H | Hattiesburg | Lamar | F | 3,077 | 2,928 | M-F, 50 Hrs. |
| **General Hospital Service Area 9** | | | | | **37,691** | **34,535** | |
| Biloxi Regional Medical Center | H | Biloxi | Harrison | F | 3,093 | 2,268 | M-F, 50+ Hrs. |
| Cedar Lake MRI-Open MRI LLC | FS | Gulfport | Harrison | F | 2,764 | 3,680 | M-F, 55 Hrs. |
| Coastal County Imaging Services | FS | Gulfport | Harrison | F | 1,445 | 1,260 | M& F, 45 Hrs. |
| Compass Imaging, LLC | FS | Gulfport | Harrison | F | 3,511 | 4,144 | M-F 80 Hrs. |
| Compass Imaging, LLC* | FS | D'Iberville | Harrison | M | - | 443 | Tu. & F, 8 Hrs. |
| Garden Park Medical Center | H | Gulfport | Harrison | F | 1,957 | 1,930 | M-F, 40 Hrs. |
| George County Hospital | H | Lucedale | George | F | 851 | 894 | M-F, 40 Hrs. |
| Hancock Medical Center/HMC-Imaging Center | H | Bay St. L./D.Head | Hancock | F (2) | 1,350 | 1,097 | M-F,100 Hrs. |
| Highland Community Hospital* | H | Picayune | Pearl River | M | 1,243 | 1,469 | M-Sat., 45 Hrs. |
| Memorial Hospital at Gulfport | H | Gulfport | Harrison | F(2) | 6,744 | 7,385 | M-F, 150 Hrs. |
| Ocean Springs Hospital | H | Ocean S./OS Img Ctr. | Jackson | F (2) | 4,652 | 4,291 | M-F, 115+ Hrs. |
| OMRI, Inc. dba Open MRI | MP | Ocean Springs | Jackson | M(3) | 4,228 | N/A | M, Thr. 120 & F 160 Hrs. |
| Singing River Hospital | H | Pascagoula | Jackson | F(2) M | 5,632 | 5,507 | M-F, 155+ Hrs. |
| Stone County Hospital | H | Wiggins | Stone | M | 221 | 167 | Sat., 4 Hrs. |
| **State Total** | | | | | **265,988** | **258,189** | |

F – Fixed Unit
M – Mobile Unit
Type of Providers: H-Hospital, FS-Freestanding, and MP-Mobile Provider

GSHA 6-Anderson RMC (ARMC) was CON approved 10/09 for a fixed MRI unit. Alliance Imaging performed mobile MRI services from 10/10-08/12. ARMC received approval through a Determination of Reviewability on June 2012 to acquire 3 fixed units from RMSC.
[2] Scott Medical Imaging is the approved service provider.
[6] Comprehensive Radiology Services, PLLC fka Hattiesburg Radiology Group, PLLC is the approved service provider.
Compass Imaging, LLC was CON Approved February 2013 to provide mobile MRI Services in D'Iberville, Harrison County, MS.
*Southern Neurologic and Spinal Institute fka Southern Medical Imaging.
*Highland Community Hospital received CON approval for the Acquisition of MRI Equipment and Conversion from Mobile MRI Services to Fixed MRI Services in April 2014.

Sources: Applications for Renewal of Hospital License for Calendar Years 2013 and 2014; Fiscal Year 2013 and 2014 Annual Hospital Reports; FY 2012 and FY 2013 MRI Utilization Survey

## 111 Digital Subtraction Angiography (DSA)

Digital Subtraction Angiography (DSA) is a diagnostic imaging procedure that combines a digital processing unit with equipment similar to that used for standard fluoroscopic procedures. A radiopaque dye is injected into the patient; a computer then compares the pre-injection and post-injection images and subtracts any interfering bone and tissue structures obscuring the arteries. The X-ray pictures are converted to a digital form, which can be electronically manipulated and stored. Through the electronic manipulation, the images can be enhanced and further refined to give detailed information about the patient's vascular anatomy without additional X-ray exposure.

In some cases, the use of DSA may eliminate the need for arterial catheterization, which many times carries a higher risk factor. Because the digital method is more sensitive to contrast materials, a lesser amount is generally needed in a given area, and intravenous injection of contrast may be sufficient. When required, intra-arterial injection can be done using less contrast per study.

Due to its relative safety and good patient acceptance, DSA may be performed on a repeat basis in cases where risk and cost of conventional angiography might otherwise preclude a series of follow-up studies. Such studies can provide valuable information regarding the natural history of a variety of vascular diseases and the long-term results of various therapeutic interventions. DSA also allows safer screening of the elderly, who have a high risk of cerebrovascular disease.

Most DSA studies can be performed in less than one hour and are appropriate as an outpatient procedure, whereas conventional angiography usually requires a hospital stay of one or two days. Twenty-six hospitals and one freestanding facility in the state provide DSA. During 2013, 42,885 procedures were reported.

DSA equipment performs several types of procedures. These procedures include examination of the carotid arteries, intracranial arteries, renal arteries, aortic arch, and peripheral leg arteries. A variety of anatomical and functional studies of the heart and coronary arteries are also performed.

Table 5-8 presents DSA utilization throughout the state in 2013.

**Table 5-8**
**Digital Subtraction Angiography (DSA) Utilization**
**FY 2013**

| County | Facilities | City | DSA Procedures 2011 |
|---|---|---|---|
| | **General Hospital Service Area 1** | | **4,441** |
| DeSoto | Baptist Memorial Hospital - DeSoto | Southaven | 879 |
| DeSoto | DeSoto Imaging Specialists[1] | Southaven | 3,562 |
| | **General Hospital Service Area 2** | | **8,278** |
| Alcorn | Magnolia Regional Medical Center | Corinth | 328 |
| Lee | North Mississippi Medical Center | Tupelo | 7,950 |
| | **General Hospital Service Area 3** | | **3,321** |
| Bolivar | Bolivar Medical Center | Cleveland | 724 |
| Leflore | Greenwood Leflore Hospital | Greenwood | 2,597 |
| | **General Hospital Service Area 4** | | **315** |
| Lafayette | Baptist Memorial Hospital - North Mississippi | Oxford | 142 |
| Lowndes | Baptist Memorial Hospital- Golden Triangle | Columbus | 173 |
| | **General Hospital Service Area 5** | | **19,902** |
| Hinds | Central Mississippi Medical Center | Jackson | 2,477 |
| Hinds | Mississippi Baptist Medical Center | Jackson | 3,558 |
| Hinds | St. Dominic Jackson Memorial Hospital | Jackson | 9,459 |
| Hinds | University Hospital & Health System | Jackson | 4,173 |
| Rankin | Crossgates River Oaks Hospital (Rankin MC) | Brandon | 220 |
| Rankin | River Oaks Hospital | Brandon | 15 |
| | **General Hospital Service Area 6** | | **3,130** |
| Lauderdale | Anderson Regional Medical Center | Meridian | 2,851 |
| Lauderdale | Rush Foundation Hospital | Meridian | 279 |
| | **General Hospital Service Area 7** | | **24** |
| Adams | Natchez Regional Medical Center | Natchez | 24 |
| | **General Hospital Service Area 8** | | **1,839** |
| Forrest | Forrest General Hospital | Hattiesburg | 1,663 |
| Jones | South Central Regional Medical Center | Laurel | 10 |
| Lamar | Wesley Medical Center | Hattiesburg | 166 |
| | **General Hospital Service Area 9** | | **1,635** |
| Harrison | Memorial Hospital at Gulfport | Gulfport | 1,190 |
| Jackson | Ocean Springs Hospital | Ocean Springs | 230 |
| Jackson | Singing River Hospital | Pascagoula | 215 |
| **State Total** | | | **42,885** |

[1] Indicates freestanding clinics.

Sources: Applications for Renewal of Hospital License for Calendar Years 2014; Fiscal Year 2013 Annual Hospital Report; FY 2013 DSA Utilization Survey.

## 112 Positron Emission Tomography (PET)

Positron emission tomography (PET) is a minimally invasive imaging procedure in which positron-emitting radionuclides, produced either by a cyclotron or by a radio-pharmaceutical producing generator, and a gamma camera are used to create pictures of organ function rather than structure. PET scans provide physicians a crucial assessment of the ability of specific tissues to function normally.

PET can provide unique clinical information in an economically viable manner, resulting in a diagnostic accuracy that affects patient management. PET scans provide diagnostic and prognostic patient information regarding cognitive disorders; for example, identifying the differences between Alzheimer's, Parkinson's, dementia, depression, cerebral disorders, and mild memory loss. PET scans also provide information regarding psychiatric disease, brain tumors, epilepsy, cardiovascular disease, movement disorders, and ataxia. Research shows that clinical PET may obviate the need for other imaging procedures.

PET installations generally take one of two forms: a scanner using only generator-produced tracers (basic PET unit) or a scanner with a cyclotron (enhanced PET unit). The rubidium-82 is the only generator approved by the FDA to produce radiopharmaceuticals. Rubidium limits PET services to cardiac perfusion imaging.

A PET scanner supported by a cyclotron can provide the capabilities for imaging a broader range of PET services, such as oncology, neurology, and cardiology. Manufacturers of PET equipment are providing more user-friendly cyclotrons, radiopharmaceutical delivery systems, and scanners which have drastically reduced personnel and maintenance requirements. These changes have made the cost of PET studies comparable to those of other high-technology studies.

Cardiology Associates of North Mississippi located in Tupelo, Mississippi (Lee County) has a fixed PET unit and performs Cardiac/PET procedures (pet scans/imaging of the heart). For FY 2013, Cardiology Associates of North Mississippi performed 1,596 procedures.

Table 5-9 presents the location, type (fixed or mobile), and utilization of PET equipment throughout the state in 2013.

**Table 5-9**
**Location and Number of PET Procedures by Service Area**
**FY 2013**

| Facility | Location | Type of Equipment | Number of PET Procedures |
|---|---|---|---|
| **General Hospital Service Area 1** | | | **374** |
| Baptist Memorial Hospital - DeSoto | Southhaven | M | 374 |
| **General Hospital Service Area 2** | | | **1,692** |
| Magnolia Regional Health Center | Corinth | M | 342 |
| North Mississippi Medical Center | Tupelo | F | 1,350 |
| **General Hospital Service Area 3** | | | **630** |
| Bethesda Regional Cancer Treatment Center[1] | Clarksdale | M | 159 |
| Bolivar Medical Center | Cleveland | M | 32 |
| Delta Regional Medical Center (Main Campus) | Greenville | M | 295 |
| Greenwood Leflore Hospital | Greenwood | M | 144 |
| **General Hospital Service Area 4** | | | **2,002** |
| Baptist Memorial Hospital - Golden Triangle | Columbus | F | 1,064 |
| Baptist Memorial Hospital - North Miss | Oxford | F | 701 |
| Grenada Diagnostics Radiology, LLC[1] | Grenada | M | 237 |
| **General Hospital Service Area 5** | | | **6,265** |
| Central Miss Medical Center | Jackson | F | 343 |
| Mississippi Baptist Medical Center | Jackson | F (2) | 2,930 |
| St. Dominic Hospital | Jackson | F | 1,011 |
| University Hospital & Health System | Jackson | F | 1,948 |
| Montfort Jones Memorial Hospital | Kosciusko | M | 33 |
| **General Hospital Service Area 6** | | | **285** |
| Anderson Regional Medical Center | Meridian | M | 285 |
| **General Hospital Service Area 7** | | | **652** |
| Natchez Regional Medical Center | Natchez | M | 283 |
| Southwest MS Regional Medical Center | McComb | M | 369 |
| **General Hospital Service Area 8** | | | **3,185** |
| Hattiesburg Clinic, P.A.[1] | Hattiesburg | F | 2,612 |
| South Central Regional Medical Center | Laurel | M | 455 |
| Wesley Medical Center | Hattiesburg | M | 118 |
| **General Hospital Service Area 9** | | | **1,545** |
| Biloxi Regional Medical Center | Biloxi | M | 105 |
| Garden Park Medical Center | Gulfport | M | 60 |
| Memorial Hospital at Gulfport | Gulfport | F | 668 |
| Ocean Springs Hospital | Ocean Springs | M | 327 |
| Singing River Hospital | Pascagoula | M | 385 |
| **State Total** | | | **16,630** |

[1] Indicates freestanding clinics.

NOTES: Delta Cancer Institute CON approved but CON was amended. Delta RMC (Main Campus) provides service. Cardiology Associates of North MS was CON approved in 2011 to provide Cardiac/PET services.
*Imaging Center at Bridgepoint, LLC in Tupelo (Lee County) was CON approved 12/2011 to offer PET services; however the proposed project was never completed.

Sources: Applications for Renewal of Hospital License for Calendar Years 2014; Fiscal Year 2012 Annual Hospital Report; FY 2011 PET Utilization Survey

## 112.01 Certificate of Need Criteria and Standards for Magnetic Resonance Imaging Services (MRI)

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### *112.01.01 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of Magnetic Resonance Imaging (MRI) Equipment and/or the Offering of MRI Services*

1. CON Review Requirements: The Certificate of Need process regarding the acquisition or otherwise control of MRI equipment and/or the offering of MRI services involves separate requirements for CON review: (a) an entity proposing to acquire or otherwise control MRI equipment must obtain a CON to do so if the capital expenditure for the MRI unit and related equipment exceeds $1,500,000; and (b) an entity proposing to offer MRI services which hasn't provided the service on a regular basis within the last twelve (12) months must obtain a CON before providing such services.

2. CON Approval Preference: The Mississippi State Department of Health shall give preference to those applicants proposing to enter into joint ventures utilizing mobile and/or shared equipment. However, the applicant must meet the applicable CON criteria and standards provided herein and the general criteria and standards contained in the currently approved *Mississippi Certificate of Need Review Manual*.

3. Mobile MRI: For purposes of this Plan, a mobile MRI unit is defined as an MRI unit operating at two or more host sites and that has a central service coordinator. The mobile MRI unit shall operate under a contractual agreement for the provision of MRI services at each host site on a regularly scheduled basis.

4. Conversion to Fixed: The conversion from mobile MRI service to fixed MRI service is considered the establishment of a new MRI service and requires CON review.

5. Utilization of Existing Units: No new MRI services shall be approved unless all existing MRI service in the applicant's defined service area performed an average of 1,700 MRI procedures per existing and approved MRI scanner during the most recent 12 month reporting period and the proposed new services would not reduce the utilization of existing providers in the service area.

6. Population-Based Formula: The MSDH shall use a population-based formula as presented at the end of this chapter when calculating MRI need. Also, the formula will use historical and projected use rates by service area and patient origin data. The population-based formula is based on the most recent population projections prepared by the Center for Policy Research and Planning of the Institutions of Higher Learning. The applicant shall project a reasonable population base to justify the provision of 2,700 procedures (or 1,700 procedures for rural hospitals) by the second year of operation.

7. Mobile Service Volume Proration**:** The required minimum service volumes for the establishment of services and the addition of capacity for mobile services shall be prorated on a "site by site" basis based on the amount of time the mobile services will be operational at each site.

8. Addition of a Health Care Facility: An equipment vendor who proposes to add a health care facility to an existing or proposed route must notify the Department in writing of any proposed changes, i.e., additional health care facilities or route deviations, from those presented in the Certificate of Need application prior to such change.

### *112.01.02 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Magnetic Resonance Imaging (MRI) Equipment and/or the Offering of MRI Services*

The Mississippi State Department of Health will review applications for a Certificate of Need for the acquisition or otherwise control of MRI equipment and/or the offering of MRI 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of MRI equipment is reviewable if the equipment cost is in excess of $1,500,000; if the equipment and/or service is relocated; and if the proposed provider of MRI services has not provided such services on a regular basis within the period of twelve (12) months prior to the time such services would be offered.

### *112.01.03 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of MRI Equipment*

1. **Need Criterion: The entity desiring to acquire or otherwise control the MRI equipment shall demonstrate a minimum of 2,700 procedures per year by the end of the second year of operation; provided, however, that MRI equipment exclusively servicing rural hospitals (those located outside U.S. Census Bureau Metropolitan Statistical Areas with 75 or less beds) shall be required to demonstrate a minimum of 1,700 procedures per year by the end of the second year of operation. This criterion includes both fixed and mobile MRI equipment. The applicant must show the methodology used for the projections.**

    a. **Applicants for non-hospital based MRI facilities may submit affidavits from referring physicians. MRI procedures projected in affidavits shall be based on actual MRI procedures referred during the year.**

    b. **The applicant shall document a reasonable population base to document that a minimum of 2,700 procedures will be performed per proposed MRI unit (or 1,700 procedures per year for a mobile MRI route exclusively serving rural hospitals).**

c. **The applicant shall demonstrate that all existing units within its defined service area have performed an average of 1,700 procedures for the most recent 12-month period.**

It is recognized that an applicant desiring to acquire or otherwise control an MRI unit may make or propose to make the MRI unit available to more than one provider of MRI services, some of which may be located outside of Mississippi. In such cases all existing or proposed users of the MRI unit must jointly meet the required service volume of 2,700 (or 1,700 for mobile MRI route exclusively serving rural hospitals) procedures annually. If the MRI unit in question is presently utilized by other providers of MRI services, the actual number of procedures performed by them during the most recent 12-month period and/or documented projections of physician referrals may be used.

2. In order to receive CON approval to acquire or otherwise control MRI equipment, the applicant shall provide a copy of the proposed contract and document the following:

   a. that the equipment is FDA approved;

   b. that only qualified personnel will be allowed to operate the equipment; and

   c. that if the equipment is to be rented, leased, or otherwise used by other qualified providers on a contractual basis, no fixed/minimum volume contracts will be permitted.

3. Applicants shall provide written assurance that they will record and maintain, at a minimum, the following information and make it available to the Mississippi State Department of Health:

   a. all facilities which have access to the equipment;

   b. utilization by each facility served by the equipment, e.g., days of operation, number of procedures, and number of repeat procedures;

   c. financial data, e.g., copy of contracts, fee schedule, and cost per scan; and

   d. demographic and patient origin data for each facility.

   In addition, if required by the Department, the above referenced information and other data pertaining to the use of MRI equipment will be made available to the MSDH within 15 business days of request. The required information may also be requested for entities outside of Mississippi that use the MRI equipment in question.

4. The entity desiring to acquire or otherwise control the MRI equipment must be a registered entity authorized to do business in Mississippi.

5. Before the specified equipment can be utilized, the applicant desiring to provide the MRI equipment shall have CON approval or written evidence that the equipment is exempt from CON approval, as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

### *112.01.04 Certificate of Need Criteria and Standards for the Offering of Fixed or Mobile MRI Services*

An entity proposing to offer MRI services shall obtain Certificate of Need (CON) approval before offering such services.

1. **Need Criterion: The entity desiring to offer MRI services must document that the equipment shall perform a minimum of 2,700 procedures (or 1,700 procedures for rural hospitals) by the end of the second year of operation. This criterion includes both fixed and mobile MRI equipment. The applicant must show methodology used for the projections.**

   a. **Applicants for non-hospital based MRI facilities may submit affidavits from referring physicians. MRI procedures projected in affidavits shall be based on actual MRI procedures referred during the year.**

   b. **The applicant shall document a reasonable population within its service area to justify 2,700 procedures per year per proposed MRI unit (1,700 procedures per year per proposed mobile MRI unit on a route exclusively serving rural hospitals).**

   c. **The applicant shall demonstrate that all existing units within its defined service area have performed an average of 1,700 procedures for the most recent 12-month period.**

   It is recognized that a particular MRI unit may be utilized by more than one provider of MRI services, some of which may be located outside of Mississippi. In such cases all existing or proposed providers of MRI services must jointly meet the required service volume of 2,700 (or 1,700 for mobile MRI route exclusively serving rural hospitals) procedures annually by the end of the second year of operation. If the MRI unit in question is presently utilized by other providers of MRI services, the actual number of procedures performed by them during the most recent 12-month period and/or documented projection of physician referrals may be used instead of the formula projections.

2. An applicant desiring to offer MRI services must document that a full range of diagnostic imaging modalities for verification and complementary studies will be available at the time MRI services begin. These modalities shall include, but not be limited to, computed tomography (full body), ultrasound, angiography, nuclear medicine, and conventional radiology.

3. All applicants proposing to offer MRI services shall give written assurance that, within the scope of its available services, neither the facility where the service is provided nor its participating medical personnel shall have policies or procedures which would exclude patients because of race, color, age, sex, ethnicity, or ability to pay.

4. The applicant must document that the following staff will be available:

   a. Director - A full-time, board eligible radiologist or nuclear medicine imaging physician, or other board eligible licensed physician whose primary responsibility

during the prior three years has been in the acquisition and interpretation of clinical images. The Director shall have knowledge of MRI through training, experience, or documented post-graduate education. The Director shall document a minimum of one week of full-time training with a functional MRI facility.

b. One full-time MRI technologist-radiographer or a person who has had equivalent education, training, and experience, who shall be on-site at all times during operating hours. This individual must be experienced in computed tomography or other cross-sectional imaging methods, or must have equivalent training in MRI spectroscopy.

5. The applicant shall document that when an MRI unit is to be used for experimental procedures with formal/approved protocols, a full-time medical physicist or MRI scientist (see definition in Glossary) with at least one year of experience in diagnostic imaging shall be available in the facility.

6. The applicant shall provide assurances that the following data regarding its use of the MRI equipment will be kept and made available to the Mississippi State Department of Health upon request:

   a. Total number of procedures performed

   b. Number of inpatient procedures

   c. Number of outpatient procedures

   d. Average MRI scanning time per procedure

   e. Average cost per procedure

   f. Average charge per procedure

   g. Demographic/patient origin data

   h. Days of operation

   In addition to the above data recording requirements, the facility should maintain the source of payment for procedures and the total amounts charged during the fiscal year when it is within the scope of the recording system.

7. Before the service can be provided, the CON applicant desiring to offer MRI services shall provide written evidence that the specified MRI equipment provider has received CON approval or is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

### *112.01.05 Population-Based Formula for Projection of MRI Service Volume*

$$X * Y \div 1{,}000 = V$$

***Where, X = Applicant's Defined Service area population***

***Y = Mississippi MRI Use Rate****

***V = Expected Volume***

****Use Rate shall be based on information in the State Health Plan***

## 113 Certificate of Need Criteria and Standards for Diagnostic Imaging Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 113.01 Certificate of Need Criteria and Standards for Digital Subtraction Angiography

The Mississippi State Department of Health will review applications for a Certificate of Need for the acquisition or otherwise control of Digital Subtraction Angiography (DSA) equipment and associated costs 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

Certificate of Need review is required when the capital expenditure for the purchase of Digital Subtraction Angiography equipment and associated costs exceed $1,500,000, or when the equipment is to be used for invasive procedures, i.e., the use of catheters. The offering of diagnostic imaging services of an invasive nature, i.e. invasive digital angiography, is reviewable if those services have not been provided on a regular basis by the proposed provider of such services within the period of twelve (12) months prior to the time such services would be offered.

1. **Need Criterion: The applicant for DSA services shall demonstrate that proper protocols for screening, consultation, and medical specialty backup are in place before services are rendered by personnel other than those with specialized training.**

For example, if a radiologist without specialized training in handling cardiac arrhythmia is to perform a procedure involving the heart, a cardiologist/cardiosurgeon must be available for consultation/backup.

The protocols shall include, but are not limited to, having prior arrangements for consultation/backup from:

a. a cardiologist/cardiosurgeon for procedures involving the heart;

b. a neurologist/neurosurgeon for procedures involving the brain; and

c. a vascular surgeon for interventional peripheral vascular procedures.

2. Before utilizing or providing the equipment or service, the applicant desiring to provide the digital subtraction angiography equipment or service shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by the Mississippi State Department of Health.

## 113.02 Positron Emission Tomography (PET) Equipment and Services

### *113.02.01 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of a Positron Emission Tomography (PET) Scanner and Related Equipment including Cardiac only PET Scanner*

1. CON Review Requirements: Applicants proposing the acquisition or otherwise control of a PET scanner shall obtain a CON to do so if the capital expenditure for the scanner and related equipment exceeds $1,500,000.

2. Indigent/Charity Care: An applicant shall be required to provide a "reasonable amount" of indigent/charity care as described in Chapter I of this Plan.

3. Service Areas: The state as a whole shall serve as a single service area in determining the need for a PET scanner. In the case of Cardiac only PET Scanner, the service area will be the General Hospital Service Areas.

4. Equipment to Population Ratio: The need for a PET scanner is estimated to be one scanner per 300,000 population. The MSDH will consider out-of-state population in determining need only when the applicant submits adequate documentation acceptable to the MSDH, such as valid patient origin studies. In the case of Cardiac only PET Scanner, this policy will not apply.

5. Access to Supplies: Applicants must have direct access to appropriate radio-pharmaceuticals.

6. Services and Medical Specialties Required: The proposed PET unit must function as a component of a comprehensive inpatient or outpatient diagnostic service. The proposed PET unit must have the following modalities (and capabilities) on-site or through contractual arrangements:

   a. Computed tomography - (whole body)

   b. Magnetic resonance imaging - (brain and whole body)

   c. Nuclear medicine - (cardiac, SPECT)

   d. Conventional radiography

   e. The following medical specialties during operational hours:

      i. Cardiology

      ii. Neurology

      iii. Neurosurgery

      iv. Oncology

      v. Psychiatry

      vi. Radiology

7. Hours of Operation: PET facilities should have adequate scheduled hours to avoid an excessive backlog of cases.

8. CON Approval Preference: The MSDH may approve applicants proposing to enter joint ventures utilizing mobile and/or shared equipment.

9. CON Requirements: The criteria and standards contained herein pertain to both fixed and/or mobile PET scanner equipment.

10. CON Exemption: Nothing contained in these CON criteria and standards shall preclude the University of Mississippi School of Medicine from acquiring and operating a PET scanner and a Cardiac only PET Scanner, provided the acquisition and use of such equipment is justified by the School's teaching and/or research mission. However, the requirements listed under the section regarding the granting of "appropriate scope of privileges for access to the scanner to any qualified physician" must be met. The MSDH shall not consider utilization of equipment/services at any hospital owned and operated by the state or its agencies when reviewing CON applications.

11. Addition to a Health Care Facility: An equipment vendor who proposes to add a health care facility to an existing or proposed route must notify the Department in writing of any proposed changes from those presented in the Certificate of Need application prior to such change, i.e., additional health care facilities or route deviations.

12. Equipment Registration: The applicant must provide the Department with the registration/serial number of the CON-approved PET scanner.

13. Certification: If a mobile PET scanner, the applicant must certify that only the single authorized piece of equipment and related equipment vendor described in the CON application will be utilized for the PET service by the authorized facility/facilities.

14. Conversion from mobile to fixed service: The conversion from mobile PET service site to a fixed PET service site is considered the establishment of a new service and requires CON review.

### *113.02.02 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of a Positron Emission Tomography (PET) Scanner and Related Equipment including Cardiac only PET Scanner*

The Mississippi State Department of Health will review applications for a Certificate of Need for the acquisition or otherwise control of a PET scanner and related equipment 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 Certificate of Need according to the general review criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of a PET scanner and related equipment is reviewable if the equipment cost is in excess of $1,500,000, or if the equipment is relocated. The offering of PET 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.

**1. Need Criterion:**

**a. The entity desiring to acquire or to otherwise control the PET scanner must project a minimum of 1,000 clinical procedures per year and must show the methodology used for the projection.**

**b. The applicant shall document a minimum population of 300,000 per PET scanner unit. The Division of Health Planning and Resource Development population projections shall be used. In the case of Cardiac only PET Scanner, this Criterion will not apply.**

2. The entity desiring to acquire or otherwise control the PET equipment must be a registered entity authorized to do business in Mississippi.

3. The MSDH will approve additional PET equipment in a service area with existing equipment only when it is demonstrated that the existing PET equipment in that service area is performing an average of 1,500 clinical procedures per PET unit per year (six clinical procedures per day x 250 working days per year). For purposes of this Criterion, PET and Cardiac only PET are to be evaluated separately.

4. The application shall affirm that the applicant shall receive approval from the Division of Radiological Health for the proposed site, plans, and equipment before service begins.

5. The applicant shall provide assurances that the following data regarding the PET equipment will be kept and made available to the Mississippi State Department of Health upon request:

    a. total number of procedures performed;

    b. total number of inpatient procedures (indicate type of procedure);

    c. total number of outpatient procedures (indicate type of procedure);

    d. average charge per specific procedure;

    e. hours of operation of the PET unit;

    f. days of operation per year; and

    g. total revenue and expense for the PET unit for the year.

6. The applicant shall provide a copy of the proposed contract and document that if the equipment is to be rented, leased, or otherwise used by other qualified providers on a contractual basis, no fixed/minimum volume contracts will be permitted.

7. Before the specified equipment can be utilized, the applicant desiring to provide the PET equipment shall have CON approval or written evidence that the equipment is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

### *113.02.03 Certificate of Need Criteria and Standards for the Offering of Fixed or Mobile Positron Emission Tomography (PET) Services including Cardiac only PET Scanner*

The offering of fixed or mobile PET 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.

1. Need Criterion: The entity desiring to offer PET services must document that the equipment shall perform a minimum of 1,000 clinical procedures per year and must show the methodology used for the projection.

2. It is recognized that a particular PET unit may be utilized by more than one provider of PET services, some of which may be located outside of Mississippi. In such cases all existing or proposed providers of PET services utilizing the same PET unit must jointly meet the required service volume of 1,000 procedures annually. If the PET unit in question is presently utilized by other providers of PET services, the actual number of procedures performed by them during the most recent 12-month period may be used.

3. An applicant proposing to provide new or expanded PET services must include written assurances in the application that the service will be offered in a physical environment that

conforms to federal standards, manufacturer's specifications, and licensing agencies' requirements. The following areas are to be addressed:

a. quality control and assurance of radiopharmaceutical production of generator or cyclotron-produced agents;

b. quality control and assurance of PET tomograph and associated instrumentation;

c. radiation protection and shielding; and

d. radioactive emissions to the environment.

4. The application shall affirm that the applicant shall receive approval from the Division of Radiological Health for the proposed site, plans, and equipment before service begins.

5. The applicant shall document provision of an on-site medical cyclotron for radionuclide production and a chemistry unit for labeling radiopharmaceuticals; or an on-site rubidium-82 generator; or access to a supply of cyclotron-produced radiopharmaceuticals from an off-site medical cyclotron and a radiopharmaceutical production facility within a two-hour air transport radius.

6. Applicants for PET shall document that the necessary qualified staff are available to operate the proposed unit. The applicant shall document the PET training and experience of the staff. The following minimum staff shall be available to the PET unit:

   a. If operating a fixed PET unit, one or more nuclear medicine imaging physician(s) available to the PET unit on a full-time basis (e.g., radiologist, nuclear cardiologist) who have been licensed by the state for the handling of medical radionuclides and whose primary responsibility for at least a one-year period prior to submission of the Certificate of Need application has been in acquisition and interpretation of tomographic images. This individual shall have knowledge of PET through training, experience, or documented postgraduate education. The individual shall also have training with a functional PET facility.

   b. If operating a cyclotron on site, a qualified PET radiochemist or radiopharmacist personnel, available to the facility during PET service hours, with at least one year of training and experience in the synthesis of short-lived positron emitting radiopharmaceuticals. The individual(s) shall have experience in the testing of chemical, radiochemical, and radionuclidic purity of PET radiopharmaceutical syntheses.

   c. Qualified engineering and physics personnel, available to the facility during PET service hours, with training and experience in the operation and maintenance of the PET equipment. Engineering personnel are not required on-site for mobile PET units.

   d. Qualified radiation safety personnel, available to the facility at all times, with training and experience in the handling of short-lived positron emitting nuclides. If a medical cyclotron is operated on-site, personnel with expertise in radiopharmacy, radiochemistry, and medical physics would also be required.

e. Certified nuclear medicine technologists with expertise in computed tomographic nuclear medicine imaging procedures, at a staff level consistent with the proposed center's expected PET service volume.

f. Other appropriate personnel shall be available during PET service hours which may include certified nuclear medicine technologists, computer programmers, nurses, and radio-chemistry technicians.

7. The applicant shall demonstrate how medical emergencies within the PET unit will be managed in conformity with accepted medical practice.

8. The applicant shall affirm that, in addition to accepting patients from participating institutions, facilities performing clinical PET procedures shall accept appropriate referrals from other local providers. These patients shall be accommodated to the extent possible by extending the hours of service and by prioritizing patients according to standards of need and appropriateness rather than source of referral.

9. The applicant shall affirm that protocols will be established to assure that all clinical PET procedures performed are medically necessary and cannot be performed as well by other, less expensive, established modalities.

10. Applicants will be required to maintain current listings of appropriate PET procedures for use by referring physicians.

11. The applicant shall provide assurances that the following data regarding the PET service will be kept and made available to the Mississippi State Department of Health upon request:

    a. total number of procedures performed; total number of inpatient procedures (indicate type of procedure);

    b. total number of outpatient procedures (indicate type of procedure);

    c. average charge per specific procedure;

    d. hours of operation of the PET unit;

    e. days of operation per year; and

    f. total revenue and expense for the PET unit for the year.

12. Before the specified service can be provided, the applicant desiring to offer the PET service shall provide written evidence that the specified PET equipment provider has CON approval or written evidence that the equipment is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

# CERTIFICATE OF NEED

# CRITERIA AND STANDARDS
# FOR
# CARDIAC CATHETERIZATION SERVICES

## 114 Cardiac Catheterization

Cardiac catheterization, predominately a diagnostic tool that is an integral part of cardiac evaluation, brings together two disciplines: cardiac catheterization (the evaluation of cardiac function) and angiography (X-ray demonstration of cardiac anatomy). Cardiac catheterization includes various therapeutic interventions: including but not limited to: percutaneous coronary interventions (PCI), thrombolysis of coronary clots in evolving myocardial infarctions, electrical ablation of abnormal conduction pathways, and closure of patent ductus arteriosus in infants.

Any facility performing diagnostic cardiac catheterizations without open-heart surgery capability must maintain formal referral agreements with a nearby facility to provide emergency cardiac services, including open-heart surgery. Such a facility must also delineate the steps it will take to ensure that high-risk or unstable patients are not catheterized in the facility. Additionally, a facility without open-heart surgery capability must document that more complex procedures are not performed in the facility. Such procedures include, but are not limited to: percutaneous coronary interventions (PCI), transseptal puncture, transthoracic left ventricular puncture, and myocardial biopsy.

Section 41-7-191(1)(d), Mississippi Code of 1972, as amended, requires Certificate of Need review for the establishment and/or offering of cardiac catheterization services if the proposed provider has not offered such services on a regular basis within 12 months prior to the time the services would be offered. Table 5-10 presents the utilization of cardiac catheterization services in 2013.

## Table 5-10
## Cardiac Catheterizations by Facility and Type
## by Cardiac Catherization/Open Heart Planning Area (CC/OHSPA)
## FY 2012 and FY 2013

| Facility | County | Total Adult Procedures | | Total Pediatric Procedures | | Total PTCA Procedures | | # Labs |
|---|---|---|---|---|---|---|---|---|
| | | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2013 |
| **CC/OHSPA 1** | | **2,928** | **2,789** | **0** | **0** | **0** | **260** | **4** |
| Baptist Memorial Hospital-DeSoto | DeSoto | 2,928 | 2,784 | 0 | 0 | 0 | 260 | 3 |
| Methodist Healthcare Olive Branch Hospital | DeSoto | - | 5 | 0 | 0 | 0 | 0 | 1 |
| **CC/OHSPA 2** | | **9,721** | **13,002** | **0** | **0** | **319** | **391** | **6** |
| Magnolia Regional Health Center | Alcorn | 2,058 | 4,728 | 0 | 0 | 128 | 167 | 2 |
| North Mississippi Medical Center | Lee | 7,663 | 8,274 | 0 | 0 | 191 | 224 | 4 |
| **CC/OHSPA 3** | | **1,188** | **1,680** | **0** | **0** | **186** | **179** | **4** |
| Delta Regional Medical Center | Washington | 830 | 944 | 0 | 0 | 186 | 179 | 2 |
| Greenwood Leflore Hospital | LeFlore | - | 0 | 0 | 0 | 0 | 0 | 1 |
| Northwest MS RMC - Main Campus* | Coahoma | 358 | 736 | 0 | 0 | 0 | 0 | 1 |
| **CC/OHSPA 4** | | **2,151** | **2,285** | 0 | 0 | **577** | **757** | **5** |
| Baptist Memorial Hospital-Golden Triangle | Lowndes | 827 | 889 | 0 | 0 | 223 | 281 | 2 |
| Baptist Memorial Hospital-N. Mississippi | Lafayette | 1,324 | 1,282 | 0 | 0 | 354 | 476 | 2 |
| UMMC Grenada* | Grenada | - | 114 | 0 | 0 | 0 | 0 | 1 |
| **CC/OHSPA 5** | | **16,434** | **15,096** | **570** | **1,681** | **2,944** | **2,289** | **22** |
| Central Mississippi Medical Center | Hinds | 1,180 | 691 | 0 | 0 | 289 | 172 | 3 |
| Mississippi Baptist Medical Center | Hinds | 4,326 | 3,757 | 0 | 0 | 1,143 | 939 | 5 |
| Rankin Cardiology Center*• | Rankin | 120 | 119 | 0 | 0 | 0 | 0 | 1 |
| River Region Health System | Warren | 1,230 | 1,536 | 0 | 0 | 314 | 241 | 3 |
| St. Dominic-Jackson Memorial Hospital | Hinds | 6,661 | 5,931 | 0 | 0 | 1,163 | 877 | 7 |
| University Hospital & Health Systems | Hinds | 2,917 | 3,062 | 570 | 1681 | 35 | 60 | 3 |
| **CC/OHSPA 6** | | **3,889** | **3,083** | **0** | **0** | **946** | **713** | **5** |
| Anderson Regional Medical Center | Lauderdale | 1,254 | 1,344 | 0 | 0 | 809 | 705 | 3 |
| Anderson Regional Medical Center -South* [1] | Lauderdale | - | - | 0 | 0 | 0 | 0 | 0 |
| Rush Foundation Hospital | Lauderdale | 2,635 | 1,739 | 0 | 0 | 137 | 8 | 2 |
| **CC/OHSPA 7** | | **1,364** | **1,271** | 0 | 0 | **310** | **288** | **4** |
| Natchez Regional Medical Center * | Adams | 399 | 257 | 0 | 0 | 0 | 0 | 1 |
| SW Miss Regional Medical Center | Pike | 965 | 1,014 | 0 | 0 | 310 | 288 | 3 |
| **CC/OHSPA 8** | | **4,367** | **4,131** | **0** | **0** | **1,267** | **1,000** | **7** |
| Forrest General Hospital | Forrest | 2,543 | 2,472 | 0 | 0 | 915 | 817 | 4 |
| South Central Regional Medical Center* | Jones | 520 | 521 | 0 | 0 | 0 | 0 | 1 |
| Wesley Medical Center | Lamar | 1,304 | 1,138 | 0 | 0 | 352 | 183 | 2 |
| **CC/OHSPA 9** | | **5,554** | **6,263** | **0** | **0** | **1,962** | **2,219** | **9** |
| Biloxi Regional Medical Center* | Harrison | 109 | 100 | 0 | 0 | 0 | 0 | 1 |
| Memorial Hospital at Gulfport | Harrison | 3,014 | 2,380 | 0 | 0 | 719 | 841 | 4 |
| Ocean Springs Hospital | Jackson | 1,377 | 2,185 | 0 | 0 | 712 | 829 | 2 |
| Singing River Hospital | Jackson | 1,054 | 1,598 | 0 | 0 | 531 | 549 | 2 |
| **State Total** | | **47,596** | **49,600** | **570** | **1,681** | **8,511** | **8,096** | **66** |

*Diagnostic Catheterizations only

•Provides Diagnostic Cardiac Catheterizations for Rankin Medical Center, Women's Hospital, and River Oaks Hospital patients, at River Oaks Hospital Campus

[1] Anderson RMC provides Diagnostic Cardiac Catheterizations for Anderson RMC- South fka Riley Hospital.

NOTE: Cardiology Associates of North MS was CON approved in 2011 to provide Cardiac/PET services.

Sources: Applications for Renewal of Hospital License for Calendar Years 2013 and 2014, and Fiscal Years 2012 and 2013 Annual Hospital Reports.

## 115 Certificate of Need Criteria and Standards for Cardiac Catheterization Services and Open-Heart Surgery Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manua*l and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 115.01 Joint Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of Cardiac Catheterization Equipment and/or the Offering of Cardiac Catheterization Services and the Acquisition of Open-Heart Surgery Equipment and/or the Offering of Open-Heart Surgery Services

Heart disease remains the leading cause of death in Mississippi as incidence rates continue to increase, particularly among the African-American population. Studies show that minorities have a higher cardiovascular death rate than whites and are less likely to receive cardiac catheterization and open-heart surgery services than are whites. The disproportionate impact on minorities' health status in general is recognized elsewhere in this *State Health Plan*.

Innovative approaches to address these problems in the cardiac area are needed. It has been shown that statistical methods, such as population base and optimum capacity at existing providers, are not accurate indicators of the needs of the underserved, nor do they address the accessibility of existing programs to the underserved. 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.

To further this goal, the MSDH adopted the following standards:

1. A minimum population base standard of 100,000;

2. The establishment of diagnostic cardiac catheterization services with a caseload of 300 diagnostic catheterization procedures;

3. The establishment of therapeutic cardiac catheterization services with a caseload of 450 diagnostic and therapeutic catheterization procedures;

4. The establishment of open-heart surgery programs with a caseload of 150 open-heart surgeries; and,

5. A minimum utilization of equipment/services at existing providers of 450 cardiac catheterizations, diagnostic and therapeutic, and when applicable, 150 open-heart surgeries.

The MSDH also adopted a provision that it shall not consider utilization of equipment/services at any hospital owned and/or operated by the state or its agencies when reviewing CON applications. The MSDH further adopted standards requiring an applicant to report information regarding catheterization and open-heart programs so as to monitor the provision of care to the medically underserved and the quality of that care.

The MSDH shall interpret and implement all standards in this *Plan* in recognition of the stated findings and so as to achieve the stated goal.

**115.02 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of Cardiac Catheterization Equipment and/or the Offering of Cardiac Catheterization Services**

1. Cardiac Catheterization Services: For purposes of the following CON criteria and standards, the term "cardiac catheterization services" or "catheterization services" shall include diagnostic cardiac catheterization services and therapeutic cardiac catheterization services.

    a. Diagnostic cardiac catheterization services are defined as, and refer to, cardiac catheterization services which are performed for the purpose of diagnosing, identifying, or evaluating cardiac related illness or disease. Diagnostic cardiac catheterization services include, but are not limited to, left heart catheterizations, right heart catheterizations, left ventricular angiography, coronary procedures, and other cardiac catheterization services of a diagnostic nature.

    b. Therapeutic cardiac catheterization services are defined as, and refer to, cardiac catheterization services which are performed for the purpose of actively treating, as opposed to merely diagnosing, cardiac-related illness or disease. Therapeutic cardiac catheterization services include, but are not limited to,-all PCIs (including primary and elective), transseptal puncture, transthoracic left ventricular puncture and myocardial biopsy.

2. Open-Heart Surgery Capability: The MSDH shall not approve CON applications for the establishment of therapeutic cardiac catheterization services at any facility that does not have open-heart surgery capability; i.e., new therapeutic cardiac catheterization services may not be established and existing therapeutic cardiac catheterization services may not be extended without approved and operational open-heart surgery services in place. This policy does not preclude approval of a Certificate of Need application proposing the concurrent establishment of both therapeutic cardiac catheterization and open-heart surgery services. However, the Department may approve a qualifying applicant to perform percutaneous coronary intervention (PCI) services in a hospital without on-site cardiac surgery.

3. Service Areas: The need for cardiac catheterization equipment/services shall be determined using the nine designated Cardiac Catheterization/Open-Heart Surgery Planning Areas (CC/OHSPAs) presented in the Open Heart Surgery section of this chapter of the Plan. Map 5-2 shows the CC/OHSPAs.

4. CC/OHSPA Need Determination: The need for cardiac catheterization equipment/ services within a given CC/OHSPA shall be determined independently of all other CC/OHSPAs.

5. Pediatric Cardiac Catheterization: Because the number of pediatric patients requiring study is relatively small, the provision of cardiac catheterization for neonates, infants, and young children shall be restricted to those facilities currently providing the service. National standards indicate that a minimum of 150 cardiac catheterization cases should be done per year and that catheterization of infants should not be performed in facilities which do not have active pediatric cardiac-surgical programs.

6. Present Utilization of Cardiac Catheterization Equipment/Services: The MSDH shall consider utilization of existing equipment/services and the presence of valid CONs for equipment/services within a given CC/OHSPA when reviewing CON applications. The MSDH shall not consider utilization of equipment/services at any hospital owned and/or operated by the state or its agencies when reviewing CON applications. The Mississippi State Department of Health may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

7. CON Application Analysis: 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.

8. Minimum CC/OHSPA Population: A minimum population base of 100,000 is required for applications proposing the establishment of cardiac catheterization services. The total population within a given CC/OHSPA shall be used when determining the need for services. Population outside an applicant's CC/OHSPA will be considered in determining need only when the applicant submits adequate documentation acceptable to the Mississippi State Department of Health, such as valid patient origin studies.

9. Minimum Caseload: Applicants proposing to offer adult diagnostic cardiac catheterization services must be able to project a caseload of at least 300 diagnostic catheterizations per year. Applicants proposing to offer adult therapeutic cardiac catheterization services must be able to project a caseload of at least 450 catheterizations, diagnostic and therapeutic, per year.

10. Residence of Medical Staff: Cardiac catheterizations must be under the control of and performed by personnel living and working within the specific hospital area. No site shall be approved for the provision of services by traveling teams.

11. Hospital-Based: All cardiac catheterizations and open-heart surgery services shall be located in acute care hospitals. The MSDH shall not approve Certificate of Need applications proposing the establishment of cardiac catheterization/open-heart surgery services in freestanding facilities or in freestanding ambulatory surgery facilities.

## 115.03 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Diagnostic Cardiac Catheterization Equipment and/or the Offering of Diagnostic Cardiac Catheterization Services

The Mississippi State Department of Health will review applications for a Certificate of Need 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of diagnostic cardiac catheterization equipment is reviewable if the equipment costs exceed $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.

1. Need Criterion: 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. Division of Health Planning and Resource Development population projections shall be used.

2. Minimum Procedures: An applicant proposing the establishment of diagnostic cardiac catheterization services only shall demonstrate that the proposed equipment/service utilization will be a minimum of 300 diagnostic cardiac catheterizations per year by its third year of operation.

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 forty-five (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. No hospital owned and/or operated by the state or its agencies shall be considered an existing unit in the CC/OHSPA under this section. The Mississippi State Department of Health may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

4. Staffing Standards: The applicant shall document that it has, or can obtain, the ability to administer the proposed services, provide sufficiently trained and experienced professional staff, and evaluate the performance of the programs. Mississippi State Department of Health staff shall use guidelines presented in *Optimal Resources for Examination of the Heart and Lungs: Cardiac Catheterization and Radiographic Facilities*, published under the auspices of the Inter-Society Commission for Heart Disease Resources, as resource materials when reviewing these items in an application.

5. Recording and Maintenance of Data: Applicants shall provide, as required under licensure standards, written assurance that they will record and maintain utilization data for diagnostic cardiac catheterization procedures (e.g., morbidity data, number of diagnostic cardiac catheterization procedures performed, and mortality data, all reported by race, sex, and payor status) and make such data available to the Mississippi State Department of Health annually.

6. Referral Agreement: An applicant proposing the establishment of diagnostic cardiac catheterization services only shall document that a formal referral agreement with a facility for the provision of emergency cardiac services (including open-heart surgery) will be in place and operational at the time of the inception of cardiac catheterization services.

7. Patient Selection: An applicant proposing to provide diagnostic cardiac catheterization services must (a) delineate the steps which will be taken to insure that high-risk or unstable patients are not catheterized in the facility, and (b) certify that therapeutic cardiac catheterization services will not be performed in the facility unless and until the applicant has received CON approval to provide therapeutic cardiac catheterization services.

8. Regulatory Approval: Before utilizing or providing the equipment or service, the applicant desiring to provide the diagnostic cardiac catheterization equipment or service shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

### 115.04 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Therapeutic Cardiac Catheterization Equipment and/or the Offering Of Therapeutic Cardiac Catheterization Services

The Mississippi State Department of Health will review applications for a Certificate of Need for the acquisition or otherwise control of therapeutic cardiac catheterization equipment and/or the offering of therapeutic 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of therapeutic cardiac catheterization equipment is reviewable if the equipment costs exceed $1,500,000. The offering of therapeutic 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.

1. **<u>Need Criterion</u>: The applicant shall document a minimum population base of 100,000 in the CC/OHSPA where the proposed therapeutic cardiac catheterization equipment/service is to be located. Division of Health Planning and Resource Development population projections shall be used.**

2. <u>Minimum Procedures</u>: An applicant proposing the establishment of therapeutic cardiac catheterization services shall demonstrate that the proposed equipment/service utilization will be a minimum of 450 cardiac catheterizations, both diagnostic and therapeutic, per year by its third year of operation and a minimum of 100 total PCIs.

3. <u>Impact on Existing Providers</u>: An applicant proposing to acquire or otherwise control therapeutic cardiac catheterization equipment and/or offer therapeutic 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. No hospital owned and/or operated by the state or its agencies shall be considered an existing unit in the CC/OHSPA under this section. The Mississippi State Department of Health may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

4. <u>Staffing Standards</u>: The applicant shall document that it has, or can obtain, the ability to administer the proposed services, provide sufficiently trained and experienced professional staff, and evaluate the performance of the programs. Mississippi State Department of Health staff shall use guidelines presented in O*ptimal Resources for Examination of the Heart and Lungs: Cardiac Catheterization and Radiographic Facilities*, published under the auspices of the Inter-Society Commission for Heart Disease Resources, as resource materials when reviewing these items in an application.

5. <u>Staff Residency:</u> The applicant shall certify that medical staff performing therapeutic cardiac catheterization procedures shall be onsite within thirty (30) minutes.

6. <u>Recording and Maintenance of Data:</u> Applicants shall provide, as required under licensure standards, written assurance that they will record and maintain separate utilization data for diagnostic and therapeutic cardiac catheterization procedures (e.g., morbidity data, number of diagnostic and therapeutic cardiac catheterization procedures performed and mortality data, all reported by race, sex and payor status) and make that data available to the Mississippi State Department of Health annually.

7. <u>Open-Heart Surgery:</u> An applicant proposing the establishment of therapeutic cardiac catheterization services shall document that open-heart surgery services are available or will be available on-site where the proposed therapeutic cardiac catheterization services are to be offered before such procedures are performed. However, qualified applicants may submit an application to perform percutaneous coronary intervention (PCI) services in a hospital without on-site cardiac surgery. To qualify, the applicant must meet the current American College of Cardiology (ACCF), American Heart Association Task Force on Practice Guidelines (AHA) and the Society of Cardiovascular Angiography and Interventions (SCAI)-ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention and the following:

a. Perform a minimum of 50 total PCIs per year/per primary operator, including 12 primary PCIs per year/per facility.

b. Qualified operators have a life-time experience of greater than 150 total PCIs with acceptable outcomes as primary operator after completing fellowship or have completed an Interventional Cardiology fellowship.

c. Minimum of less than 120 minutes to accomplish transfer from the onset of PCI complications to cardiopulmonary bypass. The program must have a formal emergency transfer agreement with a hospital providing open heart surgery. Transporting of the patient to the receiving hospital must include the capability to provide an intra-aortic balloon pump (IABP).

d. Programs must project and annually perform a minimum of 100 total PCIs per year. New programs may demonstrate compliance in the second full year of operation and continue a two year average of 100 total PCIs per year to include at a minimum-12 primary PCIs per year. New programs should have 2 years to reach the absolute minimum volume, but after that, programs failing to reach this volume for 2 consecutive years should not remain open. The Mississippi State Department of Health has the discretion under a finding of rare or unique circumstances to grant exception to the above based on a finding of need of access and quality of care by the program.

e. New Programs must participate in the STEMI ("ST"-Segment Elevation Myocardial Infarction) Network.

f. At the present time in the United States, there is no justification for a PCI program without on-site surgery to perform only elective procedures or not provide availability to primary PCI 24 hours/365 days per year. The Mississippi State Department of Health has the discretion under a finding of rare or unique circumstances to grant exception to the above based on a finding of need of access and quality of care by the program.

8. Regulatory Approval: Before utilizing or providing the equipment or service, the applicant desiring to provide the cardiac catheterization equipment or service shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

9. Applicants Providing Diagnostic Catheterization Services: An applicant proposing the establishment of therapeutic cardiac catheterization services, who is already an existing provider of diagnostic catheterization services, shall demonstrate that its diagnostic cardiac catheterization unit has been utilized for a minimum of 300 procedures per year for the two most recent years as reflected in the data supplied to and/or verified by the Mississippi State Department of Health.

# OPEN-HEART SURGERY SERVICES

## 116 Open-Heart Surgery

Open-heart surgery, defined as any surgical procedure in which a heart-lung machine is used to maintain cardiopulmonary functioning, involves a number of procedures, including valve replacement, repair of cardiac defects, coronary bypass, heart transplantation, and artificial heart implant.

Section 41-7-191(1)(d), Mississippi Code of 1972, as amended, requires Certificate of Need review for the establishment and/or offering of open-heart surgery services if the proposed provider has not offered such services on a regular basis within 12 months prior to the time the services would be offered.

Table 5-11 presents the utilization of existing facilities. Map 5-2 in the Open Heart Surgery criteria and standards section shows the Cardiac Catheterization/Open-Heart Surgery Planning Areas (CC/OHSPAs) and the location of existing services.

**Table 5-11**
**Number of Open-Heart Surgeries by Facility and Type**
**By Cardiac Catheterization/Open Heart Surgery Planning Area (CC/OHSPA)**
**FY 2012 and FY 2013**

| Facility | County | Number of Adult Open-Heart Procedures | | Number of Pediatric Open-Heart Procedures | | Number of Pediatric Heart Procedures (Less Open-Heart) | |
|---|---|---|---|---|---|---|---|
| | | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 |
| **CC/OHSPA 1** | | **271** | **327** | **0** | **20** | **0** | **8** |
| Baptist Memorial Hospital - DeSoto | DeSoto | 271 | 260 | 0 | 0 | 0 | 0 |
| Methodist Healthcare Olive Branch Hospital | DeSoto | 0 | 67 | 0 | 20 | 0 | 8 |
| **CC/OHSPA 2** | | **763** | **826** | **0** | **0** | **0** | **0** |
| Magnolia Regional Medical Center | Alcorn | 129 | 174 | 0 | 0 | 0 | 0 |
| North MS Medical Center | Lee | 634 | 652 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 3** | | **46** | **16** | **0** | **0** | **0** | **0** |
| Delta Regional Medical Center-Main Campus | Washington | 46 | 16 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 4** | | **146** | **116** | **0** | **0** | **0** | **0** |
| Baptist Memorial Hospital-Golden Triangle | Lowndes | 54 | 55 | 0 | 0 | 0 | 0 |
| Baptist Memorial Hospital-North Mississippi | Lafayette | 92 | 61 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 5** | | **860** | **804** | **212** | **223** | **179** | **186** |
| Central MS Medical Center | Hinds | 45 | 62 | 0 | 0 | 0 | 0 |
| MS Baptist Medical Center | Hinds | 254 | 272 | 0 | 0 | 0 | 0 |
| River Region Health System | Warren | 128 | 115 | 0 | 0 | 0 | 0 |
| St. Dominic Hospital | Hinds | 285 | 190 | 0 | 0 | 0 | 0 |
| University Hospital & Health System | Hinds | 148 | 165 | 212 | 223 | 179 | 186 |
| **CC/OHSPA 6** | | **170** | **193** | **0** | **0** | **0** | **0** |
| Anderson Medical Center | Lauderdale | 106 | 127 | 0 | 0 | 0 | 0 |
| Rush Foundation Hospital | Lauderdale | 64 | 66 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 7** | | **49** | **37** | 0 | 0 | **0** | **0** |
| Southwest MS Regional Med. Center | Pike | 49 | 37 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 8** | | **692** | **731** | **0** | **0** | **0** | **0** |
| Forrest General Hospital | Forrest | 550 | 601 | 0 | 0 | 0 | 0 |
| Wesley Medical Center | Lamar | 142 | 130 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 9** | | **326** | **428** | **0** | **0** | **0** | **0** |
| Memorial Hospital at Gulfport | Harrison | 115 | 156 | 0 | 0 | 0 | 0 |
| Ocean Springs Hospital | Jackson | 147 | 213 | 0 | 0 | 0 | 0 |
| Singing River Hospital | Jackson | 64 | 59 | 0 | 0 | 0 | 0 |
| **State Total** | | **3,323** | **3,478** | **212** | **243** | **179** | **194** |

Sources: Applications for Renewal of Hospital License for Calendar Years 2013 and 2014, and Fiscal Years 2012 and 2013 Annual Hospital Reports

**116.01 Policy Statement Regarding Certificate of Need Applications for the Acquisition of Open-Heart Surgery Equipment and/or the Offering of Open-Heart Surgery Services**

1. Service Areas: The need for open-heart surgery equipment/services shall be determined using the nine designated Cardiac Catheterization/Open-Heart Surgery Planning Areas (CC/OHSPAs) presented in this chapter of the Plan. Map 5-2 shows the CC/OHSPAs.

2. CC/OHSPA Need Determination: The need for open-heart surgery equipment/services within a given CC/OHSPA shall be determined independently of all other CC/OHSPAs.

3. Pediatric Open-Heart Surgery: Because the number of pediatric patients requiring open-heart surgery is relatively small, the provision of open-heart surgery for neonates, infants, and young children shall be restricted to those facilities currently providing the service.

4. Present Utilization of Open-Heart Surgery Equipment/Services: The Mississippi State Department of Health shall consider utilization of existing open-heart surgery equipment/ services and the presence of valid CONs for open-heart surgery equipment/services within a given CC/OHSPA when reviewing CON applications. The MSDH shall not consider utilization of equipment/services at any hospital owned and/or operated by the state or its agencies when reviewing CON applications. The Mississippi State Department of Health may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

5. CON Application Analysis: 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 open-heart surgery equipment and/or the offering of open-heart surgery 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.

6. Minimum CC/OHSPA Population: A minimum population base of 100,000 in a CC/OHSPA (as projected by the Division of Health Planning and Resource Development) is required before such equipment/services may be considered. The total population within a given CC/OHSPA shall be used when determining the need for services. Population outside an applicant's CC/OHSPA will be considered in determining need only when the applicant submits adequate documentation acceptable to the Mississippi State Department of Health, such as valid patient origin studies.

7. Minimum Caseload: Applicants proposing to offer adult open-heart surgery services must be able to project a caseload of at least 150 open-heart surgeries per year.

8. Residence of Medical Staff: Open-heart surgery must be under the control of and performed by personnel living and working within the specific hospital area. No site shall be approved for the provision of services by traveling teams.

## 116.02 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Open-Heart Surgery Equipment and/or the Offering of Open-Heart Surgery Services

The Mississippi State Department of Health will review applications for a Certificate of Need for the acquisition or otherwise control of open-heart surgery equipment and/or the offering of open-heart surgery 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of open-heart surgery equipment is reviewable if the equipment cost in excess of $1,500,000. The offering of open-heart surgery services is reviewable if the proposed provider has not provided those services on a regular basis within twelve (12) months prior to the time such services would be offered.

1. **<u>Need Criterion</u>: The applicant shall document a minimum population base of 100,000 in the CC/OHSPA where the proposed open-heart surgery equipment/service is to be located. Division of Health Planning and Resource Development population projections shall be used.**

2. <u>Minimum Procedures</u>: The applicant shall demonstrate that it will perform a minimum of 150 open-heart surgeries per year by its third year of operation.

3. <u>Impact on Existing Providers</u>: An applicant proposing to acquire or otherwise control open-heart surgery equipment and/or offer open-heart surgery services shall document that each facility offering open-heart surgery services which is (a) in the CC/OHSPA and (b) within 45 miles of the applicant, has performed a minimum of 150 procedures per year for the two most recent years as reflected in data supplied to and/or verified by the Mississippi State Department of Health. No hospital owned and/or operated by the state or its agencies shall be considered an existing unit in the CC/OHSPA under this section. The Mississippi State Department of Health may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

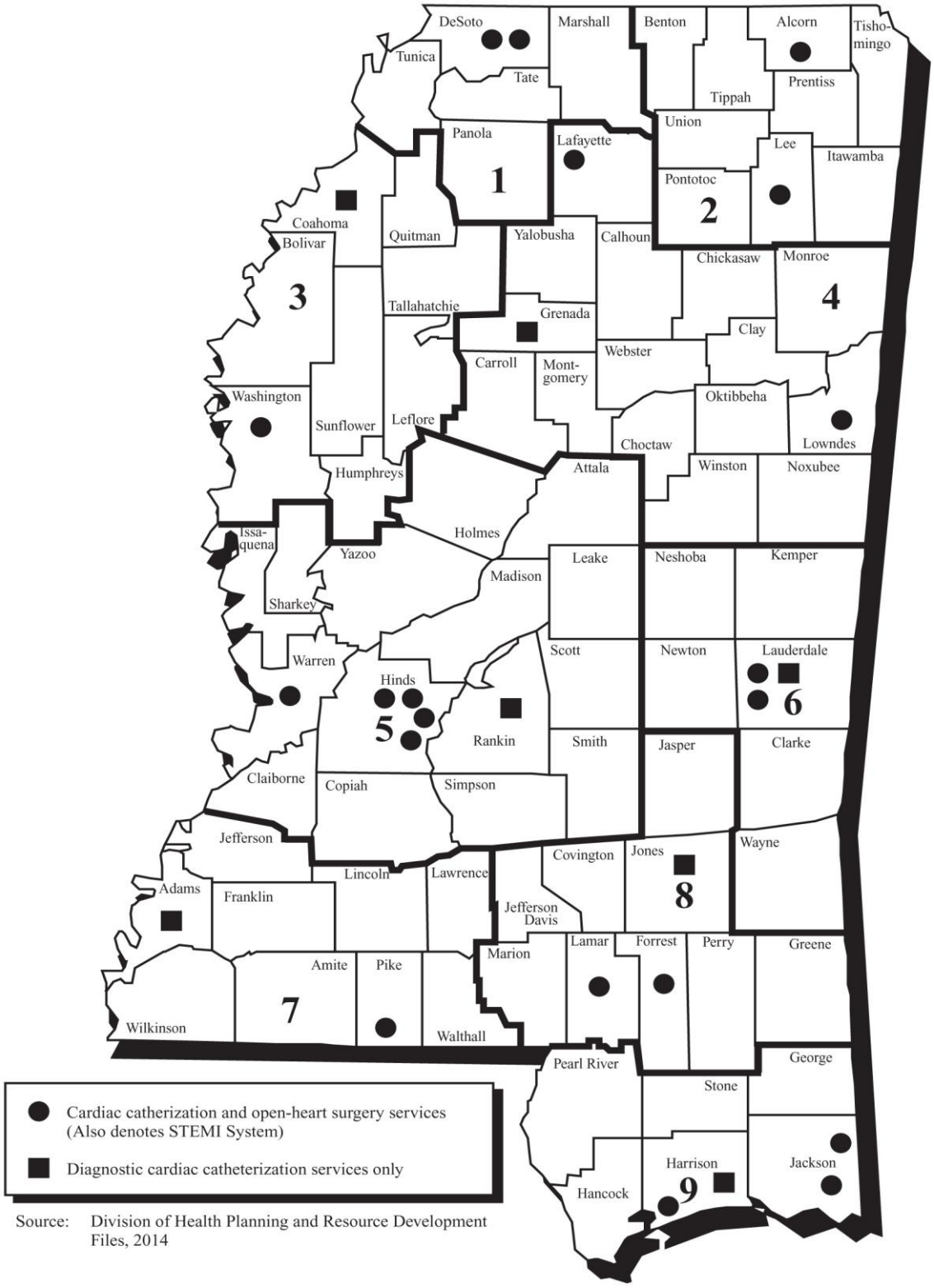
4. <u>Staffing Standard</u>s: The applicant shall document that it has, or can obtain, the ability to administer the proposed services, provide sufficiently trained and experienced professional staff, and evaluate the performance of the programs. Department of Health staff shall use guidelines presented in Optimal Resources for Examination of the Heart and Lungs: Cardiac Catheterization and Radiographic Facilities, published under the auspices of the Inter-Society Commission for Heart Disease Resources, and Guidelines and Indications for Coronary Artery Bypass Graft Surgery: A Report of the American College of Cardiology/American Heart Association Task Force on Assessment of Diagnostic and Therapeutic Cardiovascular Procedures (Subcommittee on Coronary Artery Bypass Graft Surgery), published under the auspices of the American College of Cardiology, as resource materials when reviewing these items in an application.

5. Staff Residency: The applicant shall certify that medical staff performing open-heart surgery procedures shall reside within forty-five (45) minutes normal driving time of the facility. The applicant shall document that proposed open-heart surgery procedures shall not be performed by traveling teams.

6. Recording and Maintenance of Data: Applicants shall provide, as required under licensure standards, written assurance that they will record and maintain utilization data for open-heart surgeries (e.g., morbidity data, number of open-heart surgeries performed and mortality data, all reported by race, sex, and payor status) and make such data available to the Mississippi State Department of Health annually.

7. Regulatory Approval: Before utilizing or providing the equipment or service, the applicant desiring to provide the open-heart surgery equipment or service shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

**Map 5-2**
**Cardiac Catherization/Open Heart Surgery**
**Planning Areas (CC/OHSPA)**
**and Location of Existing/CON-Approved Services**




Source: Division of Health Planning and Resource Development Files, 2014

# SYSTEMS OF CARE

## 117 Systems of Care

The four systems that comprise Mississippi's systems of care are: Emergency Medical Services (pre-hospital care), the Trauma Care System, the ST-Elevation Myocardial Infarction (STEMI) system, and the Acute Ischemic Stroke system. Mississippi is one of only six states that have multiple acute systems of care, and is the only state that has state-wide systems for Trauma, STEMI, and Stroke.

Each system of care has five key components: an organizational structure; protocols for the treatment of patients; an advisory group process, a performance/quality improvement process, and a data system.

## 118 Emergency Medical Services

In Mississippi, the Emergency Medical Services system is extraordinary in that member services and personnel not only provide the highest standards of pre-hospital care for the citizens and visitors of Mississippi, but ensure that patients are delivered to one of the many specialized facilities in one of the state's systems of care: the Trauma Care System, the STEMI System, or the Stroke System.

### 118.01 Organization

The Emergency Medical Services Act of 1973 (Miss. Code Ann. §63-13-11) established standards for the organization of emergency services. Prior to 1974, government involvement in emergency medical services was primarily limited to providing an emergency department in the public hospital. Private operators, predominantly funeral homes, provided emergency transportation.

Within the Department of Health, the Bureau of Emergency Medical Services organizes, regulates, and maintains a statewide program to improve emergency medical care. Further, it coordinates agency resources in "all-hazard" planning and response to disasters. This includes both incidents involving weapons of mass destruction as well as natural disasters, from hurricanes on the coast to ice storms in the Delta.

EMS Services are typically provided in response to a medical emergency reported through the 9-1-1 system. A 9-1-1 call placed from any telephone is automatically routed to the appropriate designated Public Safety Answering Point (PSAP).

Once the call is received, the nature of the medical emergency is determined, the call is prioritized, appropriate personnel and equipment are dispatched, and pre-arrival instructions are given if appropriate. The dispatcher may ask a number of questions to help assess the nature and severity of the injury or illness. At times the dispatcher may give the caller specific patient care instructions to maximize the success of the injury or illness outcome.

### 118.02 Protocols

When EMS professionals are called, the injured or ill person is often transported to the hospital in an ambulance. EMS professionals work under protocols approved by physicians designated as Medical Control. The physician oversees the care of patients in EMS systems, and is knowledgeable about patient care interventions and how EMS systems deliver care. Typically the physicians work in conjunction with local EMS managers to assure quality patient care. Emergency Medical Services may be provided by a fire department, an ambulance service, a county or government-based service, a hospital, or a combination of the above. EMS professionals may be paid or serve as volunteers in the community.

### 118.03 Advisory Group

In accordance with Miss. Code Ann. § 41-59-7, the Emergency Medical Services Advisory Council (EMSAC) is created, with membership appointed by the Governor.

### 118.04 Performance Improvement

The Medical Directors' Training and Quality Assurance (MDTQA) Committee provides performance improvement review of the EMS system, and develops model protocols for adoption by EMS services. The committee is chaired by the State EMS Medical Director, a board-certified emergency physician, and membership includes physicians who provide medical control to EMS services, EMS educators, and EMS practitioners.

### 118.05 Data System

The Mississippi EMS Information System (MEMSIS) uses a web-based system hosted by ImageTrend. The ImageTrend EMS State Bridge is a pre-hospital emergency data collection, analysis and reporting system. EMS State Bridge integrates information across the entire emergency medical community, whether in the ambulance, the local station, the county or state offices. With the EMS State Bridge, ambulance services are able to satisfy reporting requirements easily, without major investment and without learning complex new technology.

The system provides:

- Data collection based upon the NHTSA V2.2.1 data set.
- The aggregation of information from various units and the possibility of sharing this with other systems and agencies.
- Electronic transport of information to other systems and agencies to improve communications and to share pertinent information.
- Standard and ad hoc reporting to turn data into useful information.
- Easy expansion through its open architecture as needs grow and evolve.
- Scalability to conform to the needs of small, medium and large services as required.

Additionally, the system is HIPAA compliant and sensitive to medical data security issues. The application meets and exceeds state and federal data privacy requirements.

## 119 Mississippi Trauma Care System

Trauma is the leading cause of death for all age groups in Mississippi from birth to age 44. Serious injury and death resulting from trauma events such as vehicle crashes, falls, and firearms claim 500 lives and disable 6,000 Mississippians each year. Trauma victims require immediate, expert attention.

### 119.01 Organization

Through the State Trauma Plan, MSDH has designated seven trauma care regions; each incorporated as a 501c-3 organization which contracts with the MSDH to administer the plan within their respective region. The State Trauma Plan includes the seven regional plans, and allows for transfer protocols between trauma facilities and for trauma patients to be transported to the "most appropriate" trauma facility for their injuries.

To increase participation in the Trauma Care System, the Mississippi Legislature enacted legislation in 2008 which required MSDH to develop regulations to require all licensed acute care hospitals to participate in the Mississippi Trauma Care System ("Play or Pay"). Hospitals must participate at a level commensurate with their capabilities, or pay a non-participation fee. Each hospital's capability to participate in the Trauma Care System is reviewed annually by the respective Trauma Care Region and the Mississippi State Department of Health, which determines the appropriate level of participation and any fee.

Trauma facility designation levels set specific criteria and standards of care that guide hospital and emergency personnel in determining the level of care a trauma victim needs, and whether that hospital can care for the patient or transfer the patient to a Trauma Center that can administer more definitive care.

**Level I Trauma Centers** must have a full range of trauma capabilities, including an emergency department, a full-service surgical suite, intensive care unit, and diagnostic imaging. Level I centers must have a residency program, ongoing trauma research, and provide 24-hour trauma service. These hospitals provide a variety of other services to comprehensively care for both trauma patients and medical patients. Level I Trauma Centers act as referral facilities for Level II, III, and IV Trauma Centers. The University of Mississippi Medical Center (UMMC) in Jackson is the only Level 1 facility in the state. Two Level I Trauma Centers border the northern and southeastern part of the state and are located in Tennessee and Alabama. Additionally, a "stand-alone: Tertiary Pediatric Trauma Center located in Tennessee participates in the system.

**Level II Trauma Centers** must be able to provide comprehensive care to the severely injured patient. These facilities must have a full range of trauma capabilities, including an emergency department, a full service surgical suite, an intensive care unit, and diagnostic imaging. Level II Trauma Centers act as referral facilities for Level III and IV Trauma Centers.

**Level III Trauma Centers** must offer general surgical and orthopedic services and have the ability to manage the initial care of multi-system trauma–patients. Transfer–protocols must be in place with Level I and II Trauma Centers for patients that exceed the Level III Trauma Center's resources.

**Level IV Trauma Centers** provide initial evaluation and assessment of injured patients. Most patients will require transfer to facilities with more resources dedicated to providing optimal care for the injured patients. Level IV Trauma Centers must have transfer protocols in place with Level I, II, and III Trauma Centers.

### 119.02 Protocols

The Trauma Care System has developed uniform trauma activation criteria for all hospitals participating in the system to insure that patients receive appropriate care, regardless of locale. In addition, the hospital activation criteria has been combined with EMS destination guidelines, using the Center for Disease Control (CDC) developed Field Triage Decision Scheme, to have a single document that identifies the severity of the patient's injuries and the appropriate destination for the patient.

### 119.03 Advisory Group

In accordance with Miss. Code Ann. § 41-59-7, a committee of the Emergency Medical Services Advisory Council (EMSAC) is created, formed from the membership of the council. This committee is designated as the Mississippi Trauma Advisory Committee (MTAC), and acts as the advisory body for trauma care system development, and provides technical support to the Department in all areas of system design, clinical standards, data collection, quality improvement, funding, and evaluation of the trauma care system.

### 119.04 Performance Improvement

A systems approach to trauma care provides the best means to protect the public from pre-mature death and prolonged disability. The development of a statewide system of care for the injured must include a mechanism to monitor, measure, assess, and improve the processes and outcome of care. The process must be a continuous, multidisciplinary effort to reduce inappropriate variation in the care of trauma patients, and improve the effectiveness of the system and its components, including pre-hospital care (communication, dispatch, medical control, triage, and transport), hospital care, inter-facility management, rehabilitative care, and mass casualty disaster response.

Statewide performance improvement (PI) consists of multiple layers of continuous monitoring and evaluation of treatment processes to identify opportunities to optimize care and improve outcomes. The continuous cycle of evaluation extends from the PI programs of EMS providers and hospitals to review committees established at the regional and state levels.

The State Trauma PI Committee is appointed by the Director of Health Protection, MSDH. The committee is independent from the MTAC and EMSAC, and membership is comprised of the following representatives:

- Trauma Surgeon
- Emergency Room Physician
- State EMS PI Committee

- Trauma Registry Committee
- One representative from each Trauma Care Region
- Nursing representative from each Trauma Center level
- Tertiary Pediatric Trauma Center
- MTAC
- Trauma Medical Directors from each Level I Trauma Center

Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. The MSDH Division of Trauma provides administrative support to the PI Committee and all meetings of the Committee, including any sub-committee meetings, are by invitation only, and are not open to the public.

**119.05 Data System**

There are four objectives of the trauma registry: performance improvement, enhanced hospital operations, injury prevention, and medical research. In July 2006, the Mississippi State Department of Health deployed "Collector" Trauma Registry software to all hospitals that participated in the Mississippi Trauma Care System. Today, every Mississippi licensed acute care facility (hospital) having an organized emergency service or department uses the Collector software to submit their data to the State Trauma Registry.

Collector is a trauma registry system that helps users meet changing requirements of collection and evaluation of trauma data for quality assurance, accreditation, management, prevention and research. Collector is a complete data management and report generating package which includes a user friendly data entry and verification system, querying capabilities and integration with expert coding software. Collector offers coding, database and analysis capabilities.

In addition to its use as the trauma registry, Collector is also used as the state's burn registry the registry for Traumatic Brain and Spinal Cord Injuries (TBI/SCI).

**120 STEMI System of Care**

ST-elevation myocardial infarction (STEMI) is a significant public health problem and carries a high risk of death and disability. The American Heart Association (AHA) estimates that as many as 400,000 people will suffer from a STEMI heart attack each year in the United States. Mississippi currently leads the nation in mortality and morbidity from cardiovascular disease.

STEMI patients should be recognized as quickly as possible to identify those eligible for thrombolytic or primary PCI therapy. Research has shown that both morbidity and mortality can be reduced by the approach of rapid interventional reperfusion within ninety (90) minutes of hospital arrival. Additional research has demonstrated that in-the-field recognition by pre-hospital providers utilizing 12-lead ECG, coupled with pre-hospital notification of the receiving facilities, can further reduce time to reperfusion, resulting in improved outcomes.

### 120.01 Organization

The STEMI System of Care is a voluntary system comprised of a number of separate components, which are organized and work together, as a system. The individual components and elements are described below:

- STEMI Regions – This component facilitates system organization, coordination, and education requirements for both practitioners and the public. Each STEMI Region (North, Central, and South) will have a regional STEMI Coordinator, who will schedule and facilitate quarterly regional meetings.
- Pre-Hospital Component – EMS units are an integral part of the STEMI System. All EMTs and Paramedics need to have a basic knowledge and awareness of the STEMI System elements and system function. Specifically, this knowledge refers to entry criteria (identification of a STEMI), triage and destination guidelines, and communication procedures. On-line and Off-line medical control physicians will also need to be involved with the STEMI System elements and system function.
- Hospital Component – Hospitals may participate in the STEMI System on a voluntary basis, but must comply with and maintain nationally accepted criteria by December 30, 2012.
- Program oversight is provided by the Mississippi State Department of Health, Bureau of EMS.

Map 5-2 identifies those hospitals participating in the STEMI System.

### 120.02 Protocols

Standard treatment protocols for both PCI centers and Non-PCI centers have been developed and published by the Mississippi Healthcare Alliance (MHCA), the practitioners' organization which initiated the development of the system of care. The current protocols may be found on the MHCA website at: http://mshealthcarealliance.org/.

### 120.03 Advisory Group

The Mississippi Healthcare Alliance (MHCA) has established a STEMI System Advisory Committee comprised of the following members:

- Cardiology (chair)
- Emergency Medicine Physician (co-chair)
- Cardiologist
- Emergency Medicine Nurse
- Hospital Administration
- STEMI Nursing
- STEMI Registry
- EMS provider (Paramedic)
- EMS Administration

### 120.04 Performance Improvement

Statewide performance improvement (PI) consists of multiple layers of continuous monitoring and evaluation of treatment processes to identify opportunities to optimize care and improve outcomes. The continuous cycle of evaluation extends from the PI programs of EMS providers and hospitals to review committees established at the regional and state levels.

The STEMI PI Committee is appointed by the Mississippi Healthcare Alliance (MHCA) and membership is comprised of the following representatives:

- Cardiology (chair)
- Emergency Medicine Physician (co-chair)
- Cardiologist (one from each region)
- Emergency Medicine Physician (one from each region)
- Representative from each PCI Center
- Non-PCI hospital representative (one from each region)
- EMS representative (one from each region)

Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. The MSDH Division of Trauma provides administrative support to the PI Committee and all meetings of the Committee, including any sub-committee meetings, are by invitation only, and are not open to the public.

### 120.05 Data System

The data system for the STEMI System of Care is the ACTION Registry-GWTG (Get With The Guidelines). The ACTION Registry-GWTG is a risk-adjusted, outcomes-based quality improvement program that focuses exclusively on high-risk STEMI/NSTEMI patients. It helps hospitals apply American College of Cardiology (ACC) and American Heart Association (AHA) clinical guideline recommendations in their facilities, and provides invaluable tools to measure care and achieve quality improvement goals. Use of the ACTION Registry-GWTG is a requirement for participation in the STEMI System of Care.

## 121 Acute Ischemic Stroke System of Care

In 2007, Mississippi had an estimated population of 2.9 million people, with over 1.6 million living in a rural community (Rural Assistance Center, 2007). Stroke is the fifth leading cause of death in Mississippi, accounting for 5.3% of all deaths (Mississippi Statistically Automated Health Resource System [MSTAHRS] Report, 2010). Much of this death is premature: nearly one in five of all stroke deaths occur in Mississippians under 65 years of age. Mississippi's stroke mortality rate is the fifth highest in the nation, ranking behind Arkansas, South Carolina, Tennessee, and Alabama. Stroke death rates in Mississippi are falling slightly faster than the national average, but remain 23.8% higher than the overall U.S. rate. Therefore, it is critical that stroke care in Mississippi be a central focus for healthcare leaders.

In Mississippi, most of the specialty physicians, like neurologists, are located in select large medical centers; therefore, access to a stroke specialist is a primary concern in stroke care. Unlike trauma and STEMI systems of care, where it is essential to get the patient to a specialty facility in the shortest amount of time, stroke care can be initiated at the rural facility in conjunction with input from a practitioner trained in stroke care, either by telephone or

telemedicine. A careful patient history and examination, laboratory analysis, and a head CT can be done at "Stroke-Ready" hospitals, allowing the timely decision to treat the patient with thrombolytic therapy at that hospital before transfer to a "Stroke Center" ("drip-n-ship") if needed for Neurological, Neurosurgical, or Neuro-interventional support.

**121.01 Organization**

The Stroke System of Care is a voluntary system comprised of a number of separate components, which are organized and work together, as a system. The individual components and elements are described below:

- Stroke Regions – This component facilitates system organization, coordination, and education requirements for both practitioners and the public. Each Stroke Region (North, Central, and South; same as the STEMI Regions) will have a regional Coordinator, who will schedule and facilitate quarterly regional meetings.
- Pre-Hospital Component – EMS units are an integral part of the STEMI System. All EMTs and Paramedics need to have a basic knowledge and awareness of the Stroke System elements and system function. Specifically, this knowledge refers to entry criteria (identification of an acute ischemic stroke), triage and destination guidelines, and communication procedures. On-line and Off-line medical control physicians will also need to be involved with the Stroke System elements and system function.
- Hospital Component – Hospitals may participate in the Stroke System on a voluntary basis.
- Program oversight is provided by the Mississippi State Department of Health, Bureau of EMS.

**121.02 Protocols**

Standard treatment protocols for Stroke Ready and Non-Stroke hospitals have been developed and published by the Mississippi Healthcare Alliance (MHCA), the practitioners' organization which initiated the development of the system of care. The current protocols may be found on the MHCA website at: http://mshealthcarealliance.org/.

The protocols are centered on the "drip-n-ship" model, where outlying hospitals identify the presence of an acute ischemic stroke through a head CT, and initiate thrombolytic therapy (tPA-Alteplase) prior to transferring the patient to a Stroke Center. EMS protocols include the use of the Cincinnati Stroke Scale to identify potential stroke victims, and the delivery to a Stroke Ready hospital for diagnosis.

**121.03 Advisory Group**

The Mississippi Healthcare Alliance (MHCA) has established a STEMI System Advisory Committee comprised of the following members:

- Neurologist (chair)
- Emergency Medicine Physician
- Emergency Medicine Nurse
- Hospital Administration
- Neurology/Interventional Neurology/Interventional Radiology/Neurosurgery
- Stroke Nursing
- Stroke Registry

- EMS provider (Paramedic)
- EMS Administration

**121.04 Performance Improvement**

Statewide performance improvement (PI) consists of multiple layers of continuous monitoring and evaluation of treatment processes to identify opportunities to optimize care and improve outcomes. The continuous cycle of evaluation extends from the PI programs of EMS providers and hospitals to review committees established at the regional and state levels.

The Stroke PI Committee is appointed by the Mississippi Healthcare Alliance (MHCA) and membership is comprised of the following representatives:

- Neurologist (chair)
- Administrative or clinical representative from each Stroke Center
- Representatives from Stroke Ready hospitals (number to be determined by the committee)
- EMS representatives from hospital-based EMS, private EMS, and public/government EMS

Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. The MSDH Division of Trauma provides administrative support to the PI Committee and all meetings of the Committee, including any sub-committee meetings, are by invitation only, and are not open to the public.

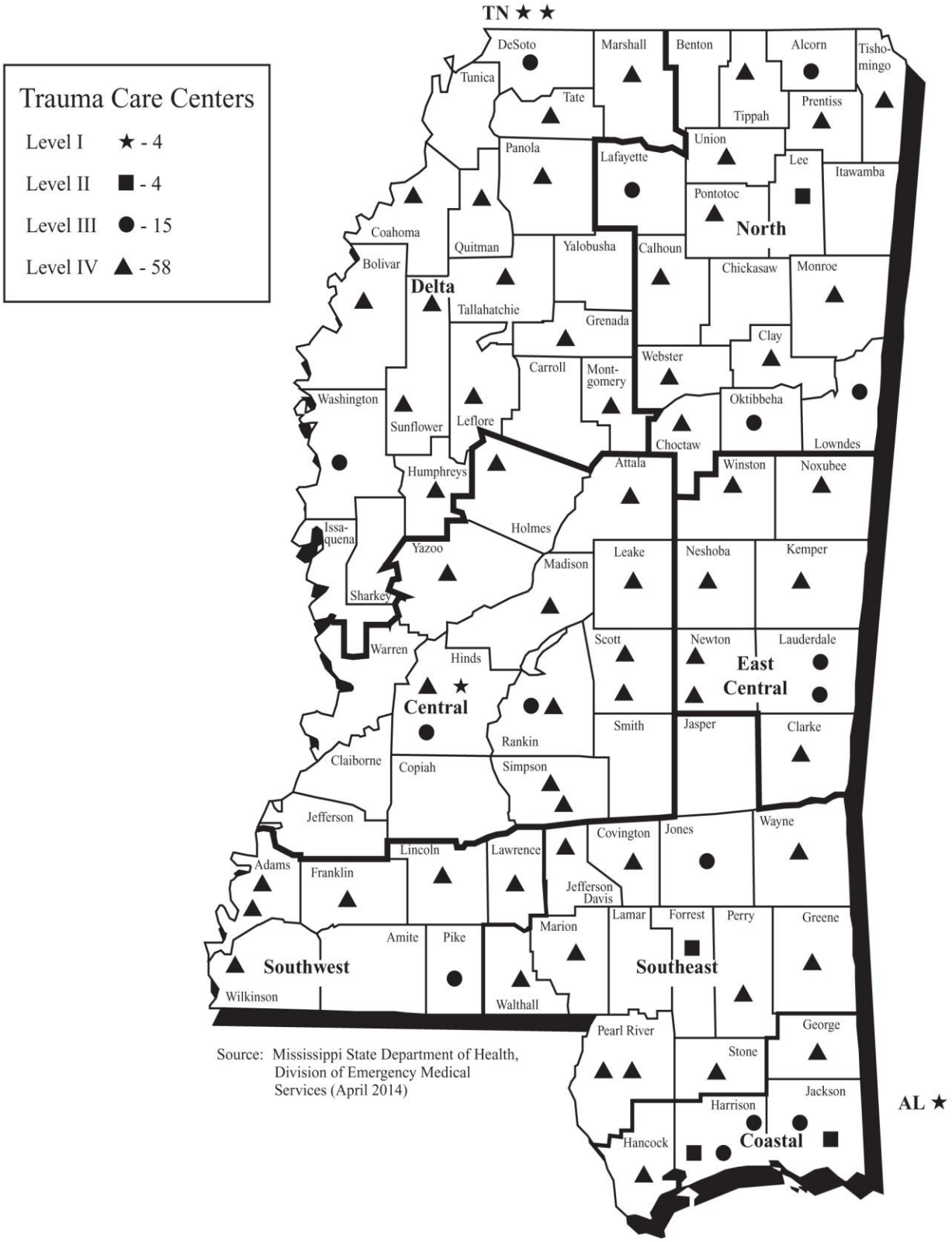
**121.05 Data System**

The American Heart Association/American Stroke Association GWTG (Get With The Guidelines) – Stroke is a performance improvement program for hospitals that uses a stroke registry to support its aims. GWTG-Stroke collects patient level data on characteristics, diagnostic testing, treatments, adherence to quality measures, and in-hospital outcomes in patients hospitalized with stroke and transient ischemic attack (TIA). Collection of comprehensive, continuous stroke data supports data analysis and the development of interventions to improve stroke care.

The primary goal of GWTG-Stroke program is to improve the quality of care and outcomes for patients hospitalized with stroke and TIA. The GWTG-Stroke registry helps achieve this goal in a variety of ways, including:

- Enabling high caliber stroke research;
- Promoting stroke center designation;
- Supporting hospital level quality improvement; and
- Driving the creation of regional stroke system

**Map 5-3**
**Mississippi Trauma Care Regions**



# CHAPTER 6

# COMPREHENSIVE MEDICAL REHABILITATION SERVICES

# Chapter 6 Comprehensive Medical Rehabilitation Services

## 100 Comprehensive Medical Rehabilitation Services

Comprehensive medical rehabilitation (CMR) services are defined as intensive care providing a coordinated multidisciplinary approach to patients with severe physical disabilities that require an organized program of integrated services. Level I facilities offer a full range of CMR services to treat disabilities such as spinal cord injury, brain injury, stroke, congenital deformity, amputations, major multiple trauma, polyarthritis, fractures of the femur, and neurological disorders. Level II facilities offer CMR services to treat disabilities other than spinal cord injury, congenital deformity, and brain injury.

The bed capacity, number of discharges, average length of stay, and occupancy rates for Level I and Level II CMR facilities are listed in Tables 6-1 and 6-2, respectively.

**Table 6-1**
**Hospital-Based Level I CMR Units**
**FY 2014**

| Facilities | Licensed Bed Capacity | Average Daily Census | Average Length of Stay | Occupancy Rate (%) |
|---|---|---|---|---|
| Baptist Memorial Hospital - DeSoto | 30 | 15.78 | 12.42 | 52.61 |
| Delta Regional Medical Center -West Campus | 24 | 7.17 | 13.07 | 44.81 |
| Forrest General Hospital | 24 | 19.4 | 15.32 | 80.84 |
| Memorial Hospital at Gulfport | 33 | 21.16 | 12.79 | 64.12 |
| Mississippi Methodist Rehab Center | 80 | 46.24 | 16.35 | 57.79 |
| North Miss Medical Center | 30 | 24.06 | 12.22 | 80.21 |
| University Hospital and Health System | 25 | 16.51 | 13.67 | 66.04 |
| **State Total** | **246** | **21.47** | **13.69** | **63.77** |

Source: 2014 Report on Hospitals, Mississippi State Department of Health

**Table 6-2**
**Hospital-Based Level II CMR Units**
**FY 2014**

| Facility | Licensed Bed Capacity | Average Daily Census | Average Length of Stay | Occupancy Rate (%) |
|---|---|---|---|---|
| Baptist Memorial Hospital - North Miss | 13 | 7.46 | 13.44 | 57.39 |
| Greenwood Leflore Hospital | 20 | 10.72 | 12.93 | 53.59 |
| Natchez Regional Medical Center | 20 | 4.24 | 13.28 | 21.21 |
| Northwest Miss Regional Med Center** | 0 | 0 | 0.00 | 0.00 |
| Anderson Regional Medical Center South | 20 | 13.36 | 11.71 | 66.79 |
| Singing River Hospital* | 20 | 16.86 | 11.50 | 84.32 |
| **TOTALS** | **93** | **8.77** | **10.48** | **47.22** |

Singing River Hospital*-CON approved February 2013 to add 8 Level II CMR beds.

Northwest Mississippi Regional Medical Center** - placed 14 Beds in abeyance September 2013.

Source: 2014 Report on Hospitals, Mississippi State Department of Health

## 101 The Need for Comprehensive Medical Rehabilitation Services

A total of 246 Level I and 93 Level II rehabilitation beds were operational in Mississippi during FY 2014. Map 6-3 at the end of this chapter shows the location of all CMR facilities in the state. The state as a whole serves as a single service area when determining the need for comprehensive medical rehabilitation beds/services. Based on the bed need formula found in the criteria and standards section of this chapter, Mississippi currently needs six Level I beds; however, needs 90 additional Level II CMR beds.

## 102 The Need for Children's Comprehensive Medical Rehabilitation Services

No universally accepted methodology exists for determining the need of children's comprehensive medical rehabilitation services. The bed need methodology in the previous section addresses need for all types of comprehensive medical rehabilitation beds, including those for children.

# CERTIFICATE OF NEED

# CRITERIA AND STANDARDS FOR COMPREHENSIVE MEDICAL REHABILITATION BEDS/SERVICES

## 103 Certificate of Need Criteria and Standards for Comprehensive Medical Rehabilitation Beds/Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 103.01 Policy Statement Regarding Certificate of Need Applications for Comprehensive Medical Rehabilitation Beds/Services

1. Definition: Comprehensive Medical Rehabilitation Services provided in a freestanding comprehensive medical rehabilitation hospital or comprehensive medical rehabilitation distinct part unit are defined as intensive care providing a coordinated multidisciplinary approach to patients with severe physical disabilities that require an organized program of integrated services. These disabilities include: stroke, spinal cord injury, congenital deformity, amputation, major multiple trauma, fractures or the femur (hip fracture), brain injury, polyarthritis, including rheumatoid arthritis, or neurological disorders, including multiple sclerosis, motor neuron disease, polyneuropathy, muscular dystrophy, and Parkinson's Disease.

2. Planning Areas: The state as a whole shall serve as a single planning area for determining the need of comprehensive medical rehabilitation beds/services.

3. Comprehensive Medical Rehabilitation Services:

   Level I - Level I comprehensive medical rehabilitation providers may provide treatment services for all rehabilitation diagnostic categories.

   Level II - Level II comprehensive medical rehabilitation providers may provide treatment services for all rehabilitation diagnostic categories except: (1) spinal cord injuries, (2) congenital deformity, and (3) brain injury.

4. CMR Need Determination: The Mississippi State Department of Health shall determine the need for Level I comprehensive rehabilitation beds/services based upon a formula of 0.08 beds per 1,000 population for the state as a whole.

   The Mississippi State Department of Health shall determine need for Level II comprehensive medical rehabilitation beds/services based upon a formula of 0.0623 beds per 1,000 population for the state as a whole. Table 6-3 shows the current need for comprehensive medical rehabilitation beds.

5. Present Utilization of Rehabilitation Services: When reviewing CON applications, the MSDH shall consider the utilization of existing services and the presence of valid CONs for services.

6. Minimum Sized Facilities/Units: Freestanding comprehensive medical rehabilitation facilities shall contain not less than 60 beds. Hospital-based Level I comprehensive medical rehabilitation units shall contain not less than 20 beds. If the established formula reveals a need for more than ten beds, the MSDH may consider a 20-bed (minimum sized) unit for approval. Hospital-based Level II comprehensive medical rehabilitation facilities are limited to a maximum of 30 beds. New Level II rehabilitation units shall not be located within a 45 mile radius of any other CMR facility.

7. Expansion of Existing CMR Beds: Before any additional CMR beds, for which CON review is required, are approved for any facility presently having CMR beds, the currently licensed CMR beds at said facility shall have maintained an occupancy rate of at least 80 percent for the most recent 12-month licensure reporting period or at least 70 percent for the most recent two years.

8. Priority Consideration: When reviewing two or more competing CON applications, the MSDH shall use the following factors in the selection process, including, but not limited to, a hospital having a minimum of 160 licensed acute care beds as of January 1, 2000; the highest average daily census of the competing applications; location of more than 45 mile radius from an existing provider of comprehensive medical rehabilitation services; proposed comprehensive range of services; and the patient base needed to sustain a viable comprehensive medical rehabilitation service.

9. Children's Beds/Services: Should a CON applicant intend to serve children, the application shall include a statement to that effect.

10. Other Requirements: Applicants proposing to provide CMR beds/services shall meet all requirements set forth in CMS regulations as applicable, except where additional or different requirements, as stated in the *State Health Plan* or in the licensure regulations, are required. Level II comprehensive medical rehabilitation units are limited to a maximum size of 30 beds and must be more than a 45 mile radius from any other Level I or Level II rehabilitation facility.

11. Enforcement: In any case in which the MSDH finds a Level II Provider has failed to comply with the diagnosis and admission criteria as set forth above, the provider shall be subject to the sanctions and remedies as set forth in Section 41-7-209 of the Mississippi Code of 1972, as amended, and other remedies available to the MSDH in law or equity.

12. Effective July 1, 1994, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need under the authority of Section 41-7-191(1)(c), unless there is a projected need for such beds in the planning district in which the facility is located.

13. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

## 103.02 Certificate of Need Criteria and Standards for Comprehensive Medical Rehabilitation Beds/Services

The MSDH will review applications for a CON for the establishment, offering, or expansion of comprehensive medical rehabilitation beds and/or services under the statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code 1972, Annotated, as amended. The MSDH will also review applications for Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

In addition, comprehensive rehabilitation services are reviewable if the proposed provider has not provided such services on a regular basis within twelve (12) months prior to the time such services would be offered. The twenty (20) bed hospital-based comprehensive medical rehabilitation facilities which are operational or approved on January 1, 2001, are *grandfathered* and shall not be required to obtain a Certificate of Need as long as the services are provided continuously by those facilities and are limited to the diagnoses set forth below for Level II comprehensive medical rehabilitation facilities.

1. **Need Criterion:**

   a. **New/Existing Comprehensive Medical Rehabilitation Beds/Service**s: The need for Level I comprehensive medical rehabilitation beds in the state shall be determined using a methodology of 0.08 beds per 1,000 population. The state as a whole shall be considered as a single planning area.

      The need for Level II comprehensive medical rehabilitation beds in the state shall be determined using a methodology of 0.0623 comprehensive medical rehabilitation beds per 1,000 population. The state as a whole shall be considered a planning area.

   b. **Projects which do not involve the addition of any CMR beds**: The applicant shall document the need for the proposed project. Documentation may consist of, but is not necessarily 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).

   **c.** **Projects which involve the addition of beds**: The applicant shall document the need for the proposed project. Exception: Notwithstanding the service specific need requirements as stated in "a" above, the MSDH may approve additional beds for facilities which have maintained an occupancy rate of at least 80 percent for the most recent 12-month licensure reporting period or at least 70 percent for the most recent two (2) years.

   d. **Level II Trauma Centers**: The applicant shall document the need for the proposed CMR project. Exception: Notwithstanding the forty-five (45) mile radius distance requirement from an existing CMR provider, the MSDH may approve the establishment of a 20-bed Level II CMR unit for any hospital without CMR beds which holds Level II Trauma care designation on July 1, 2003, as well as on the date the Certificate of Need application is filed.

e. **Conversion of Level II CMR Beds to Level I CMR Beds**: An existing Level II CMR unit may convert no more than eight (8) beds to Level I CMR status if the Lever II facility meets the following requirements:

(i) The Level II CMR unit demonstrates has maintained an occupancy rate of at least 80 percent for the most recent 12-month licensure reporting period, as reported in the Mississippi State Health Plan.

(ii) The Level II CMR unit documents the need for Level I CMR status for up to eight (8) beds by documenting that the facility expects to have a minimum of sixty (60) patient admissions annually with the three Level I rehabilitation categories: (1) spinal cord injuries, (2) congenital deformity, and (3) brain injury. The documentation will include analysis of Level II CMR unit's patient data and other patient projections to show such expected admissions.

(iii) The Level II CMR unit shall document ability to treat the additional three Level I rehabilitation categories, including but not limited to, documenting compliance with the standards for Level I CMR units, Criterion 2 (Treatment and Programs) and Criterion 3 (Staffing and Services).

(iv) The Level II facility shall obtain the written support for the project from any Level I CMR facility within a 45 mile radius of the facility. The Department shall assess the potential of the project on any adverse impact on any Level I CMR facilities operating in the state and such assessment shall be continually reviewed by the Department. The Department may revoke or suspend any Level II CMR unit operating a Level I program for non-compliance or finding of adverse impact to any Level I CMR units or programs in the state.

2. Applicants proposing to establish Level I comprehensive medical rehabilitation services shall provide treatment and programs for one or more of the following conditions:

a. stroke,

b. spinal cord injury,

c. congenital deformity,

d. amputation,

e. major multiple trauma,

f. fractures of the femur (hip fracture),

g. brain injury,

h. polyarthritis, including rheumatoid arthritis, or

i. neurological disorders, including multiple sclerosis, motor neuron disease, polyneuropathy, muscular dystrophy, and Parkinson's Disease.

Applicants proposing to establish Level II comprehensive medical rehabilitation services shall be prohibited from providing treatment services for the following rehabilitation diagnostic categories: (1) spinal cord injury, (2) congenital deformity, and (3) brain injury.

Facilities providing Level I and Level II comprehensive medical rehabilitation services shall include on their *Annual Report of Hospitals* submitted to the MSDH the following information: total admissions, average length of stay by diagnosis, patient age, sex, race, zip code, payor source, and length of stay by diagnosis.

3. Staffing and Services

a. Freestanding Level I Facilities

i. Shall have a Director of Rehabilitation who:

(1) provides services to the hospital and its inpatient clientele on a full-time basis;

(2) is a Doctor of Medicine or Osteopathy licensed under state law to practice medicine or surgery; and

(3) has had, after completing a one-year hospital internship, at least two years of training in the medical management of inpatients requiring rehabilitation services.

ii. The following services shall be provided by full-time designated staff:

(1) speech therapy

(2) occupational therapy

(3) physical therapy

(4) social services

iii. Other services shall be provided as required, but may be by consultant or on a contractual basis.

b. Hospital-Based Units

i. Both Level I and Level II hospital-based units shall have a Director of Rehabilitation who:

(1) is a Doctor of Medicine or Osteopathy licensed under state law to practice medicine or surgery;

(2) has had, after completing a one-year hospital internship, at least two years of training or experience in the medical management of inpatients requiring rehabilitation services; and

(3) provides services to the unit and its inpatients for at least 20 hours per week.

ii. The following services shall be available full time by designated staff:

(1) physical therapy

(2) occupational therapy

(3) social services

iii. Other services shall be provided as required, but may be by consultant or on a contractual basis.

### 103.03 Certificate of Need Criteria and Standards for Children's Comprehensive Medical Rehabilitation Beds/Services

Until such time as specific criteria and standards are developed, the MSDH will review CON applications for the establishment of children's comprehensive medical rehabilitation services under the general criteria and standards listed in the *Mississippi Certificate of Need Review Manual* in effect at the time of submission of the application, and the preceding criteria and standards listed.

### 103.04 Comprehensive Medical Rehabilitation Bed Need Methodology

The determination of need for Level I CMR beds/services will be based on 0.08 beds per 1,000 population in the state as a whole for the year 2020. Table 6-3 presents Level I CMR bed need.

The determination of need for Level II CMR beds/services will be based on 0.0623 beds per 1,000 population in the state as a whole for the year 2020. Table 6-3 presents Level II CMR bed need.

**Table 6-3**
**Comprehensive Medical Rehabilitation Bed Need**
**2014**

| Level | Estimated Population 2020 | Aproved CMR Beds | CMR Beds Needed | Difference |
|---|---|---|---|---|
| Level I | 3,156,054 | 246 | 252 | 6 |
| Level II * | 3,156,054 | 107 | 197 | 90 |

Level II*- Northwest Mississippi Regional Medical Center placed 14 Beds in abeyance September 2013.

Source: Applications for renewal of Hospital License for Fiscal Year 2014; *Mississippi Population Projections 2016, 2020, and 2025,* Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, February 2012.

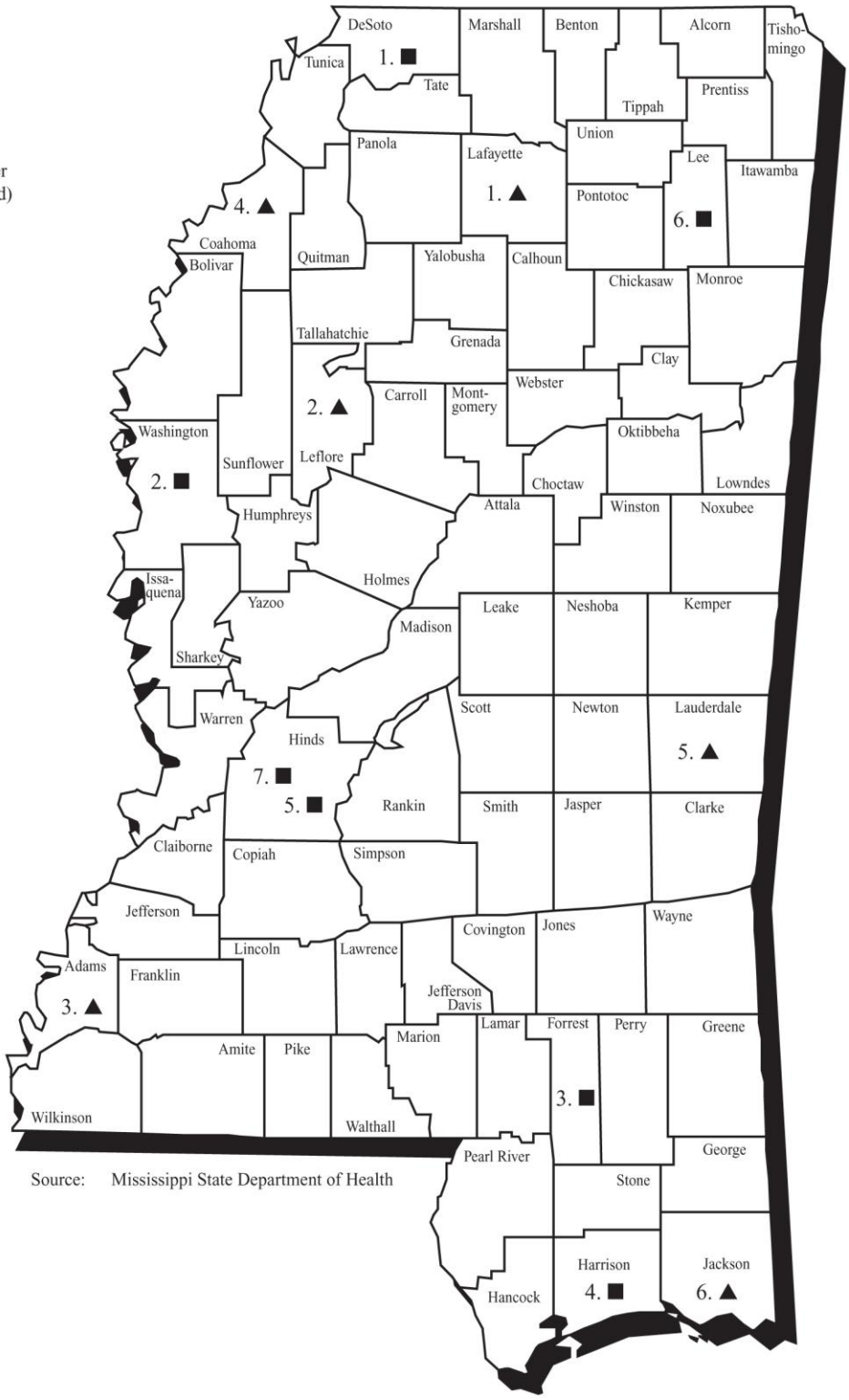
**Map 6-1**
**Location of Comprehensive**
**Medical Rehabilitation Facilities Level I and Level II**

**Level I: ■**

1. ■ Baptist Memorial Hospital
   DeSoto County
   30 Bed Unit
2. ■ Delta Regional Medical Center
   24 Bed Unit (8 CON Approved)
3. ■ Forrest General Hospital
   24 Bed Unit
4. ■ Memorial Hospital
   at Gulfport
   33 Bed Unit
5. ■ Mississippi Methodist
   Hospital and Rehabilitation
   Center
   80 Bed Unit
6. ■ North Mississippi
   Medical Center
   30 Bed Unit
   (30 CON Approved)
7. ■ University Hospital
   and Health System
   25 Bed Unit

**Level II: ▲**

1. ▲ Baptist Memorial Hospital
   North Mississippi
   13 Bed Unit
2. ▲ Greenwood Leflore Hospital
   20 Bed Unit
3. ▲ Natchez Regional
   Medical Center
   20 Bed Unit
4. ▲ Northwest MS Regional
   Medical Center
   14 Beds in Abeyance
5. ▲ Anderson Regional
   Medical Center-South
   20 Bed Unit
6. ▲ Singing River Hospital
   20 Bed Unit
   (8 CON Approved)




Source: Mississippi State Department of Health

## 104 Certificate of Need Criteria and Standards for Comprehensive Residential Medical Rehabilitation Beds/Services for Patients with Brain and Spinal Cord Injury (CR-BSCI)

Note: Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the Mississippi Certificate of Need Review Manual and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 104.01 Policy Statement Regarding Certificate of Need Applications for Comprehensive Residential Rehabilitation Beds/Services for Patients with Brain and Spinal Cord Injury

1. Definitions:

(a) Comprehensive Residential Rehabilitation Services for Patients with Brain and Spinal Cord Injury are defined as a building or place which is devoted to the provision of residential treatment and rehabilitative care in a transitional living program or a life long living program for periods of continuing for twenty-four (24) hours or longer for persons who have-brain and/or spinal cord injury.

(b) A transitional living program is treatment and rehabilitative care delivered to brain and spinal cord injury patients who require education and training for independent living with a focus on compensation for skills which cannot be restored; such care prepares clients for maximum independence, teaches necessary skills for community interaction, works with clients pre-vocational and vocational training and stresses cognitive, speech, and behavioral therapies structured to the individual needs of patients.

(c) Life long living program is treatment and rehabilitative care as shall be delivered to brain and spinal cord injury patients who have been discharged from advanced treatment and rehabilitation, but who cannot live at home independently, and who require on-going lifetime support and rehabilitation.

(d) A brain injury is a traumatic or other insult to the brain and its related parts resulting in organic damage thereto that may cause physical, intellectual, emotional, social, and/or vocational changes in a person.

(e) A spinal cord injury is a traumatic or other damage to any part of the spinal cord or nerves at the end of the spinal canal resulting in a change, either temporary or permanent, in the cord's normal motor, sensory, or automatic function.

2. Planning Areas: The state as a whole shall serve as a single planning area for determining the need of comprehensive residential rehabilitation beds/services for patients with brain and spinal cord injury.

3. Any application for a CRR-BSCI shall document for the need for such a program in the state. Any application for an expansion through the addition of beds at a CRR-BSCI shall document an occupancy rate in excess of 70 percent for the most recent two (2) years.

4. Present Utilization of Rehabilitation Services: When reviewing CON applications for CRR-BSCI, the MSDH shall consider the utilization of existing services and the presence of valid CONs for services.

5. Minimum Sized Facilities/Units: CRR-BSCI facilities shall contain not less than 6 beds nor more than 30 beds. MSDH shall give a preference for CRR-BSCI facilities that are not located within a 45 mile radius of any other CRR-BSCI facility.

6. Children's Beds/Services: Should a CON applicant intend to serve children, the application shall include a statement to that effect.

7. Other Requirements: Applicants proposing to provide CRR-BSCI beds/services shall meet all requirements set forth in CMS regulations as applicable, except where additional or different requirements, as stated in the State Health Plan or in the licensure regulations, are required. There will be no CON's issued for CRR-BSCI facilities until regulations are adopted and approved by MSDH.

8. Effective July 1, 1994, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need under the authority of Section 41-7-191(1)(c), unless there is a projected need for such beds in the planning district in which the facility is located.

9. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

### 104.02 Certificate of Need Criteria and Standards for Comprehensive Residential Rehabilitation Beds/Services for Patients with Brain and Spinal Cord Injury (CRR-BSCI)

The MSDH will review applications for a CON for the establishment, offering, or expansion of comprehensive residential rehabilitation beds and/or services for patients with brain and spinal cord injury under the statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code 1972, Annotated, as amended. The MSDH will also review applications for Certificate of Need according to the general criteria listed in the Mississippi Certificate of Need Review Manual; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

In addition, comprehensive rehabilitation services are reviewable if the proposed provider has not provided such services on a regular basis within twelve (12) months prior to the time such services would be offered.

1. Need Criterion:

   a. New/Existing Comprehensive Residential Rehabilitation Beds/Services for Patients with Brain and Spinal Cord Injury: shall be determined considering the current and projected population of the state as whole and the current and project incidence of brain and spinal cord injury. The state as a whole shall be considered a planning area.

   b. Projects which do not involve the addition of any CRR-BSCI beds: The applicant shall document the need for the proposed project. Documentation may consist of, but is not necessarily 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).

   c. Projects which involve the addition of beds: The applicant shall document the need for the proposed project. MSDH may approve additional beds for facilities which have maintained an occupancy rate of at least 70 percent for the most recent two (2) years.

2. Applicants proposing to establish comprehensive residential rehabilitation services for patients with brain and spinal cord injury shall demonstrate the ability to meet all CMS and state licensure requirements.

# CHAPTER 7

# OTHER HEALTH SERVICES

# Chapter 7 Other Health Services

Other ambulatory health services consist of primary, specialty, and supportive medical services provided on an outpatient basis, in contrast to services provided in the home or to persons who are inpatients. The term ambulatory care implies that patients must travel to a location outside the home to receive services that do not require an overnight hospital stay. This chapter describes several organizations which provide ambulatory care in Mississippi. In addition, this chapter discusses home health services in Mississippi.

## 100 Ambulatory Surgery Services

During FY 2013, 72 of the state's medical/surgical hospitals reported a total of 274,834 general surgical procedures. This number included 174,198 ambulatory surgeries, almost a 0.97 percent increase of the 169,801 ambulatory surgeries performed in hospitals during 2012. The percentage of surgeries performed on an outpatient basis in hospitals has risen from 6.6 percent in 1981 to 63.4 percent in 2013. Table 7-1 displays hospital affiliated surgery data by general hospital service area.

Mississippi licenses 20 freestanding ambulatory surgery facilities. Table 7-2 shows the distribution of facilities and related ambulatory surgery data. The 20 facilities reported 79,933 procedures during fiscal year 2013. Total outpatient surgeries (hospitals and freestanding facilities combined) comprised 71.63 percent of all surgeries performed in the state. The number of procedures performed in freestanding facilities was 22.53 percent of total surgeries in 2013.

**Table 7-1**
**Selected Hospital Affiliated Ambulatory Surgery Data by General Hospital Service Area**
**FY 2013**

| General Hospital Service Area | Total Number of Surgeries | Number of Hospitals | Number of Ambulatory Surgeries | Ambulatory Surgeries / Total Surgeries (Percent of) | Number of Operating Rooms / Suites | Average[1] Number of Surgical Procedures per Day / Suite |
|---|---|---|---|---|---|---|
| **Mississippi** | **274,834** | **72** | **174,198** | **63.4** | **453** | **2.43** |
| 1 | 7,429 | 5 | 4,428 | 59.6 | 21 | 1.42 |
| 2 | 30,577 | 5 | 20,016 | 65.5 | 44 | 2.78 |
| 3 | 21,772 | 7 | 15,929 | 73.2 | 35 | 2.49 |
| 4 | 25,874 | 8 | 18,555 | 71.7 | 39 | 2.65 |
| 5 | 85,982 | 17 | 48,007 | 55.8 | 140 | 2.46 |
| 6 | 22,847 | 9 | 17,769 | 77.8 | 43 | 2.13 |
| 7 | 18,577 | 6 | 12,820 | 69.0 | 35 | 2.12 |
| 8 | 23,628 | 6 | 14,062 | 59.5 | 42 | 2.25 |
| 9 | 38,148 | 9 | 22,612 | 59.3 | 54 | 2.83 |

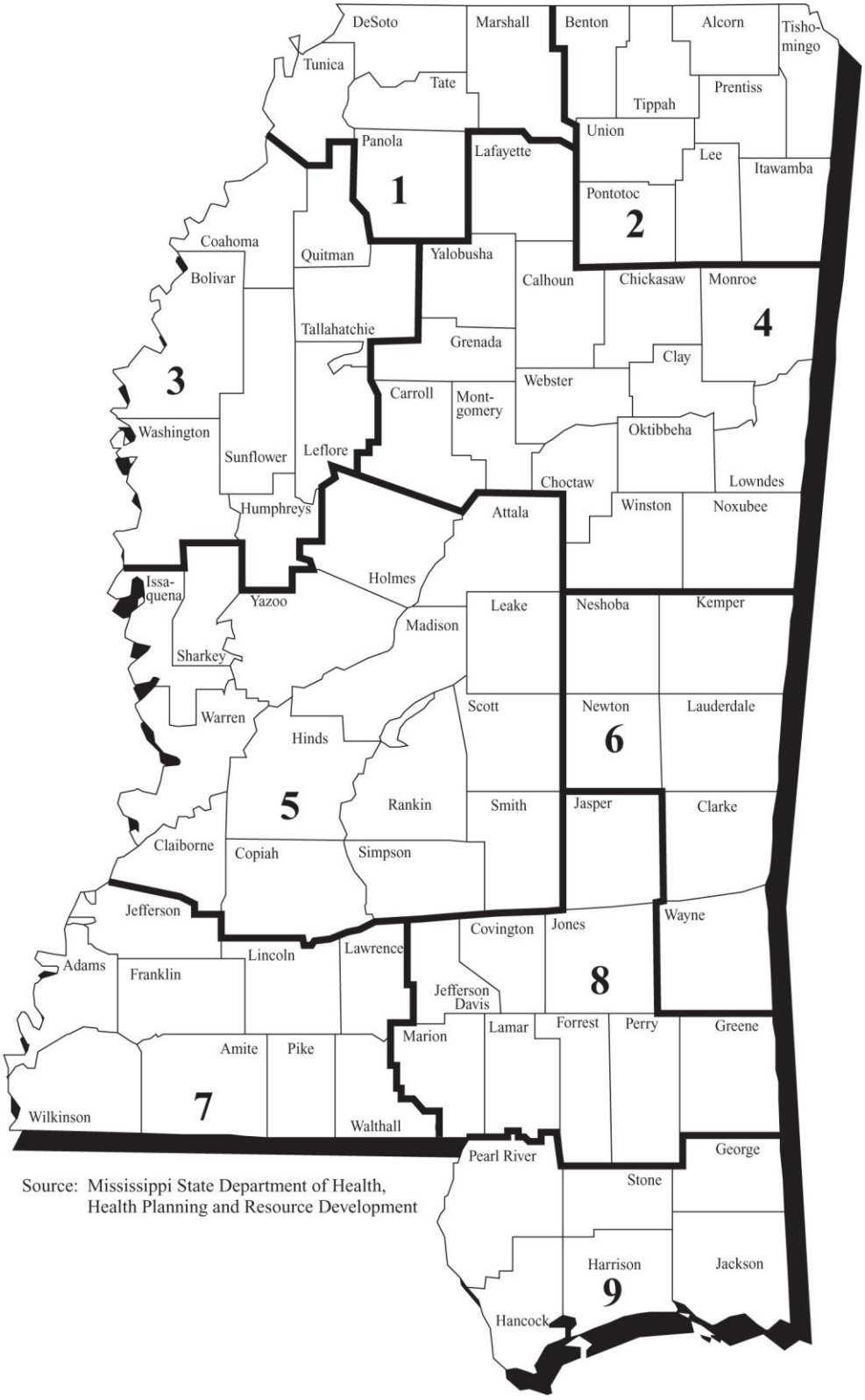
[1] Based on 250 working days per year
Source: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report

**Table 7-2**
**Selected Freestanding Ambulatory Surgery Data by County**
**FY 2013**

| Ambulatory Surgery Planning Area | County | Number of Freestanding Ambulatory Surgery Centers | Number of Ambulatory Surgeries Performed | Number of Operating Rooms/Suites | Number[1] of Surgical Procedures Per Day/O.R. Suite |
|---|---|---|---|---|---|
| **(ASPAs)** | **Mississippi** | **20** | **79,933** | **81** | **3.95** |
| 1 | DeSoto | 1 | 1,962 | 3 | 2.62 |
| 2 | Lee | 1 | 6,506 | 8 | 3.25 |
| 4 | Lafayette | 1 | 3,430 | 4 | 3.43 |
| 5 | Hinds | 4 | 24,635 | 19 | 5.19 |
| 5 | Rankin | 1 | 4,201 | 5 | 3.36 |
| 6 | Lauderdale | 1 | 3,081 | 3 | 4.11 |
| 8 | Forrest | 4 | 20,593 | 16 | 5.15 |
| 8 | Jones | 1 | 1,622 | 3 | 2.16 |
| 9 | Harrison | 3 | 8,923 | 11 | 3.24 |
| 9 | Jackson | 3 | 4,980 | 9 | 2.21 |

[1] Based on 250 working days per year
Source: Survey of individual ambulatory surgery centers conducted April 2014; Division of Health Planning and Resource Development, Mississippi State Department of Health

**Map 7-1**
**Ambulatory Surgery Planning Areas**




Source: Mississippi State Department of Health,
Health Planning and Resource Development

# AMBULATORY SURGERY SERVICES

## 101 Certificate of Need Criteria and Standards for Ambulatory Surgery Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 101.01 Policy Statement Regarding Certificate of Need Applications for Ambulatory Surgery Services

1. Ambulatory Surgery Planning Areas (ASPAs): The Mississippi State Department of Health (MSDH) shall use the Ambulatory Surgery Planning Areas as outlined on Map 7-1 of this Plan for planning and Certificate of Need (CON) decisions. The need for ambulatory surgery facilities in any given ASPA shall be calculated independently of all other ASPAs.

2. Ambulatory Surgery Facility Service Areas: An applicant's Ambulatory Surgery Facility Service Area must have a population base of approximately 60,000 within 30 minutes normal driving time or 25 miles, whichever is greater, of the proposed/established facility. Note: Licensure standards require a freestanding facility to be within 15 minutes traveling time of an acute care hospital and a transfer agreement with said hospital must be in place before a CON may be issued. Additionally, the ambulatory surgery facility service area must have a stable or increasing population.

3. Definitions: The Glossary of this Plan includes the definitions in the state statute regarding ambulatory surgery services.

4. Surgeries Offered: The MSDH shall not approve single service ambulatory surgery centers. Only multi-specialty ambulatory surgery center proposals may be approved for a CON.

5. Minimum Surgical Operations: The minimum of 1,000 surgeries required to determine need is based on five (5) surgeries per operating room per day x 5 days per week x 50 weeks per year x 80 percent utilization rate.

6. Present Utilization of Ambulatory Surgery Services: The MSDH shall consider the utilization of existing services and the presence of valid CONs for services within a given ASPA when reviewing CON applications.

7. Optimum Capacity: The optimum capacity of an ambulatory surgery facility is 800 surgeries per operating room per year. The MSDH shall not issue a CON for the establishment or expansion of an additional facility(ies) unless the existing facilities within the ASPA have performed in aggregate at least 800 surgeries per operating room per year for the most recent 12-month reporting period, as reflected in data

supplied to and/or verified by the MSDH. The MSDH may collect additional information it deems essential to render a decision regarding any application. Optimum capacity is based on four (4) surgeries per operating room per day x 5 days per week x 50 weeks per year x 80 percent utilization rate.

8. Conversion of Existing Service: Applications proposing the conversion of existing inpatient capacity to hospital-affiliated ambulatory surgical facilities located within the hospital shall receive approval preference over detached or freestanding ambulatory surgical facilities if the applicant can show that such conversion is less costly than new construction and if the application substantially meets other adopted criteria.

9. Construction/Expansion of Facility: Any applicant proposing to construct a new facility or major renovation to provide ambulatory surgery must propose to build/renovate no fewer than two operating rooms.

10. Indigent/Charity Care: The applicant shall be required to provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this Plan.

### 101.02 Certificate of Need Criteria and Standards for Ambulatory Surgery Services

The MSDH will review applications for a CON for new ambulatory surgery facilities, as defined in Mississippi law, under the statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code of 1972 Annotated, as amended. The MSDH will also review applications submitted for Certificate of Need in accordance with the rules and regulations in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The offering of ambulatory surgery services is reviewable if the proposed provider has not provided those services on a regular basis within twelve (12) months prior to the time such services would be offered. In addition, ambulatory surgery services require CON review when the establishment or expansion of the services involves a capital expenditure in excess of $2,000,000.

1. **Need Criterion: The applicant shall demonstrate that the proposed ambulatory surgery facility shall perform a minimum average of 1,000 surgeries per operating room per year.**

2. The applicant must document that the proposed Ambulatory Surgery Facility Service Area has a population base of approximately 60,000 within 30 minutes travel time.

3. An applicant proposing to offer ambulatory surgery services shall document that the existing facilities in the ambulatory surgery planning area have been utilized for a minimum of 800 surgeries per operating room per year for the most recent 12-month reporting period as reflected in data supplied to and/or verified by the Mississippi State Department of Health. The MSDH may collect additional information it deems essential to render a decision regarding any application.

4. The applicant must document that the proposed program shall provide a full range of surgical services in general surgery.

5. The applicant must provide documentation that the facility will be economically viable within two years of initiation.

6. The proposed facility must show support from the local physicians who will be expected to utilize the facility.

7. Medical staff of the facility must live within a 25-mile radius of the facility.

8. The proposed facility must have a formal agreement with a full service hospital to provide services which are required beyond the scope of the ambulatory surgical facility's programs. The facility must also have a formal process for providing follow-up services to the patients (e.g., home health care, outpatient services) through proper coordination mechanisms.

9. Indigent/Charity Care: The applicant shall affirm that the applicant will provide a "reasonable amount" of indigent/charity care by stating the amount of indigent/charity care the applicant intends to provide.

# HOME HEALTH SERVICES

## 102 Home Health Care

Mississippi licensure regulations define a home health agency as: a public or privately owned agency or organization, or a subdivision of such an agency or organization, properly authorized to conduct business in Mississippi, which is primarily engaged in providing to individuals at the written direction of a licensed physician, in the individual's place of residence, skilled nursing services provided by or under the supervision of a registered nurse licensed to practice in Mississippi, and one or more of the following additional services or items:

1. physical, occupational, or speech therapy
2. medical social services
3. home health aide services
4. other services as approved by the licensing agency
5. medical supplies, other than drugs and biologicals, and the use of medical appliances
6. medical services provided by a resident in training at a hospital under a teaching program of such hospital."

All skilled nursing services and the services listed in items 1 through 4 must be provided directly by the licensed home health agency. For the purposes of this *Plan*, "directly" means either through an agency employee or by an arrangement with another individual not defined as a health care facility in Section 41-7-173 (h), Mississippi Code 1972, as amended. The requirements of this paragraph do not apply to health care facilities which had contracts for the above services with a home health agency on January 1, 1990.

### 102.01 Home Health Status

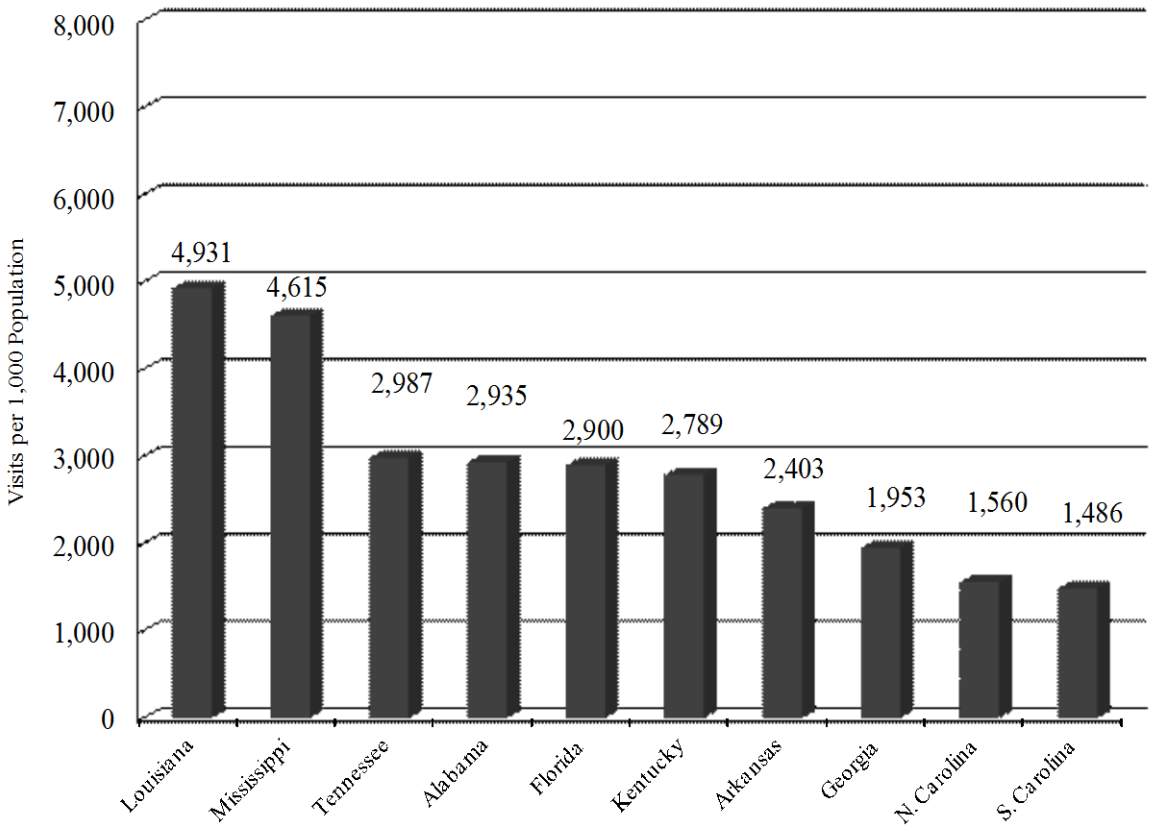
The latest Mississippi's 2012 *Report on Home Health Agencies* (the latest available) indicated that 88,408 Mississippians (non-duplicate count) received home health services during the year, an increase of 1.7 percent from the 86,923 patients served in 2012. There were 3,242,592 home health care visits made in 2012. Each patient (all payor sources) received an average of 36.68 visits. Mississippi has 9 hospital-based home health agencies, 40 freestanding agencies and 4 regional home health agencies operated by the MSDH.

**7-3**
**Medicare Home Health Statistics**
**in the Ten-State Region**
**January 1, 2012 – December 31, 2012**

| | 2020 Population 65+ | 2012 Total Medicare-Paid Home Health Visits | Medicare-Paid Home Health Visits per 1,000 Population 65+ | Total Medicare Reimbursement | Total Medicare Home Health Patients | Average Reimbursement per Patient | Average Visits per Patient |
|---|---|---|---|---|---|---|---|
| **Region Total** | **13,488,705** | **36,577,786** | **2,712** | **$5,457,514,756** | **982,613** | **$5,554** | **37** |
| Alabama | 842,607 | 2,472,715 | 2,935 | $357,498,026 | 71,395 | $5,007 | 35 |
| Arkansas | 531,028 | 1,276,081 | 2,403 | $159,990,765 | 35,483 | $4,509 | 37 |
| Florida | 5,106,857 | 14,810,817 | 2,900 | $2,194,992,017 | 355,080 | $6,182 | 42 |
| Georgia | 1,409,923 | 2,753,624 | 1,953 | $426,827,528 | 87,001 | $4,906 | 32 |
| Kentucky | 729,741 | 2,034,991 | 2,789 | $302,351,441 | 61,096 | $4,949 | 33 |
| Louisiana | 763,468 | 3,764,993 | 4,931 | $523,238,910 | 75,026 | $6,974 | 50 |
| **Mississippi** | **499,190** | **2,303,737** | **4,615** | **$341,326,801** | **55,579** | $6,141 | **41** |
| North Carolina | 1,618,578 | 2,524,479 | 1,560 | $429,220,677 | 107,916 | $3,977 | 23 |
| South Carolina | 866,250 | 1,287,463 | 1,486 | $216,977,522 | 50,935 | $4,260 | 25 |
| Tennessee | 1,121,063 | 3,348,886 | 2,987 | $505,091,069 | 83,102 | $6,078 | 40 |

Source: Palmetto GBA – Medicare Statistical Analysis Department, HCIS (Health Care Information System), May 29, 2014

**Figure 7-1**
**Total Medicare Paid Home Health Visits Per 1,000 Population**
**Aged 65+ in the Ten-State Region**
**2012**




Note: 2012 Average Home Health Visits per 1,000 Population Aged 65+ in the Ten-State Region is 2,712

## 103 Certificate of Need Criteria and Standards for Home Health Agencies/Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 103.01 Policy Statement Regarding Certificate of Need Applications for the Establishment of a Home Health Agency and/or the Offering of Home Health Services

1. Service Areas: The need for home health agencies/services shall be determined on a county by county basis.

2. Determination of Need: A possible need for home health services may exist in a county if for the most recent calendar year available that county had fewer home health care visits per 1,000 elderly (65+) population than the average number of visits received per 1,000 elderly (65+) in the "ten-state region" consisting of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. That number is currently 2,712 as shown in Table 7-3 (FY 2012 is most recent data available).

3. Unmet Need: If it is determined that an unmet need exists in a given county, the unmet need must be equivalent to 50 patients in each county proposed to be served. Based on 2012 data 2,712 visits approximates 40 patients.

4. All CON applications for the establishment of a home health agency and/or the offering of home health services shall be considered substantive and will be reviewed accordingly.

### 103.02 Certificate of Need Criteria and Standards for the Establishment of a Home Health Agency and/or the Offering of Home Health Services

If the present moratorium were removed or partially lifted, the MSDH would review applications for a CON for the establishment of a home health agency and/or the offering of home health 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 submitted for CON according to the general criteria as 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 development or otherwise establishment of a home health agency requires CON. The offering of home health 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.

1. **Need Criterion: The applicant shall document that a possible need for home health services exists in each county proposed to be served using the methodology contained in this section of the *Plan*.**

2. The applicant shall state the boundaries of the proposed home health service area in the application.

3. The applicant shall document that each county proposed to be served has an unmet need equal to 50 patients, using a ratio of 2,712 patient visits equals 40 patients.

4. The applicant shall document that the home office of a new home health agency shall be located in a county included in the approved service area of the new agency. An existing agency receiving CON approval for the expansion of services may establish a sub-unit or branch office if such meets all licensing requirements of the Division of Licensure.

5. The application shall document the following for each county to be served:

   a. Letters of intent from physicians who will utilize the proposed services.

   b. Information indicating the types of cases physicians would refer to the proposed agency and the projected number of cases by category expected to be served each month for the initial year of operation.

   c. Information from physicians who will utilize the proposed service indicating the number and type of referrals to existing agencies over the previous 12 months.

   d. Evidence that patients or providers in the area proposed to be served have attempted to find services and have not been able to secure such services.

   e. Projected operating statements for the first three years, including:

      i. total cost per licensed unit;

      ii. average cost per visit by category of visit; and

      iii. average cost per patient based on the average number of visits per patient.

6. Information concerning whether proposed agencies would provide services different from those available from existing agencies.

### 103.03 Statistical Need Methodology for Home Health Services

The methodology used to calculate the average number of visits per 1,000 elderly (65+) in the 10-state region is:

1. The 10-state region consists of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee.

2. The 2020 projected population aged 65 and older are estimates from each state.

3. Table 7-3 shows the average number of Medicare paid home health visits per 1,000 elderly (65+) for the 10-state region, according to 2012 data from Palmetto GBA - Medicare Statistical Analysis Department of the Centers for Medicare and Medicaid Services. Figure 7-1 shows the total number of Medicare paid home health visits per 1,000 elderly in the 10-state region.

4. In 2012, the region average of home health visits per 1,000 population aged 65 and older was 2,712. An average patient in the region received 37 home health visits. Therefore 2,712 visits equal 37 patients. Note: The Mississippi average for 2012 was 3,327 visits (Medicare reimbursed) per 1,000 population aged 65 and older, and an average patient received 38 visits.

# END STAGE RENAL DISEASE SERVICES

## 104 End Stage Renal Disease

End stage renal disease (ESRD) describes the loss of kidney function from chronic renal failure to the extent that the remaining kidney function will no longer sustain life. The kidney's function of filtering waste products from the blood and removing fluid and salts from the body is essential for life; consequently, if untreated, end stage renal disease results in death.

Treatment generally consists of either transplantation or dialysis. Dialysis consists of either peritoneal dialysis or hemodialysis. In peritoneal dialysis, the patient's own abdominal membrane is part of the "equipment". A dialyzing fluid is placed in the abdominal cavity through a plastic tube, and waste products (fluid and salts) exchange across the peritoneal membrane between the patient's blood and the dialyzing fluid. Hemodialysis is the process by which an artificial kidney machine "washes" metabolic waste products from the bloodstream and removes fluids and salts.

The kidney machine or peritoneal dialysis mimics the function normally done by the kidney. Dialysis can be done either by the patient and an assistant in the home, in a facility, or by professional staff in a hospital or limited care facility. Mississippi had 61 ESRD facilities providing maintenance dialysis services as of May 2014, and two additional facilities CON-approved but not yet operational (most recent data available). BMA of MS, Inc. d/b/a FMC-West Hinds County received CON Authority to establish a 10 Station Satellite ESRD facility in Clinton, Hinds County, MS. Map 7-1 shows the facility locations and Table 7-4 shows the number of existing and CON approved ESRD facilities by county.

Kidney transplantation is the treatment of choice for most patients with end stage renal failure. Unfortunately, suitable kidneys will probably never be available in the number that would be required to treat everyone with this mode of therapy. In kidney transplantation, a healthy kidney is removed from a donor and placed into an ESRD patient. Donors for kidney transplantation may come either from a close relative, such as a sibling or parent, or from an emotionally connected donor, such as a spouse or close associate. Kidneys may also be obtained from cadaver donors who have the closest matching tissue type. Living donors are preferred because they function longer than cadaver kidneys – 30 years for a living donor versus 15 years for a cadaver kidney.

The University of Mississippi Medical Center, the only kidney transplant program in the state, performed 103 cadaver and 0 living-donor transplants during the calendar year 2013. It is certified by membership in the United Network of Organ Sharing, a private agency under contract from the Health Care Financing Administration. Transplant results are comparable to those with transplant programs with similar population basis and can be viewed on the Internet under www.ustransplants.org. Approximately, 100 additional transplants in Mississippi residents are performed in neighboring states.

**Table 7-4**
**Number of Existing and CON Approved ESRD Facilities by County**

| ESRD Facilities by County | Number of Certified and CON Approved Stations |
|---|---|
| **Adams** | **29** |
| RCG of Natchez | 29 |
| **Alcorn** | **22** |
| RCG of Corinth | 22 |
| **Attala** | **20** |
| FMC Kosciusko | 20 |
| **Bolivar** | **60** |
| Fresenius Medical Care | 28 |
| RCG of Cleveland | 32 |
| **Claiborne** | **10** |
| FMC - Port Gibson | 10 |
| **Clarke** | **9** |
| Pachuta Dialysis Unit | 9 |
| **Coahoma** | **40** |
| RCG of Clarksdale | 40 |
| **Copiah** | **25** |
| FMC Hazlehurst | 13 |
| Hazelhurst Dialysis fka NRI of Hazlehurst | 12 |
| **Covington** | **21** |
| Collins Dialysis Unit - Collins | 21 |
| **DeSoto** | **50** |
| FMC Southaven | 50 |
| **Forrest** | **60** |
| Hattiesburg Clinic Dialysis Unit | 60 |
| **George** | **16** |
| Lucedale Dialysis | 16 |
| **Grenada** | **29** |
| RCG of Grenada | 29 |
| **Hancock** | **12** |
| FMC-South Miss Kidney Center - Diamondhead | 12 |

FY 2013 Annual ESRD Dialysis Utilization Survey conducted April 2014.

[1] CON Approved but not yet licensed

**Table 7-4 (Continued)**
**Number of Existing and CON Approved ESRD Facilities by County**

| ESRD Facilities by County | Number of Certified and CON Approved Stations |
|---|---|
| **Harrison** | **90** |
| FMC-South Mississippi Center of Biloxi | 20 |
| FMC-South Miss Kidney Center - Diamondhead/Gulfport | 20 |
| FMC-South Miss Kidney Center - Orange Grove | 18 |
| FMC-South Miss Kidney Center - D'Iberville | 12 |
| FMC-South Miss Kidney Center - North Gulfport | 20 |
| **Hinds** | **201** |
| FMC Jackson | 38 |
| FMC Southwest Jackson | 31 |
| Davita Jackson North fka NRI - Jackson North | 46 |
| Davita Jackson South fka NRI - Jackson South | 28 |
| Davita Jackson Southwest fka NRI-Jackson Southwest | 17 |
| University MS Medical Center Hospital and Clinics Outpatient Dialysis - Jackson | 35 |
| University Pediatric & ESRD Adult Outpatient Clinic | 6 |
| **Holmes** | **21** |
| Davita RCG of Lexington fka NRI - Lexington | 21 |
| **Humphreys** | **9** |
| RCG of Belzoni | 9 |
| **Jackson** | **42** |
| Davita Ocean Springs Dialysis | 16 |
| Davita Singing River Dialysis | 26 |
| **Jasper** | **21** |
| Bay Springs Dialysis Unit - Bay Springs | 21 |
| **Jefferson** | **8** |
| DRG Fayette | 8 |
| **Jones** | **34** |
| Laurel Dialysis Center - Laurel | 34 |
| **Kemper** | **6** |
| BMA, Inc. d/b/a FMC-Dekalb [1] **(opened 12/2013)** | 6 |
| **Lafayette** | **28** |
| RCG Oxford | 28 |
| **Lauderdale** | **61** |
| RCG of Meridian | 61 |
| **Lawrence** | **18** |
| Silver Creek Dialysis | 18 |
| **Leake** | **15** |
| Renal Care Group of Carthage fka NRI of Carthage | 15 |

[1] CON Approved but not yet licensed

**Table 7-4 (Continued)**
**Number of Existing and CON Approved ESRD Facilities by County**

| ESRD Facilities by County | Number of Certified and CON Approved Stations |
|---|---|
| **Lee** | **50** |
| RCG of Tupelo | 50 |
| **Leflore** | **34** |
| RCG of Greenwood | 34 |
| **Lincoln** | **32** |
| RCG of Brookhaven | 32 |
| **Lowndes** | **37** |
| RCG of Columbus | 37 |
| **Madison** | **35** |
| FMC Canton | 18 |
| Canton Renal Center | 17 |
| **Marion** | **30** |
| Columbia Dialysis Unit - Columbia | 30 |
| **Marshall** | **20** |
| RCG of Holly Springs | 20 |
| **Monroe** | **32** |
| RCG of Aberdeen | 32 |
| **Montgomery** | **15** |
| RCG of Winona | 15 |
| **Neshoba** | **36** |
| RCG of Philadelphia | 36 |
| **Newton** | **16** |
| RCG of Newton | 16 |
| **Noxubee** | **24** |
| RCG of Macon | 24 |
| **Oktibbeha** | **25** |
| RCG of Starkville | 25 |
| **Panola** | **24** |
| RCG of Sardis | 24 |
| **Pearl River** | **20** |
| Pearl River Dialysis Center - Picayune | 20 |

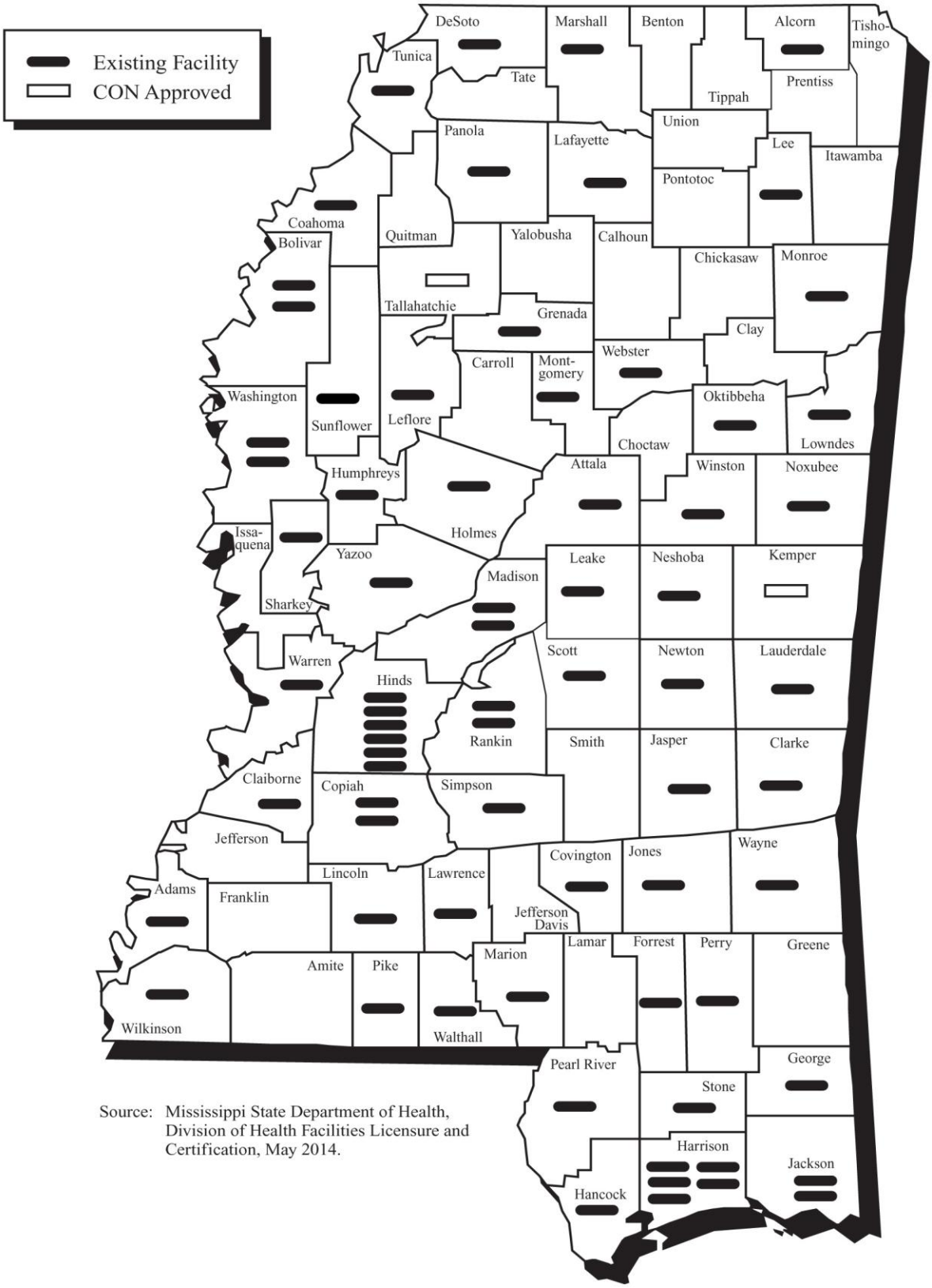
[1] CON Approved but not yet licensed

**Table 7-4 (Continued)**
**Number of Existing and CON Approved ESRD Facilities by County**

| ESRD Facilities by County | Number of Certified and CON Approved Stations |
|---|---|
| **Perry** | **20** |
| Richton Dialysis Unit | 20 |
| **Pike** | **32** |
| FMC of McComb | 32 |
| **Rankin** | **45** |
| FMC Dialysis Services of Rankin County-Brandon | 21 |
| NRI-Brandon | 24 |
| **Scott** | **18** |
| Davita Brandon fka Central Dialysis Unit of Forest | 18 |
| **Sharkey** | **13** |
| RCG of Mayersville | 13 |
| **Simpson** | **17** |
| FMC of Magee | 17 |
| **Stone** | **12** |
| Wiggins Dialysis Unit | 12 |
| **Sunflower** | **21** |
| RCG of Indianola | 21 |
| **Tallahatchie** | **6** |
| Healthcare Engineers - Charleston[1] | 6 |
| **Tunica** | **12** |
| Tunica Dialysis | 12 |
| **Walthall** | **20** |
| Tylertown Dialysis Unit | 20 |
| **Warren** | **23** |
| RCG of Vicksburg | 23 |
| **Washington** | **47** |
| Mid-Delta Kidney Center, Inc (Peritoneal -9) | 9 |
| RCG of Greenville | 38 |
| **Wayne** | **15** |
| Waynesboro Renal Dialysis Unit | 15 |
| **Webster** | **14** |
| RCG of Europa | 14 |
| **Wilkinson** | **17** |
| RCG of Centerville | 17 |
| **Winston** | **17** |
| RCG of Louisville | 17 |
| **Yazoo** | **21** |
| FMC Yazoo City | 21 |
| **State Total** | **1,757** |

[1] CON Approved but not yet licensed

**Map 7-2**
**End Stage Renal Disease Facilities**




Source: Mississippi State Department of Health, Division of Health Facilities Licensure and Certification, May 2014.

## 104 Certificate of Need Criteria and Standards for End Stage Renal Disease Facilities

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 104.01 Policy Statement Regarding Certificate of Need Applications for the Establishment of End Stage Renal Disease (ESRD) Facilities

1. Establishment of an ESRD Facility: The provision or proposed provision of maintenance dialysis services constitutes the establishment of an ESRD facility 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.

2. Annual Review Cycle: The MSDH shall accept and process CON applications proposing the establishment of ESRD facilities in accordance with the following review cycle:

   a. Applications may be submitted only during the period beginning July 1 and ending September 1 (5:00 p.m.) each year.

   b. All applications received during this period (July 1 through September 1 each year) which are deemed "complete" by October 1 of the year of submission, will be entered into the 90-day review cycle (October-December cycle).

   c. The State Health Officer will make CON decisions on "complete" applications in the month of December each year.

   d. Any CON application received other than in accordance with the above review cycle shall not be accepted by the Department, but shall be returned to the applicant.

3. Type of Review: CON applications for ESRD services shall be considered substantive as defined under the appropriate *Mississippi State Health Plan*, and "complete" competing applications from the same ESRD Facility Service Area shall be batched.

4. ESRD Facility Service Area: An ESRD Facility Service Area is defined as the area within a thirty (30) mile radius of an existing or proposed ESRD facility. ESRD Facility Service Areas, including the Service Areas of existing facilities which overlap with the proposed Service Area, shall be used for planning purposes.

5. CON Approval: A CON application for the establishment of an ESRD facility shall be considered for approval only when each individual facility within an applicant's

proposed ESRD Facility Service Area has maintained, at a minimum, an annual or prorated utilization rate of 80 percent as verified by the MSDH. The 12 months prior to the month of submission of the CON application shall be used to determine utilization, if such information is available and verifiable by the Department.

6. Need Threshold: For planning and CON purposes a need for an additional ESRD facility may exist when each individual operational ESRD station within a given ESRD Facility Service Area has maintained an annual utilization rate of 80 percent, i.e. an average of 749 dialyses per station per year. The need threshold may be adjusted to the appropriate need utilization based on the actual shifts in existence in the service area.

7. Utilization Definitions:

   a. Full Utilization: For planning and CON purposes, full (100 percent) utilization is defined as an average of 936 dialyses per station per year.

   b. Optimum Utilization: For planning and CON purposes, optimum (65 percent) utilization is defined as an average of 608 dialyses per station per year.

   c. Need Utilization: For planning and CON purposes, need (80 percent) utilization is defined as an average of 749 dialyses per station per year.

These utilization definitions are based upon three (3) shifts per day six (6) days per week, or eighteen (18) shifts per week. Only equipment (peritoneal or hemodialysis) that requires staff assistance for dialysis and is in operation shall be counted in determining the utilization rate. Utilization of equipment in operation less than twelve (12) months shall be prorated for the period of time in actual use.

8. Outstanding CONs: ESRD facilities that have received CON approval but are not operational shall be considered to be operating at 50 percent, which is the minimum utilization rate for a facility the first year of operation.

9. Utilization Data: The Department may use any source of data, subject to verification by the Department, it deems appropriate to determine current utilization or projected utilization of services in existing or proposed ESRD facilities. The source of data may include, but is not limited to, Medicare Certification records maintained by the Division of Health Facilities Licensure and Certification, ESRD Network #8 data, and Centers for Medicare and Medicaid Services (CMS) data.

10. Minimum Expected Utilization: It is anticipated that a new ESRD facility may not be able to reach optimum utilization (608 percent) of ten ESRD stations during the initial phase of operation. Therefore, for the purposes of CON approval, an application must demonstrate how the applicant can reasonably expect to have 50 percent utilization of a minimum of ten ESRD stations by the end of the first full year of operation and 65 percent utilization by the end of the third full year of operation.

11. Minimum Size Facility: No CON application for the establishment of a new ESRD facility shall be approved for less than ten (10) stations.

12. Expansion of Existing ESRD Facilities: Existing ESRD facilities may add ESRD stations without certificate of need review, as long as the facility does not add, over a period of two (2) years, more than the greater of six (6) stations or 15% of the facility's current number of certified stations.

13. Home Dialysis Programs: Each existing ESRD facility may establish or relocate one home dialysis program to any location within a 5-mile radius of the existing facility without certificate of need review; provided, however, that the facility shall submit an application for determination of non-reviewability prior to the establishment of the home dialysis program. If such established or relocated the home dialysis program is a freestanding program, the freestanding home dialysis program shall document that it has a back-up agreement for the provision of any necessary dialysis services with the existing ESRD facility. If an existing ESRD facility wants to create, either through establishment or relocation, more than one (1) home dialysis programs, the project shall be subject to CON review as the establishment of a new ESRD facility.

14. Establishment of Satellite ESRD Facilities: Any existing ESRD facility which reaches a total of 30 ESRD stations, may establish a twelve (12) station satellite facility. A certificate of need must be obtained by the facility prior to the establishment of the satellite facility. An ESRD facility may apply for a CON for more than one (1) satellite facility.

15. Non-Discrimination: An applicant shall affirm that within the scope of its available services, neither the facility nor its staff shall have policies or procedures which would exclude patients because of race, color, age, sex, or ethnicity.

16. Indigent/Charity Care: An applicant shall be required to provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this *Plan*.

17. Staffing: The facility must meet, at a minimum, the requirements and qualifications for staffing as contained in 42 CFR § 494.140. In addition, the facility must meet all staffing requirements and qualifications contained in the service specific criteria and standards.

18. Federal Definitions: The definitions contained in 42 CFR Subpart A § 494.10 shall be used as necessary in conducting health planning and CON activities.

19. Affiliation with a Renal Transplant Center: ESRD facilities shall be required to enter into a written affiliation agreement with a renal transplant center.

20. Treatment of Acute Renal Failure (ARF) Patients: An ESRD facility may seek authority, by filing a determination request, to add designated stations to its facility in order to provide dialysis services to ARF patients. The applicant must certify in its filing that the designated stations will only provide dialysis to ARF patients. Should the Department approve such designated stations, the ESRD facility will be required to report the designated stations utilization annually to the Department for review so that the Department may determine the need for the continued use of the designated stations. For purposes of this section, "acute renal failure patients" shall mean those patients needing dialysis that is unrelated to a diagnosis of ESRD.

## 104.02 Certificate of Need Criteria and Standards for End Stage Renal Disease (ESRD) Facilities

The Mississippi State Department of Health will review applications for a Certificate of Need for the establishment of an ESRD facility 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 Certificate of Need according to the general criteria as listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

When a provider proposes to offer ESRD services in an ESRD facility service area where he does not currently provide services or proposes to transfer an existing ESRD unit(s) from a current location into a different ESRD facility service area, it will constitute the establishment of a new ESRD health care facility. (Note: The transfer of dialysis stations from an existing ESRD facility to any other location is a relocation of a health care facility or portion thereof and requires Certificate of Need review. Likewise, new dialysis stations placed into service at a site separate and distinct from an existing ESRD facility constitutes the establishment of a new health care facility and requires Certificate of Need review. Dialysis stations placed into service in an individual patient's home or residence, solely for the treatment of the individual patient concerned, are exempt from this regulation.)

### 104.02.01 Establishment of an End Stage Renal Disease (ESRD) Facility

1. **Need Criterion for Establishment of New ESRD Facilities: An applicant proposing the establishment of a limited care renal dialysis facility or the relocation of a portion of an existing ESRD facility's dialysis stations to another location shall demonstrate, subject to verification by the Mississippi State Department of Health, that each individual existing ESRD facility in the proposed ESRD Facility Service Area has maintained a minimum annual utilization rate of eighty (80) percent.**

2. <u>Need Criterion for Expansion of Existing ESRD Facilities:</u>

   a. In the event that an existing ESRD facility proposes to add more than the greater of six (6) stations or 15% of the facility's current number of certified stations within a two-year period, then the facility must apply for a certificate of need, and shall document that it has maintained a minimum annual utilization rate of 55% for the 12 months prior to the month of the submission of the CON application. NOTE: ESRD Policy Statements 2, 4, 5 and 6, and Need Criterion 1, do not apply to applications for the expansion of existing ESRD facilities.

   b. <u>Expansion of Satellite ESRD Facilities:</u> In the event that a satellite ESRD facility proposes to add additional stations then the facility must apply for a certificate of need. In doing so, it shall document that it has maintained a minimum annual utilization rate of fifty-five percent (55%) for twelve (12) months prior to the month of the prior to the month of the submission of the CON application. NOTE: ESRD Policy Statements 2, 4, 5, and 6, and Need Criterion 1, do not apply to applications for the expansion of existing ESRD facilities.

3. Need Criterion for Establishment of ESRD Satellite Facilities: In order for a 30 station ESRD facility to be approved for the establishment of a twelve (12) station satellite facility through the transfer and relocation of existing stations within a five mile radius or less from the existing facility, the facility must (a) document that it has maintained a minimum annual utilization rate of 55% for the 12 months prior to the month of the submission of the CON application; (b) justify the need for the project, which may include, but is not limited to, physical or space limitations at the existing facility; and (c) document that it is more cost effective to establish a satellite facility than to expand the existing facility. If the proposed satellite facility will be established at a location between a five and twenty-five mile radius of the existing facility, the facility must (a) document that it has maintained a minimum annual utilization rate of 55% for the 12 months prior to the month of the submission of the CON application; (b) justify the need for the project, which may include, but is not limited to, physical or space limitations at the existing facility; and (c) document that it is more cost effective to establish a satellite facility than to expand the existing facility; and (d) demonstrate that the proposed satellite facility's location is not within thirty miles of an existing facility without obtaining the existing facility's written support. NOTE: ESRD Policy Statements 2, 4, 5 and 6, and Need Criterion 1, do not apply to applications for the establishment of satellite ESRD facilities. An ESRD satellite facility established under this Need Criterion 3 shall not be used or considered for purposes of establishing or determining an ESRD Facility Service Area. An ESRD facility may apply for a CON for more than one (1) satellite facility.

4. Number of Stations: The applicant shall state the number of ESRD stations that are to be located in the proposed facility. No new facility shall be approved for less than ten (10) dialysis stations.

5. Minimum Utilization: The application shall demonstrate that the applicant can reasonably expect to meet the minimum utilization requirements as stated in ESRD Policy Statement #10.

6. Minimum Services: The application shall affirm that the facility will provide, at a minimum, social, dietetic, and rehabilitative services. Rehabilitative services may be provided on a referral basis.

7. Access to Needed Services: The application shall affirm that the applicant will provide for reasonable access to equipment/facilities for such needs as vascular access and transfusions required by stable maintenance ESRD patients.

8. Hours of Operation: The application shall state the facility's hours of operation each day of the week. The schedule should accommodate patients seeking services after normal working hours.

9. Home Training Program: The application shall affirm that the applicant will make a home training program available to those patients who are medically eligible and receptive to such a program. The application shall affirm that the applicant will counsel all patients on the availability of and eligibility requirements to enter the home/self-dialysis program.

10. Indigent/Charity Care: The application shall affirm that the applicant will provide a "reasonable amount" of indigent/charity care. The application shall also state the amount of indigent/charity care the applicant intends to provide.

11. Facility Staffing: The application shall describe the facility's staffing by category (i.e., registered nurse, technologist, technician, social worker, dietician) as follows:

    a. Qualifications (minimum education and experience requirements)

    b. Specific Duties

    c. Full Time Equivalents (FTE) based upon expected utilization

12. Staffing Qualifications: The applicant shall affirm that the staff of the facility will meet, at a minimum, all requirements and qualifications as stated in 42 CFR, Subpart D § 494.140.

13. Staffing Time:

    a. The applicant shall affirm that when the unit is in operation, at least one (1) R.N. will be on duty. There shall be a minimum of two (2) persons for each dialysis shift, one of whom must be an R.N.

    b. The applicant shall affirm that the medical director or a designated physician will be on-site or on-call at all times when the unit is in operation. It is desirable to have one other physician to supplement the services of the medical director.

    c. The applicant shall affirm that when the unit is not in operation, the medical director or designated physician and a registered nurse will be on-call.

14. Data Collection: The application shall affirm that the applicant will record and maintain, at a minimum, the following utilization data and make this data available to the Mississippi State Department of Health as required. The time frame for the submission of the utilization data shall be established by the Department.

    a. Utilization data, e.g., days of operation, shifts, inventory and classification of all stations, number of patients in dialysis, transplanted, or expired.

    b. The number of charity/indigent patients (as defined in this *Plan*) served by the facility and the number of dialysis procedures provided to these patients free of charge or at a specified reduced rate.

15. Staff Training: The application shall affirm that the applicant will provide an ongoing program of training in dialysis techniques for nurses and technicians at the facility.

16. Scope of Privileges: The applicant shall affirm that the facility shall provide access to doctors of medicine or osteopathic medicine licensed by the State of Mississippi who possess qualifications established by the governing body of the facility.

17. Affiliation with a Renal Transplant Center: The applicant shall affirm that within one year of commencing operation the facility will enter into an affiliation agreement with a transplantation center. The written agreement shall describe the relationship between the transplantation facility and the ESRD facility and the specific services that the transplantation center will provide to patients of the ESRD facility. The agreement must include at least the following:

    a. time frame for initial assessment and evaluation of patients for transplantation,

    b. composition of the assessment/evaluation team at the transplant center,

    c. method for periodic re-evaluation,

    d. criteria by which a patient will be evaluated and periodically re-evaluated for transplantation, and

    e. signatures of the duly authorized persons representing the facilities and the agency providing the services.

    f. Furthermore, the application shall affirm that the applicant understands and agrees that failure to comply with this criterion may (after due process) result in revocation of the Certificate of Need.

### 104.02.02 Establishment of a Renal Transplant Center

1. **Need Criterion: The applicant shall document that the proposed renal transplant center will serve a minimum population of 3.5 million people.**

2. The applicant shall document that the proposed facility will provide, at a minimum, the following:

    a. medical-surgical specialty services required for the care of ESRD transplant patients;

    b. acute dialysis services;

    c. an organ procurement system;

    d. an organ preservation program; and

    e. a tissue typing laboratory.

3. The applicant shall document that the facility will perform a minimum of 25 transplants annually.

# GLOSSARY

# Glossary

**Accessibility** — a measure of the degree to which the health care delivery system inhibits or facilitates an individual's ability to receive its services, including geographic, architectural, transportation, social, time, and financial considerations.

**Ambulatory Surgery** — surgical procedures that are more complex than office procedures performed under local anesthesia but less complex than major procedures requiring prolonged post-operative monitoring and hospital care to ensure safe recovery and desirable results. General anesthesia is used in most cases. The patient must arrive at the facility and expect to be discharged on the same day. Ambulatory surgery shall be performed only by physicians or dentists licensed to practice in the state of Mississippi.

Examples of procedures performed include, but are not limited to:

- Tonsillectomies and adenoidectomies
- Nasal polypectomy
- Submucosa resection
- Some cataract procedures
- Cosmetic procedures
- Breast biopsy
- Augmentation mammoplasty
- Hand surgery
- Cervical conization
- Laparoscopy and tubal sterilization
- Circumcision
- Urethral dilation
- Simple hernia repairs
- Stripping and ligation of varicose veins

**Ambulatory Surgical Facility** — a publicly or privately owned institution which is primarily organized, constructed, renovated, or otherwise established for the purpose of providing elective surgical treatment of outpatients whose recovery, under normal and routine circumstances, will not require inpatient care. Such facility as herein defined does not include the offices of private physicians or dentists whether practicing individually or in groups, but does include organizations or facilities primarily engaged in such outpatient surgery, whether using the name "ambulatory surgical facility" or a similar or different name. Such organization or facility, if in any manner considered to be operated or owned by a hospital or a hospital holding, leasing, or management company, either for-profit or not-for-profit, is required to comply with all Mississippi State Department of Health ambulatory surgical licensure standards governing a hospital affiliated facility as adopted under Section 41-9-1 et seq., Mississippi Code of 1972, provided that such organization or facility does not intend to seek federal certification as an ambulatory surgical facility as provided for 42 CFR, Parts 405 and 416. Further, if such organization or facility is to be operated or owned by a hospital or a hospital holding, leasing, or management company and intends to seek federal certification as an

ambulatory facility, then such facility is considered to be freestanding and must comply with all Mississippi State Department of Health ambulatory surgical licensure standards governing a freestanding facility. If such organization or facility is to be owned or operated by an entity or person other than a hospital or hospital holding, leasing, or management company, then such organization or facility must comply with all Mississippi Department of Health ambulatory surgical facility standards governing a freestanding facility.

**Bed Need Methodologies** — quantitative approaches to determining present and future needs for inpatient beds.

**Capital Improvements** — costs other than construction which will yield benefits over a period of years. Examples of capital improvements are painting, refurbishing, and land improvements, such as improving driveways, fences, parking lots, and sprinkler systems.

**Capitalized Interest** — interest incurred during the construction period, which is included in debt borrowing.

**Construction Formulas** —

**New Construction/Renovation**
(Prorated Project):

$$\text{Cost/square foot} = \frac{A+C+D+(E+F+G(A\%^{*}))}{\text{New Const. Square Feet}}$$

$$\text{Cost/square foot} = \frac{B+(E+F+G(B\%))^{**}+H}{\text{Renov. Square Feet}}$$

**New Construction**
(No Renovation Involved):

$$\text{Cost/square foot} = \frac{A+C+D+E+F+G}{\text{Square Feet}}$$

**Renovation**
(No New Construction):

$$\text{Cost/square foot} = \frac{B+C+E+F+G+H}{\text{Square Feet}}$$

When:

| | |
|---|---|
| A = New Construction | E = Fees |
| B = Renovation | F = Contingency |
| C = Fixed Equipment | G = Capitalized Interest |
| D = Site Preparation | H = Capital Improvement |

*A% - refers to the percentage of square feet allocated to new construction.

**B% - refers to the percentage of square feet allocated to renovation.

Example: ABC Health Care's project for construction/renovation consists of 10,000 square feet of new construction and 9,000 square feet of renovation, for a total of 19,000 square feet.

$$A\% = \frac{10{,}000}{19{,}000} \text{ or } 53\%$$

$$B\% = \frac{9{,}000}{19{,}000} \text{ or } 47\%$$

**Continuing Care Retirement Community** — a comprehensive, cohesive living arrangement for the elderly which is offered under a contract that lasts for more than one year or for the life of the resident and describes the service obligations of the CCRC and the financial obligations of the resident. The contract must obligate the CCRC to provide, at a minimum, room, board, and nursing care to an individual not related by consanguinity or affinity to the provider furnishing such care. The contract explicitly provides for full lifetime nursing home care as required by the resident. The resident may be responsible for the payment of some portion of the costs of his/her nursing home care, and the CCRC sponsor is responsible for the remaining costs as expressly set forth in the contract. Depletion of the contractee's personal resources does not affect the contribution of the CCRC sponsor.

**Conversion** — describes a major or proportional change that a health care facility undertakes in its overall mission, such as the change from one licensure category to another, from one organizational tax status to another, or from one type of health care facility to another.

**Cost Containment** — the control of the overall costs of health care services within the health care delivery system.

**Criteria** — guidelines or pre-determined measurement characteristics on which judgment or comparison of need, appropriateness, or quality of health services may be made.

**Distinct Part Skilled Nursing Unit -** Medicare eligible certified units which meet the current definition of "Distinct Part of an Institution as SNF" as defined in the current Medicare Part A Intermediary Manual by the Centers for Medicare and Medicaid Services (CMS) of the U.S. Department of Health and Human Services.

**Existing Provider** — an entity that has provided a service on a regular basis during the most recent 12-month period.

**Facilities** — collectively, all buildings constructed for the purpose of providing health care (including hospitals, nursing homes, clinics, or health centers, but not including physician offices); encompasses physical plant, equipment, and supplies used in providing health services.

**Feasibility Study** — a report prepared by the chief financial officer, CPA or an independent recognized firm of accountants demonstrating that the cash flow generated from the operation of the facility will be sufficient to complete the project being financed and to pay future annual debt service. The study includes the financial analyst's opinion of the ability of the facility to undertake the debt obligation and the probable effect of the expenditure on present and future operating costs.

**Freestanding Ambulatory Surgical Facility** — a separate and distinct facility or a separate and distinct organized unit of a hospital owned, leased, rented, or utilized by a hospital or other persons for the primary purpose of performing ambulatory surgery procedures. Such facility must be separately licensed as herein defined and must comply with all licensing standards promulgated by the Mississippi State Department of Health regarding a freestanding ambulatory surgical facility. Further, such facility must be a separate, identifiable entity and must be physically, administratively, and financially independent and distinct from other operations of any other health facility and shall maintain a separate organized medical and administrative staff. Furthermore, once licensed as a freestanding ambulatory surgical facility, such facility shall not become a component of any other health facility without securing a Certificate of Need to do so.

**Group Home** — a single dwelling unit whose primary function is to provide a homelike residential setting for a group of individuals, generally 8 to 20 persons, who neither live in their own home nor require institutionalization. Group homes are used as a vehicle for normalization.

**Habilitation** — the combined and coordinated use of medical, social, educational, and vocational measures for training individuals who are born with limited functional ability as contrasted with people who have lost abilities because of disease or injury.

**Home Health Agency** — certain services must be provided directly by a licensed home health agency and must include all skilled nursing services; physical, occupational, or speech therapy; medical social services; part-time or intermittent services of a home health aide; and other services as approved by the licensing agency for home health agencies. In this instance, "directly" means either through an agency employee or by an arrangement with another individual not defined as a health care facility.

**Hospital Affiliated Ambulatory Surgical Facility** — a separate and distinct organized unit of a hospital or a building owned, leased, rented, or utilized by a hospital and located in the same county in which the hospital is located for the primary purpose of performing ambulatory surgery procedures. Such facility is not required to be separately licensed and may operate under the hospital's license in compliance with all applicable requirements of Section 41-9-1 et seq.

**Limited Care Renal Dialysis Facility** — a health care facility which provides maintenance or chronic dialysis services on an ambulatory basis for stable ESRD patients. The limited care renal dialysis facility is considered a substitute for home dialysis to be used by patients who cannot dialyze at home. The facility provides follow-up and back-up services for home dialysis patients.

**Magnetic Resonance Imaging (MRI) Scientist** — a professional with similar skills and job qualifications as a medical physicist, who holds a comparable degree in an allied science, such as chemistry or engineering, and shows similar experience as the medical physicist with medical imaging and MRI imaging spectroscopy.

**Market Share** — historical data used to define a primary or secondary geographic service area, i.e. patient origin study, using counties, zip codes, census tracts.

**Observation Bed** — a licensed, acute care bed on the premise of a licensed, short-term, acute care facility. The hospital bed shall be used by a physician and/or nursing/medical staff to periodically monitor/evaluate a patient's medical condition. A bed that is occupied by a patient who is admitted to the hospital for a period of 23 hours and 59 minutes or ≤ (less than) 48 hours will be counted as an observation bed. Also, the status of a patient will be documented by a physician as an <u>outpatient</u>.

**Observation Services** — a well-defined set of specific, clinically appropriate services, which include ongoing short term treatment, assessment, and reassessment, that are furnished while a decision is being made regarding whether patients will require further treatment as hospital inpatients or if they are able to be discharged from the hospital. Observation services begin at the clock time <u>documented in the patient's medical record</u>, which coincides with the time that observation services are initiated in accordance with a <u>physician's order</u> for observation services. In most cases, a beneficiary (patient) may not remain in observation status for more than 24 or 48 hours. The hospital status of a patient will be documented as an <u>outpatient until</u> the physician writes an order to admit a person as an inpatient. Billing and coding of physician services are expected to be billed consistent with the patient's status as an outpatient or an inpatient.

General standing orders for observation services following all outpatient surgery are not recognized. Hospitals should not report postoperative monitoring during a standard recovery period (e.g., 4-6 hours) as observation care, services because those hours may be considered recovery room services.

**Occupancy Rate** — measure of average percentage of hospital beds occupied; determined by dividing available bed-days (bed capacity) by patient days actually used during a specified time period.

**Outpatient Facility** — a medical institution designed to provide a limited or full spectrum of health and medical services (including health education and maintenance services, preventive services, diagnosis, treatment, and rehabilitation) to individuals who do not require hospitalization or institutionalization.

**Pediatric Skilled Nursing Facility** — a pediatric skilled nursing facility is an institution or a distinct part of an institution that is primarily engaged in providing to inpatients skilled nursing care and related services for persons under 21 years of age who require medical, nursing care, or rehabilitation services for the rehabilitation of injured, disabled, or sick persons.

**Policy Statement** — a definite course of action selected in light of given conditions to guide and determine present and future decisions.

**Positron Emission Tomography (PET)** — a non-invasive imaging procedure in which positron-emitting radionuclides, that are produced either by a cyclotron or a radiopharmaceutical producing generator, and a nuclear camera are used to create pictures of organ function rather than structure. PET, therefore, has the potential for providing unique, clinically important information about disease processes. Key applications for PET are in coronary artery disease and myocardial infarction, epilepsy, cerebral gliomas, and dementia.

**Radiation Therapy** — the use of ionizing radiations for the treatment of tumors.

**Renal Dialysis Center** — a health care facility which provides dialysis services to hospital patients who require such services. The dialysis provided in a renal dialysis center functions primarily as a backup program for ESRD patients dialyzing at home or in a limited care facility who are placed in a hospital. A renal dialysis center may also serve as an initial dialysis setting for newly diagnosed ESRD patients who are in the hospital. A center may also provide acute dialysis services as needed.

**Renal Transplant Center** — a health care facility which provides direct transplant and other medical-surgical specialty services required for the care of the ESRD transplant patient. Services provided include, but are not limited to, acute renal dialysis, organ procurement system, organ preservation program, and tissue typing laboratory.

**Standard** — a quantitative level to be achieved regarding a particular criterion to represent acceptable performance as judged by the agency establishing the standard.

**Therapeutic Radiation Services** — therapeutic radiation treatments/procedures delivered through the use of a linear accelerator or 60Co teletherapy unit.

**Therapeutic Radiation Unit/Equipment** — a linear accelerator or 60Co teletherapy unit. This equipment is also commonly referred to as a "megavoltage therapeutic radiation unit/equipment."

# APPENDIX

# NURSING HOME BED NEED

# 2020

## Table 2-3A
## 2020 Projected Nursing Home Bed Need[1]

| State of Mississippi | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Long-Term Care Planning District** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| District I | 496,626 | 248 | 51,737 | 517 | 30,285 | 1,090 | 15,643 | 2,112 | 3,968 | 177 | 3,076 | 715 |
| District II | 492,597 | 246 | 57,424 | 574 | 37,819 | 1,361 | 20,806 | 2,809 | 4,991 | 48 | 3,825 | 1,118 |
| District III | 724,285 | 362 | 81,025 | 810 | 45,481 | 1,637 | 24,559 | 3,315 | 6,125 | 52 | 4,518 | 1,555 |
| District IV | 880,964 | 440 | 102,734 | 1,027 | 64,346 | 2,316 | 34,549 | 4,664 | 8,448 | 298 | 5,156 / 182 | 2,812 |
| **State Total** | **2,594,472** | **1,297** | **292,920** | **2,929** | **177,931** | **6,406** | **95,557** | **12,900** | **23,532** | **575** | **16,575 / 182** | **6,200** |

[1] Data may not equal totals due to rounding

**Note**: Licensed beds do not include 719 beds operated by the Department of Mental Health, 120 beds operated by the Mississippi Band of Choctaw Indians, 600 beds operated by the Mississippi Veteran's Affairs Board, 60 beds operated by the Mississippi Methodist Rehabilitation Center for the treatment of patients with special disabilities, including persons with spinal cord and closed-head injuries and ventilator-dependent patients, or 574 beds licensed to continuing care retirement communities (CCRC).

Sources: Mississippi State Department of Health, Division of Licensure and Certification; and Division of Health Planning and Resource Development Calculations, 2014

Population Projections: *Mississippi Population Projections 2016, 2020, and 2025*. Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, September 2008

## Table 2-3A (continued)
## 2020 Projected Nursing Home Bed Need

| District I | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Attala | 16,091 | 8.05 | 1,953 | 19.53 | 1,489 | 53.60 | 861 | 116.24 | 197 | 0 | 120 | 77 |
| Bolivar | 29,339 | 14.67 | 3,498 | 34.98 | 1,888 | 67.97 | 962 | 129.87 | 247 | 60 | 290 | -103 |
| Carroll | 7,324 | 3.66 | 1,195 | 11.95 | 802 | 28.87 | 401 | 54.14 | 99 | 0 | 60 | 39 |
| Coahoma | 20,425 | 10.21 | 2,485 | 24.85 | 1,470 | 52.92 | 795 | 107.33 | 195 | 8 | 170 | 17 |
| DeSoto | 189,592 | 94.80 | 16,462 | 164.62 | 8,995 | 323.82 | 4,102 | 553.77 | 1,137 | 0 | 320 | 817 |
| Grenada | 19,183 | 9.59 | 2,303 | 23.03 | 1,543 | 55.55 | 869 | 117.32 | 205 | 10 | 237 | -42 |
| Holmes | 15,752 | 7.88 | 1,420 | 14.20 | 860 | 30.96 | 486 | 65.61 | 119 | 10 | 128 | -19 |
| Humphreys | 7,119 | 3.56 | 931 | 9.31 | 507 | 18.25 | 294 | 39.69 | 71 | 0 | 60 | 11 |
| Leflore | 28,414 | 14.21 | 2,579 | 25.79 | 1,480 | 53.28 | 810 | 109.35 | 203 | 8 | 402 | -207 |
| Montgomery | 8,348 | 4.17 | 1,186 | 11.86 | 872 | 31.39 | 510 | 68.85 | 116 | 0 | 120 | -4 |
| Panola | 30,817 | 15.41 | 3,153 | 31.53 | 1,963 | 70.67 | 1,069 | 144.32 | 262 | 0 | 190 | 72 |
| Quitman | 5,879 | 2.94 | 549 | 5.49 | 372 | 13.39 | 209 | 28.22 | 50 | 0 | 60 | -10 |
| Sunflower | 21,836 | 10.92 | 2,070 | 20.70 | 1,093 | 39.35 | 571 | 77.09 | 148 | 2 | 242 | -96 |
| Tallahatchie | 9,437 | 4.72 | 1,321 | 13.21 | 877 | 31.57 | 480 | 64.80 | 114 | 21 | 77 | 16 |
| Tate | 24,541 | 12.27 | 2,700 | 27.00 | 1,624 | 58.46 | 834 | 112.59 | 210 | 0 | 120 | 90 |
| Tunica | 10,617 | 5.31 | 1,065 | 10.65 | 524 | 18.86 | 247 | 33.35 | 68 | 0 | 60 | 8 |
| Washington | 40,315 | 20.16 | 5,477 | 54.77 | 2,927 | 105.37 | 1,569 | 211.82 | 392 | 58 | 298 | 36 |
| Yalobusha | 11,597 | 5.80 | 1,390 | 13.90 | 999 | 35.96 | 574 | 77.49 | 133 | 0 | 122 | 11 |
| **District Total** | **496,626** | **248.31** | **51,737** | **517.37** | **30,285** | **1,090.26** | **15,643** | **2,111.81** | **3,968** | **177** | **3,076** | **715** |

## Table 2-3A (continued)
## 2020 Projected Nursing Home Bed Need

| District II | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Alcorn | 29,801 | 14.90 | 3,873 | 38.73 | 2,794 | 100.58 | 1,507 | 203.45 | 358 | 0 | 264 | 94 |
| Benton | 6,702 | 3.35 | 812 | 8.12 | 635 | 22.86 | 363 | 49.01 | 83 | 0 | 60 | 23 |
| Calhoun | 10,574 | 5.29 | 1,520 | 15.20 | 1,125 | 40.50 | 650 | 87.75 | 149 | 0 | 155 | -6 |
| Chickasaw | 14,359 | 7.18 | 1,757 | 17.57 | 1,182 | 42.55 | 652 | 88.02 | 155 | 0 | 139 | 16 |
| Choctaw | 6,689 | 3.34 | 1,063 | 10.63 | 694 | 24.98 | 392 | 52.92 | 92 | 13 | 47 | 32 |
| Clay | 15,888 | 7.94 | 2,155 | 21.55 | 1,235 | 44.46 | 723 | 97.61 | 172 | 20 | 140 | 12 |
| Itawamba | 18,872 | 9.44 | 2,193 | 21.93 | 1,559 | 56.12 | 816 | 110.16 | 198 | 0 | 196 | 2 |
| Lafayette | 38,776 | 19.39 | 3,228 | 32.28 | 2,088 | 75.17 | 1,181 | 159.44 | 286 | 0 | 180 | 106 |
| Lee | 70,950 | 35.48 | 8,130 | 81.30 | 4,876 | 175.54 | 2,608 | 352.08 | 644 | 0 | 347 | 297 |
| Lowndes | 46,336 | 23.17 | 6,026 | 60.26 | 3,621 | 130.36 | 1,917 | 258.80 | 473 | 0 | 320 | 153 |
| Marshall | 31,568 | 15.78 | 3,534 | 35.34 | 2,184 | 78.62 | 1,104 | 149.04 | 279 | 0 | 180 | 99 |
| Monroe | 29,146 | 14.57 | 3,818 | 38.18 | 2,648 | 95.33 | 1,490 | 201.15 | 349 | 0 | 332 | 17 |
| Noxubee | 8,946 | 4.47 | 1,073 | 10.73 | 622 | 22.39 | 335 | 45.23 | 83 | 0 | 60 | 23 |
| Oktibbeha | 38,771 | 19.39 | 3,300 | 33.00 | 2,088 | 75.17 | 1,124 | 151.74 | 279 | 0 | 179 | 100 |
| Pontotoc | 26,996 | 13.50 | 2,905 | 29.05 | 1,825 | 65.70 | 1,036 | 139.86 | 248 | 0 | 164 | 84 |
| Prentiss | 20,188 | 10.09 | 2,507 | 25.07 | 1,869 | 67.28 | 1,035 | 139.73 | 242 | 0 | 144 | 98 |
| Tippah | 17,430 | 8.72 | 2,018 | 20.18 | 1,449 | 52.16 | 806 | 108.81 | 190 | 0 | 240 | -50 |
| Tishomingo | 14,626 | 7.31 | 2,037 | 20.37 | 1,598 | 57.53 | 912 | 123.12 | 208 | 15 | 163 | 30 |
| Union | 24,030 | 12.02 | 2,603 | 26.03 | 1,749 | 62.96 | 988 | 133.38 | 234 | 0 | 180 | 54 |
| Webster | 7,065 | 3.53 | 887 | 8.87 | 665 | 23.94 | 396 | 53.46 | 90 | 0 | 155 | -65 |
| Winston | 14,884 | 7.44 | 1,985 | 19.85 | 1,313 | 47.27 | 771 | 104.09 | 179 | 0 | 180 | -1 |
| **District Total** | **492,597** | **246.30** | **57,424** | **574.24** | **37,819** | **1,361.48** | **20,806** | **2,808.81** | **4,991** | **48** | **3,825** | **1,118** |

## Table 2-3A (continued)
## 2020 Projected Nursing Home Bed Need

| District III | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Adams | 22,067 | 11.03 | 3,622 | 36.22 | 2,310 | 83.16 | 1,329 | 179.42 | 310 | 20 | 234 | 56 |
| Amite | 10,516 | 5.26 | 1,450 | 14.50 | 1,032 | 37.15 | 539 | 72.77 | 130 | 0 | 80 | 50 |
| Claiborne | 9,359 | 4.68 | 943 | 9.43 | 473 | 17.03 | 283 | 38.21 | 69 | 18 | 59 | -8 |
| Copiah | 25,248 | 12.62 | 2,860 | 28.60 | 1,736 | 62.50 | 963 | 130.01 | 234 | 0 | 180 | 54 |
| Franklin | 6,495 | 3.25 | 880 | 8.80 | 581 | 20.92 | 335 | 45.23 | 78 | 0 | 60 | 18 |
| Hinds | 208,563 | 104.28 | 23,595 | 235.95 | 12,366 | 445.18 | 6,615 | 893.03 | 1,678 | 14 | 1,399 | 265 |
| Issaquena | 1,062 | 0.53 | 110 | 1.10 | 76 | 2.74 | 38 | 5.13 | 9 | 0 | 0 | 9 |
| Jefferson | 7,060 | 3.53 | 803 | 8.03 | 442 | 15.91 | 249 | 33.62 | 61 | 0 | 60 | 1 |
| Lawrence | 10,999 | 5.50 | 1,302 | 13.02 | 820 | 29.52 | 476 | 64.26 | 112 | 0 | 60 | 52 |
| Lincoln | 29,871 | 14.94 | 3,616 | 36.16 | 2,328 | 83.81 | 1,331 | 179.69 | 315 | 0 | 320 | -5 |
| Madison | 102,068 | 51.03 | 9,303 | 93.03 | 4,758 | 171.29 | 2,619 | 353.57 | 669 | 0 | 275 | 394 |
| Pike | 33,647 | 16.82 | 3,972 | 39.72 | 2,456 | 88.42 | 1,435 | 193.73 | 339 | 0 | 285 | 54 |
| Rankin | 146,614 | 73.31 | 15,404 | 154.04 | 8,244 | 296.78 | 4,107 | 554.45 | 1,079 | 0 | 410 | 669 |
| Sharkey | 3,783 | 1.89 | 606 | 6.06 | 305 | 10.98 | 168 | 22.68 | 42 | 0 | 54 | -12 |
| Simpson | 22,837 | 11.42 | 2,650 | 26.50 | 1,652 | 59.47 | 927 | 125.15 | 223 | 0 | 180 | 43 |
| Walthall | 12,863 | 6.43 | 1,415 | 14.15 | 978 | 35.21 | 555 | 74.93 | 131 | 0 | 137 | -6 |
| Warren | 39,327 | 19.66 | 5,245 | 52.45 | 2,940 | 105.84 | 1,479 | 199.67 | 378 | 0 | 380 | -2 |
| Wilkinson | 8,527 | 4.26 | 897 | 8.97 | 562 | 20.23 | 323 | 43.61 | 77 | 0 | 105 | -28 |
| Yazoo | 23,379 | 11.69 | 2,352 | 23.52 | 1,422 | 51.19 | 788 | 106.38 | 193 | 0 | 240 | -47 |
| **District Total** | **724,285** | **362.14** | **81,025** | **810.25** | **45,481** | **1,637.32** | **24,559** | **3,315.47** | **6,125** | **52** | **4,518** | **1,555** |

## Table 2-3A (continued)
## 2020 Projected Nursing Home Bed Need

| District IV | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Clarke | 13,053 | 6.53 | 1,833 | 18.33 | 1,240 | 44.64 | 695 | 93.83 | 163 | 0 | 120 | 43 |
| Covington | 18,940 | 9.47 | 1,993 | 19.93 | 1,398 | 50.33 | 773 | 104.36 | 184 | 0 | 120 | 64 |
| Forrest | 76,116 | 38.06 | 6,447 | 64.47 | 4,197 | 151.09 | 2,367 | 319.55 | 573 | 100 | 386 | 87 |
| George | 23,340 | 11.67 | 2,397 | 23.97 | 1,430 | 51.48 | 688 | 92.88 | 180 | 0 | 79 / 41 | 60 |
| Greene | 10,646 | 5.32 | 1,186 | 11.86 | 731 | 26.32 | 363 | 49.01 | 93 | 0 | 120 | -27 |
| Hancock | 39,628 | 19.81 | 5,435 | 54.35 | 3,636 | 130.90 | 1,918 | 258.93 | 464 | 29 | 140 | 295 |
| Harrison | 156,334 | 78.17 | 19,550 | 195.50 | 11,865 | 427.14 | 6,311 | 851.99 | 1,553 | 60 | 742 | 699 |
| Jackson | 115,300 | 57.65 | 14,617 | 146.17 | 8,595 | 309.42 | 4,211 | 568.49 | 1,082 | 0 | 528 | 554 |
| Jasper | 14,835 | 7.42 | 1,764 | 17.64 | 1,155 | 41.58 | 657 | 88.70 | 155 | 0 | 110 | 45 |
| Jeff Davis | 9,741 | 4.87 | 1,333 | 13.33 | 902 | 32.47 | 485 | 65.48 | 116 | 0 | 60 | 56 |
| Jones | 56,837 | 28.42 | 6,712 | 67.12 | 4,446 | 160.06 | 2,552 | 344.52 | 600 | 10 | 418 | 172 |
| Kemper | 7,795 | 3.90 | 979 | 9.79 | 632 | 22.75 | 369 | 49.82 | 86 | | 60 | 26 |
| Lamar | 52,145 | 26.07 | 4,882 | 48.82 | 2,630 | 94.68 | 1,319 | 178.07 | 348 | 3 | 177 | 168 |
| Lauderdale | 62,209 | 31.10 | 7,723 | 77.23 | 4,965 | 178.74 | 2,858 | 385.83 | 673 | 47 | 525 / 21 | 80 |
| Leake | 21,557 | 10.78 | 2,328 | 23.28 | 1,502 | 54.07 | 886 | 119.61 | 208 | 0 | 143 | 65 |
| Marion | 21,267 | 10.63 | 2,613 | 26.13 | 1,598 | 57.53 | 952 | 128.52 | 223 | 0 | 297 | -74 |
| Neshoba | 27,246 | 13.62 | 2,961 | 29.61 | 1,940 | 69.84 | 1,094 | 147.69 | 261 | 3 | 217 | 41 |
| Newton | 19,177 | 9.59 | 2,163 | 21.63 | 1,511 | 54.40 | 899 | 121.37 | 207 | 0 | 180 | 27 |
| Pearl River | 54,348 | 27.17 | 6,526 | 65.26 | 4,128 | 148.61 | 2,065 | 278.78 | 520 | 6 | 240 / 120 | 154 |
| Perry | 10,134 | 5.07 | 1,187 | 11.87 | 758 | 27.29 | 386 | 52.11 | 96 | 0 | 60 | 36 |
| Scott | 23,844 | 11.92 | 2,764 | 27.64 | 1,676 | 60.34 | 925 | 124.88 | 225 | 0 | 140 | 85 |
| Smith | 12,617 | 6.31 | 1,606 | 16.06 | 1,108 | 39.89 | 593 | 80.06 | 142 | 0 | 121 | 21 |
| Stone | 16,394 | 8.20 | 1,764 | 17.64 | 994 | 35.78 | 497 | 67.10 | 117 | 40 | 83 | -6 |
| Wayne | 17,461 | 8.73 | 1,971 | 19.71 | 1,309 | 47.12 | 686 | 92.61 | 168 | 0 | 90 | 78 |
| **District Total** | **880,964** | **440.48** | **102,734** | **1,027.34** | **64,346** | **2,316.46** | **34,549** | **4,664.12** | **8,448** | **298** | **5,156 / 182** | **2,812** |

# *PROPOSED*

# FY 2016
# MISSISSIPPI
# STATE HEALTH PLAN

Mississippi State Department of Health

# FY 2016

# MISSISSIPPI STATE HEALTH PLAN

Mississippi State Department of Health

Governor’s Letter of Approval

(To be Included)

## Governor
## State of Mississippi

**The Honorable Phil Bryant**

## Mississippi State Board of Health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# Acknowledgments

The Mississippi Department of Health, Division of Health Planning and Resource Development, prepared the *FY 2015 Mississippi State Health Plan (also State Health Plan or Plan)* in accordance with Sections 41-7-173(s) and 41-7-185(g) Mississippi Code 1972 Annotated, as amended.

The *FY 2016 State Health Plan* results from the comments and information supplied by various divisions of the Department of Health, other agencies of state government, health care provider associations, and interested members of the public. The *Plan* also reflects the direction and guidance of the Mississippi State Board of Health.

The Division of Health Planning and Resource Development expresses appreciation to the many individuals who provided invaluable help in publishing a timely and accurate *State Health Plan* and recognizes the following agencies for particular contributions:

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- Communications
- Health Information Management
- Print Shop

- Office of Health Protection
  - Preparedness and Response
  - Licensure
  - Communicable Disease
  - Environmental Health

- Office of Health Services
  - Child\Adolescent Health
  - Women’s Health

Office of the Governor

Mississippi Department of Human Services

Mississippi Department of Mental Health

Mississippi Department of Rehabilitation Services

Mississippi Department of Education

University of Mississippi Medical Center
- School of Medicine
- School of Dentistry
- School of Health Related Professions

Board of Trustees of State Institutions of Higher Learning

Mississippi State Board of Medical Licensure

Mississippi State Board of Nursing

Mississippi Dental Association

Mississippi Nurses' Association

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# HEALTH CARE SYSTEM

# CHAPTER 1

# INTRODUCTION

## Title 15 - Mississippi Department of Health

## Part VIII – Office of Health Policy and Planning

## Subpart 90 – Planning and Resource Development

# Chapter 01 Introduction

### 100 Legal Authority and Purpose

Section 41-7-171 et seq., Mississippi Code 1972 Annotated, as amended, established the Mississippi State Department of Health (MSDH) as the sole and official agency to administer and supervise all health planning responsibilities for the state, including development and publication *of* the *Mississippi State Health Plan.* The effective dates *of* the *Fiscal Year 2016 Mississippi State Health Plan* extend from December 2, 2015, through December 1, 2016, or until superseded by a later *Plan.*

The 2016 State Health Plan establishes criteria and standards for health-related activities which require Certificate of Need review in an effort to meet the priority health needs identified by the department. The priority health needs are as follows:

- Disease prevention, health protection, and health promotion;
- Health care for specific populations, such as mothers, babies, the elderly, the indigent, the uninsured, and minorities;
- Implementation of a statewide trauma system;
- Health needs of persons with mental illness, alcohol/drug abuse problems, mental retardation/developmental disabilities, and/or handicap;
- Availability of adequate health manpower throughout the state; and
- Enhance capacity for detention of a response to public health emergencies, including acts of bioterrorism.

Section 41-7-191, Mississippi Code 1972 Annotated, as amended, requires Certificate of Need (CON) approval for the establishment, relocation, or expansion of health care facilities. The statute also requires CON approval for the acquisition or control of major medical equipment and for the change of ownership of defined health care facilities unless the facilities meet specific requirements.

This *Plan* provides the service-specific CON criteria and standards developed and adopted by the MSDH for CON review of health-related activities requiring such review. The *Mississippi Certificate of Need Review Manual* provides additional general CON criteria by which the Department reviews all applications.

## 101 General Certificate of Need Policies

Mississippi's health planning and health regulatory activities have the following purposes:

- To improve the health of Mississippi residents;
- To increase the accessibility, acceptability, continuity, and quality of health services;
- To prevent unnecessary duplication of health resources; and
- To provide some cost containment.

The MSDH intends to approve an application for CON if it substantially complies with the projected need and with the applicable criteria and standards presented in this *Plan*, and to disapprove all CON applications which do not substantially comply with the projected need or with applicable criteria and standards presented in this *Plan*.

The MSDH intends to disapprove CON applications which fail to confirm that the applicant shall provide a reasonable amount of indigent care, or if the applicant's admission policies deny or discourage access to care by indigent patients. Furthermore, the MSDH intends to disapprove CON applications if such approval would have a significant adverse effect on the ability of an existing facility or service to provide indigent care. Finally, it is the intent of the Mississippi State Department of Health to strictly adhere to the criteria set forth in the *State Health Plan* and to ensure that any provider desiring to offer healthcare services covered by the Certificate of Need statutes undergoes review and is issued a Certificate of Need prior to offering such services.

The State Health Officer shall determine whether the amount of indigent care provided or proposed to be offered is "reasonable." The Department considers a reasonable amount of indigent care as that which is comparable to the amount of such care offered by other providers of the requested service within the same, or proximate, geographic area.

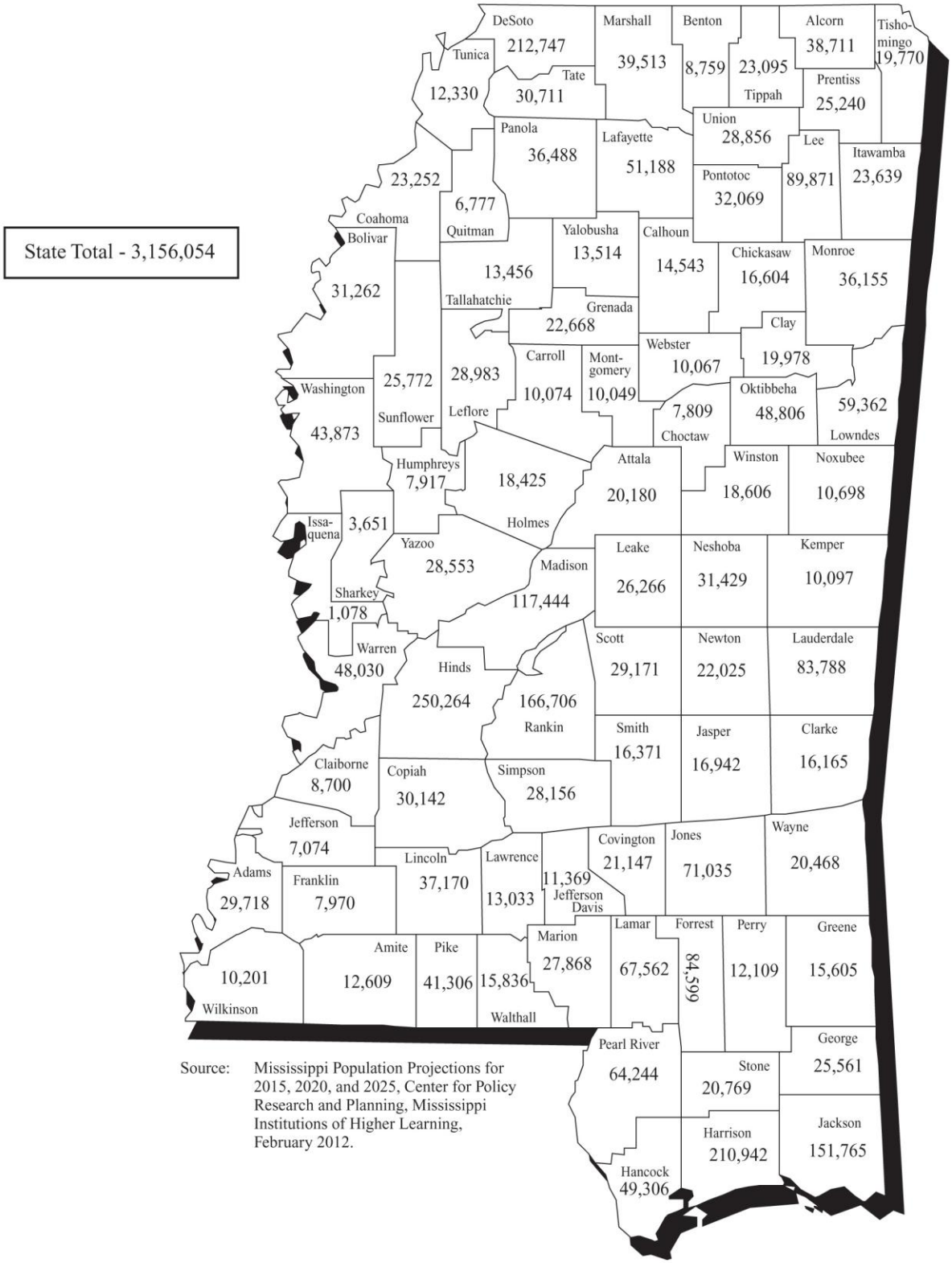
The MSDH may use a variety of statistical methodologies including, but not limited to, market share analysis or patient origin data to determine substantial compliance with projected need and with applicable criteria and standards in this *Plan*.

## 102 Population for Planning

Population projections used in this *Plan* were calculated by the Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, as published in *MISSISSIPPI, Population Projections for 2015, 2020, and 2025*, February 2012. This plan is based on 2020 population projections.

Map 1-1 depicts the state's 2020 estimated population by county. Mississippi population projections for the years 2020 and 2025 can be obtained from the State Institutions of Higher Learning at www.ihl.state.ms.us. (1) Select University Research Center; 2) Economics; and 3) Miss Population Projections)

**Map 1-1**
**Population Projections**
**2020**




Source: Mississippi Population Projections for 2015, 2020, and 2025, Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, February 2012.

## 103 Health Personnel

High quality health care services depend on the availability of competent health personnel in sufficient numbers to meet the population's needs. Mississippi is traditionally a medically underserved state, particularly in sparsely populated rural areas and areas containing large numbers of poor people, elderly people, and minorities. This section discusses some of the areas of greatest need for health care personnel, focusing on physicians, dentists, and nurses.

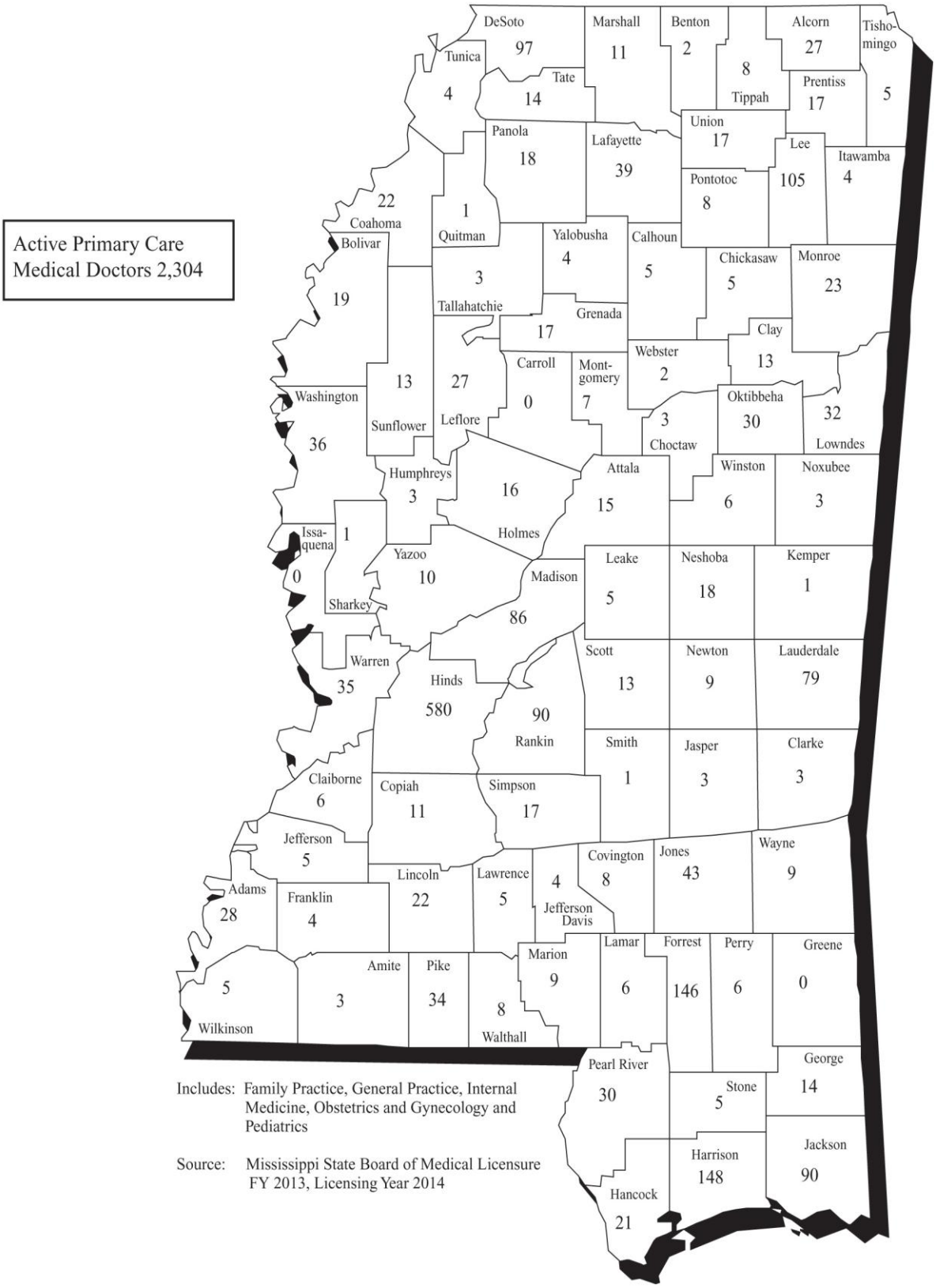
### 103.01 Physicians

Mississippi had 5,666 active medical doctors, 379 osteopaths, and 66 podiatrists licensed by the Board of Medical Licensure for FY 2014 (licensing year 2015) for a total of 6,111 active licensed physicians practicing in the state. This number represents an increase of 69 physicians, or more than 1.01 percent, from FY 2013 (licensing year 2014).

Approximately 2,348 (41 percent) of the state's active medical doctors are primary care physicians, representing a ratio of one primary care physician for every 1,344 persons, based on 2020 projected population. The primary care physicians included 770 family practitioners, 83 general practitioners, 730 internal medicine physicians, 333 obstetrical and gynecological physicians, and 432 pediatricians. Map 1-2 depicts the total number of primary care medical doctors by county.

According to the Health Resources and Services Administration's Office of Shortage Designation, Mississippi has a total of 108 primary care health professional shortage area (HPSA) designations. Seventy-seven of the designations are single county designations. The United States Department of Health and Human Services defines a primary care health professional shortage area (HPSA) as a geographic area that has a ratio in excess of 3,500 persons per primary care physician and insufficient access to those physicians within a 30 minute traveling radius. Also, areas with 3,000 to 3,500 persons per primary care physician that have unusually high needs for primary care services and have insufficient access to primary care doctors within a 30 minute traveling radius, can also be designated as a primary care HPSA.

**Map 1 -2**
**Active Primary Care Medical Doctors by County of Residence**
**FY 2013**



## 103.02 Dentists

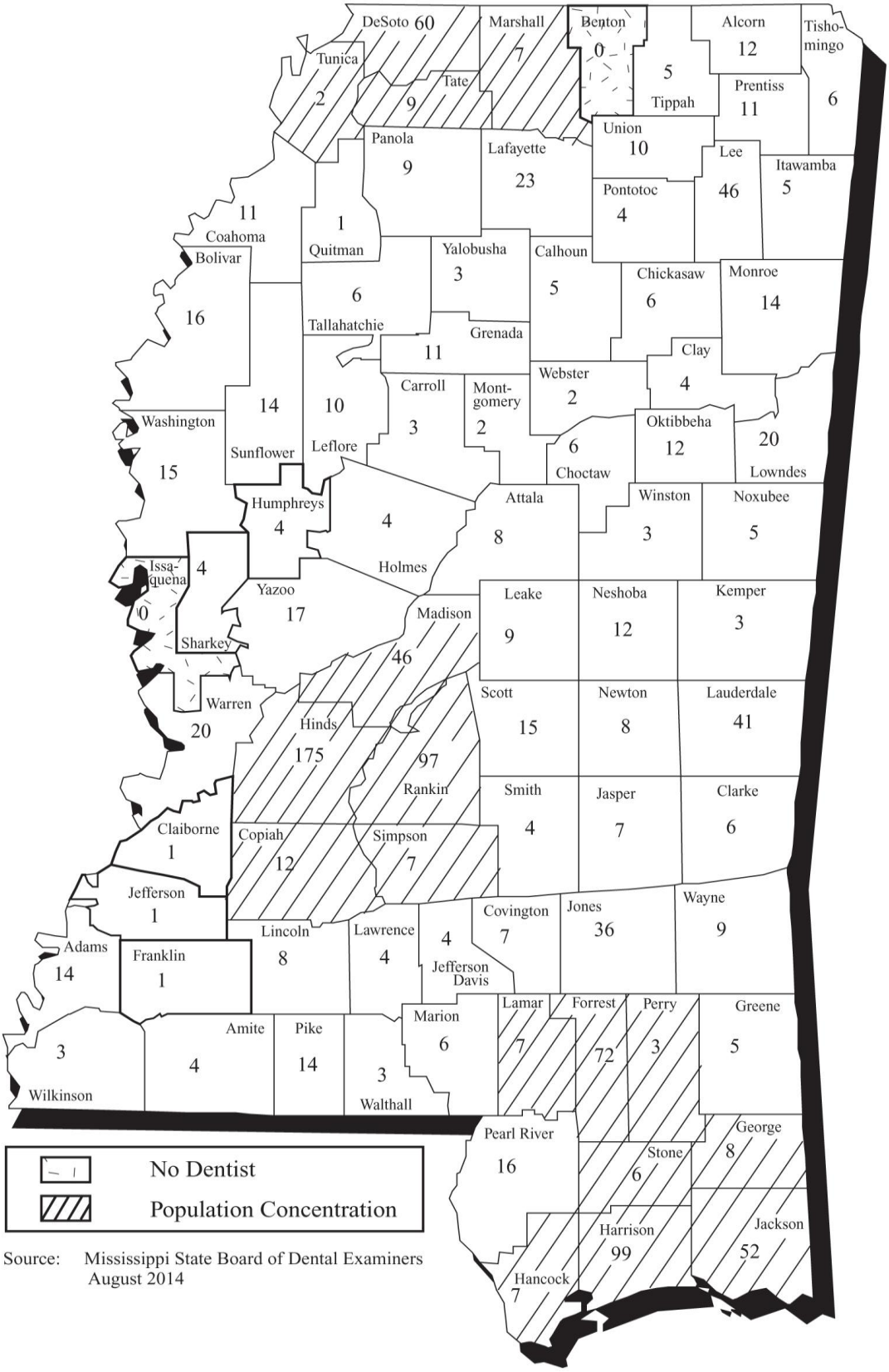
The Mississippi State Board of Dental Examiners reported 1,071 licensed (1,041 “active” and 30 “inactive”) dentists in the state as of August 2015, with 64 new dentists licensed during calendar year 2014. Based on Mississippi's 2020 projected population of 3,156,054, the state has one active dentist for every 2,947 persons.

The more populated areas of Mississippi are sufficiently supplied with dentists; however, many rural areas still face tremendous shortages. According to the Health Resources and Services Administration’s Office of Shortage Designation (HRSA/OSD), Mississippi currently has a total of 109 dental health professional shortage area (HPSA) designations. Seventy-nine of the designations are single county designations.

Mississippi's two major population centers contain the most active dentists. The Jackson area had a total of 331 active dentists in the summer of 2015, with 180 in Hinds County, 99 in Rankin County, and 52 in Madison County. The Gulf Coast region had the second largest count at 167, with 105 in Harrison County, 55 in Jackson County, and 7 in Hancock County. Combined, these two metropolitan areas contained 41.88 percent of the state's total supply of active dentists.

On the opposite end of the spectrum, four counties— Claiborne, Franklin, Jefferson, and Quitman—had only one active dentist each and two counties—Benton, and Issaquena—had no active dentist. Map 1-3 depicts the number of dentists per county and indicates the number of in-state, active, licensed dentists who have mailing addresses in the state.

## Map 1-3
## Active Dentists by County




Source: Mississippi State Board of Dental Examiners
August 2014

## 103.03 Nurses

### Registered Nurses

The Mississippi Board of Nursing reported 45,269 registered nurses (RNs) licensed in FY 2015 with (33,305) who worked full or 5,286 part-time in nursing careers. That included 22,126 in hospitals; 3,841 in community, public, or home health; 2,111 in physicians' offices; 12,407in nursing homes; and the remainder in other nursing careers. RNs by degree in FY 2015 included, 1,403 diploma, 22,182 associates, 1,386 baccalaureate non-nursing, 14,062 baccalaureate nursing, 758 masters non-nursing, 3,396 masters nursing, and 47 doctorate degrees.

### Advanced Practice Registered Nurses

Advanced practice registered nurse (APRN) includes any person licensed to practice nursing in Mississippi and certified by the Board of Nursing to practice in an expanded role as an advanced practice registered nurse including nurse midwives and certified registered nurse anesthetists. For FY 2015 there were 3,880 RNs certified as APRNs, with 1,961 family nurse practitioners; 820 certified registered nurse anesthetist; and 124 in adult acute care. The remainder practiced in such specialties as adult and family mental health, gerontology, midwifery, neonatal, pediatric, women's health care and family planning.

### Licensed Practical Nurses

The Board of Nursing reported 13,751 licensed practical nurses (LPNs) licensed in FY 2015 with 9,234 who worked full or 1,598 part-time in nursing careers. That included 4,245 in nursing homes; 1,548 in hospitals; 2,301 as office nurses; 1,003 in community, public, or home health; and the remainder in other nursing careers. There were 4,487 LPNs certified for an expanded role in FY 2015, including 4,638 in intravenous therapy, 43 in hemodialysis, and 108 in both expanded roles.

## Office of Nursing Workforce Redevelopment

The Mississippi Nursing Organization Liaison Committee (NOLC), a committee of the Mississippi Nurses Association composed of representation from 25 nursing organizations, has worked proactively to address nursing workforce issues related to anticipated changes in nursing and the health care delivery system. Through the efforts of the NOLC, the Mississippi Legislature passed the Nursing Workforce Redevelopment Act during the 1996 Session. The Act authorized the Mississippi Board of Nursing to establish an entity that would be responsible for addressing changes impacting the nursing workforce.

Currently, with funding from the legislature and the Mississippi Development Authority, Office of Nursing Workforce Redevelopment (ONWR) is working with the Mississippi Council of Deans and Directors of Schools of Nursing, the Mississippi Nurses Association and the Mississippi Organization of Nurse Executives to address issues vital to nursing. These issues include faculty shortages, barriers to nursing education, recruitment into nursing, scholarship funding, the image of nursing, service/education collaboratives, retention of nursing service employees, and leadership

training for nurses. More information is available by calling ONW or visiting www.monw.org.

### 103.04 Physical Therapy Practitioners

Physical therapy (PT) practitioners provide preventive, diagnostic, and rehabilitative services to restore function or prevent disability from disease, trauma, injury, loss of a limb, or lack of use of a body part to individuals of all ages.

The Mississippi State Board of Physical Therapy reported 1,893 licensed physical therapists in Mississippi as of April 10, 2015 with 1,552 residing in the state. Eight percent of the Mississippi resident physical therapists practitioners live in Hinds County, five percent in Harrison County, and ten percent in Madison County, for a total of 22 percent in three counties. Mississippi ranks 39th in the United States for the ratio of therapists per 100,000 population. The Board also reported 1102 licensed physical therapist assistants, with 979 practicing in the state.

### 103.05 Occupational Therapist

Occupational therapy (OT) is a health and rehabilitation profession that serves people of all ages who are physically, psychologically, or developmentally disabled. Their functions range from diagnosis to treatment, including the design and construction of various special and self-help devices. OTs direct their patients in activities designed to help them learn skills necessary to perform daily tasks, diminish or correct pathology, and promote and maintain health.

The MSDH reported 990 licensed occupational therapists and 530 licensed occupational therapy assistants on its Mississippi roster as of April 8, 2015, with 884 of the OTs and 476 of the OTAs residing in the state.

### 103.06 Emergency Medical Personnel

The training of emergency medical personnel includes ambulance operators and emergency medical technicians (EMTs) of both advanced and basic levels. Mississippi requires all ambulance drivers to have EMS driver certification (EMS-D). To qualify, an individual must complete an approved driver training program that involves driving tasks, vehicle dynamics, vehicle preventative maintenance, driver perception, night driving, and information on different driving maneuvers. This training offers both academic and clinical (practical hands on) experiences for the prospective ambulance driver. In FY 2014, Mississippi issued 339 EMS driver certifications or recertification.

Additionally, all emergency medical technicians – both advanced level and basic level – must complete a National Highway Safety and Traffic Administration training program for the respective level. This training provides extensive academic and clinical hours for the prospective students. Upon completion, students must pass the National Registry for Emergency Medical Technicians test and receive their national certification before applying for the Mississippi certification. For FY 2014, the MSDH Bureau of Emergency Medical Services reported issuing a total of 1,036 EMT certifications or recertifications; and 858 Paramedics.

The Legislature authorized the MSDH Bureau of Emergency Medical Services (BEMS) to certify Mississippi's medical first responders beginning July 1, 2004. In fiscal year 2014, BEMS has certified 14 medical first responders.

## 104 Outline of the State Health Plan

The *State Health Plan* describes existing services, evaluates the need for additional services in various aspects of health care, and provides Certificate of Need (CON) criteria and standards for each service requiring CON review. These services include: long-term care, including care for the aged and the mentally retarded; mental health care, including psychiatric, chemical dependency, and long-term residential treatment facilities; perinatal care; acute care, including various types of diagnostic and therapeutic services; ambulatory care, including outpatient services and freestanding ambulatory surgical centers; comprehensive medical rehabilitation; home health services; and end stage renal disease facilities.

The Glossary contains definitions of terms and phrases used in this *Plan*.

# HEALTH FACILITIES AND SERVICES/CERTIFICATE OF NEED CRITERIA AND STANDARDS

# CHAPTER 2

# LONG-TERM CARE

# Chapter 02 Long-Term Care

"Long-term care" simply means assistance provided to a person who has chronic conditions that reduce their ability to function independently. Many people with severe limitations in their ability to care for themselves are able to remain at home or in supportive housing because they have sufficient assistance from family, friends, or community services.

Mississippi's long-term care (nursing home and home health) patients are primarily disabled elderly people, who make up 20 percent of the 2025 projected population above age 65. Projections place the number of people in this age group at approximately 642,506 by 2025, with more than 186,327 disabled in at least one essential activity of daily living.

The risk of becoming frail, disabled, and dependent rises dramatically with age. While the average length of life has increased, people are often living longer with some very disabling chronic conditions which the present medical system can "manage" but not cure. So while the lives of many people have been prolonged through advances in medicine and public health, the quality of an older person's life often suffers. Aged individuals may become dependent on medical technology and professional care providers for years - not just weeks or months.

## 100 Options for Long-Term Care

Several programs for individuals with infirmities serve, if properly used, can delay or avoid institutionalization. These programs, although not reviewable through Certificate of Need authority, drastically affect the demand for skilled nursing beds.

Community services play a vital role in helping the elderly maintain some degree of independence. Examples of community-based elder-care include adult day care, senior centers, transportation, meals on wheels or meals at community locations, and home health services. More information concerning such services can be obtained by contacting the Mississippi Department of Human Services, Division of Aging and Adult Services.

## 101 Housing for the Elderly

Many elderly or infirmed people do not need skilled nursing care on a daily basis, but simply safe, affordable housing and some assistance with the activities of daily living. Such housing can take many forms.

"Board and care homes" are residences providing rooms (often semi-private), shared common areas, meals, protective oversight, and help with bathing, dressing, grooming, and other daily needs. In Mississippi, these facilities are licensed as personal care homes: Personal Care Home - Residential Living and Personal Care Home - Assisted Living. Both of these facilities provide residents a sheltered environment and assistance with the activities of daily living. Additionally, Personal Care Homes - Assisted Living may provide additional supplemental medical services that include the provision of certain routine health maintenance and emergency response services. In December of 2012, the state had 174 licensed personal care homes, with a total of 5,545 licensed beds. Personal care facilities presently are not reviewable under Certificate of Need authority.

"Retirement communities" or "senior housing facilities" have become common around the state. These communities usually provide apartments for independent living, with services such as transportation, weekly or bi-weekly housekeeping, and one to three meals daily in a common dining room. Many of these facilities include a licensed personal care home where the resident may move when he or she is no longer physically or mentally able to remain in their own apartment. Most facilities do not require an initial fee and do not sign a lifetime contract with their residents. They generally offer only independent living and personal care - most do not include a skilled nursing home as a part of the retirement community. Table 8-1 shows the distribution of personal care facilities by Long-Term Care Planning Districts.

**Table 2-1**
**Personal Care Home Licensed Beds, Occupancy Rates and Average Daily Census**
**2012**

| District I | | | |
|---|---|---|---|
| **County** | **Licensed Beds** | **Occupancy Rate %** | **Average Daily Census** |
| Attala | 30 | N/A | N/A |
| Bolivar | 146 | 70.03 | 96.44 |
| Carroll | 0 | 0.00 | 0.00 |
| Coahoma | 36 | 32.35 | 11.64 |
| DeSoto | 409 | 59.03 | 241.45 |
| Grenada | 63 | 80.52 | 50.72 |
| Holmes | 16 | 87.26 | 13.96 |
| Humphreys | 0 | 0.00 | 0.00 |
| Leflore | 74 | 86.62 | 64.10 |
| Montgomery | 0 | 0.00 | 0.00 |
| Panola | 54 | 89.28 | 48.21 |
| Quitman | 0 | 0.00 | 0.00 |
| Sunflower | 52 | 91.57 | 43.46 |
| Tallahatchie | 0 | 0.00 | 0.00 |
| Tate | 70 | N/A | N/A |
| Tunica | 0 | 0.00 | 0.00 |
| Washington | 129 | 72.02 | 74.18 |
| Yalobusha | 0 | 0.00 | 0.00 |
| **District Total** | **1,079** | **66.87** | **644.16** |

| District II | | | |
|---|---|---|---|
| **County** | **Licensed Beds** | **Occupancy Rate %** | **Average Daily Census** |
| Alcorn | 69 | 75.05 | 51.78 |
| Benton | N/A | N/A | N/A |
| Calhoun | 20 | 64.13 | 12.83 |
| Chickasaw | 18 | 76.40 | 13.75 |
| Choctaw | 14 | 89.64 | 12.55 |
| Clay | 21 | 84.34 | 17.71 |
| Itawamba | 140 | 69.25 | 96.95 |
| Lafayette | 145 | 61.40 | 89.02 |
| Lee | 391 | 79.77 | 311.91 |
| Lowndes | 150 | 75.97 | 113.96 |
| Marshall | 46 | 67.65 | 31.12 |
| Monroe | 83 | 88.84 | 73.73 |
| Noxubee | 25 | 73.10 | 18.28 |
| Oktibbeha | 54 | 87.27 | 31.42 |
| Pontotoc | 40 | N/A | N/A |
| Prentiss | 74 | 63.35 | 25.34 |
| Tippah | 0 | 0.00 | 0.00 |
| Tishomingo | 117 | 88.71 | 81.61 |
| Union | 84 | 87.49 | 55.99 |
| Webster | 13 | N/A | N/A |
| Winston | 31 | 87.24 | 27.04 |
| **District Total** | **1,535** | **65.98** | **1,064.99** |

**Table 2-1 (Continued)**
**Personal Care Home Licensed Beds, Occupancy Rates and Average Daily Census**
**2012**

| District III | | | |
|---|---|---|---|
| **County** | **Licensed Beds** | **Occupancy Rate %** | **Average Daily Census** |
| Adams | 46 | 94.74 | 43.58 |
| Amite | 0 | 0.00 | 0.00 |
| Claiborne | 5 | N/A | N/A |
| Copiah | 0 | 0.00 | 0.00 |
| Franklin | 0 | 0.00 | 0.00 |
| Hinds | 410 | 92.73 | 254.99 |
| Issaquena | 0 | 0.00 | 0.00 |
| Jefferson | 0 | 0.00 | 0.00 |
| Lawrence | 12 | 64.21 | 7.7 |
| Lincoln | 23 | 31.25 | 7.22 |
| Madison | 442 | 80.38 | 347.22 |
| Pike | 98 | 63.45 | 62.18 |
| Rankin | 260 | 77.00 | 113.97 |
| Sharkey | 0 | 0.00 | 0.00 |
| Simpson | 51 | 58.98 | 17.69 |
| Walthall | 0 | 0.00 | 0.00 |
| Warren | 73 | 81.18 | 59.27 |
| Wilkinson | 0 | 0.00 | 0.00 |
| Yazoo | 0 | 0.00 | 0.00 |
| **District Total** | **1,420** | **64.39** | **913.82** |
| **State Total** | | | |

| District IV | | | |
|---|---|---|---|
| **County** | **Licensed Beds** | **Occupancy Rate %** | **Average Daily Census** |
| Clarke | 45 | 46.06 | 20.72 |
| Covington | 36 | 76.81 | 27.65 |
| Forrest | 181 | 62.43 | 79.29 |
| George | 87 | 70.97 | 51.10 |
| Greene | 0 | 0.00 | 0.00 |
| Hancock | 12 | 81.26 | 8.13 |
| Harrison | 370 | 50.21 | 160.66 |
| Jackson | 76 | 93.43 | 48.58 |
| Jasper | 48 | 45.08 | 21.64 |
| Jeff Davis | 0 | 0.00 | 0.00 |
| Jones | 189 | 63.25 | 101.54 |
| Kemper | 0 | 0.00 | 0.00 |
| Lamar | 163 | 72.07 | 117.48 |
| Lauderdale | 220 | 75.62 | 138.38 |
| Leake | 15 | 100.00 | 15.00 |
| Marion | 8 | N/A | N/A |
| Neshoba | 44 | 83.58 | 10.03 |
| Newton | 53 | 67.58 | 35.82 |
| Pearl River | 66 | 67.94 | 8.15 |
| Perry | 39 | 90.37 | 35.25 |
| Scott | 28 | 79.44 | 22.24 |
| Smith | 0 | 0.00 | 0.00 |
| Stone | 16 | N/A | N/A |
| Wayne | 49 | 66.47 | 32.57 |
| **District Total** | **1,745** | **68.03** | **934.23** |
| | **5,779** | **65.41** | **3,557.20** |

Note: State total occupancy rate of 65.41% is based on 4,537 beds.

Source: *2012 Report on Institutions for the Aged or Infirm, December 2013;* MSDH, Bureau of Health Facilities Licensure and Certification

Another type of retirement center, called a "continuing care retirement community" (CCRC) includes three stages: independent living in a private apartment, a personal care facility, and a skilled nursing home. Residents of this type of facility enter into a contract whereby the residents pay a substantial fee upon entering the CCRC and the facility agrees to provide care for the remainder of the residents' lives. Table 2-2 shows the distribution of CCRCs within the state.

**Table 2-2**
**Continuing Care Retirement Community (CCRC)**

| County | Facility | Licensed CCRC Beds | LTCPD* |
|---|---|---|---|
| Hancock | Woodland Village | 33 | IV |
| Lee | Cedars Health Center* | 140 | II |
| Lowndes | Trinity Healthcare* | 60 | II |
| Madison | The Arbor Skilled Nursing Facility | 60 | III |
| Madison | St Catherine's Village* | 120 | III |
| Pike | Camellia Estates | 30 | III |
| Rankin | Brandon Court Nursing Home | 40 | III |
| Rankin | Wisteria Gardens | 52 | III |
| Stone | Stone County Nursing and Rehab Center | 39 | IV |
| **Total** | | **574** | |

*Trinity Healthcare, Cedars Health Center and St. Catherine's Village were exempt from CON Review.
LTCPD-Long-Term Care Planning District

Source: Mississippi State Department of Health, Division of Licensure and Certification; and Division of Health Planning and Resource Development

## 102 Nursing Facilities

As of June 2014, Mississippi has 187 public or proprietary skilled nursing homes, with a total of 16,575 licensed beds. Two entities have received CON approval for the construction of 81 additional nursing home beds, and 23 facilities have voluntarily de-licensed a total of 575 nursing home beds which are being held in abeyance by MSDH. This count of licensed nursing home beds excludes 120 beds operated by the Mississippi Band of Choctaw Indians; 719 licensed beds operated by the Department of Mental Health; a total of 574 beds in continuing care retirement communities (CCRCs); 600 operated by the Mississippi State Veteran's Affairs Board, and 60 beds (which are dedicated to serving patients with special rehabilitative needs, including spinal cord and closed-head injuries) operated by Mississippi Methodist Rehabilitation Center. These beds are not subject to Certificate of Need review and are designated to serve specific populations.

Map 2-1 shows the general Long-Term Care Planning Districts and Table 2-3 presents the projected nursing home bed need for 2016 by planning district. Both the map and table appear in the criteria and standards section of this chapter. For 2020 projections see Appendix.

## 103 Long-Term Care Beds for Individuals with Mental Retardation and Other Developmental Disabilities

Mississippi has 2,816 licensed beds classified as ICF/MR (intermediate care facility for the mentally retarded). The Department of Mental Health (MDMH) operates five comprehensive regional centers that contain 2,072 active licensed and staffed beds. Five proprietary facilities operate 669 beds and one non-profit facility operates the remaining 95 beds. The residents of the MDMH's regional centers, although they have mental retardation/developmental disabilities, also have severe physical disabilities that result in their requiring care at the nursing home level. Regular nursing facilities are not equipped to serve these individuals. Map 2-2 shows the MR/DD Long-Term Care Planning Districts and Table 2-4 presents the MR/DD nursing home bed need by Planning District. Both the map and table appear in the criteria and standards section of this chapter.

# CERTIFICATE OF NEED

# CRITERIA AND STANDARDS
# FOR
# NURSING HOME BEDS

## 104 Certificate of Need Criteria and Standards for Nursing Home Beds

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 104.01 Policy Statement Regarding Certificate of Need Applications for the Offering of Nursing Home Care Services

1. Legislation

   a. The 1990 Mississippi Legislature imposed a permanent moratorium which prohibits the MSDH from granting approval for or issuing a Certificate of Need to any person proposing the new construction of, addition to, expansion of, or conversion of vacant hospital beds to provide skilled or intermediate nursing home care, except as specifically authorized by statute.

   b. Effective July 1, 1990, any health care facility defined as a psychiatric hospital, skilled nursing facility, intermediate care facility, intermediate care facility for the mentally retarded, or psychiatric residential treatment facility that is owned by the State of Mississippi and under the direction and control of the State Department of Mental Health is exempted from the requirement of the issuance of a Certificate of Need under Section 41-7-171 et seq., for projects which involve new construction, renovation, expansion, addition of new beds, or conversion of beds from one category to another in any such defined health care facility.

   c. The 1999 Mississippi Legislature temporarily lifted the 1990 moratorium to allow a 60-bed nursing facility to be added to each of 26 counties with the greatest need between the years 2000 and 2003. The Legislature also permitted CONs for 60 nursing facility beds for individuals with Alzheimer's disease in the northern, central, and southern parts of each of the Long-Term Care Planning Districts, for a total of 240 additional beds.

   d. Effective April 12, 2002, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need.

   e. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

f. A health care facility that has ceased to operate for a period of 60 months (five years) or more shall require a Certificate of Need prior to reopening.

g. Long-Term Care Planning Districts (LTCPD): The MSDH shall determine the need for additional nursing home care beds based on the LTCPDs as outlined on Map 2-1. The MSDH shall calculate the statistical need for beds in each LTCPD independently of all other LTCPDs.

2. Bed Need: The need for nursing home care beds is established at:

   0.5 beds per 1,000 population aged 64 and under
   10 beds per 1,000 population aged 65-74
   36 beds per 1,000 population aged 75-84
   135 beds per 1,000 population aged 85 and older

3. Population Projections: The MSDH shall use population projections as presented in Table 2-3 when calculating bed need. These population projections are the most recent projections prepared by the Center for Policy Research and Planning of the Institutions of Higher Learning.

4. Bed Inventory: The MSDH shall review the need for additional nursing home beds using the most recent information available regarding the inventory of such beds.

5. Size of Facility: The MSDH shall not approve construction of a new or replacement nursing home care facility for less than 60 beds. However, the number of beds authorized to be licensed in a new or replacement facility may be less than 60 beds.

6. Definition of CCRC: The Glossary of this *Plan* presents the MSDH's definition of a "continuing care retirement community" for the purposes of planning and CON decisions.

7. Medicare Participation: The MSDH strongly encourages all nursing homes participating in the Medicaid program to also become certified for participation in the Medicare program.

8. Alzheimer's/Dementia Care Unit: The MSDH encourages all nursing home owners to consider the establishment of an Alzheimer's/Dementia Care Unit as an integral part of their nursing care program.

### 104.02 Certificate of Need Criteria and Standards for Nursing Home Care Beds

If the legislative moratorium were removed or partially lifted, the MSDH would review applications for the offering of nursing home care under the statutory requirements of Sections 41-7-173 (h) subparagraphs (iv) and (vi), 41-7-191, and 41-7-193, Mississippi Code of 1972, as amended. The MSDH will also review applications for Certificate of Need according to the applicable policy statements contained in this *Plan*; 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.

Certificate of Need review is required for the offering of nursing home care services, as defined, if the capital expenditure exceeds $2,000,000; if the licensed bed capacity is increased through the conversion or addition of beds; or if nursing home care services have not been provided on a regular basis by the proposed provider of such services within the period of twelve (12) months prior to the time such services would be offered. Certificate of Need review is required for the construction, development, or otherwise establishment of new nursing home care beds regardless of capital expenditure.

1. **Need Criterion: The applicant shall document a need for nursing home care beds using the need methodology as presented herein: The Long-Term Care Planning District wherein the proposed facility will be located must show a need using the following ratio:**

   **0.5 beds per 1,000 population aged 64 and under**
   **10 beds per 1,000 population aged 65-74**
   **36 beds per 1,000 population aged 75-84**
   **135 beds per 1,000 population aged 85 and older**

2. The applicant shall document the number of beds that will be constructed, converted, and/or licensed as offering nursing home care services.

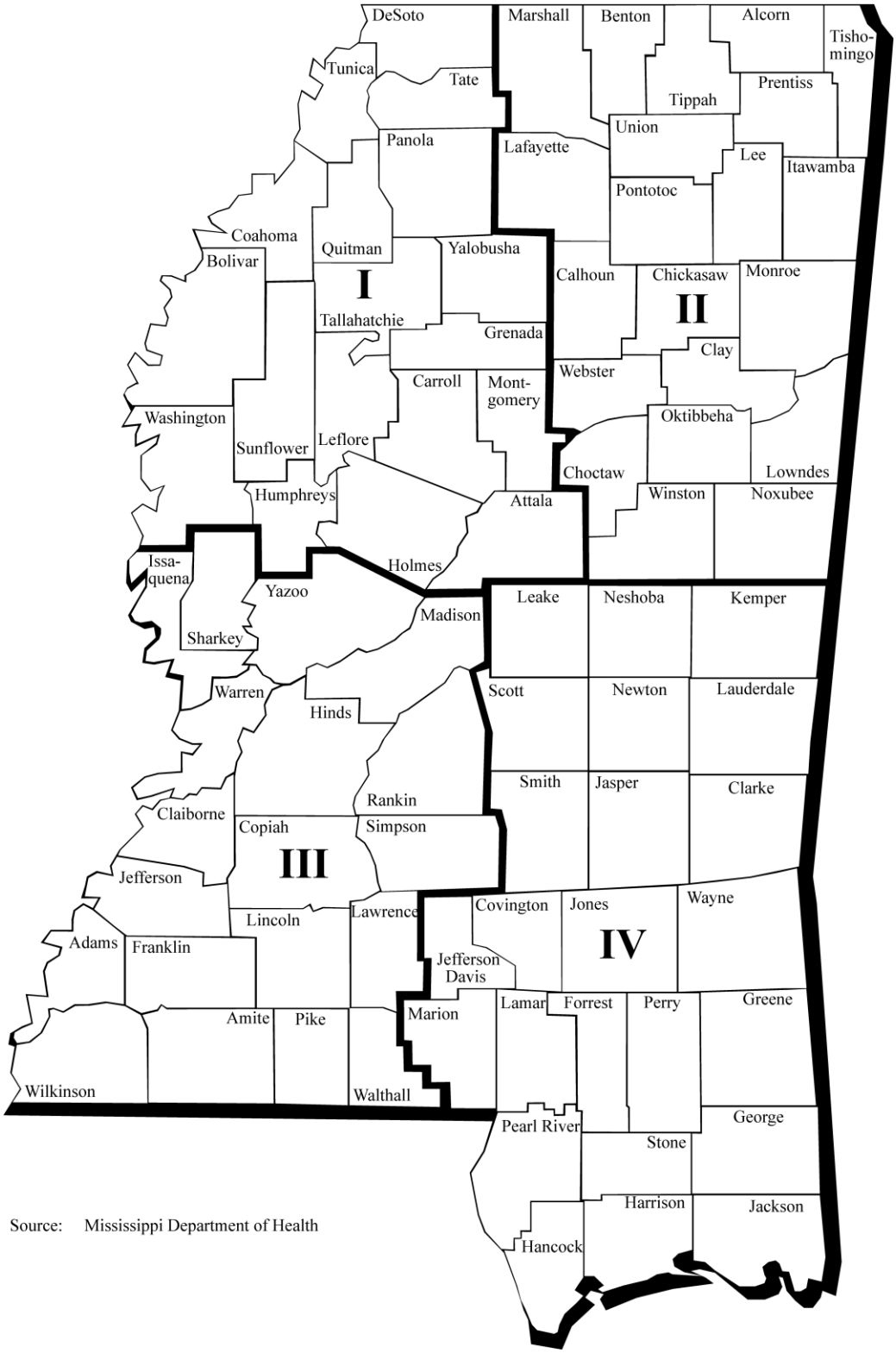
3. The MSDH should consider the area of statistical need as one criterion when awarding Certificates of Need in the case of competing applications.

4. Any applicant applying for nursing home beds who proposes to establish an Alzheimer's/Dementia Care Unit shall affirm that the applicant shall fully comply with all licensure regulations of the MSDH for said Alzheimer's/Dementia Care Unit.

### 104.03 Certificate of Need Criteria and Standards for Nursing Home Beds As Part of a Continuing Care Retirement Community (CCRC)

Entities desiring to establish nursing home beds as part of a CCRC shall meet all applicable requirements, as determined by the MSDH, of the policy statements and general CON criteria and standards in the *Mississippi Certificate of Need Review Manua*l and the CON criteria and standards for nursing home beds established in this *State Health Plan*.

**Map 2-1**
**Long-Term Care Planning Districts**




Source: Mississippi Department of Health

**Table 2-3**
**2016 Projected Nursing Home Bed Need[1]**

| State of Mississippi | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Long-Term Care Planning District** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| District I | 494,838 | 247 | 44,913 | 449 | 25,546 | 920 | 13,807 | 1,864 | 3,480 | 177 | 3,076 | 227 |
| District II | 501,539 | 251 | 51,488 | 515 | 33,024 | 1,189 | 18,381 | 2,481 | 4,436 | 48 | 3,825 | 563 |
| District III | 726,616 | 363 | 66,984 | 670 | 39,091 | 1,407 | 21,846 | 2,949 | 5,328 | 52 | 4,518 | 758 |
| District IV | 878,279 | 439 | 89,637 | 896 | 60,338 | 2,172 | 31,819 | 4,296 | 7,803 | 298 | 5,156 / 182 | 2,167 |
| **State Total** | **2,601,272** | **1,301** | **253,022** | **2,530** | **157,999** | **5,688** | **85,853** | **11,590** | **21,047** | **575** | **16,575 / 182** | **3,715** |

[1] Data may not equal totals due to rounding

**Note**: Licensed beds do not include 719 beds operated by the Department of Mental Health, 120 beds operated by the Mississippi Band of Choctaw Indians, 600 beds operated by the Mississippi Veteran's Affairs Board, 60 beds operated by the Mississippi Methodist Rehabilitation Center for the treatment of patients with special disabilities, including persons with spinal cord and closed-head injuries and ventilator-dependent patients, or 574 beds licensed to continuing care retirement communities (CCRC).

Sources: Mississippi State Department of Health, Division of Licensure and Certification; and Division of Health Planning and Resource Development Calculations, 2013

Population Projections: *Mississippi Population Projections 2016, 2020, and 2025*. Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, September 2008

**Table 2-3 (continued)**
**2016 Projected Nursing Home Bed Need**

| District I | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Attala | 16,237 | 8.12 | 1,843 | 18.43 | 1,331 | 47.92 | 804 | 108.54 | 183 | 0 | 120 | 63 |
| Bolivar | 30,972 | 15.49 | 3,129 | 31.29 | 1,566 | 56.38 | 904 | 122.04 | 225 | 60 | 290 | -125 |
| Carroll | 7,865 | 3.93 | 1,166 | 11.66 | 661 | 23.80 | 344 | 46.44 | 86 | 0 | 60 | 26 |
| Coahoma | 21,973 | 10.99 | 2,146 | 21.46 | 1,287 | 46.33 | 741 | 100.04 | 179 | 8 | 170 | 1 |
| DeSoto | 172,781 | 86.39 | 13,826 | 138.26 | 6,690 | 240.84 | 3,162 | 426.87 | 892 | 0 | 320 | 572 |
| Grenada | 19,430 | 9.72 | 2,062 | 20.62 | 1,366 | 49.18 | 792 | 106.92 | 186 | 10 | 237 | -61 |
| Holmes | 16,915 | 8.46 | 1,269 | 12.69 | 869 | 31.28 | 470 | 63.45 | 116 | 10 | 128 | -22 |
| Humphreys | 7,840 | 3.92 | 739 | 7.39 | 477 | 17.17 | 271 | 36.59 | 65 | 0 | 60 | 5 |
| Leflore | 28,992 | 14.50 | 2,253 | 22.53 | 1,353 | 48.71 | 802 | 108.27 | 194 | 8 | 402 | -216 |
| Montgomery | 8,923 | 4.46 | 1,071 | 10.71 | 782 | 28.15 | 488 | 65.88 | 109 | 0 | 120 | -11 |
| Panola | 31,041 | 15.52 | 2,779 | 27.79 | 1,737 | 62.53 | 945 | 127.58 | 233 | 0 | 190 | 43 |
| Quitman | 6,602 | 3.30 | 561 | 5.61 | 385 | 13.86 | 217 | 29.30 | 52 | 0 | 60 | -8 |
| Sunflower | 24,677 | 12.34 | 1,821 | 18.21 | 1,026 | 36.94 | 579 | 78.17 | 146 | 2 | 242 | -98 |
| Tallahatchie | 10,472 | 5.24 | 1,196 | 11.96 | 771 | 27.76 | 433 | 58.46 | 103 | 21 | 77 | 5 |
| Tate | 24,165 | 12.08 | 2,389 | 23.89 | 1,343 | 48.35 | 698 | 94.23 | 179 | 0 | 120 | 59 |
| Tunica | 10,375 | 5.19 | 857 | 8.57 | 416 | 14.98 | 216 | 29.16 | 58 | 0 | 60 | -2 |
| Washington | 43,986 | 21.99 | 4,533 | 45.33 | 2,589 | 93.20 | 1,433 | 193.46 | 354 | 58 | 298 | -2 |
| Yalobusha | 11,592 | 5.80 | 1,273 | 12.73 | 897 | 32.29 | 508 | 68.58 | 119 | 0 | 122 | -3 |
| **District Total** | **494,838** | **247.42** | **44,913** | **449.13** | **25,546** | **919.66** | **13,807** | **1,863.95** | **3,480** | **177** | **3,076** | **227** |

## Table 2-3 (continued)
## 2016 Projected Nursing Home Bed Need

| District II | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Alcorn | 30,092 | 15.05 | 3,739 | 37.39 | 2,358 | 84.89 | 1,314 | 177.39 | 315 | 0 | 264 | 51 |
| Benton | 6,522 | 3.26 | 764 | 7.64 | 539 | 19.40 | 318 | 42.93 | 73 | 0 | 60 | 13 |
| Calhoun | 11,176 | 5.59 | 1,411 | 13.98 | 992 | 35.71 | 613 | 82.76 | 138 | 0 | 155 | -17 |
| Chickasaw | 15,127 | 7.56 | 1,584 | 15.84 | 1,067 | 38.41 | 585 | 78.98 | 141 | 0 | 139 | 2 |
| Choctaw | 7,234 | 3.62 | 916 | 9.16 | 615 | 22.14 | 358 | 48.33 | 83 | 13 | 47 | 23 |
| Clay | 16,851 | 8.43 | 1,769 | 17.69 | 1,156 | 41.62 | 670 | 90.45 | 158 | 20 | 140 | -2 |
| Itawamba | 19,131 | 9.57 | 2,108 | 21.08 | 1,337 | 48.13 | 713 | 96.26 | 175 | 0 | 196 | -21 |
| Lafayette | 38,065 | 19.03 | 2,788 | 27.88 | 1,847 | 66.49 | 1,050 | 141.75 | 255 | 0 | 180 | 75 |
| Lee | 71,191 | 35.60 | 6,989 | 69.89 | 4,186 | 150.70 | 2,210 | 298.35 | 555 | 0 | 347 | 208 |
| Lowndes | 48,761 | 24.38 | 5,246 | 52.46 | 3,043 | 109.55 | 1,712 | 231.12 | 418 | 0 | 320 | 98 |
| Marshall | 31,766 | 15.88 | 3,172 | 31.72 | 1,806 | 65.02 | 947 | 127.85 | 240 | 0 | 180 | 60 |
| Monroe | 30,305 | 15.15 | 3,568 | 35.68 | 2,380 | 85.68 | 1,304 | 176.04 | 313 | 0 | 332 | -19 |
| Noxubee | 9,543 | 4.77 | 924 | 9.24 | 571 | 20.56 | 324 | 43.74 | 78 | 0 | 60 | 18 |
| Oktibbeha | 38,822 | 19.41 | 2,853 | 28.53 | 1,779 | 64.04 | 986 | 133.11 | 245 | 0 | 179 | 66 |
| Pontotoc | 26,636 | 13.32 | 2,514 | 25.14 | 1,586 | 57.10 | 927 | 125.15 | 221 | 0 | 164 | 57 |
| Prentiss | 20,832 | 10.42 | 2,385 | 23.85 | 1,632 | 58.75 | 903 | 121.91 | 215 | 0 | 144 | 71 |
| Tippah | 17,693 | 8.85 | 1,836 | 18.36 | 1,272 | 45.79 | 696 | 93.96 | 167 | 0 | 240 | -73 |
| Tishomingo | 14,959 | 7.48 | 1,978 | 19.78 | 1,427 | 51.37 | 791 | 106.79 | 185 | 15 | 163 | 7 |
| Union | 23,708 | 11.85 | 2,380 | 23.80 | 1,551 | 55.84 | 866 | 116.91 | 208 | 0 | 180 | 28 |
| Webster | 7,537 | 3.77 | 840 | 8.40 | 635 | 22.86 | 377 | 50.90 | 86 | 0 | 155 | -69 |
| Winston | 15,588 | 7.79 | 1,724 | 17.24 | 1,245 | 44.82 | 717 | 96.80 | 167 | 0 | 180 | -13 |
| **District Total** | **501,539** | **250.77** | **51,488** | **514.88** | **33,024** | **1,188.86** | **18,381** | **2,481.44** | **4,436** | **48** | **3,825** | **563** |

## Table 2-3 (continued)
## 2016 Projected Nursing Home Bed Need

| District III | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| County | Population 0 - 64 | Bed Need (0.5/1,000) | Population 65 - 74 | Bed Need (10/1,000) | Population 75 - 84 | Bed Need (36/1,000) | Population 85+ | Bed Need (135/1,000) | Total Bed Need | # Beds in Abeyance | Licensed/CON Approved Beds | Difference |
| Adams | 24,016 | 12.01 | 2,976 | 29.76 | 2,121 | 76.36 | 1,212 | 163.62 | 282 | 20 | 234 | 28 |
| Amite | 10,855 | 5.43 | 1,365 | 13.65 | 864 | 31.10 | 488 | 65.88 | 116 | 0 | 80 | 36 |
| Claiborne | 9,784 | 4.89 | 720 | 7.20 | 483 | 17.39 | 254 | 34.29 | 64 | 18 | 59 | -13 |
| Copiah | 25,509 | 12.75 | 2,445 | 24.45 | 1,510 | 54.36 | 889 | 120.02 | 212 | 0 | 180 | 32 |
| Franklin | 6,842 | 3.42 | 707 | 7.07 | 524 | 18.86 | 306 | 41.31 | 71 | 0 | 60 | 11 |
| Hinds | 214,492 | 107.25 | 19,287 | 192.87 | 10,646 | 383.26 | 6,060 | 818.10 | 1,501 | 14 | 1,399 | 88 |
| Issaquena | 1,213 | 0.61 | 114 | 1.14 | 76 | 2.74 | 36 | 4.86 | 9 | 0 | 0 | 9 |
| Jefferson | 7,625 | 3.81 | 629 | 6.29 | 404 | 14.54 | 216 | 29.16 | 54 | 0 | 60 | -6 |
| Lawrence | 11,157 | 5.58 | 1,090 | 10.90 | 774 | 27.86 | 402 | 54.27 | 99 | 0 | 60 | 39 |
| Lincoln | 29,652 | 14.83 | 3,082 | 30.82 | 2,007 | 72.25 | 1,189 | 160.52 | 278 | 0 | 320 | -42 |
| Madison | 95,478 | 47.74 | 6,929 | 69.29 | 4,009 | 144.32 | 2,272 | 306.72 | 568 | 0 | 275 | 293 |
| Pike | 33,661 | 16.83 | 3,378 | 33.78 | 2,231 | 18.86 | 1,337 | 180.50 | 250 | 0 | 285 | -35 |
| Rankin | 141,980 | 70.99 | 12,963 | 129.63 | 6,613 | 238.07 | 3,372 | 455.22 | 894 | 0 | 410 | 484 |
| Sharkey | 4,343 | 2.17 | 474 | 4.74 | 278 | 10.01 | 155 | 20.93 | 38 | 0 | 54 | -16 |
| Simpson | 23,271 | 11.64 | 2,334 | 23.34 | 1,478 | 53.21 | 825 | 111.38 | 200 | 0 | 180 | 20 |
| Walthall | 12,828 | 6.41 | 1,291 | 12.91 | 883 | 31.79 | 490 | 66.15 | 117 | 0 | 137 | -20 |
| Warren | 40,882 | 20.44 | 4,439 | 44.39 | 2,391 | 86.08 | 1,301 | 175.64 | 327 | 0 | 380 | -53 |
| Wilkinson | 8,729 | 4.36 | 745 | 7.45 | 527 | 18.97 | 290 | 39.15 | 70 | 0 | 105 | -35 |
| Yazoo | 24,299 | 12.15 | 2,016 | 20.16 | 1,272 | 45.79 | 752 | 101.52 | 180 | 0 | 240 | -60 |
| **District Total** | **726,616** | **363.31** | **66,984** | **669.84** | **39,091** | **1,407.28** | **21,846** | **2,949.21** | **5,328** | **52** | **4,518** | **758** |

## Table 2-3 (continued)
## 2016 Projected Nursing Home Bed Need

| District IV | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Clarke | 13,753 | 6.88 | 1,694 | 16.94 | 1,103 | 39.71 | 635 | 85.73 | 149 | 0 | 120 | 29 |
| Covington | 18,635 | 9.32 | 1,797 | 17.97 | 1,230 | 44.28 | 662 | 89.37 | 161 | 0 | 120 | 41 |
| Forrest | 73,011 | 36.51 | 5,776 | 57.76 | 3,854 | 138.74 | 2,222 | 299.97 | 533 | 100 | 386 | 47 |
| George | 22,197 | 11.10 | 2,010 | 20.10 | 1,196 | 43.06 | 575 | 77.63 | 152 | 0 | 79 / 41 | 32 |
| Greene | 11,092 | 5.55 | 1,181 | 11.81 | 732 | 26.35 | 372 | 50.22 | 94 | 0 | 120 | -26 |
| Hancock | 38,538 | 19.27 | 5,383 | 53.83 | 3,474 | 125.06 | 1,722 | 232.47 | 431 | 29 | 140 | 262 |
| Harrison | 156,487 | 78.24 | 16,375 | 163.75 | 10,732 | 386.35 | 5,566 | 751.41 | 1,380 | 60 | 742 | 578 |
| Jackson | 116,634 | 58.32 | 12,751 | 127.51 | 7,711 | 277.60 | 3,694 | 498.69 | 962 | 0 | 528 | 434 |
| Jasper | 15,096 | 7.55 | 1,617 | 16.17 | 1,198 | 43.13 | 648 | 87.48 | 154 | 0 | 110 | 44 |
| Jeff Davis | 10,233 | 5.12 | 1,270 | 12.70 | 900 | 32.40 | 489 | 66.02 | 116 | 0 | 60 | 56 |
| Jones | 57,584 | 28.79 | 5,922 | 59.22 | 4,426 | 159.34 | 2,439 | 329.27 | 577 | 10 | 418 | 149 |
| Kemper | 8,187 | 4.09 | 905 | 9.05 | 723 | 26.03 | 398 | 53.73 | 93 | | 60 | 33 |
| Lamar | 49,368 | 24.68 | 3,720 | 37.20 | 2,265 | 81.54 | 1,141 | 154.04 | 297 | 3 | 177 | 117 |
| Lauderdale | 63,908 | 31.95 | 6,569 | 65.69 | 4,989 | 179.60 | 2,865 | 386.78 | 664 | 47 | 525 / 21 | 71 |
| Leake | 21,019 | 10.51 | 1,914 | 19.14 | 1,417 | 51.01 | 806 | 108.81 | 189 | 0 | 143 | 46 |
| Marion | 21,667 | 10.83 | 2,195 | 21.95 | 1,627 | 58.57 | 946 | 127.71 | 219 | 0 | 297 | -78 |
| Neshoba | 27,048 | 13.52 | 2,602 | 26.02 | 1,941 | 69.88 | 1,096 | 147.96 | 257 | 3 | 217 | 37 |
| Newton | 19,259 | 9.63 | 1,954 | 19.54 | 1,520 | 54.72 | 852 | 115.02 | 199 | 0 | 180 | 19 |
| Pearl River | 53,238 | 26.62 | 5,559 | 55.59 | 3,535 | 127.26 | 1,770 | 238.95 | 448 | 6 | 240 / 120 | 82 |
| Perry | 10,382 | 5.19 | 1,157 | 11.57 | 766 | 27.58 | 368 | 49.68 | 94 | 0 | 60 | 34 |
| Scott | 24,341 | 12.17 | 2,489 | 24.89 | 1,724 | 62.06 | 903 | 121.91 | 221 | 0 | 140 | 81 |
| Smith | 13,067 | 6.53 | 1,493 | 14.93 | 1,113 | 40.07 | 583 | 78.71 | 140 | 0 | 121 | 19 |
| Stone | 15,666 | 7.83 | 1,425 | 14.25 | 885 | 31.86 | 425 | 57.38 | 111 | 40 | 83 | -12 |
| Wayne | 17,869 | 8.93 | 1,879 | 18.79 | 1,277 | 45.97 | 642 | 86.67 | 160 | 0 | 90 | 70 |
| **District Total** | **878,279** | **439.14** | **89,637** | **896.37** | **60,338** | **2,172.17** | **31,819** | **4,295.57** | **7,803** | **298** | **5,156 / 182** | **2,167** |

## 105 Policy Statement Regarding Certificate of Need Applications for a Pediatric Skilled Nursing Facility

1. The 1993 Mississippi Legislature authorized the Department of Health to issue a Certificate of Need for the construction of a pediatric skilled nursing facility not to exceed 60 new beds.

2. A pediatric skilled nursing facility is defined as an institution or a distinct part of an institution that is primarily engaged in providing to inpatients skilled nursing care and related services for persons under 21 years of age who require medical, nursing care, or rehabilitation services for the rehabilitation of injured, disabled, or sick persons.

3. The MSDH will review applications for the construction of pediatric skilled nursing facility beds using the general CON review criteria and standards contained in the *Mississippi Certificate of Need Review Manual*, criteria and standards for nursing homes and MR/DD facilities contained in the *State Health Plan*, and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

4. Effective April 12, 2002, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need under the authority of Section 41-7-191(1)(c).

5. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

## 106 Certificate of Need Criteria and Standards for Nursing Home Care Services for Mentally Retarded and other Developmentally Disabled Individuals

### 106.01 Policy Statement Regarding Certificate of Need Applications for the Offering of Nursing Home Care Services for Mentally Retarded and Other Developmentally Disabled Individuals

1. Legislation

   a. The 1990 Mississippi Legislature imposed a permanent moratorium which prohibits the MSDH from granting approval for or issuing a CON to any person proposing the new construction, addition to, or expansion of an intermediate care facility for the mentally retarded (ICF/MR).

   b. Effective July 1, 1990, any health care facility defined as a psychiatric hospital, skilled nursing facility, intermediate care facility, intermediate care facility for the mentally retarded, or psychiatric residential treatment facility which is owned by the State of Mississippi and under the direction and control of the State Department of Mental Health is exempted from the requirement of the issuance of

a Certificate of Need under Section 41-7-171 et seq., for projects which involve new construction, renovation, expansion, addition of new beds, or conversion of beds from one category to another in any such defined health care facility.

c. Effective April 12, 2002, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need.

d. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

2. MR/DD Long-Term Care Planning Districts (MR/DD LTCPD): The need for additional MR/DD nursing home care beds shall be based on the MR/DD LTCPDs as outlined on Map 2-2.

3. Bed Need: The need for MR/DD nursing home care beds is established at one bed per 1,000 population less than 65 years of age.

4. Population Projections: The MSDH shall use population projections as presented in Table 2-4 when calculating bed need.

5. Bed Limit: No MR/DD LTCPD shall be approved for more than its proportioned share of needed MR/DD nursing home care beds. No application shall be approved which would over-bed the state as a whole.

6. Bed Inventory: The MSDH shall review the need for additional MR/DD nursing home care beds utilizing the most recent information available regarding the inventory of such beds.

### 106.02 Certificate of Need Criteria and Standards for Nursing Home Beds for Mentally Retarded and Other Developmentally Disabled Individuals

If the legislative moratorium were removed or partially lifted, the Mississippi State Department of Health would review applications for MR/DD nursing home care beds under the statutory requirements of Sections 41-7-173 (h) subparagraph (viii), 41-7-191, and 41-7-193, Mississippi Code 1972, as amended. The MSDH will also review applications for Certificate of Need according to the applicable policy statements contained in this *Plan;* the general criteria as listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

Certificate of Need review is required for the offering of MR/DD nursing home care services, as defined, if the capital expenditure exceeds $2,000,000; if the licensed bed capacity is increased through the conversion or addition of beds; or if MR/DD nursing home care services have not been provided on a regular basis by the proposed provider of such services within the period of twelve (12) months prior to the time such services would be offered. Certificate of

Need review is required for the construction, development, or otherwise establishment of new MR/DD nursing home care beds regardless of capital expenditure.

1. **Need Criterion: The applicant shall document a need for MR/DD nursing home care beds using the need methodology as presented below. The applicant shall document in the application the following:**

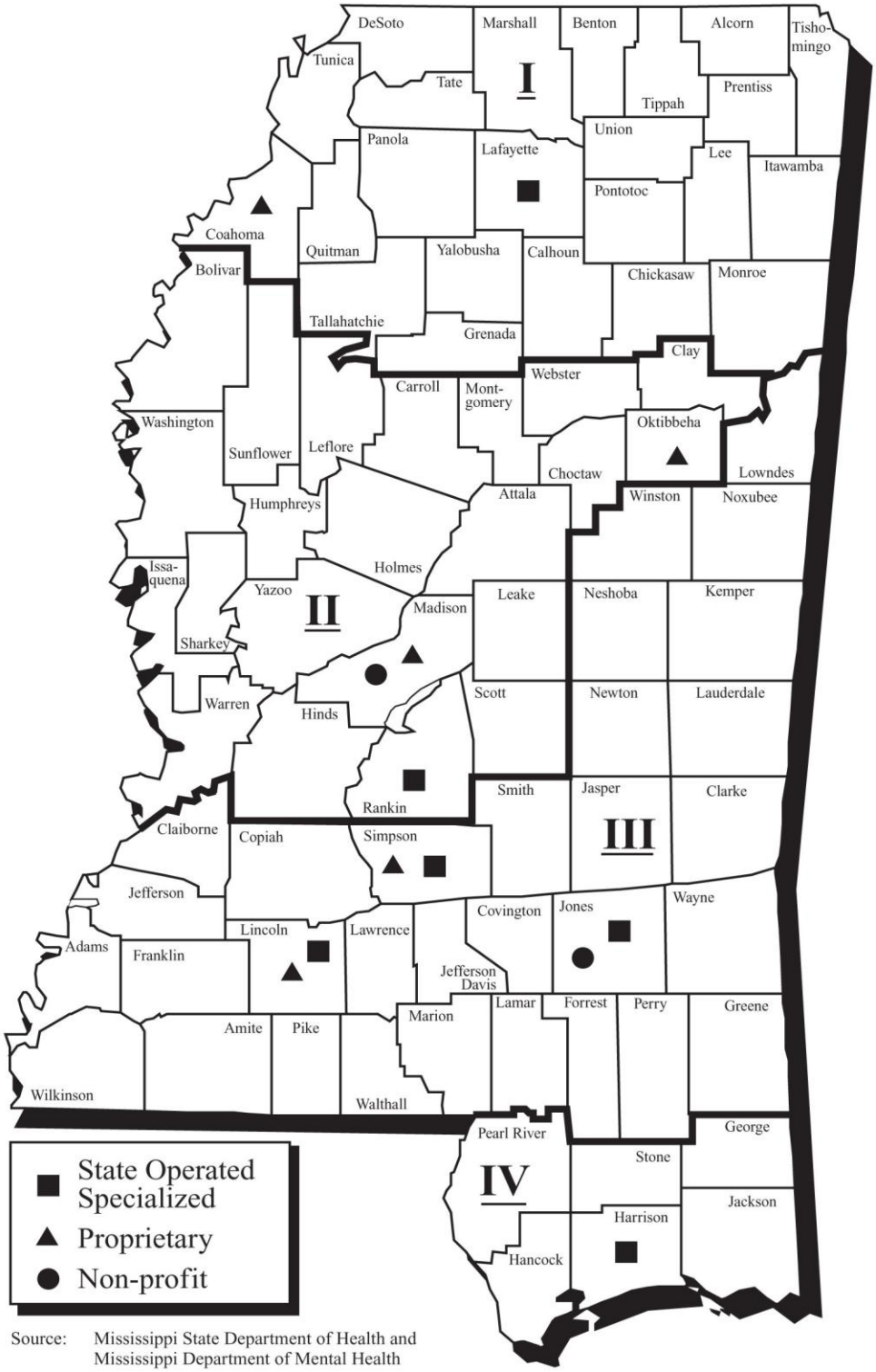
    a. **using the ratio of one bed per 1,000 population under 65 years of age, the state as a whole must show a need; and**

    b. **the MR/DD Long-Term Care Planning District (LTCPD) where the proposed facility/beds/services are to be located must show a need.**

2. The applicant shall document the number of beds that will be constructed/converted and/or licensed as offering MR/DD nursing home care services.

3. The MSDH shall give priority consideration to those CON applications proposing the offering of MR/DD nursing home care services in facilities which are 15 beds or less in size.

**Map 2-2**
**Mentally Retarded/Developmentally Disabled Long-Term Care**
**Planning Districts and Location of Existing Facilities**
**(ICF/MR – Licensed)**




Source: Mississippi State Department of Health and Mississippi Department of Mental Health

**Table 2-4**
**2016 Projected MR/DD Nursing Home Bed Need**
**(1 Bed per 1,000 Population Aged 65 and Under)**

| | 2015 Projected Pop. <65 | 2012 Licensed Beds | Projected MR/DD Bed Need [1] | Difference [1] |
|---|---|---|---|---|
| **Mississippi** | **2,601,272** | **2,816** | **2,601** | **-215** |
| **District I** | **665,634** | **617** | **666** | **49** |
| Alcorn | 30,092 | | 30 | 30 |
| Benton | 6,522 | | 7 | 7 |
| Calhoun | 11,176 | | 11 | 11 |
| Chickasaw | 15,127 | | 15 | 15 |
| Coahoma | 21,973 | 132 | 22 | -110 |
| DeSoto | 172,781 | | 173 | 173 |
| Grenada | 19,430 | | 19 | 19 |
| Itawamba | 19,131 | | 19 | 19 |
| Lafayette | 38,065 | 485 | 38 | -447 |
| Lee | 71,191 | | 71 | 71 |
| Marshall | 31,766 | | 32 | 32 |
| Monroe | 30,305 | | 30 | 30 |
| Panola | 31,041 | | 31 | 31 |
| Pontotoc | 26,636 | | 27 | 27 |
| Prentiss | 20,832 | | 21 | 21 |
| Quitman | 6,602 | | 7 | 7 |
| Tallahatchie | 10,472 | | 10 | 10 |
| Tate | 24,165 | | 24 | 24 |
| Tippah | 17,693 | | 18 | 18 |
| Tishomingo | 14,959 | | 15 | 15 |
| Tunica | 10,375 | | 10 | 10 |
| Union | 23,708 | | 24 | 24 |
| Yalobusha | 11,592 | | 12 | 12 |

[1] Data may not equal totals due to rounding.

**Table 2-4 (continued)**
**2016 Projected MR/DD Nursing Home Bed Need**
**(1 Bed per 1,000 Population Aged 65 and Under)**

| | 2015 Projected Pop. <65 | 2012 Licensed Beds | Projected MR/DD Bed Need [1] | Difference [1] |
|---|---|---|---|---|
| **District II** | **873,659** | **707** | **874** | **167** |
| Attala | 16,237 | | 16 | 16 |
| Bolivar | 30,972 | | 31 | 31 |
| Carroll | 7,865 | | 8 | 8 |
| Choctaw | 7,234 | | 7 | 7 |
| Clay | 16,851 | | 17 | 17 |
| Hinds | 214,492 | | 214 | 214 |
| Holmes | 16,915 | | 17 | 17 |
| Humphreys | 7,840 | | 8 | 8 |
| Issaquena | 1,213 | | 1 | 1 |
| Leake | 21,019 | | 21 | 21 |
| Leflore | 28,992 | | 29 | 29 |
| Lowndes | 48,761 | | 49 | 49 |
| Madison | 95,478 | 152 | 95 | -57 |
| Montgomery | 8,923 | | 9 | 9 |
| Oktibbeha | 38,822 | 140 | 39 | -101 |
| Rankin | 141,980 | 415 | 142 | -273 |
| Scott | 24,341 | | 24 | 24 |
| Sharkey | 4,343 | | 4 | 4 |
| Sunflower | 24,677 | | 25 | 25 |
| Warren | 40,882 | | 41 | 41 |
| Washington | 43,986 | | 44 | 44 |
| Webster | 7,537 | | 8 | 8 |
| Yazoo | 24,299 | | 24 | 24 |

[1] Data may not equal totals due to rounding.

**Table 2-4 (continued)**
**2016 Projected MR/DD Nursing Home Bed Need**
**(1 Bed per 1,000 Population Aged 65 and Under)**

| | 2015 Projected Pop. <65 | 2012 Licensed Beds | Projected MR/DD Bed Need [1] | Difference [1] |
|---|---|---|---|---|
| **District III** | **659,219** | **1,252** | **659** | **-593** |
| Adams | 24,016 | | 24 | 24 |
| Amite | 10,855 | | 11 | 11 |
| Claiborne | 9,784 | | 10 | 10 |
| Clarke | 13,753 | | 14 | 14 |
| Copiah | 25,509 | | 26 | 26 |
| Covington | 18,635 | | 19 | 19 |
| Forrest | 73,011 | | 73 | 73 |
| Franklin | 6,842 | | 7 | 7 |
| Greene | 11,092 | | 11 | 11 |
| Jasper | 15,096 | | 15 | 15 |
| Jefferson | 7,625 | | 8 | 8 |
| Jefferson Davis | 10,233 | | 10 | 10 |
| Jones | 57,584 | 757 | 58 | -699 |
| Kemper | 8,187 | | 8 | 8 |
| Lamar | 49,368 | | 49 | 49 |
| Lauderdale | 63,908 | | 64 | 64 |
| Lawrence | 11,157 | | 11 | 11 |
| Lincoln | 29,652 | 172 | 30 | -142 |
| Marion | 21,667 | | 22 | 22 |
| Neshoba | 27,048 | | 27 | 27 |
| Newton | 19,259 | | 19 | 19 |
| Noxubee | 9,543 | | 10 | 10 |
| Perry | 10,382 | | 10 | 10 |
| Pike | 33,661 | | 34 | 34 |
| Simpson | 23,271 | 323 | 23 | -300 |
| Smith | 13,067 | | 13 | 13 |
| Walthall | 12,828 | | 13 | 13 |
| Wayne | 17,869 | | 18 | 18 |
| Wilkinson | 8,729 | | 9 | 9 |
| Winston | 15,588 | | 16 | 16 |

[1] Data may not equal totals due to rounding.

**Table 2-4 (continued)**
**2016 Projected MR/DD Nursing Home Bed Need**
**(1 Bed per 1,000 Population aged 65 and Under)**

| | 2015 Projected Pop. <65 | 2012 Licensed Beds | Projected MR/DD Bed Need [1] | Difference 1 |
|---|---|---|---|---|
| **District IV** | **402,760** | **240** | **403** | **163** |
| George | 22,197 | | 22 | 22 |
| Hancock | 38,538 | | 39 | 39 |
| Harrison | 156,487 | 240 | 156 | -84 |
| Jackson | 116,634 | | 117 | 117 |
| Pearl River | 53,238 | | 53 | 53 |
| Stone | 15,666 | | 16 | 16 |

[1] Data may not equal totals due to rounding.

# CHAPTER 3

# MENTAL HEALTH

# Chapter 03 Mental Health

This chapter addresses mental illness, alcoholism, drug abuse, and developmental disabilities. These conditions result in social problems of such magnitude that mental health ranks as one of the state's priority health issues. The Mississippi Department of Mental Health, regional community Mental Health-Mental Retardation Centers, and licensed private sector facilities provide most of the state's mental health services. Unless otherwise specified, information in this chapter is limited to the programs and services of private non-governmental entities.

## 100 Mississippi Department of Mental Health

State law designates the Mississippi Department of Mental Health (MDMH) as the agency to coordinate and administer the delivery of public mental health services, alcohol/drug abuse services, and services for persons with intellectual/developmental disabilities throughout the state, as well as community-based day programs for individuals with Alzheimer's disease and other dementia. Responsibilities of MDMH include: (a) state-level planning and expansion of all types of mental health, mental retardation, and substance abuse services, (b) standard-setting and support for community mental health/mental retardation and alcohol/drug abuse programs, (c) state liaison with mental health training and educational institutions, (d) operation of the state's psychiatric facilities, and (e) operation of the state's facilities for individuals with intellectual/developmental disabilities.

Regional community mental health-mental retardation centers provide a major component of the state's mental health services. Fourteen centers currently operate in the state's mental health service areas, and most centers have satellite offices in other counties. Each center must meet federal and state program and performance standards. The major objectives of the regional community mental health centers include: (a) providing accessible services to all citizens with mental and emotional problems; (b) reducing the number of initial admissions to the state hospitals; and (c) preventing re-admissions through supportive aftercare services. These centers are a vital element in the plan to provide an integrated system of mental health services to all residents of Mississippi.

## 101 Mental Health Needs in Mississippi

The prevalence of mental illness, although difficult to assess, serves as a good indicator of the volume of need for mental health services in a given population. The negative social stigma associated with the term "mental illness" also obstructs efforts to measure the true incidence/ prevalence of most types of mental illness and behavior disorders and the need for mental health services.

Using the methodology updated by the federal Center for Mental Health Services (CMHS) for estimated prevalence of serious mental illness among adults (*Federal Register*, June 24, 1999) and U.S. Bureau of the Census 2013 population estimates, the MDMH estimates the prevalence of serious mental illness among adults in Mississippi, ages 18 years and above, as 5.4 percent or 120,332 individuals. The same methodology estimates the national prevalence for the same age group also as 5.4 percent.

In Fiscal Year 2014, a total of 70,334 adults received mental health services through the public community mental health system, including the regional community mental health centers and the state psychiatric hospitals. (Note: Totals might include some duplication across community and hospital services.)

### 101.01 Mental Health Needs of Children/Adolescents

Precise data concerning the size of the country's population of children and adolescents with emotional or mental disorders remain difficult to obtain. The methodology issued by the national Center of Mental Health Services (*Federal Register*, July 17,1998) estimates the number of children and adolescents (9-17 years of age) with serious emotional disturbance to be 369,698 for the year 2013. The methodology adjusts for socio-economic differences across states. Given Mississippi's relatively high poverty rate when compared to other states, (29.1% of ages 5-17 in poverty, based on 2013 federal poverty rates), the estimated prevalence ranges for the state, as follows:

1. Mississippi's estimated prevalence of serious emotional disturbance in children and adolescents (ages 9 to 17) is between 11 and 13 percent, or 40,667– 58,061 children.

2. Mississippi's estimated prevalence of the more severely impaired group of children and adolescents (estimated at five to seven percent of the national population), aged 9-17 is between seven and nine percent, or 25,879 – 33,273 Mississippi children.

In Fiscal Year 2014, the public community mental health system served 34,194 children and adolescents with serious emotional disturbance. (Mississippi State Plan for Community Mental Health Services Implementation Report, FY 2014) (Note: Totals might include some duplication across community mental health centers and other nonprofit programs).

### 101.02 National Survey on Drug Use and Health for Mississippi

According to statistics cited in SAMHSA's *2007-08 National Survey on Drug Use and Health* state estimates (most available data), seven percent of Mississippians 12 years or older were past-month illicit drug users. Past-month marijuana use among Mississippians 12 years and older was four percent. Approximately 38.4 percent of Mississippians were past-month alcohol users. Past month binge alcohol use among Mississippians was 19.87 percent.

## 101.03 Developmental Disabilities

The nationally-accepted prevalence rate estimate used by the Administration on Developmental Disabilities for estimating the state rate is 1.8 percent of the general population. By applying the 1.8 percent prevalence rate to Mississippi's 2020 population projections, the results equal 56,808 individuals who may have a developmental disability. The intellectual and/or developmental disability bed need determinations can be found in Chapter 2 of this *Plan.*

## 102 Adult Psychiatric Services (State-Operated and Private)

Mississippi's four state-operated hospitals and nine crisis intervention centers provide the majority of inpatient psychiatric care and services throughout the state. In FY 2014, the Mississippi State Hospital at Whitfield reported a total of 360 active psychiatric licensed beds; East Mississippi State Hospital at Meridian reported 120 active psychiatric licensed beds, North Mississippi State Hospital in Tupelo reported 50 active licensed beds, and South Mississippi State Hospital in Purvis reported 50 licensed beds. The four facilities reported that 3,020 adults received psychiatric services at the hospitals in FY 2014, 1,174 at Mississippi State Hospital at Whitfield, 694 at East Mississippi State Hospital, 520 at North Mississippi State Hospital, and 632 at South

Mississippi State Hospital. Additionally, a total of 4,007 adults were served through the nine crisis centers in FY 2014.

Even though many private facilities have low occupancy rates, the state institutions provide the majority of inpatient care for the medically indigent. Medically indigent patients have difficulty gaining access to private psychiatric facilities in their respective communities. To help address the problem, the Legislature provided funding for seven state crisis intervention centers as satellites to existing facilities operated by the Department of Mental Health (DMH). Centers are operational in Brookhaven, Corinth, Newton, Laurel, Cleveland, and Batesville. The Department of Mental Health contracted with Life Help (Region VI community mental health center) to operate the crisis center in Grenada beginning September 1, 2009. This pilot program began with the purpose of studying the potential for increased efficiencies and improved access to services by individuals without their being involuntarily committed.

All of the centers include 16 beds and one isolation bed. The role of these centers in the regional system is to provide stabilization and treatment services to persons who have been committed to a psychiatric hospital and for whom a bed is not available. Beginning July 1, 2010, DMH transitioned five of the remaining state-operated crisis centers (now called Crisis Stabilization Units) to a regional community mental health center located in Batesville, Brookhaven, Cleveland, Corinth and Laurel. Central Mississippi Residential Center will continue to operate the unit in Newton. The Gulfport center is operated by Gulf Coast Mental Health and partially funded by a grant from DMH. Timber Hills Mental Health Services operates the Brookhaven CSU; Life Help operates the CSUs located in Grenada and Cleveland; and Pine Belt Mental Resources operates the Laurel CSU. In FY 2013, the CSUs served 3,731 adults. Life Help assumed operation of the Cleveland Crisis Stabilization Unit.

Mississippi has 14 hospital-based and two freestanding adult psychiatric facilities, with a capacity of 588 licensed beds for adult psychiatric patients (plus 2 held in abeyance by the MSDH and 20 CON approved) distributed throughout the state. The criteria and standards section of this chapter provides a full description of the services that private facilities must provide. Map 3-1 shows the location of inpatient facilities in Mississippi serving adult acute psychiatric patients; Table 3-2 shows utilization statistics.

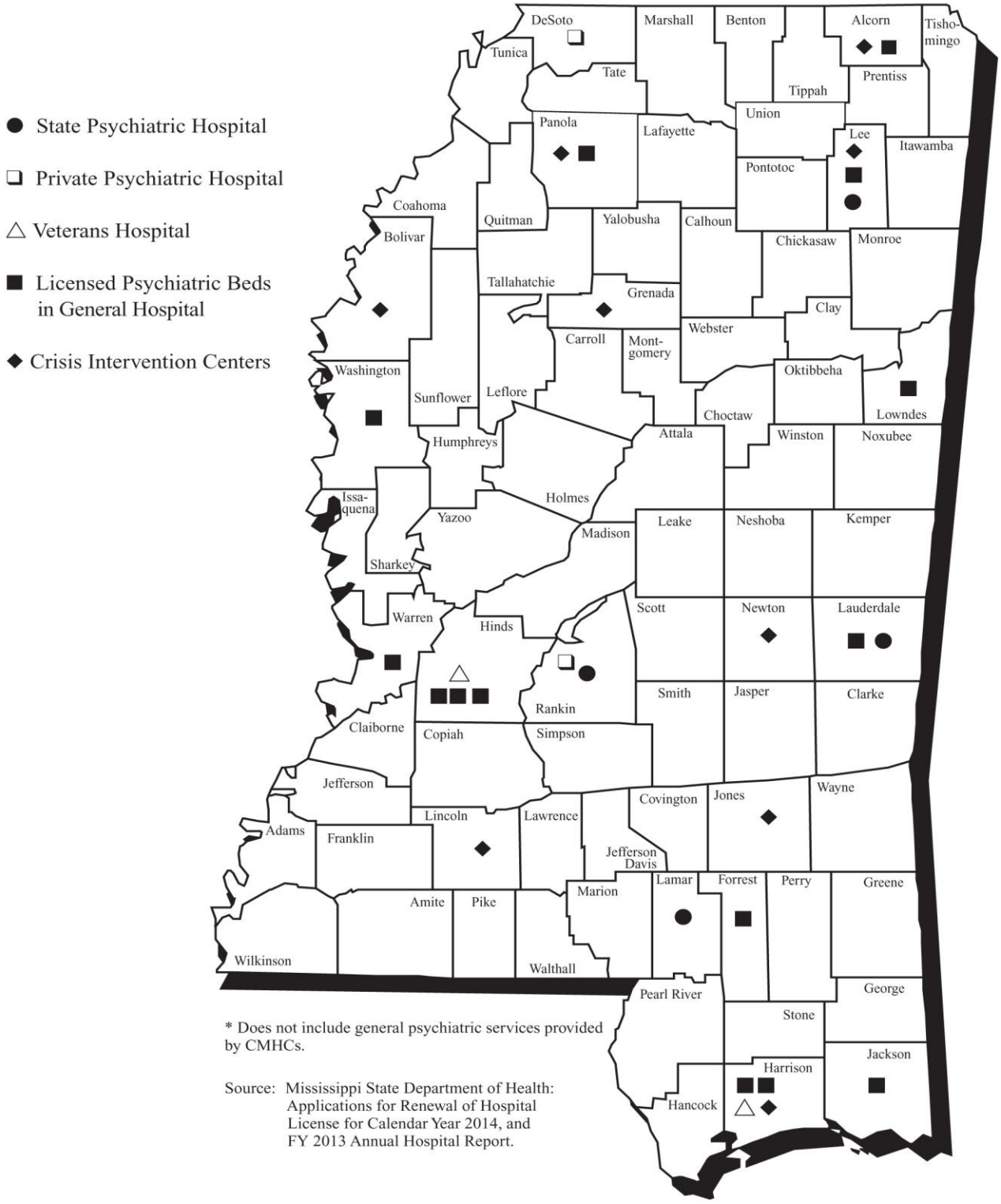
**Table 3-1**
**Acute Adult Psychiatric Bed Utilization**
**FY 2013**

| Facility | County | Licensed/CON[a]/ Abeyance[b] Beds | | Inpatient Days | Occupancy Rate (%) | ALOS |
|---|---|---|---|---|---|---|
| Alliance Health Center | Lauderdale | 38 | | 13,912 | 100.30 | 8.99 |
| Baptist Memo. Hospital-Golden Triangle | Lowndes | 22 | | 6,704 | 83.49 | 6.30 |
| Biloxi Regional Medical Center | Harrison | 45 | | 9,923 | 60.41 | 6.49 |
| Brentwood Behavioral Health Care * | Rankin | 31 | 2[b] | 5,308 | 46.91 | 8.69 |
| Central Miss Medical Center** | Hinds | 47 | | 8,819 | 51.41 | 4.73 |
| Delta Regional Medical Center- West | Washington | 9 | | 2,099 | 63.90 | 4.02 |
| Forrest General Hospital | Forrest | 64 | | 11,267 | 48.23 | 4.65 |
| Magnolia Regional Health Center | Alcorn | 19 | | 4,044 | 58.31 | 6.40 |
| Memorial Hospital at Gulfport | Harrison | 59 | | 4,925 | 22.87 | 7.00 |
| North Miss Medical Center | Lee | 33 | | 8,111 | 67.34 | 6.77 |
| Parkwood Behavorial HS-Olive Branch*** | DeSoto | 22 | 20[a] | 9,183 | 114.36 | 9.67 |
| River Region Health System | Warren | 40 | | 5,157 | 35.32 | 6.18 |
| Singing River Hospital | Jackson | 30 | | 3,718 | 33.95 | 5.52 |
| St. Dominic Hospital | Hinds | 83 | | 14,714 | 48.57 | 5.29 |
| Tri-Lakes Medical Center * | Panola | 25 | | 6,374 | 69.85 | 6.23 |
| University Hospital & Clinics | Hinds | 21 | | 5,866 | 76.53 | 6.30 |
| **Total Adult Psychiatric Beds** | | **588** | **20[a]/2[b]** | **120,124** | **55.97** | **6.22** |

[a] CON approved
[b] Beds held in abeyance by the MSDH
*Tri-Lakes Medical Center leases 25 beds from Brentwood Behavioral Health Center. 10 beds were CON approved July 2010 and became licensed/operational 09/01/2010. During FY 2011, Brentwood further reduced its adult bed capacity from 50 to 31 to create room for additional child/adolescent beds.
**Central Mississippi Medical Center received CON authority in February 2013 to expand its adult psychiatric unit bed capacity from 29 to 47 beds.
***Parkwood Behavorial HS-Olive Branch received CON authority in April 2013 to add 20 Adult Psychiatric Beds to its existing 22 beds.
Garden Park Medical Center received CON authority in March 2014 for the provision of Post Traumatic Stress Disorder Services and Addition of Nine Psychiatric Beds
East MS State Hospital placed 212 Adult Psychiatric Beds in abeyance as of 12/31/14

Sources: Applications for Renewal of Hospital License for Calendar Year 2015 and FY 2014 Annual Hospital Report; and Division of Health Planning and Resource Development Computations

**Map 3-1**
**Operational and Proposed Inpatient Facilities**
**Serving Adult Acute Psychiatric Patients***




* Does not include general psychiatric services provided by CMHCs.

Source: Mississippi State Department of Health: Applications for Renewal of Hospital License for Calendar Year 2014, and FY 2013 Annual Hospital Report.

## 103 Child/Adolescent Psychiatric Services

Three private and five hospital-based facilities, with a total of 239 licensed beds, provide acute psychiatric inpatient services for children and adolescents. Map 3-2 shows the location of inpatient facilities that serve adolescent acute psychiatric patients; Table 3-2 gives utilization statistics. The criteria and standards section of this chapter provides a further description of the programs that inpatient facilities offering child/adolescent psychiatric services must provide. The Mississippi State Legislature has placed a moratorium on the approval of new Medicaid-certified child/adolescent beds within the state.

The Department of Mental Health operates a separately-licensed 60-bed facility (Oak Circle Center) at Mississippi State Hospital to provide short-term inpatient psychiatric treatment for children and adolescents between the ages of four and 17. East Mississippi State Hospital operates a 50-bed psychiatric and chemical dependency treatment unit for adolescent males.

**Table 3-2**
**Acute Adolescent Psychiatric Bed Utilization**
**FY 2013**

| Facility | County | Licensed/CON[a]/ Abeyance[b] Beds | | Inpatient Days | Occupancy Rate(%) | ALOS |
|---|---|---|---|---|---|---|
| Alliance Health Center | Lauderdale | 30 | | 8,468 | 77.33 | 12.89 |
| Biloxi Regional Medical Center * | Harrison | 11 | | N/A | N/A | N/A |
| Brentwood Behavioral Health Care ** | Rankin | 74 | | 21,829 | 80.82 | 10.68 |
| Diamond Grove Center ** | Winston | 25 | | 7,658 | 83.92 | 11.36 |
| Forrest General Hospital | Forrest | 16 | | 4,920 | 84.25 | 6.15 |
| Memorial Hospital at Gulfport | Harrison | 30 | | 4,761 | 43.48 | 6.27 |
| Parkwood Behavioral HS-Oliva Branch | DeSoto | 52 | | 12,277 | 64.68 | 10.16 |
| River Region Health System | Warren | 0 | 20[a] | N/A | N/A | N/A |
| University Hospital & Clinics | Hinds | 12 | | 2,017 | 46.05 | 9.22 |
| **Total Adolescent Psychiatric Beds** | | **250** | **20[a]** | **61,930** | **67.87** | **9.73** |

[a] CON approved
[b] Beds held in abeyance by the MSDH
* Biloxi Regional Medical Center has 11 licensed adolescent psychiatric beds; however, data was not available for the unit.
**Diamond Grove Center transferred 15 CON approved beds to Brentwood Behavioral Health Center in February 2011 and they are a part of the 74 licensed beds at Brentwood Behavioral Health Center.

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; and Division of Health Planning and Resource Development Computations

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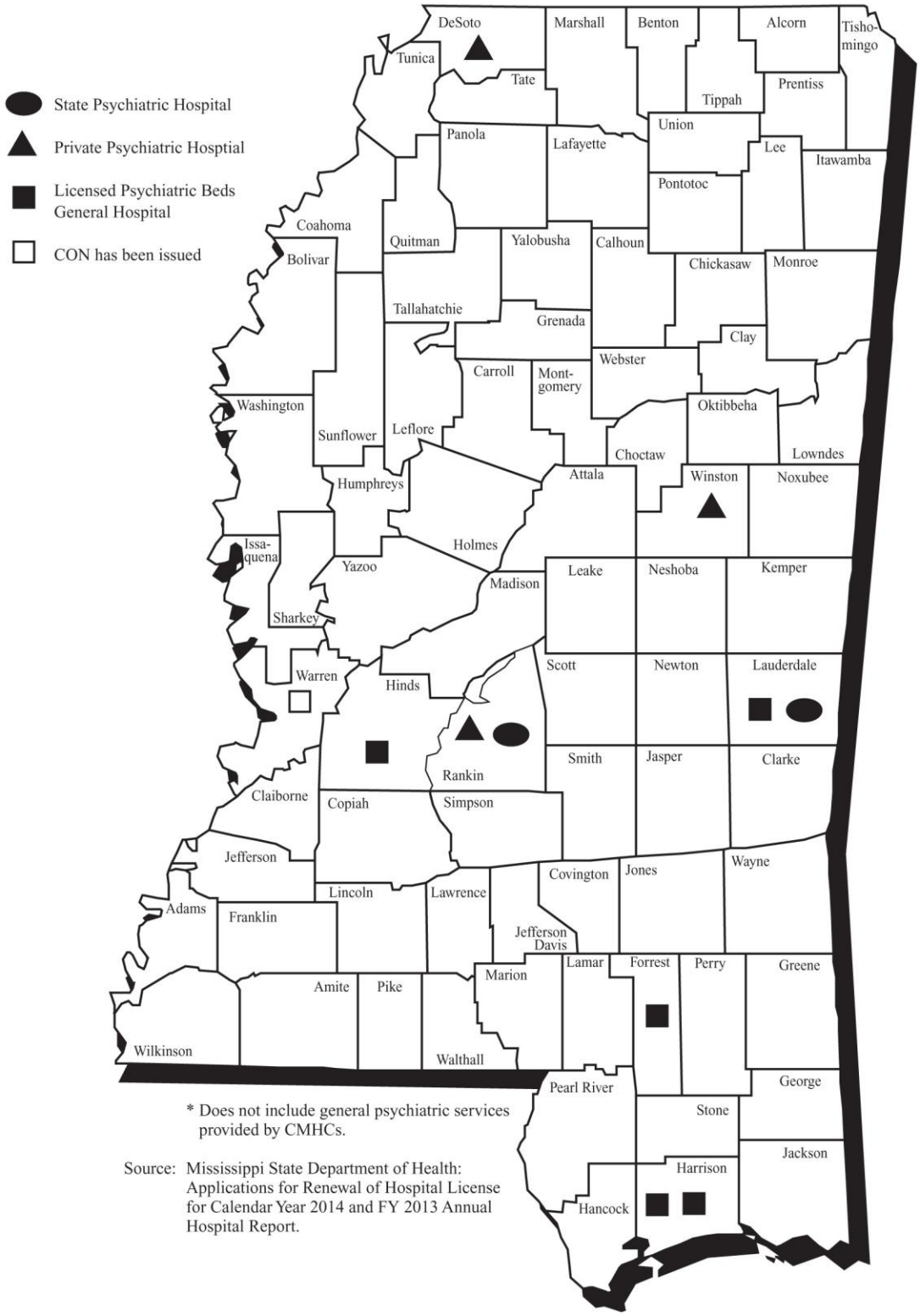
**Map 3-2**
**Operational and Proposed Inpatient Facilities**
**Serving Adolescent Acute Psychiatric Patients***




* Does not include general psychiatric services provided by CMHCs.

Source: Mississippi State Department of Health: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report.

## 104 Psychiatric Residential Treatment Facilities

Psychiatric Residential Treatment Facilities (PRTF) serve emotionally disturbed children and adolescents who are not in an acute phase of illness that requires the services of a psychiatric hospital, but who need restorative residential treatment services. "Emotionally disturbed" in this context means a condition exhibiting certain characteristics over a long period of time and to a marked degree. The criteria and standards section of this chapter describes these facilities more fully. Table 3-3 shows six facilities are in operation with a total of 298 PRTF beds. Map 3-3 presents the location of the private psychiatric residential treatment facilities throughout the state. Children and adolescents who need psychiatric residential treatment beyond the scope of these residential treatment centers are served in acute psychiatric facilities or sent out of the state to other residential treatment facilities.

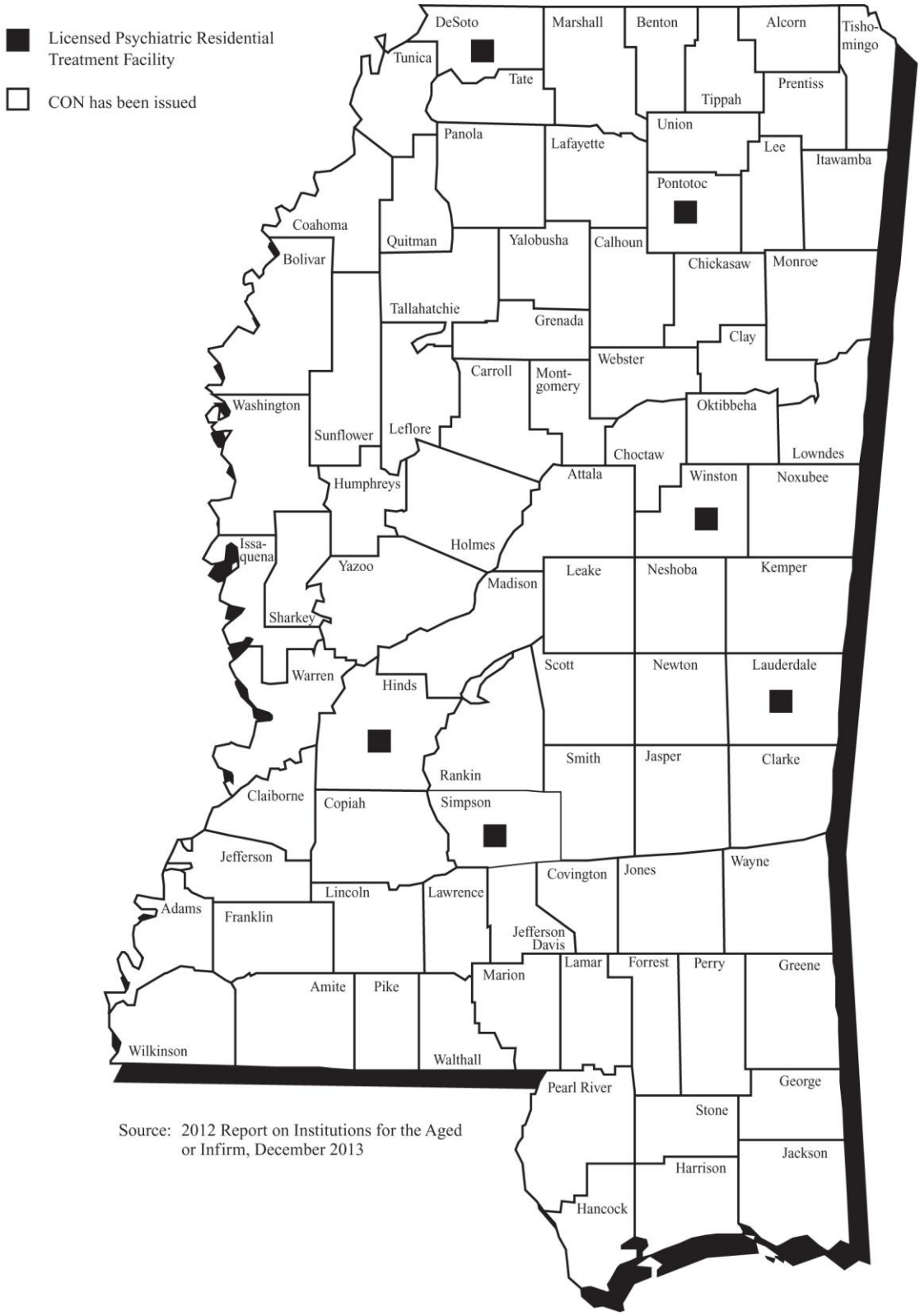
**Table 3-3**
**Private Psychiatric Residential Treatment Facility (PRTF)**
**Utilization**
**FY 2012**

| Facility | County | Licensed/CON[a] Approved Beds | | Inpatient Days | Occupancy Rate (%) | Average Daily Census |
|---|---|---|---|---|---|---|
| Parkwood BHS | DeSoto | 40 | | 10,647 | 72.73 | 29.09 |
| Cares Center | Hinds | 60 | | 21,414 | 97.51 | 58.51 |
| The Crossing | Lauderdale | 60 | | 21,927 | 99.85 | 59.91 |
| Millcreek of Pontotoc | Pontotoc | 51 | | 18,411 | 98.63 | 50.30 |
| Millcreek PRTF | Simpson | 57 | | 19,903 | 95.40 | 54.38 |
| Diamond Grove Center | Winston | 30 | | 10,844 | 98.76 | 29.63 |
| **Total PRTF Beds** | | **298** | | **103,146** | **94.57** | **281.82** |

[a] CON approved
Source: Mississippi State Department of Health, 2012 Report on Institutions for the Aged or Infirm, and Division of Health Planning and Resource Development

The DMH operates a specialized 32 bed treatment facility (ICF/MR) in Brookhaven for youth with an intellectual and/or developmental disability who are 13 years, but less than 21 years of age. A similar facility, licensed as a psychiatric residential treatment facility, is located in Harrison County for youth who have also been diagnosed with a mental disorder. Adolescents appropriate for admission are 13 years, but less than 21 years of age, who present with an Axis I diagnosis of a severe emotional disturbance and need psychiatric residential care.

**Map 3-3**
**Private Psychiatric Residential Treatment Facilities**



## 105 Alcohol and Drug Abuse Services

### 105.01 Alcohol and Drug Abuse

Alcohol and other drug problems cause pervasive effects: biological, psychological, and social consequences for the abuser; psychological and social effects on family members and others; increased risk of injury and death to self, family members, and others (especially by accidents, fires, or violence); and derivative social and economic consequences for society at large.

The location of facilities with alcohol and drug abuse programs is shown on Maps 3-4 and 3-5. Ten general hospitals and two freestanding facilities in Mississippi offer private alcohol and drug abuse treatment programs. Tables 3-4 and 3-5 show the utilization of these facilities for adult and adolescent chemical dependency services, respectively. The state hospitals at Whitfield and Meridian and the Veterans Administration Hospitals in Jackson and Gulfport provide inpatient alcohol and drug abuse services. Also, there are four facilities with programs designed for targeted populations: 1) the State Penitentiary at Parchman; 2) the Center for Independent Learning in Jackson; 3) the Mississippi Band of Choctaw Indians reservation treatment program; and 4) the Alcohol Services Center in Jackson. Additionally, each of the 15 regional community mental health centers provide a variety of alcohol and drug services, including residential and transitional treatment programs. A total of 38 such residential programs for adults and adolescents are scattered throughout the state. The Mississippi State Legislature has placed a moratorium on the approval of new Medicaid-certified child/adolescent chemical dependency beds within the state.

**Table 3-4**
**Adult Chemical Dependency Unit**
**Bed Utilization**
**FY 2013**

| Facility | County | Licensed/CON[a] Approved Beds | | Average Daily Census | Occupancy Rate (%) | ALOS |
|---|---|---|---|---|---|---|
| Alliance Health Center | Lauderdale | 8 | | 10.06 | 126.13 | 5.39 |
| Baptist Memorial Hospital - Golden Triangle | Lowndes | 8 | 13[a] | 2.39 | 29.93 | 4.48 |
| Brentwood Behavorial Healthcare * | Rankin | 0 | | 0.00 | 0.00 | 0.00 |
| Delta Regional Medical Center | Washington | 7 | | 1.06 | 15.23 | 5.07 |
| Forrest General Hospital ** | Forrest | 8 | | 1.20 | 15.03 | 3.30 |
| Mississippi Baptist Medical Center * | Hinds | 77 | | 0.66 | 0.86 | 8.58 |
| North Miss Medical Center | Lee | 33 | | 1.16 | 3.54 | 4.50 |
| Parkwood Behavioral Health System | DeSoto | 14 | | 4.85 | 34.72 | 7.30 |
| River Region Health System | Warren | 28 | | 14.77 | 52.89 | 9.94 |
| South Central Regional Medical Center | Jones | 10 | | 6.68 | 66.96 | 4.58 |
| St. Dominic Hospital | Hinds | 35 | | N/A | N/A | N/A |
| Tri-Lakes Medical Center * | Panola | 10 | | 5.41 | 54.22 | 5.33 |
| **Total Adult CDU Beds** | | **238** | **13[a]** | **48.24** | **20.32** | **6.37** |

*Brentwood Behavioral Healthcare of Rankin County will lease four beds from Mississippi Baptist Medical Center (MBMC). MBMC's licensed bed count will decrease from 77 to 73. Tri-Lakes MC now leases10 of the 23 beds from MBMC. MBMC has 13 beds that are not in use.
** Forrest General Hospital received a CON to convert 24 adult CDU beds to adult psychiatric beds April 2010.

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; Division of Health Planning and Resource Development.

As a note to Table 3-4, The Oxford Center was CON approved on May 31, 2012 and began leasing 35 adult chemical dependency beds from Mississippi Baptist Medical Center effective 10/01/2012.

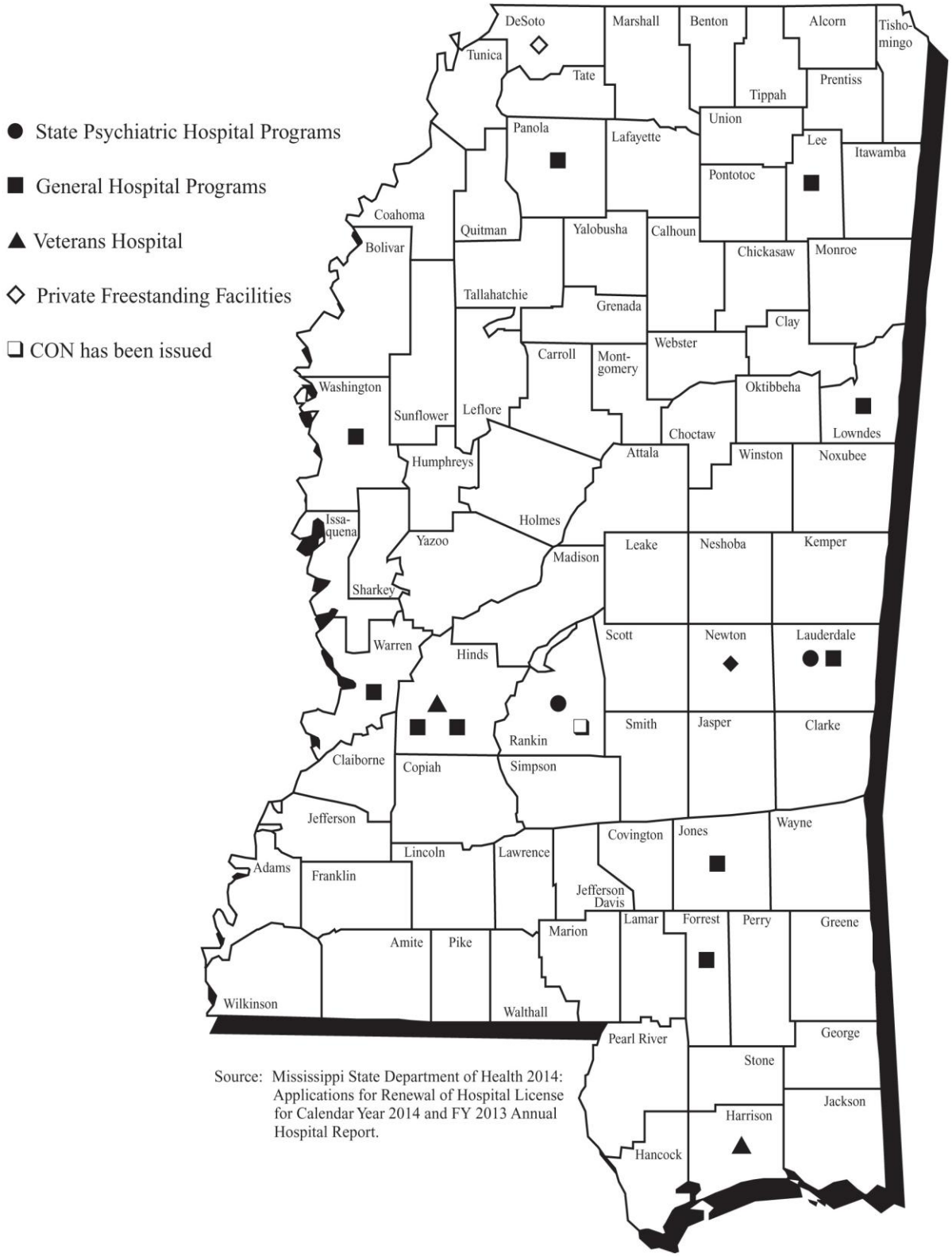
**Table 3-5**
**Adolescent Chemical Dependency Unit**
**Bed Utilization**
**FY 2013**

| Facilities | County | Licensed/CON Approved Beds | Average Daily Census | Occupancy Rate (%) * | ALOS |
|---|---|---|---|---|---|
| Memorial Hospital at Gulfport | Harrison | 20 | 2.23 | 11.21 | 9.14 |
| Mississippi Baptist Medical Center * | Hinds | 20 | N/A | N/A | N/A |
| River Region Health System * | Warren | 12 | N/A | N/A | N/A |
| **Total Adolescent CDU Beds *** | | **52** | **2.23** | **4.30** | **9.14** |

* Mississippi Baptist Medical Center and River Region Health System have 20 and 12 licensed adolescent CDU beds, respectively; however, data was not available for the units. Occupancy rate is based on 20 beds instead of 52 beds.

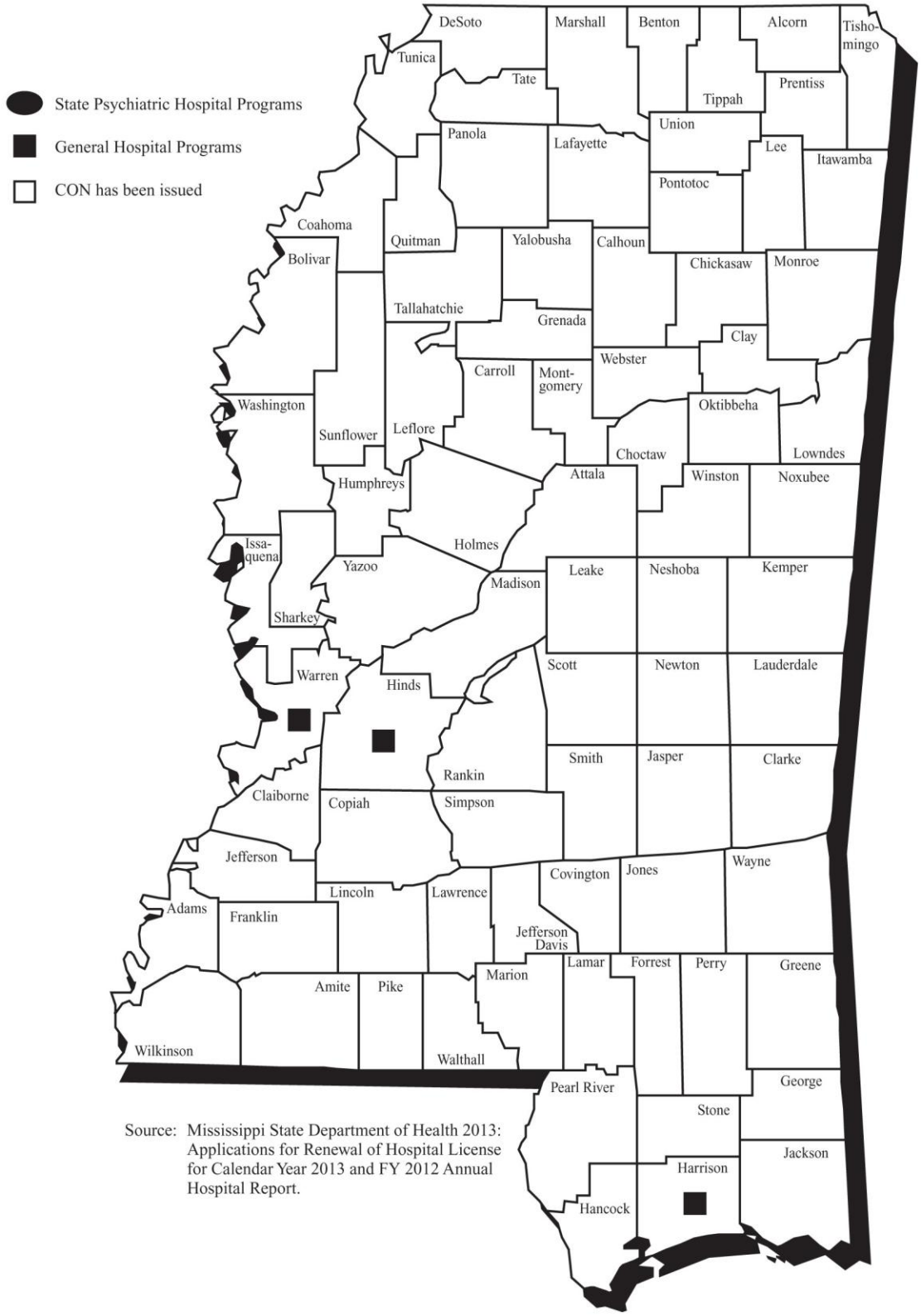
Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; Division of Health Planning and Resource Development.

**Map 3-4**
**Operational and Proposed Adult Chemical Dependency Programs and Facilities**




Source: Mississippi State Department of Health 2014: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report.

**Map 3-5**
**Operational and Proposed Adolescent Chemical Dependency Programs and Facilities**




Source: Mississippi State Department of Health 2013: Applications for Renewal of Hospital License for Calendar Year 2013 and FY 2012 Annual Hospital Report.

# CERTIFICATE OF NEED
# CRITERIA AND STANDARDS
# FOR
# ACUTE PSYCHIATRIC,
# CHEMICAL DEPENDENCY,
# AND
# PSYCHIATRIC RESIDENTIAL
# TREATMENT FACILITY BEDS/SERVICES

## 106 Certificate of Need Criteria and Standards for Acute Psychiatric, Chemical Dependency, and Psychiatric Residential Treatment Facility Beds/Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 106.01 Policy Statement Regarding Certificate of Need Applications for Acute Psychiatric, Chemical Dependency, and Psychiatric Residential Treatment Facility Beds/Services

1. An applicant must provide a "reasonable amount" of indigent/charity care as described in Chapter I of this *Plan*.

2. Mental Health Planning Areas: The Department of Health shall use the state as a whole to determine the need for acute psychiatric beds/services, chemical dependency beds/ services, and psychiatric residential treatment beds/services. Tables 3-6, 3-7, and 3-8 give the statistical need for each category of beds.

3. Public Sector Beds: Due to the public sector status of the acute psychiatric, chemical dependency, and psychiatric residential treatment facility beds operated directly by the Mississippi Department of Mental Health (MDMH), the number of licensed beds operated by the MDMH shall not be counted in the bed inventory used to determine statistical need for additional acute psychiatric, chemical dependency, and psychiatric residential treatment facility beds.

4. Comments from Department of Mental Health: The Mississippi State Department of Health shall solicit and take into consideration comments received from the Mississippi Department of Mental Health regarding any CON application for the establishment or expansion of inpatient acute psychiatric, chemical dependency, and/or psychiatric residential treatment facility beds.

5. Separation of Adults and Children/Adolescents: Child and adolescent patients under 18 years of age must receive treatment in units which are programmatically and physically distinct from adult (18+ years of age) patient units. A single facility may house adults as well as adolescents and children if both physical design and staffing ratios provide for separation.

6. Separation of Males and Females: Facilities must separate males and females age 13 and over for living purposes (e.g., separate rooms and rooms located at separate ends of the halls, etc.).

7. Patients with Co-Occurring Disorders: It is frequently impossible for a provider to totally predict or control short-term deviation in the number of patients with mixed

psychiatric/ addictive etiology to their illnesses. Therefore, the Department will allow deviations of up to 25 percent of the total licensed beds as "swing-beds" to accommodate patients having diagnoses of both psychiatric and substance abuse disorders. However, the provider must demonstrate to the Division of Licensure and Certification that the "swing-bed" program meets all applicable licensure and certification regulations for each service offered, i.e., acute psychiatric, chemical dependency, and psychiatric residential treatment facility services, before providing such "swing-bed" services.

8. Comprehensive Program of Treatment: Any new mental health beds approved must provide a comprehensive program of treatment that includes, but is not limited to, inpatient, outpatient, and follow-up services, and in the case of children and adolescents, includes an educational component. The facility may provide outpatient and appropriate follow-up services directly or through contractual arrangements with existing providers of these services.

9. Medicaid Participation: An applicant proposing to offer acute psychiatric, chemical dependency, and/or psychiatric residential treatment facility services or to establish, expand, and/or convert beds under any of the provisions set forth in this section or in the service specific criteria and standards shall affirm in the application that:

   a. the applicant shall seek Medicaid certification for the facility/program at such time as the facility/program becomes eligible for such certification; and

   b. the applicant shall serve a reasonable number of Medicaid patients when the facility/program becomes eligible for reimbursement under the Medicaid Program. The application shall affirm that the facility will provide the MSDH with information regarding services to Medicaid patients.

10. Licensing and Certification: All acute psychiatric, chemical dependency treatment, co-occurring disorders beds /services, and psychiatric residential treatment facility beds/services must meet all applicable licensing and certification regulations of the Division of Health Facilities Licensure and Certification. If licensure and certification regulations do not exist at the time the application is approved, the program shall comply with such regulations following their effective date.

11. Psychiatric Residential Treatment Facility: A psychiatric residential treatment facility (PRTF) is a non-hospital establishment with permanent licensed facilities that provides a twenty-four (24) hour program of care by qualified therapists including, but not limited to, duly licensed mental health professionals, psychiatrists, psychologists, psychotherapists, and licensed certified social workers, for emotionally disturbed children and adolescents referred to such facility by a court, local school district, or the Department of Human Services, who are not in an acute phase of illness requiring the services of a psychiatric hospital and who are in need of such restorative treatment services. For purposes of this paragraph, the term "emotionally disturbed" means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance:

   a. an inability to learn which cannot be explained by intellectual, sensory, or health factors;

b. an inability to build or maintain satisfactory relationships with peers and teachers;

c. inappropriate types of behavior or feelings under normal circumstances;

d. a general pervasive mood of unhappiness or depression; or

e. a tendency to develop physical symptoms or fears associated with personal or school problems.

An establishment furnishing primarily domiciliary care is not within this definition.

12. Certified Educational Programs: Educational programs certified by the Department of Education shall be available for all school age patients. Also, sufficient areas suitable to meet the recreational needs of the patients are required.

13. Preference in CON Decisions: Applications proposing the conversion of existing acute care hospital beds to acute psychiatric and chemical dependency beds shall receive preference in CON decisions provided the application meets all other criteria and standards under which it is reviewed.

14. Dedicated Beds for Children's Services: It has been determined that there is a need for specialized beds dedicated for the treatment of children less than 14 years of age. Therefore, of the beds determined to be needed for child/adolescent acute psychiatric services and psychiatric residential treatment facility services, 25 beds under each category, for a total of 50 beds statewide, shall be reserved exclusively for programs dedicated to children under the age of 14.

15. Effective April 12, 2002, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need under the authority of Section 41-7-191(1)(c).

16. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

17. A health care facility has ceased to operate for a period of 60 months or more shall require a Certificate of Need prior to reopening.

### 106.02 General Certificate of Need Criteria and Standards for Acute Psychiatric, Chemical Dependency, and/or Psychiatric Residential Treatment Facility Beds/Services

The Mississippi State Department of Health will review applications for a Certificate of Need for the establishment, offering, or expansion of acute psychiatric, chemical dependency treatment, and/or psychiatric residential treatment beds/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 Certificate of Need according to the

policies in this *Plan*; the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the general and service specific criteria and standards listed below.

The offering of acute psychiatric, chemical dependency treatment, and/or psychiatric residential treatment facility services is reviewable if the proposed provider has not offered those services on a regular basis within the period of twelve (12) months prior to the time such services would be offered. The construction, development, or other establishment of a new health care facility to provide acute psychiatric, chemical dependency treatment, and/or psychiatric residential treatment services requires CON review regardless of capital expenditure.

1. **Need Criterion:**

   a. **New/Existing Acute Psychiatric, Chemical Dependency, and/or Psychiatric Residential Treatment Facility Beds/Services**: The applicant shall document a need for acute psychiatric, chemical dependency, and/or psychiatric residential treatment facility beds using the appropriate bed need methodology as presented in this section under the service specific criteria and standards.

   b. Projects which do not involve the addition of acute psychiatric, chemical dependency, and/or psychiatric residential treatment facility 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.).

   c. **Projects which involve the addition of beds**: The applicant shall document the need for the proposed project. Exception: Notwithstanding the service specific statistical bed need requirements as stated in "a" above, the Department may approve additional beds for facilities which have maintained an occupancy rate of at least 80 percent for the most recent 12-month licensure reporting period or at least 70 percent for the most recent two (2) years.

   d. **Child Psychiatry Fellowship Program**: Notwithstanding the service specific statistical bed need requirements as stated in "a" above, the Department may approve a 15-bed acute child psychiatric unit at the University of Mississippi Medical Center for children aged 4-12 to provide a training site for psychiatric residents.

   e. **Establishment or Addition of Programs for the Exclusive Treatment of Adults for Primary Psychiatric Diagnosis of Post Traumatic Stress Disorder (PTSD)**: Notwithstanding the service specific statistical bed need requirements as stated in "a" above, the Department may approve service and/or beds for the exclusive treatment of adults ~~for~~ eighteen years of age and older with a primary psychiatric diagnosis of PTSD. ~~from Military Service for those adults covered by Veterans Health Care System or indigent/charity care.~~ The applicant shall document the need for the proposed project and justify the number of inpatient beds to be dedicated for such purpose.

2. The application shall affirm that the applicant will record and maintain, at a minimum, the following information regarding charity care and care to the medically indigent and make such information available to the Mississippi State Department of Health within 15 business days of request:

   a. source of patient referral;

   b. utilization data, e.g., number of indigent admissions, number of charity admissions, and inpatient days of care;

   c. demographic/patient origin data;

   d. cost/charges data; and

   e. any other data pertaining directly or indirectly to the utilization of services by medically indigent or charity patients which the Department may request.

3. A CON applicant desiring to provide or to expand chemical dependency, psychiatric, and/or psychiatric residential treatment facility services shall provide copies of signed memoranda of understanding with Community Mental Health Centers and other appropriate facilities within their patient service area regarding the referral and admission of charity and medically indigent patients.

4. Applicants should also provide letters of comment from the Community Mental Health Centers, appropriate physicians, community and political leaders, and other interested groups that may be affected by the provision of such care.

5. The application shall document that within the scope of its available services, neither the facility nor its participating staff shall have policies or procedures which would exclude patients because of race, color, age, sex, ethnicity, or ability to pay.

The application shall document that the applicant will provide a reasonable amount of charity/indigent care as provided for in Chapter I of this *Plan*.

## 106.03 Service Specific Certificate of Need Criteria and Standards for Acute Psychiatric, Chemical Dependency, and/or Psychiatric Residential Treatment Facility Beds/Services

### 106.03.01 Acute Psychiatric Beds for Adults

1. The Mississippi State Department of Health shall base statistical need for adult acute psychiatric beds on a ratio of **0.21 beds per 1,000 population aged 18 and older for 2020** in the state as a whole as projected by the Division of Health Planning and Resource Development. Table 3-6 presents the statistical need for adult psychiatric beds.

2. The applicant shall provide information regarding the proposed size of the facility/unit. Acute psychiatric beds for adults may be located in either freestanding or hospital-based facilities. Freestanding facilities should not be larger than 60 beds.

Hospital units should not be larger than 30 beds. Patients treated in adult facilities and units should be 18 years of age or older.

3. The applicant shall provide documentation regarding the staffing of the facility. Staff providing treatment should be specially trained for the provision of psychiatric and psychological services. The staff should include both psychiatrists and psychologists and should provide a multi-discipline psychosocial medical approach to treatment.

### 106.03.02 Acute Psychiatric Beds for Children and Adolescents

1. The Mississippi State Department of Health shall base statistical need for child/adolescent acute psychiatric beds on a ratio of **0.55 beds per 1,000 population aged 7 to 17 for 2020** in the state as a whole as projected by the Division of Health Planning and Resource Development. Table 3-6 presents the statistical need for child/adolescent psychiatric beds. Of the specified beds needed, 25 beds are hereby set aside exclusively for the treatment of children less than 14 years of age.

2. The applicant shall provide information regarding the proposed size of the facility/unit. Acute psychiatric beds for children and adolescents may be located in freestanding or hospital-based units and facilities. A facility should not be larger than 60 beds. All units, whether hospital-based or freestanding, should provide a homelike environment. Ideally, a facility should provide cottage-style living units housing eight to ten patients. Because of the special needs of children and adolescents, facilities or units which are not physically attached to a general hospital are preferred. For the purposes of this *Plan*, an adolescent is defined as a minor who is at least 14 years old but less than 18 years old, and a child is defined as a minor who is at least 7 years old but less than 14 years old.

3. The applicant shall provide documentation regarding the staffing of the facility. Staff should be specially trained to meet the needs of adolescents and children. Staff should include both psychiatrists and psychologists and should provide a multi-discipline psychosocial medical approach to treatment. The treatment program must involve parents and/or significant others. Aftercare services must also be provided.

4. The applicant shall describe the structural design of the facility in providing for the separation of children and adolescents. In facilities where both children and adolescents are housed, the facility should attempt to provide separate areas for each age grouping.

### 106.03.03 Chemical Dependency Beds for Adults

1. The Mississippi State Department of Health shall base statistical need for adult chemical dependency beds on a ratio of **0.14 beds per 1,000 population aged 18 and older for 2020** in the state as a whole as projected by the Division of Health Planning and Resource Development. Table 3-7 presents the statistical need for adult chemical dependency beds.

2. The applicant shall provide information regarding the proposed size of the facility/unit. Chemical dependency treatment programs may be located in either freestanding or hospital-based facilities. Facilities should not be larger than 75 beds, and individual units should not be larger than 30 beds. The bed count also includes detoxification beds. Staff should have specialized training in the area of alcohol and substance abuse treatment, and a multi-discipline psychosocial medical treatment approach which involves the family and significant others should be employed.

3. The applicant shall describe the aftercare or follow-up services proposed for individuals leaving the chemical dependency program. Chemical dependency treatment programs should include extensive aftercare and follow-up services.

4. The applicant shall specify the type of clients to be treated at the proposed facility. Freestanding chemical dependency facilities and hospital-based units should provide services to substance abusers as well as alcohol abusers.

### 106.03.04 Chemical Dependency Beds for Children and Adolescents

1. The Mississippi State Department of Health shall base statistical need for child/adolescent chemical dependency beds on a ratio of **0.44 beds per 1,000 population aged 12 to 17 for 2020** in the state as a whole as projected by the Division of Health Planning and Resource Development. Table 3-7 presents the statistical need for child/adolescent chemical dependency beds.

2. The applicant shall provide information regarding the proposed size of the facility/unit. Chemical dependency beds may be located in either freestanding or hospital-based facilities. Because of the unique needs of the child and adolescent population, facilities shall not be larger than 60 beds. Units shall not be larger than 20 beds. The bed count of a facility or unit will include detoxification beds.

   Facilities or units, whether hospital-based or freestanding, should provide a home-like environment. Ideally, facilities should provide cottage-style living units housing eight to ten patients. Because of the special needs of children and adolescents, facilities or units which are not physically attached to a general hospital are preferred.

3. The applicant shall provide documentation regarding the staffing of the facility. Staff should be specially trained to meet the needs of adolescents and children. Staff should include both psychiatrists and psychologists and should provide a multi-discipline psychosocial medical approach to treatment. The treatment program must involve parents and significant others. Aftercare services must also be provided.

4. The applicant shall describe the structural design of the facility in providing for the separation of the children and adolescents. Child and adolescent patients shall be separated from adult patients for treatment and living purposes.

5. The applicant shall describe the aftercare or follow-up services proposed for individuals leaving the chemical dependency program. Extensive aftercare and follow-up services involving the family and significant others should be provided to

clients after discharge from the inpatient program. Chemical dependency facilities and units should provide services to substance abusers as well as alcohol abusers.

### 106.03.05 Psychiatric Residential Treatment Facility Beds/Services

1. The Mississippi State Department of Health shall base statistical need for psychiatric residential treatment beds on a ratio of **0.5 beds per 1,000 population aged 5 to 21 for 2020** in the state as a whole as projected by the Division of Health Planning and Resource Development. Table 3-8 presents the statistical need for psychiatric residential treatment facility beds.

2. The application shall state the age group that the applicant will serve in the psychiatric residential treatment facility and the number of beds dedicated to each age group (5 to 13, 14 to 17, and 18 to 21).

3. The applicant shall describe the structural design of the facility for the provision of services to children less than 14 years of age. Of the beds needed for psychiatric residential treatment facility services, 25 beds are hereby set aside exclusively for the treatment of children less than 14 years of age. An applicant proposing to provide psychiatric residential treatment facility services to children less than 14 years of age shall make provision for the treatment of these patients in units which are programmatically and physically distinct from the units occupied by patients older than 13 years of age. A facility may house both categories of patients if both the physical design and staffing ratios provide for separation.

4. This criterion does not preclude more than 25 psychiatric residential treatment facility beds being authorized for the treatment of patients less than 14 years of age. However, the Department shall not approve more psychiatric residential treatment facility beds statewide than specifically authorized by legislation (Miss. Code Ann. § 41-7-191 et. seq). This authorization is limited to 334 beds for the entire state. (Note: the 298 licensed and CON approved beds indicated in Table 3-8 were the result of both CON approval and legislative actions).

5. The applicant shall provide information regarding the proposed size of the facility/unit. A psychiatric residential treatment facility should provide services in a homelike environment. Ideally, a facility should provide cottage-style living units not exceeding 15 beds. A psychiatric residential treatment facility should not be larger than 60 beds.

6. The applicant shall provide documentation regarding the staffing of the facility. Staff should be specially trained to meet the treatment needs of the age category of patients being served. Staff should include both psychiatrists and psychologists and should provide a multi-discipline psychosocial medical approach to treatment. The treatment program must involve parents and/or significant others. Aftercare/follow-up services must also be provided.

**Table 3-6**
**Statewide Acute Psychiatric Bed Need**
**2020**

| Bed Category and Ratio | 2020 Projected Population | Projected Bed Need | Licensed/CON Approved/Abeyance Beds | Difference |
|---|---|---|---|---|
| Adult Psychiatric: 0.21 beds per 1,000 population aged 18+ | 2,389,142 | 502 | 610 | -108 |
| Child/Adolescent Psychiatric: 0.55 beds per 1,000 population aged 7 to 17 | 461,382 | 254 | 270 | -16 |

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; and Division of Health Planning and Resource Development calculations, October 2014

**Table 3-7**
**Statewide Chemical Dependency Bed Need**
**2020**

| Bed Category and Ratio | 2020 Projected Population | Projected Bed Need | Licensed/CON Approved Beds | Difference |
|---|---|---|---|---|
| Adult Chemical Dependency: 0.14 beds per 1,000 population aged 18+ | 2,389,142 | 334 | 251 | 83 |
| Child/Adolescent Chemical Dependency: 0.44 beds per 1,000 population aged 12 to 17 | 251,695 | 111 | 52 | 59 |

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; Division of Health Planning and Resource Development calculations, October 2014

**Table 3-8**
**Statewide Psychiatric Residential**
**Treatment Facility Bed Need**
**2020**

| Age Cohort | Bed Ratio per 1,000 Population | 2020 Projected Population | Projected Bed Need | Licensed/CON Approved Beds | Difference |
|---|---|---|---|---|---|
| 5 to 21 | 0.50 | 712,045 | 356 | 298 | 58 |

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; and Division of Health Planning and Resource Development calculations, October 2014

## 107 Private Distinct-Part Geriatric Psychiatric Services

During 2012, 37 Mississippi hospitals operated certified distinct-part geriatric psychiatric units (Geropsych DPU) with a total of 467 beds. Geropsych units receive Medicare certification as a distinct-part psychiatric unit but are licensed as short-term acute hospital beds. These Geropsych units served a total of 87,329 inpatient days of psychiatric services to 7,492 patients aged 55 and older.

The industry standard formula for determining Geropsych DPU bed need is 0.5 beds per 1,000 population aged 55 and over. The Office of Policy Research and Planning, Mississippi Institute of Higher Learning, projects that Mississippi will have 937,596 persons aged 55 and older by 2020. This population will need a total of 469 Geropsych DPU beds. The optimum unit size of a Geropsych unit is 12 to 24 beds. Table 3-9 shows the state's 37 distinct-part geriatric psychiatric units. County population projections can be found in Chapter 1 of this *Plan*.

The following facilities received approval through a Determination of Reviewability for the establishment of a Geriatric Psychiatric Distinct Part (Geriatric-Psychiatric DPU or Gero-psych) Unit/Service:

- Anderson Regional Medical Center-South Campus (16-Beds) - Approved on 08/31/2012
- Pioneer Community Hospital of Choctaw (10-Beds) - Approved 03/08/2013
- Highland Community Hospital, Picayune, Mississippi (10 Bed) - Approved 07/29/2013

## Table 3-9
## Geriatric Psychiatric Bed Utilization
## FY 2013

| Facility | County | Certified Beds | Inpatient Days | Occupancy Rate (%) | Discharges | ALOS | Discharge Days |
|---|---|---|---|---|---|---|---|
| **State Total** | | **467** | **82,520** | **48.41** | **6,918** | **11.89** | **82,275** |
| **General Hospital Service Area 1** | | **54** | **7,038** | **35.71** | **600** | **11.97** | **7,179** |
| Alliance Healthcare System | Marshall | 20 | 1,374 | 18.82 | 134 | 10.43 | 1,397 |
| North Oak Regional Medical Center | Tate | 12 | 1,807 | 41.26 | 140 | 12.80 | 1,792 |
| Tri-Lakes Medical Center | Panola | 22 | 3,857 | 48.03 | 326 | 12.24 | 3,990 |
| **General Hospital Service Area 2** | | **15** | **2,995** | **54.70** | **229** | **12.66** | **2,899** |
| Baptist Memorial Hospital - Booneville | Prentiss | 15 | 2,995 | 54.70 | 229 | 12.66 | 2,899 |
| **General Hospital Service Area 3** | | **59** | **10,142** | **47.10** | **823** | **12.01** | **9,882** |
| Bolivar Medical Center | Bolivar | 12 | 1,763 | 40.25 | 153 | 11.33 | 1,733 |
| Delta Regional Medical Center West Campus | Washington | 14 | 2,238 | 43.80 | 209 | 10.82 | 2,262 |
| Greenwood Leflore Hospital | Leflore | 15 | 1,834 | 33.50 | 157 | 11.75 | 1,845 |
| North Sunflower County Hospital | Sunflower | 10 | 2,619 | 71.75 | 208 | 12.10 | 2,516 |
| Quitman County Hospital | Quitman | 8 | 1,688 | 57.81 | 96 | 15.90 | 1,526 |
| **General Hospital Service Area 4** | | **65** | **9,398** | **39.61** | **777** | **12.06** | **9,368** |
| Calhoun Health Services | Calhoun | 9 | 1,148 | 34.95 | 93 | 12.56 | 1,168 |
| Pioneer Community Hospital of Aberdeen | Monroe | 10 | 1,940 | 53.16 | 140 | 13.21 | 1,850 |
| Pioneer Community Hospital of Choctaw | Newton | 0 | N/A | 36.70 | N/A | 12.10 | N/A |
| Trace Regional Hospital | Chickasaw | 18 | 2,294 | 34.92 | 188 | 12.20 | 2,293 |
| University of MS Medical Center Grenada | Grenada | 14 | 1,667 | 32.62 | 176 | 9.62 | 1,693 |
| Winston Medical Center | Winston | 14 | 2,349 | 45.97 | 180 | 13.13 | 2,364 |
| **General Hospital Service Area 5** | | **125** | **23,900** | **52.38** | **2,073** | **11.53** | **23,900** |
| Central Mississippi Medical Center **(closed Jan. 2013)** | Hinds | 0 | 1,030 | 62.88 | 218 | 4.72 | 1,030 |
| Claiborne County Hospital | Claiborne | 10 | 1,981 | 54.27 | 185 | 11.34 | 1,981 |
| Crossgates River Oaks Hospital | Rankin | 20 | 5,351 | 73.30 | 441 | 12.10 | 5,351 |
| Mississippi Baptist Medical Center | Hinds | 24 | 3,496 | 39.91 | 266 | 13.05 | 3,496 |
| Montfort Jones Memorial Hospital | Attala | 11 | 1,947 | 48.49 | 143 | 13.59 | 1,947 |
| Patients' Choice Medical Center of Smith County | Smith | 10 | 2,293 | 62.82 | 147 | 14.67 | 2,293 |
| River Region Health System | Warren | 20 | 1,886 | 25.84 | 204 | 9.41 | 1,886 |
| S.E. Lackey Critical Access Hospital | Scott | 10 | 1,888 | 51.73 | 155 | 14.00 | 1,888 |
| Sharkey - Issaquena Community Hospital | Sharkey | 10 | 1,568 | 42.96 | 150 | 10.45 | 1,568 |
| Simpson General Hospital | Simpson | 10 | 2,460 | 67.40 | 164 | 14.55 | 2,460 |
| **General Hospital Service Area 6** | | **47** | **7,353** | **42.86** | **587** | **12.53** | **7,353** |
| Alliance Health Center | Lauderdale | 12 | 1,507 | 38.41 | 120 | 12.78 | 1,507 |
| Anderson Regional Medical Center South | Lauderdale | 16 | 2,010 | 34.42 | 158 | 12.47 | 2,010 |
| Neshoba General Hospital - Philadelphia | Neshoba | 10 | 1,973 | N/A | 171 | N/A | 1,973 |
| Pioneer Community Hospital of Newton | Newton | 9 | 1,863 | N/A | 138 | N/A | 1,863 |
| **General Hospital Service Area 7** | | **40** | **9,885** | **67.71** | **814** | **12.14** | **9,885** |
| Franklin County Memorial Hospital | Franklin | 10 | 2,176 | 59.62 | 181 | 12 | 2,176 |
| Jefferson County Hospital | Jefferson | 18 | 5,987 | 91.13 | 426 | 13.26 | 5,987 |
| Natchez Regional Medical Center | Adams | 12 | 1,722 | 39.32 | 207 | 10.23 | 1,722 |
| **General Hospital Service Area 8** | | **38** | **5,630** | **40.59** | **454** | **12.40** | **5,630** |
| Covington County Hospital | Covington | 10 | 1,570 | 43.01 | 122 | 12.92 | 1,570 |
| Jeff Davis Community Hospital | Jeff Davis | 10 | 1,780 | 48.77 | 130 | 13.72 | 1,780 |
| South Central Medical Center | Jones | 18 | 2,280 | 34.7 | 202 | 9.97 | 2,280 |
| **General Hospital Service Area 9** | | **24** | **6,179** | **70.54** | **561** | **11.01** | **6,179** |
| Biloxi Regional Medical Center | Harrison | 12 | 3,193 | 72.9 | 251 | 12.42 | 3,193 |
| Garden Park Medical Center | Harrison | 12 | 2,986 | 68.17 | 310 | 9.66 | 2,986 |

*George County Hospital's 10 Geriatric Psychiatric Beds closed as of March 3, 2011.

Sources: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; and Division of Health Planning and Resource Development calculations, October 2014.

# CHAPTER 4

# PERINATAL CARE

# Chapter 4 Perinatal Care

## 100 Natality Statistics

Mississippi experienced 38,618 live births in 2012; 48.2 percent of these (18,611) were white non-Hispanic, 39.4 percent (15,232) were black non-Hispanic, 2.0 percent were other non-Hispanic and 3.1 percent (1,210) were Hispanic. A physician attended 97.3 percent of all in-hospital live births delivered in 2012 (37,569). Nurse midwife deliveries accounted for 811 live births.

More than 99 percent of the live births occurred to women 15 to 44 years age. Births to unmarried women made up 54.7 percent (21,128) of all live births in 2012; of these, 59.5 percent (12,580) were to black women and 30.3 percent (6,396) were to white women and 3.2 percent (670) were to Hispanic women. Mothers under the age of 15 gave birth to 90 children; 68.9 percent (62) were black and 31.1 percent (28) were white and one was Hispanic.

The birth rate in 2012 was 12.9 live births per 1,000 population; the fertility rate was 64.1 live births per 1,000 women aged 15-44 years.

Mississippi reported 376 fetal deaths in 2012. The black fetal death ratio, which is the number of deaths per live births to mothers in the specified age group, was more than two times that of whites, with a ratio of 14.0 per 1,000 live births compared to 6.5 for whites. Mothers aged 35-39, had the highest fetal death ratio at 20.7 per 1,000 live births, followed by mothers aged, 25-29 with a ratio of 15.9. The MSDH requires the reporting of fetal deaths with gestation of 20 or more weeks or fetal weight of 350 grams or more. The MSDH does not report fetal death rates for an age group if there are less than 100 births.

There were 16 maternal deaths reported during 2012. Maternal mortality refers to deaths resulting from complications of pregnancies, childbirth, or the puerperium within 42 days of delivery.

## 101 Infant Mortality

Infant mortality remains a critical concern in Mississippi. There was a slight decline in the infant mortality rate to 8.8 in 2012 from 9.4 in 2011. Table 4-1 shows the infant mortality rate, neonatal, and post-neonatal mortality for blacks all substantially above the rates for whites and Hispanics. (Note: 2012 vital statics data is the most recent currently available.)

**Table 4-1**
**2012 Mortality Rates (deaths per 1,000 live births)**

| Category | Overall State Rate | White Rate | Black Rate | Hispanic Rate |
|---|---|---|---|---|
| Total Infant Mortality (age under one year) | 8.8 | 5.4 | 12.4 | 0.0 |
| Neonatal Mortality (age under 28 days) | 5.5 | 3.2 | 17.2 | 0.0 |
| Postneonatal Mortality (age 28 days to one year) | 3.3 | 7.2 | 8.6 | 0.0 |

Table 4-2 presents Mississippi's infant mortality rates from 2001 to 2012, along with the rates for Region IV and for the United States. Map 4-1 shows the five-year average infant mortality rate by county for the period 2007 to 2012.

**Table 4-2**
**Infant Mortality Rates**
**Mississippi, Region IV and USA – All Races**
**2001– 2012**

| Year | Mississippi | Region IV | USA |
|---|---|---|---|
| 2011 | 9.4 | N/A | N/A |
| 2010 | 9.6 | N/A | N/A |
| 2009 | 10.0 | N/A | N/A |
| 2008 | 9.9 | 7.8 | 6.6 |
| 2007 | 10.0 | 8.0 | 6.8 |
| 2006 | 10.5 | 8.1 | 6.7 |
| 2005 | 11.4 | 8.1 | 6.9 |
| 2004 | 9.7 | 8.1 | 6.8 |
| 2003 | 10.7 | 8.2 | 6.9 |
| 2002 | 10.4 | 8.4 | 7.0 |
| 2001 | 10.4 | 8.2 | 6.8 |
| 2000 | 10.5 | 8.3 | 6.9 |

N/A – Not Available
Source: Office of Health Informatics, Mississippi State Department of Health, 2011
RNDMU – Region IV Network for Utilization Data Management and Utilization (no longer operational)

Many factors contribute to Mississippi's high infant mortality rate including: the high incidence of preterm birth, teenage pregnancy, low birthweight, low levels of acquired education, low socioeconomic status, lack of access for planned delivery services, and lack of adequate perinatal and acute medical care.

More than 98 percent of expectant mothers received some level of prenatal care in 2012. More than 84 percent (32,706) of the mothers who began prenatal care in the first trimester; 11.7 percent (4,532) began in the second trimester, and 1.8 percent (678) during the third trimester. Only one percent (233) of expectant mothers received no prenatal care prior to delivery; and it was unknown whether 141 mothers (0.4 percent) received any prenatal care. White mothers usually receive initial prenatal care much earlier in pregnancy than do black mothers.

In 2012, 11.9 percent of births were low birthweight (less than 5.5 pounds – 2,500 grams) and 17.1 percent were premature (gestational age less than 37 weeks). These indicators differ markedly by maternal race: 8.6 percent of white births were low birthweight compared to 16.2 percent for blacks. The low birthweight rate for Hispanics was 5.8 percent. The premature birth rate was 14.2 percent for Hispanics, 14.1 percent for whites and 20.6 percent for blacks.

A total of 4,868 Mississippi teenagers gave birth in 2012 — 12.6 percent of the state's 38,618 live births. Until 2008 births to teenagers have increased each year since 2005, and the 2012 number represents a 10.8 percent decrease from the 5,459 births to teenagers in 2011. Teen pregnancy is one of the major reasons for school drop-out. Teenage mothers are (a) more likely to be single parents; (b) less likely to get prenatal care before the second trimester; (c) at higher risk of having low birthweight babies; (d) more likely to receive public assistance; (e) at greater risk to commit abuse or neglect; and (f) more likely to have children who will themselves become teen parents. In 2012, 13.1 percent of the births to teenagers were low birthweight, and 19.1 percent were premature.

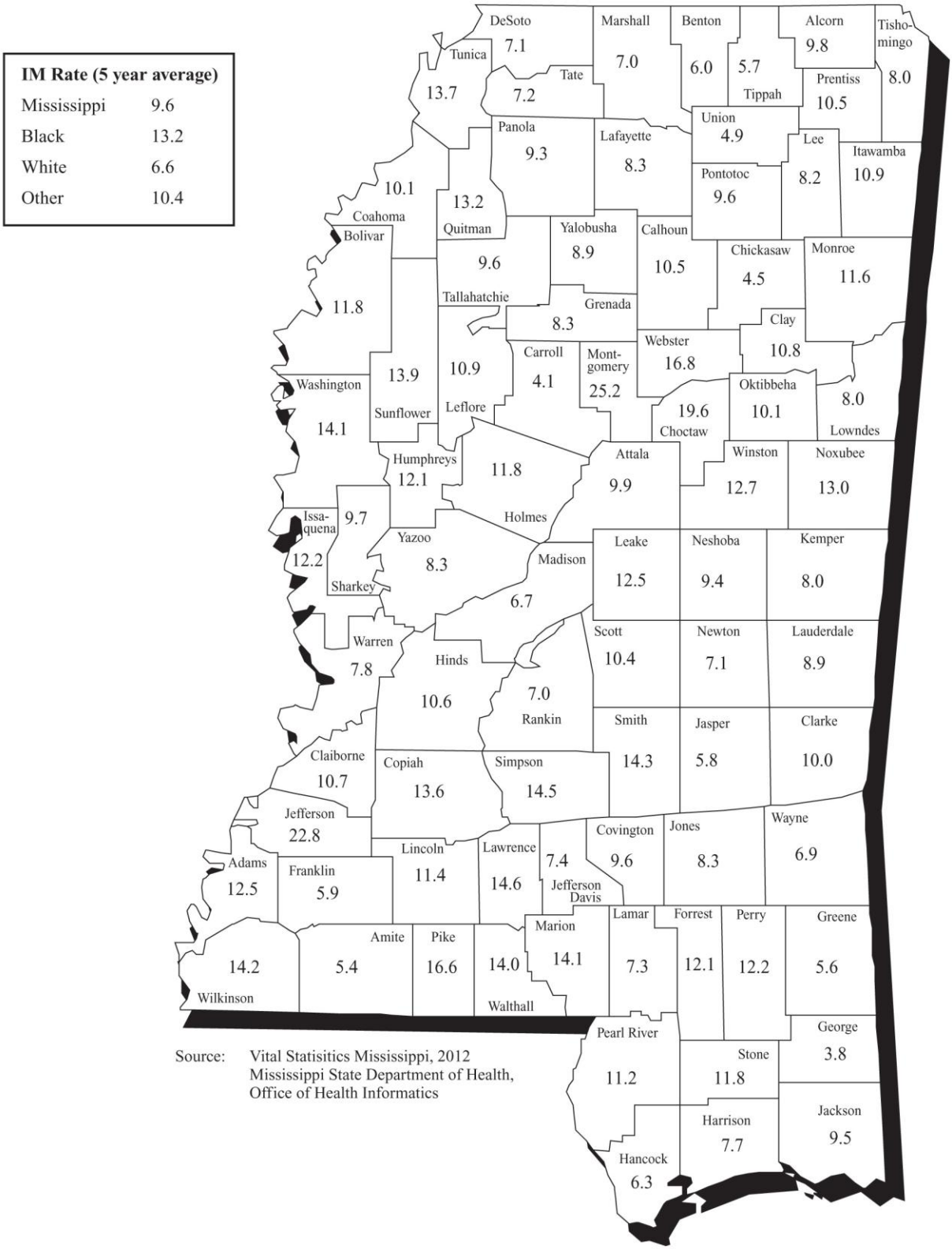
Of the 38,618 total births in 2012, 29,801 were associated with "at risk" mothers (77.2 percent). “At risk" factors include mothers who are and/or have:

- under 17 years of age or above 35 years of age;
- unmarried;
- completed fewer than eight years of school;
- had fewer than five prenatal visits;
- begun prenatal care in the third trimester;
- had previous terminations of pregnancy; and/or
- a short inter-pregnancy interval (prior delivery within 11 months of conception for the current pregnancy).

## 102 Physical Facilities for Perinatal Care

The 46 hospitals that experienced live births reported 37,184 deliveries. Two of these hospitals reported more than 2,000 obstetrical deliveries each in Fiscal Year 2013, accounting for 4,542 deliveries or 12.2 percent of the state's total hospital deliveries: the University Hospital and Health Systems, with 2,343 deliveries and Forrest General Hospital, with 2,199. These hospitals with a large number of deliveries are strategically located in central and south Mississippi. Table 4-2 shows the Perinatal Planning Areas.

**Map 4-1**
**Infant Mortality Rates by County of Residence**
**2008 to 2012 (Five – Year Average)**




Source: Vital Statisitics Mississippi, 2012
Mississippi State Department of Health,
Office of Health Informatics

**Table 4-3**
**Utilization Data for Hospitals with Obstetrical Deliveries**
**FY 2012 and FY 2013**

| Facility | County | Number of Deliveries 2012 | Number of Deliveries 2013 |
|---|---|---|---|
| University Hospital & Clinics | Hinds | 2,476 | 2,343 |
| Forrest General Hospital | Forrest | 2,223 | 2,199 |
| North Mississippi Medical Center | Lee | 2,116 | 1,980 |
| Baptist Memorial Hospital-DeSoto | DeSoto | 2,050 | 1,891 |
| River Oaks Hospital | Rankin | 1,842 | 1,684 |
| St. Dominic-Jackson Memorial Hospital | Hinds | 1,345 | 1,507 |
| Wesley Medical Center | Lamar | 1,495 | 1,426 |
| Woman's Hospital at River Oaks | Rankin | 1,467 | 1,313 |
| Memorial Hospital at Gulfport | Harrison | 1,435 | 1,289 |
| Anderson Regional Medical Center | Lauderdale | 1,238 | 1,270 |
| Baptist Memorial Hospital - Union County | Union | 1,106 | 1,161 |
| Mississippi Baptist Medical Center | Hinds | 1,268 | 1,158 |
| Rush Foundation Hospital | Lauderdale | 853 | 1,050 |
| Baptist Memorial Hospital-Golden Triangle | Lowndes | 900 | 943 |
| Oktibbeha County Hospital | Oktibbeha | 958 | 929 |
| Baptist Memorial Hospital - North Miss | Lafayette | 893 | 917 |
| South Central Regional Medical Center | Jones | 837 | 893 |
| Northwest Mississippi Regional Medical Center | Coahoma | 852 | 836 |
| Ocean Springs Hospital | Jackson | 868 | 834 |
| Delta Regional Medical Center-Main Campus | Washington | 890 | 819 |
| Biloxi Regional Medical Center | Harrison | 757 | 814 |
| Southwest Mississippi Regional Medical Center | Pike | 879 | 743 |
| River Region Health System | Warren | 691 | 706 |
| Central Mississippi Medical Center | Hinds | 764 | 658 |
| King's Daughters Medical Center-Brookhaven | Lincoln | 643 | 648 |
| Magnolia Regional Health Center | Alcorn | 542 | 635 |
| Singing River Hospital | Jackson | 577 | 616 |
| Greenwood Leflore Hospital | Leflore | 627 | 589 |

**Table 4-3 (continued)**
**Utilization Data for Hospitals with Obstetrical Deliveries**
**FY 2012 and FY 2013**

| Facility | County | Number of Deliveries 2012 | Number of Deliveries 2013 |
|---|---|---|---|
| Gilmore Memorial Regional Medical Center | Monroe | 561 | 577 |
| Garden Park Medical Center | Harrison | 465 | 505 |
| Natchez Community Hospital | Adams | 499 | 483 |
| Bolivar Medical Center | Bolivar | 441 | 461 |
| Madison River Oaks Medical Center | Madison | 415 | 430 |
| Natchez Regional Medical Center | Adams | 459 | 425 |
| University of MS Medical Center Grenada | Grenada | 406 | 406 |
| North Miss Medical Center-West Point | Clay | 362 | 347 |
| Highland Community Hospital | Pearl River | 292 | 314 |
| Magee General Hospital | Simpson | 307 | 294 |
| South Sunflower County Hospital | Sunflower | 197 | 299 |
| Tri-Lakes Medical Center | Panola | 196 | 203 |
| Hancock Medical Center | Hancock | 189 | 201 |
| Wayne General Hospital | Wayne | 226 | 196 |
| George County General Hospital | George | 176 | 186 |
| King's Daughters-Yazoo City | Yazoo | 4 | 3 |
| Baptist Medical Center Leake | Leake | 2 | 2 |
| John C Stennis Memorial Hospital | Kemper | 0 | 1 |
| Anderson Regional Medical Center South | Lauderdale | 0 | 0 |
| Marion General Hospital | Marion | 0 | 0 |
| Scott Regional Hospital | Scott | 0 | 0 |
| Leake Memorial Hospital | Leake | 0 | 0 |
| Laird Hospital | Newton | 0 | 0 |
| Covington County Hospital | Covington | 0 | 0 |
| Alliance Health Care System | | 0 | 0 |
| Gulf Coast Medcial Center | Harrison | 0 | 0 |
| Holmes County Hospital and Clinics | Holmes | 0 | 0 |
| Baptist Memorial Hospital Booneville | Prentiss | 0 | 0 |
| Jefferson Davis Community Hospital | Jeff Davis | 1 | 0 |
| Neshoba County General Hospital | Neshoba | 0 | 0 |
| Newton Regional Hospital | Newton | 0 | 0 |
| Patients Choice Medical Center | Claiborne | 0 | 0 |
| S.E. Lackey Memorial Hospital | Scott | 0 | 0 |
| Stone County Hospital | Marion | 0 | 0 |
| **Total** | | **37,790** | **37,184** |

Sources: Applications for Renewal of Hospital License for Calendar Years 2013 and 2014 and Fiscal Years 2012 and 2013 Annual Hospital Report, Mississippi State Department of Health

# CERTIFICATE OF NEED

# CRITERIA AND STANDARDS FOR OBSTETRICAL SERVICES

## 103 Certificate of Need Criteria and Standards for Obstetrical Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 103.01 Policy Statement Regarding Certificate of Need Applications for the Offering of Obstetrical Services

1. An applicant is required to provide a reasonable amount of indigent/charity care as described in Chapter 1 of this *Plan*.

2. Perinatal Planning Areas (PPA): The MSDH shall determine the need for obstetrical services using the Perinatal Planning Areas as outlined on Map 4-2 at the end of this chapter.

3. Travel Time: Obstetrical services should be available within one (1) hour normal travel time of 95 percent of the population in rural areas and within 30 minutes normal travel time in urban areas.

4. Preference in CON Decisions: The MSDH shall give preference in CON decisions to applications that propose to improve existing services and to reduce costs through consolidation of two basic obstetrical services into a larger, more efficient service over the addition of new services or the expansion of single service providers.

5. Patient Education: Obstetrical service providers shall offer an array of family planning and related maternal and child health education programs that are readily accessible to current and prospective patients.

Levels of Care: All hospitals providing obstetric and newborn services will be designated a perinatal level of care by MSDH, based upon its functional capabilities to provide risk-appropriate care for pregnant women and neonates. The levels of care will be divided into four levels defined in accordance with the 2012 policy statement by the American Academy of Pediatrics, (PEDIATRICS Vol. 130, No. 3, September, 2012) and maternal standards set forth by the American College of Obstetricians and Gynecologists with modifications approved by MSDH. The levels are:

Level I- Basic Care, Well newborn nursery
Level II- Specialty Care, Special care nursery
Level III- Sub-specialty Care, Neonatal Intensive Care Unit
Level IV- Regional Care

Details of the levels are outlined in section 105.03 of the State Health Plan.

6. An applicant proposing to offer obstetrical services shall be equipped to provide perinatal services in accordance with the guidelines contained in the *Minimum Standards of Operation for Mississippi Hospitals* § 130, Obstetrics and Newborn Nursery. All hospitals offering obstetric and newborn care shall conform to the practice guidelines of the American Academy of Pediatrics, Policy Statement, Levels of Care and professional standards established in the Guidelines for the Operations of Perinatal Units.

7. An applicant proposing to offer obstetrical services shall agree to provide an amount of care to Medicaid mothers/babies comparable to the average percentage of Medicaid care offered by other providers of the requested service within the same, or most proximate, geographic area.

### 103.02 Certificate of Need Criteria and Standards for Obstetrical Services

The Mississippi State Department of Health will review applications for a Certificate of Need to establish obstetric services under the 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The establishment or expansion of Level I- basic or Level II- specialty perinatal services shall require approval under the Certificate of Need statute if the $2,000,000 capital expenditure threshold is crossed. Any hospital proposing to establish or expand existing services to become a Level III-subspecialty or Level IV-regional perinatal center shall require approval under the Certificate of Need statute.

Provision for individual units should be consistent with the regionalized perinatal care system involved. Those facilities desiring to provide obstetric services shall meet the Basic facility minimum standards as listed under *Guidelines for the Operation of Perinatal Units* found at the end of this chapter.

1. Need Criterion:

   **The application shall demonstrate how the applicant can reasonably expect to deliver a minimum of 150 babies the first full year of operation and 250 babies by the second full year. In this demonstration, the applicant shall document the number of deliveries performed in the proposed perinatal planning area (as described in Section 103.01, policy statement 2, by hospital.**

2. The application shall document that the facility will provide one of the three types of perinatal services: Basic, Specialty, or Subspecialty.

3. The facility shall provide full-time nursing staff in the labor and delivery area on all shifts. Nursing personnel assigned to nursery areas in Basic Perinatal Centers shall be under the direct supervision of a qualified registered nurse with extra training such as Neonatal Resuscitation Program (NRP) certification and the S.T.A.B.L.E program.

4. Any facility proposing the offering of obstetrical services shall have written policies delineating responsibility for immediate newborn care, resuscitation, transfer to higher-level of care, selection and maintenance of necessary equipment, and training of personnel in proper techniques.

5. The application shall document that the nurse, anesthesia, neonatal resuscitation, and obstetric personnel required for emergency cesarean delivery shall be in the hospital or readily available at all times.

6. The application shall document that the proposed services will be available within one (1) hour normal driving time of 95 percent of the population in rural areas and within 30 minutes normal driving time in urban areas.

7. The applicant shall affirm that the hospital will have protocols for the transfer of medical care of the neonate in both routine and emergency circumstances.

8. The application shall affirm that the applicant will record and maintain, at a minimum, the following information regarding charity care and care to the medically indigent and make it available to the Mississippi State Department of Health within 15 business days of request:

    a. source of patient referral;

    b. utilization data, e.g., number of indigent admissions, number of charity admissions, and inpatient days of care;

    c. demographic/patient origin data;

    d. cost/charges data; and

    e. Any other data pertaining directly or indirectly to the utilization of services by medically indigent or charity patients which the Department may request.

9. The applicant shall document that within the scope of its available services, neither the facility nor its participating staff shall have policies or procedures which would exclude patients because of race, age, sex, ethnicity, or ability to pay.

# CERTIFICATE OF NEED

# CRITERIA AND STANDARDS
# FOR
# NEONATAL SPECIAL CARE SERVICES

## 104 Certificate of Need Criteria and Standards for Neonatal Special Care Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 104.01 Policy Statement Regarding Certificate of Need Applications for the Offering of Neonatal Special Care Services

1. An applicant is required to provide a reasonable amount of indigent/charity care as described in Chapter 1 of this *Plan*.

2. Perinatal Planning Areas (PPA): The MSDH shall determine the need for neonatal special care services using the Perinatal Planning Areas as outlined on Map 4-2 at the end of this chapter.

3. Bed Limit: The total number of neonatal special care beds is not to exceed eight (8) per 1,000 live births in a specified PPA as defined below:

    a. Two (2) intensive care beds per 1,000 live births; and

    b. Six (6) intermediate care beds per 1,000 live births.

4. Size of Facility: A single neonatal special care unit (Subspecialty) Level 3 or greater facility should contain a minimum of 15 beds.

5. Levels of Care: The MSDH shall determine the perinatal level of care designation of the facility based upon its functional capabilities to provide risk-appropriate care for pregnant women and neonates. Facilities shall be designated as one of four levels of care as outlined in Section 105.03 of the State Health Plan.

    Level I- Basic Care, Well newborn nursery
    Level II- Specialty Care, Special care nursery
    Level III- Sub-specialty Care, Neonatal Intensive Care Unit
    Level IV- Regional Care

6. An applicant proposing to offer neonatal special care services shall agree to provide an amount of care to Medicaid babies comparable to the average percentage of Medicaid care offered by the other providers of the requested services.

## 104.02 Certificate of Need Criteria and Standards for Neonatal Special Care Services

The Mississippi State Department of Health will review applications for a Certificate of Need to establish neonatal special care services under the 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

All neonatal intensive care units providing subspecialty care are reviewable under the Certificate of Need law based upon the addition/conversion of hospital beds required to establish such units.

Those facilities desiring to provide neonatal special care services shall meet the capacity and levels of neonatal care for the specified facility (Specialty, Subspecialty or Regional) as outlined by the American Academy of Pediatrics, Policy Statement, Levels of Neonatal Care (PEDIATRICS Vol. 130, No. 3, September, 2012).

1. **Need Criterion: The application shall demonstrate that the Perinatal Planning Area (PPA) wherein the proposed services are to be offered had a minimum of 3,600 deliveries for the most recent 12-month reporting period. The MSDH shall determine the need for neonatal special care services based upon the following:**

    a. **Two (2) neonatal intensive (subspecialty) care bed per 1,000 live births in a specified Perinatal Planning Area for the most recent 12-month reporting period; and**

    b. **Six (6) neonatal intermediate (specialty) care beds per 1,000 live births in a specified Perinatal Planning Area for the most recent 12-month reporting period.**

    Neonatal intensive care beds can only be housed within a hospital designated as a Level III facility. Neonatal intermediate or specialty care beds can be housed within either a Level II, Level III or Level IV facility.

    Projects for existing providers of neonatal special care services which seek to expand capacity by the addition or conversion of neonatal special care beds: The applicant shall document the need for the proposed project. The applicant shall demonstrate that the facility in question has maintained an occupancy rate for neonatal special care services of at least 70 percent for the most recent two (2) years or 80 percent neonatal special care services occupancy rate for the most recent year, notwithstanding the neonatal special care bed need outlined in Table 4-4 below. The applicant may be approved for such additional or conversion of neonatal special care beds to meet projected demand balanced with optimum utilization rate for the Perinatal Planning Area.

2. A single neonatal special care unit (Subspecialty or Regional) that is Level 3 or greater should contain minimum of 15 beds (neonatal intensive care and/or neonatal intermediate care). An adjustment downward may be considered for a specialty unit; when travel time to an alternate unit is a serious hardship due to geographic remoteness.

3. The application shall document that the proposed services will be available within one (1) hour normal driving time of 95 percent of the population in rural areas and within 30 minutes normal driving time in urban areas.

4. The application shall document that the applicant has established referral networks to transfer infants requiring more sophisticated care than is available in less specialized facilities.

5. The application shall affirm that the applicant will record and maintain, at a minimum, the following information regarding charity care and care to the medically indigent and make it available to the Mississippi State Department of Health within 15 business days of request:

    a. source of patient referral;

    b. utilization data e.g., number of indigent admissions, number of charity admissions, and inpatient days of care;

    c. demographic/patient origin data;

    d. cost/charges data; and

    e. any other data pertaining directly or indirectly to the utilization of services by medically indigent or charity patients which the Department may request.

6. The applicant shall document that within the scope of its available services, neither the facility nor its participating staff shall have policies or procedures which would exclude patients because of race, age, sex, ethnicity, or ability to pay.

### 104.03 Neonatal Special Care Services Bed Need Methodology

The determination of need for neonatal special care beds/services in each Perinatal Planning Area will be based on eight (8) beds per 1,000 live births as defined below.

1. Two (2) neonatal intensive care beds per 1,000 live births in the most recent 12-month reporting period.

2. Six (6) neonatal intermediate care beds per 1,000 live births in the most recent 12-month reporting period.

**Table 4-4**
**Neonatal Special Care Bed Need**
**2014**

| Perinatal Planning Areas | Number Live Births[1] | Neonatal Intensive Care Bed Need | Neonatal Intermediate Care Bed Need |
|---|---|---|---|
| PPA I | 3,374 | 7 | 20 |
| PPA II | 4,725 | 9 | 28 |
| PPA III | 2,068 | 4 | 12 |
| PPA IV | 2,797 | 6 | 17 |
| PPA V | 10,197 | 20 | 61 |
| PPA VI | 2,241 | 4 | 13 |
| PPA VII | 2,418 | 5 | 15 |
| PPA VIII | 4,792 | 10 | 29 |
| PPA IX | 5,175 | 10 | 31 |
| **State Total** | **37,787** | **76** | **227** |

[1] 2012 Occurrence Data. Number of beds based upon births rounded to the nearest 1,000.
Sources: Mississippi State Department of Health, Division of Licensure and Certification; and Division of Health Planning and Resource Development Calculations, 2014

Source: Bureau of Public Health Statistics

# GUIDELINES FOR THE

# OPERATION OF PERINATAL UNITS

# (OBSTETRICS AND NEWBORN NURSERY)

## 105 Guidelines for the Operation of Perinatal Units (Obstetrics and Newborn Nursery)

### 105.01 Organization

Obstetrics and newborn nursery services shall be under the direction of a member of the staff of physicians who has been duly appointed for this service and who has experience in maternity and newborn care.

There shall be a qualified professional registered nurse responsible at all times for the nursing care of maternity patients and newborn infants.

Provisions shall be made for pre-employment and annual health examinations for all personnel on this service.

Physical facilities for perinatal care in hospitals shall be conducive to care that meets the normal physiologic and psychosocial needs of mothers, neonates and their families. The facilities provide for deviations from the norm consistent with professionally recognized standards/guidelines.

The perinatal service should have facilities for the following components:

1. Antepartum care and testing
2. Fetal diagnostic services
3. Admission/observation/waiting
4. Labor
5. Delivery/cesarean birth
6. Newborn nursery
7. Newborn special care unit (Level II- Specialty)
8. Newborn Intensive Care Unit (Level III Subspecialty and Level IV –Regional care only
9. Recovery and postpartum care
10. Visitation

### 105.02 Staffing

The facility must be staffed to meet its patient care commitments based upon its designated level of care, consistent with the American Academy of Pediatrics, Policy Statement, Levels of Care and professional guidelines. Hospitals with Neonatal Intensive Care Units providing subspecialty care must include appropriately trained personnel (neonatologists, neonatal nurses, and respiratory therapists) and equipment to provide life support for as long as necessary.

## 105.03 Perinatal Levels of Care

### Level 1- Basic Care, Well Newborn Nursery

#### Neonatal Guidelines

1. Provide neonatal resuscitation at every delivery.
2. Evaluate and provide postnatal care to stable term newborn infants.
3. Stabilize and provide care for infants born at 35-37 weeks gestation who remain physiologically stable.
4. Stabilize newborn infants who are ill and those born at <35 weeks gestation until transfer to the appropriate higher level of care.
5. Maintain a staff of providers including pediatricians, family physicians, nurse practitioners with newborn training, registered nurses with newborn training including being current with Neonatal Resuscitation Program Certification and S.T.A.B.L.E.

#### Maternal Guidelines

1. Surveillance and care of all patients admitted to the obstetric service, with an established triage system for identifying high-risk patients who should be transferred to a facility that provides specialty or sub-specialty care.
2. Capability to begin an emergency cesarean delivery within 30 minutes of the decision to do so.
3. Mothers that are stable and likely to deliver before 35 weeks gestation or have a fetus that is likely to require specialty services and mothers who themselves are likely to require specialty services should be transferred prior to delivery, when possible.
4. Proper detection and supportive care of known maternal conditions and unanticipated maternal-fetal problems that occur during labor and delivery.
5. Care of postpartum conditions.
6. Maintain a staff of providers certified to perform normal and operative vaginal deliveries and cesarean sections including obstetricians and family physicians with advanced training in obstetrics, providers certified to perform normal vaginal deliveries including certified nurse midwives, and registered nurses with training in labor and delivery, post partum care or inpatient obstetrics.

#### Hospital Resources

1. Availability of anesthesia, radiology, ultrasound, blood bank and laboratory services available on a 24-hour basis.
2. Consultation and transfer agreement with specialty and/or subspecialty perinatal centers.
3. Parent-sibling-neonate visitation.
4. Data collection and retrieval.

5. Quality improvement programs, maximizing patient safety.

**Level II- Specialty Care, Special Care Nursery**

**Neonatal Guidelines**

1. Performance of all basic care services as described above.
2. Provide care for infants born ≥ 32 weeks and weighing ≥ 1500g who have physiologic immaturity or who are moderately ill with problems that are expected to resolve rapidly and are not anticipated to need subspecialty services on an urgent basis.
3. Provide care for infants convalescing after intensive care.
4. Provide mechanical ventilation for brief duration (<24h) or continuous positive airway pressure or both.
5. Stabilize infants born before 32 wk gestation and weighing less than 1500g until transfer to a Level III or Level IV neonatal intensive care facility.
6. Maintain a staff of providers including those listed in Basic Care plus pediatric hospitalists, neonatologist, and neonatal nurse practitioners.
7. Referral to a higher level of care for all infants when needed for pediatric surgical or medical subspecialty intervention.
8. Level II nurseries must have equipment (eg, portable x-ray machine, blood gas analyzer) and personal (eg, physicians, specialized nurses, respiratory therapists, radiology technicians and laboratory technicians) to provide ongoing care of admitted infants as well as to address emergencies.

**Maternal Guidelines**

1. Perform all basic maternal services listed above.
2. Mothers that are stable and likely to deliver before 32 weeks gestation or have a neonate that is likely to require sub-specialty services, or mothers who themselves are likely to require sub-specialty services should be transferred prior to delivery, when possible.
3. Access to maternal fetal medicine consultation and antenatal diagnosis technology including fetal ultrasound.

**Level III- Sub-specialty Care/Neonatal Intensive Care Unit**

**Neonatal Guidelines**

1. Provision of all Level I and Level II services.
2. Level III NICUs are defined by having continuously available personnel (neonatologists, neonatal nurses, and respiratory therapists) and equipment to provide life support for as long as necessary.

3. Provide comprehensive care for infants born < 32 weeks gestation and weighing <1500 grams and infants born at all gestational ages and birth weights with critical illness.

4. Provide prompt and readily available access to a full range of pediatric medical subspecialists, pediatric surgical specialists, pediatric anesthesiologists or anesthesiologists with experience in neonatal surgical care and pediatric ophthalmologists, on site or by prearranged consultative agreements.

5. Provide a full range of respiratory support and physiologic monitoring that may include conventional and/or high-frequency ventilation and inhaled nitric oxide.

6. Perform advanced imaging with interpretation on an urgent basis, including computed tomography, MRI and echocardiography.

7. Social and family support including social services and pastoral care.

8. If geographic constraints for land transportation exist, the level III facility should ensure availability of rotor and fixed-wing transport services to transfer infants requiring subspecialty intervention from other regions and facilities.

9. Consultation and transfer agreements with both lower level referring hospitals and regional centers, including back-transport agreements.

10. Prompt diagnosis and appropriate referral of all conditions requiring surgical intervention. Major surgery should be performed by pediatric surgical specialists (including anesthesiologists with pediatric expertise) on–site within the hospital or at a closely related institution, ideally in close geographic proximity if possible. Level III facilities should be able to offer complete care, management, and evaluation for high risk neonates 24 hours a day. A neonatologist should be available either in-house or on-call with the capacity to be in-house in a timely manner, 24 hours a day.

11. Level III facilities should maintain a sufficient volume of infants <1500grams to meet professionally accepted guidelines to achieve adequate experience and expertise.

12. Enrollment in the Vermont Oxford Network to report and monitor data regarding outcomes of infants born <32 weeks and weighing <1500 grams.

13. Participation in and evaluation of quality improvement initiatives.

**Maternal Guidelines**

1. Manage complex maternal and fetal illnesses before, during and after delivery.

2. Maintain access to consultation and referral to Maternal-Fetal Medicine specialists

**Level IV- Regional Care**

**Neonatal Guidelines**

1. All level III capabilities listed above.

2. Located within an institution with the capability to provide surgical repair of complex congenital or acquired conditions.

3. Maintain a full range of pediatric medical subspecialists, pediatric surgical subspecialists and pediatric anesthesiologists at the site.

4. Facilitate transport and provide outreach education including community taught NRP and S.T.A.B.L.E. classes.

**Maternal Guidelines**

1. All level III capabilities listed above.

2. Maintain a full range of surgical and medical specialists including Maternal-Fetal Medicine specialists at the site.

3. Facilitate maternal transport and provide outreach education.

## 105.04 Perinatal Care Services

**Antepartum Care**

There should be policies for the care of pregnant patients with obstetric, medical, or surgical complications and for maternal transfer.

**Intra-partum Services: Labor and Delivery**

Intra-partum care should be both personalized and comprehensive for the mother and fetus. There should be written policies and procedures in regard to:

1. Assessment
2. Admission
3. Medical records (including complete prenatal history and physical)
4. Consent forms
5. Management of labor including assessment of fetal well-being:
    a. Term patient
    b. Preterm patients
    c. Premature rupture of membranes
    d. Preeclampsia/eclampsia
    e. Third trimester hemorrhage

f. Pregnancy Induced Hypertension (PIH)

6. Patient receiving oxytocics or tocolytics
7. Patients with stillbirths and miscarriages
8. Pain control during labor and delivery
9. Management of delivery
10. Emergency cesarean delivery (capability within 30 minutes)
11. Assessment of fetal maturity prior to repeat cesarean delivery or induction of labor
12. Vaginal birth after cesarean delivery
13. Assessment and care of neonate in the delivery room
14. Infection control in the obstetric and newborn areas
15. A delivery room shall be kept that will indicate:
    a. The name of the patient
    b. Date of delivery
    c. Sex of infant
    d. Apgar
    e. Weight
    f. Name of physician
    g. Name of person assisting
    h. What complications, if any, occurred
    i. Type of anesthesia used
    j. Name of person administering anesthesia
16. Maternal transfer
17. immediate postpartum/recovery care
18. Housekeeping

**Newborn Care**

There shall be policies and procedures for providing care of the neonate including:

1. Immediate stabilization period
2. Neonate identification and security
3. Assessment of neonatal risks
4. Cord blood, Coombs, and serology testing
5. Eye care
6. Subsequent care
7. Administration of Vitamin K
8. Neonatal screening

9. Circumcision
10. Parent education
11. Visitation
12. Admission of neonates born outside of facility
13. Housekeeping
14. Care of or stabilization and transfer of high-risk neonates

**Postpartum Care**

There shall be policies and procedures for postpartum care of mother:

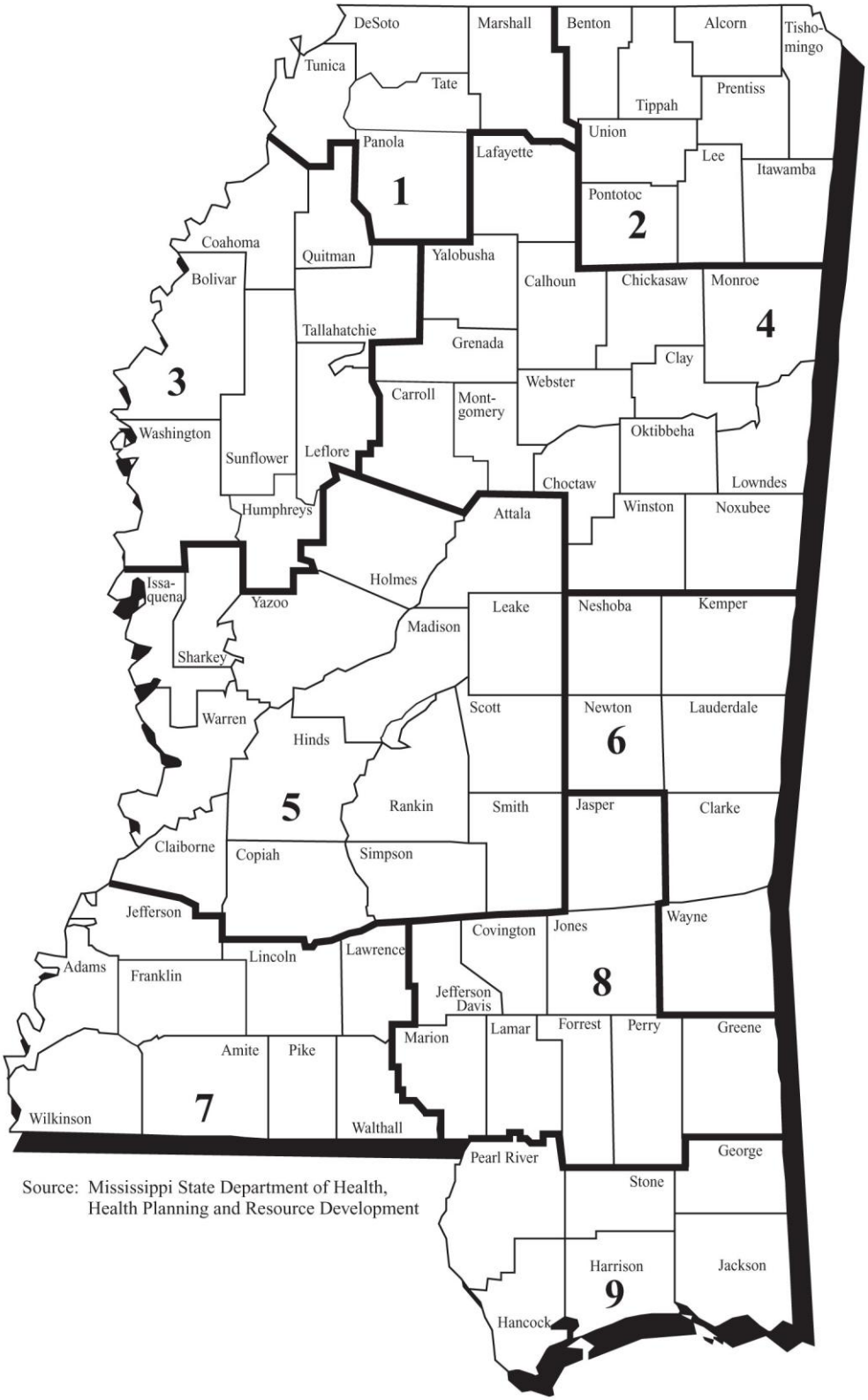
1. Assessment
2. Subsequent care (bed rest, ambulation, diet, care of the vulva, care of the bowel and bladder functions, bathing, care of the breasts, temperature elevation)
3. Postpartum sterilization
4. Immunization: RHIG and Rubella
5. Discharge planning

**105.05 Hospital Evaluation and Level of Care Designation**

All hospitals offering obstetric and newborn services will be evaluated at regular intervals and designated a level of care by the Mississippi State Health Department.

Source: Guidelines for Perinatal Care, Second, Fourth, and Sixth Editions, American Academy of Pediatrics and the American College of Obstetricians and Gynecologists, 1988, 1992, and 2007.

**Map 4-2**
**Perinatal Planning Areas**




Source: Mississippi State Department of Health,
Health Planning and Resource Development

# CHAPTER 5

# ACUTE CARE FACILITIES AND SERVICES

# Chapter 5 Acute Care

Mississippi had 96 non-federal medical/surgical hospitals in FY 2013, with a total of 10,948 licensed acute care beds (plus 286 beds held in abeyance by the MSDH). This total includes one OB/GYN hospital but excludes one rehabilitation hospital with acute care beds and Delta Regional Medical Center-West Campus which is licensed as an acute care hospital but is used primarily for other purposes. This total also excludes long term acute care (LTAC), rehabilitation, psychiatric, chemical dependency, and other special purpose beds. In addition, numerous facilities provide specific health care services on an outpatient basis. Some of these facilities are freestanding; others are closely affiliated with hospitals. Such facilities offer an increasingly wider range of services, many of which were once available only in inpatient acute care settings. Examples include diagnostic imaging, therapeutic radiation, and ambulatory surgery.

## 100 General Medical/Surgical Hospitals

The 96 acute care medical/surgical hospitals reported 9,753 beds set up and staffed during 2013, or 89.08 percent of the total licensed bed capacity. Based on beds set up and staffed, the hospitals experienced an overall occupancy rate of 45.74 percent and an average length of stay of 4.67 days. When calculating the occupancy rate using total licensed bed capacity, the overall occupancy rate drops to 40.74 percent. Using these statistics and 2020 projected population totals, Mississippi had a licensed bed capacity to population ratio of 3.47 per 1,000 and an occupied bed to population ratio of 1.46 per 1,000. Table 5-1 shows the licensed Mississippi hospital beds by service areas.

These statistics indicate an average daily census in Mississippi hospitals of 4,460.91, leaving approximately 6,487.09 unused licensed beds on any given day. Seventy-five of the state's hospitals reported occupancy rates of less than 40 percent during FY 2013.

Mississippi requires Certificate of Need (CON) review for all projects that increase the bed complement of a health care facility or exceed a capital expenditure threshold of $2 million. The law requires CON review regardless of capital expenditure for the construction, development, or other establishment of a new health care facility, including a replacement facility; the relocation of a health care facility or any portion of the facility which does not involve a capital expenditure and is more than 5,280 feet from the main entrance of the facility; and a change of ownership of an existing health care facility, unless the MSDH receives proper notification at least 30 days in advance. A health care facility that has ceased to treat patients for a period of 60 months or more must receive CON approval prior to reopening. A CON is required for major medical equipment purchase if the capital expenditure exceeds $1.5 million and is not a replacement of existing medical equipment.

A statewide glut of licensed acute care beds complicates planning for community hospital services. There are far more hospital beds than needed. The average use of licensed beds has been less than 50 percent in recent years. With few exceptions, the surplus is statewide. The continued presence of surplus hospital beds in all planning districts, and in nearly all counties with acute care hospitals, raises a number of basic planning questions:

- Does the “carrying cost” of maintaining unused beds raise operating cost unnecessarily?
- Do the surpluses, and any associated economic burdens, retard the introduction of new and more cost effective practices and services?

- Do existing services providers maintain unwarranted surpluses to shield themselves from competition, as argued by some potential competitors?
- Should the space allocated to surplus beds be converted to other uses, particularly if doing so would avoid construction of new space, or facilities, to accommodate growing outpatient caseloads?
- Do the large surpluses mask need for additional services and capacity in some regions and reduce the sensitivity and responsiveness of planners and regulators to these legitimate community needs?
- Do the continuing surpluses, and the view of them by stakeholders and other interested parties, create an environment that invites policy intervention by legislators and other responsible parties?

These questions are unusually difficult to answer definitively. That they arise not infrequently suggest the importance of reducing excess capacity where it is possible to do so and is not likely to result in problematic consequences. The Department urges each hospital to voluntarily reduce the licensed bed capacity to equal its average daily census plus a confidence factor that will assure that an unused hospital bed will be available on any given day.

**Table 5-1**
**Licensed Short-Term Acute Care Hospital Beds by Service Area**
**FY 2013**

| Facility | Licensed Beds | Abeyance Beds | Average Daily Census | Occupancy Rate | Average Length of Stay |
|---|---|---|---|---|---|
| **General Hospital Service Area 1** | **562** | **18** | **238.50** | **42.55** | **4.57** |
| Alliance Healthcare System - Holly Springs | 40 | 0 | 8.41 | 21.03 | 5.72 |
| Baptist Memorial Hospital - DeSoto | 309 | 0 | 192.44 | 62.28 | 4.55 |
| Methodist Healthcare Olive Branch Hospital* | 60 | 0 | 0.65 | 1.08 | 3.06 |
| North Oak Regional Medical Center - Senatobia | 76 | 0 | 13.40 | 17.63 | 4.99 |
| Tri-Lakes Medical Center - Batesville | 77 | 18 | 24.26 | 31.50 | 4.22 |
| **General Hospital Service Area 2** | **1,095** | **25** | **489.20** | **44.68** | **4.96** |
| Baptist Memorial Hospital - Booneville | 114 | 0 | 25.23 | 22.13 | 6.20 |
| Baptist Memorial Hospital - Union County | 153 | 0 | 30.55 | 19.97 | 3.06 |
| Iuka Hospital - Iuka | 48 | 0 | 5.75 | 11.99 | 3.11 |
| Magnolia Regional Health Center - Corinth | 181 | 0 | 86.41 | 47.74 | 4.43 |
| North Miss Medical Center - Tupelo | 554 | 0 | 333.31 | 60.16 | 5.46 |
| Pontotoc Health Services - Pontotoc | 25 | 0 | 2.71 | 10.83 | 3.08 |
| Tippah County Hospital - Ripley | 20 | 25 | 5.24 | 26.19 | 3.75 |
| **General Hospital Service Area 3** | **896** | **0** | **283.90** | **31.69** | **4.38** |
| Bolivar Medical Center - Cleveland | 165 | 0 | 39.37 | 23.86 | 4.11 |
| Delta Regional Medical Center (Main) - Greenville | 227 | 0 | 95.08 | 41.89 | 4.80 |
| Greenwood Leflore Hospital - Greenwood | 188 | 0 | 70.11 | 37.29 | 4.42 |
| North Sunflower County Hospital | 35 | 0 | 13.62 | 38.91 | 5.59 |
| Northwest Miss Regional Medical Center-Clarksdale | 181 | 0 | 45.72 | 25.26 | 3.99 |
| Patient's Choice Medical Center of Humphreys County* | 0 | 0 | 0.00 | 0 | 0 |
| Quitman County Hospital - Marks | 33 | 0 | 8.93 | 27.07 | 5.55 |
| South Sunflower County Hospital | 49 | 0 | 9.06 | 18.48 | 2.65 |
| Tallahatchie General Hospital & ECF | 18 | 0 | 2.02 | 11.20 | 3.16 |
| **General Hospital Service Area 4** | **1,244** | **24** | **367.89** | **29.57** | **4.37** |
| Baptist Memorial Hospital - North Miss - Oxford | 204 | 0 | 97.97 | 48.03 | 4.67 |
| Baptist Memorial Hospital-Golden Triangle | 285 | 0 | 83.09 | 29.15 | 4.12 |
| Calhoun Health Services - Calhoun City | 30 | 0 | 6.17 | 20.57 | 5.96 |
| Gilmore Memorial Hospital, Inc. | 95 | 0 | 30.77 | 32.39 | 3.92 |
| Grenada Lake Medical Center | 156 | 0 | 32.94 | 21.12 | 4.11 |
| Kilmichael Hospital | 19 | 0 | 1.23 | 6.49 | 3.60 |
| North Mississippi Medical Center-West Point | 60 | 0 | 20.87 | 34.78 | 3.68 |
| Noxubee General Critical Access Hospital | 25 | 0 | 7.82 | 31.29 | 3.51 |
| Oktibbeha County Hospital Regional Medical Center | 96 | 0 | 27.57 | 28.72 | 3.98 |
| Pioneer Community Hospital of Aberdeen | 35 | 0 | 7.56 | 21.60 | 6.27 |
| Pioneer Community Hospital of Choctaw | 25 | 0 | 3.92 | 15.66 | 5.50 |
| Trace Regional Hospital | 84 | 0 | 10.13 | 12.06 | 6.45 |
| Tyler Holmes Memorial Hospital | 25 | 0 | 5.47 | 21.90 | 3.43 |
| Webster Health Services | 38 | 0 | 16.50 | 43.42 | 5.05 |
| Winston Medical Center | 41 | 24 | 12.93 | 31.53 | 7.17 |
| Yalobusha General Hospital | 26 | 0 | 2.95 | 11.35 | 3.46 |

**Table 5-1 (continued)**
**Licensed Short-Term Acute Care Hospital Beds by Service Area**
**FY 2013**

| Facilities | Licensed Beds | Abeyance Beds | Average Daily Census | Occupancy Rate | Average Length of Stay |
|---|---|---|---|---|---|
| **General Hospital Service Area 5** | **3,167** | **56** | **1,515.17** | **47.84** | **5.02** |
| Baptist Medical Center Leake | 25 | 0 | 6.03 | 24.12 | 3.39 |
| Central Mississippi Medical Center | 415 | 0 | 74.74 | 18.01 | 4.73 |
| Claiborne County Hospital | 32 | 0 | 10.38 | 32.44 | 5.83 |
| Crossgates River Oaks Hospital | 149 | 0 | 54.49 | 36.57 | 5.61 |
| Hardy Wilson Memorial Hospital | 25 | 10 | 15.28 | 61.13 | 7.24 |
| Holmes County Hospital and Clinics | 25 | 10 | 1.87 | 7.46 | 2.07 |
| King's Daughters Hospital-Yazoo City | 25 | 0 | 8.63 | 34.53 | 3.80 |
| Madison River Oaks Medical Center | 67 | 0 | 16.96 | 25.31 | 3.21 |
| Magee General Hospital | 64 | 0 | 16.75 | 26.16 | 4.27 |
| Mississippi Baptist Medical Center | 541 | 0 | 292.78 | 54.12 | 5.52 |
| Montfort Jones Memorial Hospital | 35 | 36 | 16.48 | 47.08 | 4.73 |
| Patients' Choice Medical Center of Smith County | 29 | 0 | 6.28 | 21.66 | 14.61 |
| River Oaks Hospital | 160 | 0 | 56.76 | 35.48 | 3.63 |
| River Region Health System | 261 | 0 | 106.13 | 40.66 | 5.30 |
| S.E. Lackey Critical Access Hospital | 35 | 0 | 23.48 | 67.08 | 4.99 |
| Scott Regional Hospital | 25 | 0 | 5.18 | 20.71 | 3.29 |
| Sharkey - Issaquena Community Hospital | 29 | 0 | 7.52 | 25.94 | 5.01 |
| Simpson General Hospital | 35 | 0 | 10.57 | 30.21 | 5.76 |
| St. Dominic-Jackson Memorial Hospital | 417 | 0 | 311.93 | 74.80 | 4.20 |
| University Hospital & Health System | 664 | 0 | 455.75 | 68.64 | 6.16 |
| Woman's Hospital at River Oaks | 109 | 0 | 17.16 | 15.75 | 3.36 |
| **General Hospital Service Area 6** | **869** | **90** | **299.00** | **34.41** | **4.87** |
| Alliance Health Center | 78 | 0 | 4.13 | 5.29 | 12.78 |
| Alliance Laird Hospital - Union | 25 | 0 | 3.36 | 13.46 | 2.88 |
| Anderson Regional Medical Center - Meridian | 260 | 71 | 141.87 | 54.57 | 5.03 |
| Anderson Regional Medical Center South* | 49 | 0 | 5.51 | 11.24 | 12.47 |
| H.C. Watkins Memorial Hospital, Inc. - Quitman | 25 | 0 | 2.78 | 11.10 | 3.90 |
| John C. Stennis Memorial Hospital | 25 | 0 | 1.25 | 5.02 | 3.15 |
| Neshoba General Hospital - Philadelphia | 82 | 0 | 17.19 | 20.97 | 4.11 |
| Pioneer Community Hospital of Newton | 30 | 19 | 10.14 | 33.79 | 5.00 |
| Rush Foundation Hospital - Meridian | 215 | 0 | 87.10 | 40.51 | 4.67 |
| Wayne General Hospital - Waynesboro | 80 | 0 | 25.66 | 32.08 | 4.80 |
| **General Hospital Service Area 7** | **719** | **0** | **252.17** | **35.07** | **4.11** |
| Beacham Memorial Hospital | 37 | 0 | 12.44 | 33.62 | 6.81 |
| Field Memorial Community Hospital | 25 | 0 | 4.68 | 18.72 | 3.36 |
| Franklin County Memorial Hospital | 35 | 0 | 7.45 | 21.28 | 7.72 |
| Jefferson County Hospital | 30 | 0 | 17.98 | 59.94 | 10.27 |
| King's Daughters Medical Center - Brookhaven | 122 | 0 | 37.22 | 30.51 | 2.84 |
| Lawrence County Hospital | 25 | 0 | 3.83 | 15.31 | 3.49 |
| Natchez Community Hospital | 101 | 0 | 44.04 | 43.61 | 4.37 |
| Natchez Regional Medical Center | 159 | 0 | 33.26 | 20.92 | 4.83 |
| Southwest Miss Regional Medical Center | 160 | 0 | 88.31 | 55.20 | 3.75 |
| Walthall County General Hospital | 25 | 0 | 2.96 | 11.84 | 3.16 |

**Table 5-1 (continued)**
**Licensed Short-Term Acute Care Hospital Beds by Service Area**
**FY 2013**

| Facility | Licensed Beds | Abeyance Beds | Average Daily Census | Occupancy Rate | Average Length of Stay |
|---|---|---|---|---|---|
| **General Hospital Service Area 8** | **1,046** | **38** | **495.93** | **47.41** | **4.61** |
| Covington County Hospital | 35 | 0 | 9.19 | 26.27 | 5.63 |
| Forrest General Hospital | 400 | 0 | 265.64 | 66.41 | 4.43 |
| Greene County Hospital | 3 | 0 | 0.27 | 9.04 | 4.95 |
| Jasper General Hospital | 16 | 0 | 0.09 | 0.58 | 6.80 |
| Jeff Davis Community Hospital - Prentiss | 35 | 0 | 7.29 | 20.83 | 7.13 |
| Marion General Hospital | 49 | 30 | 9.63 | 19.65 | 4.23 |
| Perry County General Hospital | 22 | 8 | 2.09 | 9.51 | 3.47 |
| South Central Regional Medical Center | 275 | 0 | 91.90 | 33.42 | 4.66 |
| Wesley Medical Center | 211 | 0 | 109.82 | 52.05 | 4.93 |
| **General Hospital Service Area 9** | **1,350** | 35 | **518.50** | **38.41** | **4.22** |
| Biloxi Regional Medical Center* | 153 | 0 | 71.10 | 46.47 | 4.57 |
| Garden Park Medical Center | 130 | 0 | 45.48 | 34.99 | 4.07 |
| George County Hospital | 48 | 0 | 13.70 | 28.53 | 3.53 |
| Hancock Medical Center | 86 | 0 | 17.14 | 19.93 | 3.30 |
| Highland Community Hospital - Picayune | 60 | 35 | 17.59 | 29.32 | 3.11 |
| Memorial Hospital at Gulfport | 303 | 0 | 149.10 | 49.21 | 4.50 |
| Ocean Springs Hospital | 136 | 0 | 101.90 | 74.93 | 4.43 |
| Pearl River Hospital & Nursing Home - Poplarville | 24 | 0 | 1.23 | 5.14 | 2.91 |
| Singing River Hospital | 385 | 0 | 97.92 | 25.43 | 4.11 |
| Stone County Hospital | 25 | 0 | 3.33 | 13.30 | 2.89 |
| **TOTAL** | **10,948** | **286** | **4,460.91** | **40.75** | **4.67** |

Note: *Methodist Health Care Olive Branch opened in FY 2013.
*Patients Choice Medical Center of Humphreys County closed in FY 2013.
* Riley Memorial Hospital –Meridian changed their name to Anderson Regional Medical Center-South.

Occupancy rate is calculated based on total number of licensed beds and excludes beds in abeyance. As a result, the occupancy rate may not equal the occupancy rate published in the *2013 Mississippi Hospital Report.*

Source: Application for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report; Division of Health Planning and Resource Development, Office of Health Policy and Planning

## 101 Hospital Outpatient Services

The following table shows the number of visits to hospital emergency rooms and hospital outpatient clinics in FY 2013. These statistics represent an increase over 2012's total of 4,862,405 visits to hospital emergency rooms and outpatient clinics.

**Table 5-2**
**Selected Data for Hospital-Based or Affiliated Outpatient Clinics**
**by General Hospital Service Area**
**FY 2013**

| General Hospital Service Area | Number with Emergency Department | Number of Emergency Room Visits | Number of Hospitals with Organized Outpatient | Number of Outpatient Clinic Visits | Total Outpatient Visits |
|---|---|---|---|---|---|
| **Mississippi** | **87** | **1,829,621** | **80** | **3,047,718** | **4,877,339** |
| 1 | 5 | 93,074 | 5 | 49,966 | 143,040 |
| 2 | 7 | 183,518 | 7 | 324,675 | 508,193 |
| 3 | 8 | 147,599 | 6 | 226,228 | 373,827 |
| 4 | 14 | 226,534 | 13 | 413,246 | 639,780 |
| 5 | 19 | 429,815 | 20 | 671,353 | 1,101,168 |
| 6 | 8 | 107,138 | 7 | 149,759 | 256,897 |
| 7 | 9 | 124,762 | 7 | 147,034 | 271,796 |
| 8 | 8 | 190,551 | 6 | 187,829 | 378,380 |
| 9 | 9 | 326,630 | 9 | 877,628 | 1,204,258 |

Source: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report, Mississippi State Department of Health

# ACUTE CARE

## 102 Certificate of Need Criteria and Standards for General Acute Care Facilities

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 102.01 Policy Statement Regarding Certificate of Need Applications for General Acute Care Hospitals and General Acute Care Beds

1. Acute Care Hospital Need Methodology: With the exception of psychiatric, chemical dependency, and rehabilitation hospitals, the Mississippi State Department of Health (MSDH) will use the following methodologies to project the need for general acute care hospitals:

   a. **Counties Without a Hospital** - The MSDH shall determine hospital need by multiplying the state's average annual occupied beds (1.41 in FY 2013) per 1,000 population by the estimated 2020 county population to determine the number of beds the population could utilize. A hospital with a maximum of 100 beds may be considered for approval if: (a) the number of beds needed is 100 or more; (b) there is strong community support for a hospital; and (c) a hospital can be determined to be economically feasible.

   b. **Counties With Existing Hospitals** - The MSDH shall use the following formula to determine the need for an additional hospital in a county with an existing hospital:

   $$\mathbf{ADC + K(\sqrt{ADC})}$$

   **Where: ADC = Average Daily Census**

   **K = Confidence Factor of 2.57**

   The formula is calculated for each facility within a given General Hospital Service Area (GHSA); then beds available and beds needed under the statistical application of the formula are totaled and subtracted to determine bed need or excess within each GHSA. Map 5-1 delineates the GHSAs. The MSDH may consider approval of a hospital with a maximum of 100 beds if: (a) the number of beds needed is 100 or more; (b) there is strong community support for a hospital; and (c) a hospital can be determined to be economically feasible.

   c. **Counties Located in an Underdeveloped General Hospital Service Area and With a Rapidly Growing Population -** Notwithstanding the need formula in b above, any county with a population in excess of 140,000 people; projecting a population growth rate in excess of ten (10) percent over the next ten (10) year period; and its General Hospital Service Area does not presently exceed a factor of three (beds per 1,000 population); may

be considered for a new acute care hospital not to exceed one hundred (100) beds, in that county.

Further, any person proposing a new hospital under criterion 1c above must meet the following conditions:

1) Provide an amount of indigent care in excess of the average of the hospitals in the General Hospital Service Area as determined by the State Health Officer;

2) Provide an amount of Medicaid care in excess of the average of the hospitals in the General Hospital Service Area as determined by the State Health Officer; and

3) If the proposed hospital will be located in a county adjacent to a county or counties without a hospital, the applicant must establish outpatient services in the adjacent county or counties without a hospital;

4) Fully participate in the Trauma Care System at a level to be determined by the Department for a reasonable number of years to be determined by the State Health Officer. Fully participate means play in the Trauma Care System as provided in the Mississippi Trauma Care System Regulations and the new hospital shall not choose or elect to pay a fee not to participate or participate at a level lower than the level specified in the CON; and

5) The new hospital must also participate as a network provider in the State and School Employees' Health Insurance Plan as defined in Mississippi Code Section 25-15-3 and 25-15-9.

2. Need in Counties Without a Hospital: Six counties in Mississippi do not have a hospital: Amite, Benton, Carroll, Issaquena, Itawamba, and Tunica. Most of these counties do not have a sufficient population base to indicate a potential need for the establishment of a hospital, and all appear to receive sufficient inpatient acute care services from hospitals in adjoining counties.

3. Expedited Review: The MSDH may consider an expedited review for Certificate of Need applications that address only license code deficiencies, project cost overruns, and relocation of facilities or services.

4. Capital Expenditure: For the purposes of Certificate of Need review, transactions which are separated in time but planned to be undertaken within 12 months of each other and which are components of an overall long-range plan to meet patient care objectives shall be reviewed in their entirety without regard to their timing. For the purposes of this policy, the governing board of the facility must have duly adopted the long-range plan at least 12 months prior to the submission of the CON application.

5. No health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need.

6. If a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the

delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

7. A health care facility that has ceased to operate for a period of 60 months or more shall require a Certificate of Need prior to reopening.

### 102.02 Certificate of Need Criteria and Standards for the Establishment of a General Acute Care Hospital

The Mississippi State Department of Health (MSDH) will review applications for a Certificate of Need to construct, develop, or otherwise establish a new hospital 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 Certificate of Need 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.

1. **Need Criterion: The applicant shall document a need for a general acute care hospital using the appropriate need methodology as presented in this section of the *Plan.* In addition, the applicant must meet the other conditions set forth in the need methodology**.

2. The application shall document that the applicant will provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this *Plan*.

### 102.03 Certificate of Need Criteria and Standards for Construction, Renovation, Expansion, Capital Improvements, Replacement of Health Care Facilities, and Addition of Hospital Beds

The Mississippi State Department of Health (MSDH) will review applications for a Certificate of Need for the addition of beds to a health care facility and projects for construction, renovation, expansion, or capital improvement involving a capital expenditure in excess of $2,000,000 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 Certificate of Need 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 construction, development, or other establishment of a new health care facility, the replacement and/or relocation of a health care facility or portion thereof, and changes of ownership of existing health care facilities are reviewable regardless of capital expenditure.

3. **<u>Need Criterion:</u>**

   a. **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.

b. **Projects which involve the addition of beds**: The applicant shall document the need for the proposed project. In addition to the documentation required as stated in Need Criterion (1)(a), the applicant shall document that the facility in question has maintained an occupancy rate of at least 60 percent for the most recent two (2) years or has maintained an occupancy rate of at least 70 percent for the most recent two (2) years according to the below formula:

# Observation patient days*/365/ licensed beds + Inpatient Occupancy rate

*An observation patient is a patient that has NOT been admitted as an inpatient, but occupies an acute care bed (observation bed) and is provided observation services in a licensed, acute care hospital. Hospitals shall follow strict guidelines set forth by The Centers for Medicare & Medicaid Services, health insurance companies, and others in reporting observation bed data to the Department. For definitions that correspond with the above referenced item, please refer to the Glossary included in the Plan.

4. Bed Service Transfer/Reallocation/Relocation: Applications proposing the transfer, reallocation, and/or relocation of a specific category or sub-category of bed/service from another facility as part of a renovation, expansion, or replacement project shall document that the applicant will meet all regulatory/licensure requirements for the type of bed/service being transferred/reallocated/relocated.

5. Charity/Indigent Care: The application shall affirm that the applicant will provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this *Plan*.

6. The application shall demonstrate that the cost of the proposed project, including equipment, is reasonable in comparison with the cost of similar projects in the state.

   a. The applicant shall document that the cost per square foot (per bed if applicable) does not exceed the median construction costs, as determined by the MSDH, for similar projects in the state within the most recent 12-month period by more than 15 percent. The Glossary of this *Plan* provides the formulas to be used by MSDH staff in calculating the cost per square foot for construction and/or construction/renovation projects.

   b. If equipment costs for the project exceed the median costs for equipment of similar quality by more than 15 percent, the applicant shall provide justification for the excessive costs. The median costs shall be based on projects submitted during the most recent six-month period and/or estimated prices provided by acceptable vendors.

7. The applicant shall specify the floor areas and space requirements, including the following factors:

   a. The gross square footage of the proposed project in comparison to state and national norms for similar projects.

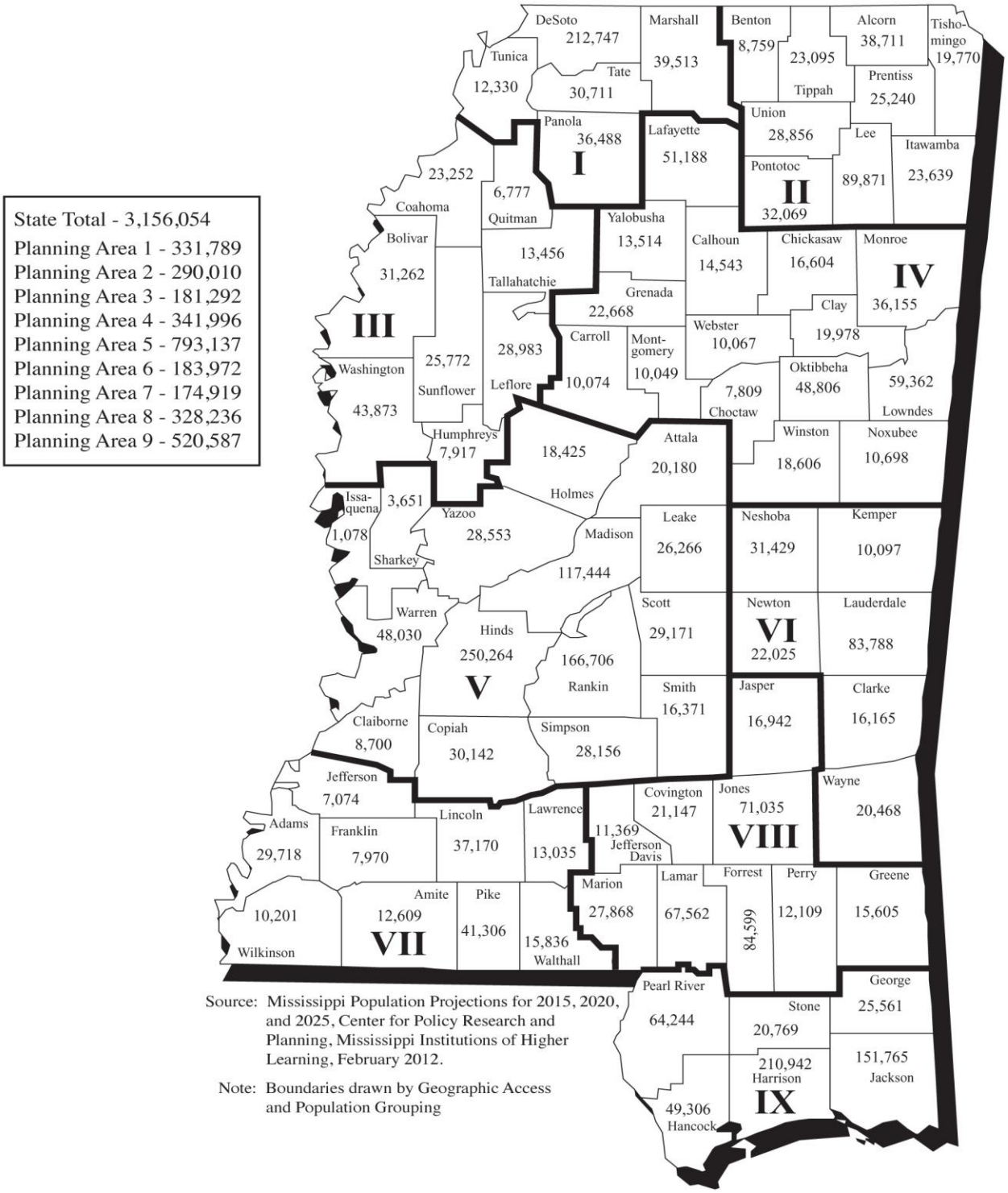
   b. The architectural design of the existing facility if it places restraints on the proposed project.

c. Special considerations due to local conditions.

8. If the cost of the proposed renovation or expansion project exceeds 85 percent of the cost of a replacement facility, the applicant shall document their justification for rejecting the option of replacing said facility.

9. The applicant shall document the need for a specific service (i.e. perinatal, ambulatory care, psychiatric, etc.) using the appropriate service specific criteria as presented in this and other sections of the *Plan*.

# Map 5-1
# General Hospital Service Areas
# 2020 Population Projections




Source: Mississippi Population Projections for 2015, 2020, and 2025, Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, February 2012.

Note: Boundaries drawn by Geographic Access and Population Grouping

# LONG-TERM ACUTE CARE HOSPITALS/BEDS

## 103 Long-Term Acute Care Hospitals

A long-term acute care (LTAC) hospital is a free-standing, Medicare-certified acute care hospital with an average length of inpatient stay greater than 25 days that is primarily engaged in providing chronic or long-term medical care to patients who do not require more than three hours of rehabilitation or comprehensive rehabilitation per day. As of April 2014, ten long-term acute care hospitals were in operation. The following table lists specific LTAC information.

**Table 5-3**
**Long-Term Acute Care Hospitals**
**2013**

| Facility | Location | Authorized Beds | Licensed Beds | Occupancy Rate | Discharges | ALOS |
|---|---|---|---|---|---|---|
| **General Hospital Service Area 1** | | **0** | **0** | **0.00** | **0** | **0.00** |
| NONE | | | | | | |
| **General Hospital Service Area 2** | | **0** | **0** | **0.00** | **0** | **0.00** |
| NONE | | | | | | |
| **General Hospital Service Area 3** | | **80** | **79** | **58.14** | **624** | **26.32** |
| Alliance Specialty Hospital Greenville* | - Greenville | 40 | 39 | 52.98 | 267 | 28.22 |
| Greenwood AMG Specialty Hospital* | - Greenwood | 40 | 40 | 63.16 | 357 | 24.90 |
| **General Hospital Service Area 4** | | **0** | **0** | **0.00** | **0** | **0.00** |
| NONE | | | | | | |
| **General Hospital Service Area 5** | | **149** | **149** | **79.73** | **1,591** | **26.96** |
| Mississippi Hospital for Restorative Care | - Jackson | 25 | 25 | 83.15 | 221 | 32.91 |
| Promise Hospital of Vicksburg | - Vicksburg | 35 | 35 | 74.50 | 377 | 24.84 |
| Regency Hospital of Jackson | - Jackson | 36 | 36 | 74.64 | 368 | 26.65 |
| Select Specialty Hospital of Jackson | - Jackson | 53 | 53 | 85.03 | 625 | 26.32 |
| **General Hospital Service Area 6** | | **89** | **89** | **86.49** | **982** | **28.54** |
| Regency Hospital of Meridian | - Meridian | 40 | 40 | 75.51 | 386 | 27.80 |
| Specialty Hospital of Meridian | - Meridian | 49 | 49 | 95.44 | 596 | 29.03 |
| **General Hospital Service Area 7** | | **0** | **0** | **0.00** | **0** | **0.00** |
| NONE | | | | | | |
| **General Hospital Service Area 8** | | **33** | **33** | **77.05** | **378** | **25.42** |
| Regency Hospital of Southern Mississippi | - Hattiesburg | 33 | 33 | 77.05 | 378 | 25.42 |
| **General Hospital Service Area 9** | | **80** | **61** | **43.70** | **361** | **25.61** |
| Select Specialty Hospital-Gulfport | - Gulfport | 80 | 61 | 43.70 | 361 | 25.61 |
| **TOTAL** | | **431** | **411** | **71.48** | **3,936** | **26.98** |

NOTE: There are currently no LTAC Hospitals located in GHSA 1, 2, 4, and 7.

*Delta Regional Medical Center changed their name to Alliance Specialty Hospital of Greenville.
*Long Term Acute Hospital of Greenwood changed their name to Greenwood AMG Specialty Hospital.

Source: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report, Mississippi State Department of Health

## 104 Certificate of Need Criteria and Standards for Long-Term Acute Care Hospitals/Beds

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 104.01 Policy Statement Regarding Certificate of Need Applications for Long-Term Acute Care Hospitals and Long-Term Acute Care Hospital Beds

1. Restorative Care Admissions: Restorative care admissions shall be identified as patients with one or more of the following conditions or disabilities:

    a. Neurological Disorders

        i. Head Injury

        ii. Spinal Cord Trauma

        iii. Perinatal Central Nervous System Insult

        iv. Neoplastic Compromise

        v. Brain Stem Trauma

        vi. Cerebral Vascular Accident

        vii. Chemical Brain Injuries

    b. Central Nervous System Disorders

        i. Motor Neuron Diseases

        ii. Post Polio Status

        iii. Developmental Anomalies

        iv. Neuromuscular Diseases (e.g. Multiple Sclerosis)

        v. Phrenic Nerve Dysfunction

        vi. Amyotrophic Lateral Sclerosis

c. Cardio-Pulmonary Disorders

i. Obstructive Diseases

ii. Adult Respiratory Distress Syndrome

iii. Congestive Heart Failure

iv. Respiratory Insufficiency

v. Respiratory Failure

vi. Restrictive Diseases

vii. Broncho-Pulmonary Dysplasia

viii. Post Myocardial Infarction

ix. Central Hypoventilation

d. Pulmonary Cases

i. Presently Ventilator-Dependent/Weanable

ii. Totally Ventilator-Dependent/Not Weanable

iii. Requires assisted or partial ventilator support

iv. Tracheostomy that requires supplemental oxygen and bronchial hygiene

2. Bed Licensure: All beds designated as long-term care hospital beds shall be licensed as general acute care.

3. Average Length of Stay: Patients' average length of stay in a long-term care hospital must be 25 days or more.

4. Size of Facility: Establishment of a long-term care hospital shall not be for less than 20 beds.

5. Long-Term Medical Care: A long-term acute care hospital shall provide chronic or long-term medical care to patients who do not require more than three (3) hours of rehabilitation or comprehensive rehabilitation per day.

6. Transfer Agreement: A long-term acute care hospital shall have a transfer agreement with an acute care medical center and a comprehensive medical rehabilitation facility.

7. Effective July 1, 1994, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need under the authority of Section 41-7-191(1)(c), unless there is a projected need for such beds in the planning district in which the facility is located.

## 104.02 Certificate of Need Criteria and Standards for the Establishment of a Long-Term Acute Care Hospital and Addition of Long-Term Acute Care Hospital Beds

The Mississippi State Department of Health will review applications for a Certificate of Need for the construction, development, or otherwise establishment of a long-term acute care hospital and bed additions 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

1. **Need Criterion: The applicant shall document a need for the proposed project. Documentation shall consist of the following:**

    a. **minimum of 450 clinically appropriate restorative care admissions with an average length of stay of 25 days; and**

    b. **a projection of financial feasibility by the end of the third year of operation.**

2. The applicant shall document that any beds which are constructed/converted will be licensed as general acute care beds offering long-term acute care hospital services.

3. Applicants proposing the transfer/reallocation/relocation of a specific category or sub-category of bed/service from another facility as part of a renovation, expansion, or replacement project shall document that they will meet all regulatory and licensure requirements for the type of bed/service proposed for transfer/reallocation/relocation.

4. The application shall affirm that the applicant will provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this *Plan*.

5. The application shall demonstrate that the cost of the proposed project, including equipment, is reasonable in comparison with the cost of similar projects in the state. The applicant shall document that the cost per square foot (per bed if applicable) does not exceed the median construction costs, as determined by the MSDH, for similar projects in the state within the most recent 12-month period by more than 15 percent. The Glossary of this *Plan* provides the formulas MSDH staff shall use to calculate the cost per square foot of space for construction and/or construction-renovation projects.

6. The applicant shall specify the floor areas and space requirements, including the following factors:

    a. The gross square footage of the proposed project in comparison to state and national norms for similar projects.

    b. The architectural design of the existing facility if it places restraints on the proposed project.

    c. Special considerations due to local conditions.

7. The applicant shall provide copies of transfer agreements entered into with an acute care medical center and a comprehensive medical rehabilitation facility.

# SWING-BED SERVICES

## 105 Swing-Bed Programs and Extended Care Services

Federal law allows hospitals of up to 100 beds to use designated beds as “swing beds” to alternate between acute and extended care. Patients occupy swing-beds for a few days to several weeks. Hospitals must meet several requirements for certification as swing-beds under Medicare and Medicaid. Federal certification requirements focus on eligibility, skilled nursing facility services, and coverage requirements. Eligibility criteria include rural location, fewer than 100 beds, a Certificate of Need, and no waiver of the 24-hour nursing requirement.

In addition to meeting acute care standards, swing-bed hospitals must also meet six standards for nursing facility services. These standards involve patients' rights, dental services, specialized rehabilitative services, social services, patient activities, and discharge planning. Swing-bed hospitals have the same Medicare coverage requirements and coinsurance provisions as nursing facilities. Many patients, particularly elderly patients, no longer need acute hospital care but are not well enough to go home. Swing-beds enable the hospital to provide nursing care, rehabilitation, and social services with a goal of returning patients to their homes. Many of these patients would become nursing home residents without the extended period of care received in a swing-bed.

Swing-beds provide a link between inpatient acute care and home or community-based services in a continuum of care for the elderly and others with long-term needs. If return to the community is not possible, the swing-bed hospital assists the patient and family with nursing home placement. The swing-bed concept may help alleviate the problem of low utilization in small rural hospitals and provide a new source of revenue with few additional expenses. Additionally, swing-beds allow hospitals to better utilize staff during periods of low occupancy in acute care beds.

### 105.01 Swing-Bed Utilization

The fifty-six Mississippi hospitals and one specialty hospital participated in the swing bed program. During Fiscal Year 2013, they reported 7,072 discharges from their swing beds, with 106,850 patient days of care and an average length of stay of 14.35 days. The number of days of care provided in swing beds was equivalent to approximately 258 nursing home beds.

The swing-bed program offers a viable alternative to placement in a nursing home for short-term convalescence. During the year, only about 15.26 percent of the patients who were discharged from a swing-bed went to a nursing home; 66.52 percent went home, 35.16 percent were referred to home health, 9.5 percent was readmitted to a hospital; and 1.6 percent were referred to a personal care home.

**Table 5-4**
**Swing Bed Utilization**
**FY 2013**

| Facility | Licensed Beds | Discharges | ALOS | Average Daily Census |
|---|---|---|---|---|
| **General Hospital Service Area 1** | **4** | **24** | **7.58** | **0.50** |
| Alliance Health Care System | 4 | 24 | 7.58 | 0.50 |
| **General Hospital Service Area 2** | **67** | **679** | **10.15** | **18.32** |
| Baptist Memorial Hospital-Booneville | 10 | 246 | 9.61 | 5.93 |
| Baptist Memorial Hospital-Union County | 12 | 129 | 6.95 | 2.53 |
| North MS Medical Center-Iuka | 10 | 104 | 12.33 | 3.51 |
| Pontotoc Health Services | 25 | 160 | 12.43 | 5.41 |
| Tippah County Hospital | 10 | 40 | 8.95 | 0.93 |
| **General Hospital Service Area 3** | **61** | **701** | **8.59** | **22.72** |
| Bolivar Medical Center | 12 | 170 | 9.66 | 4.47 |
| North Sunflower Medical Center | 15 | 311 | 10.74 | 9.14 |
| Patients Choice Med. Ctr. of Humphreys County* | 0 | 0 | 0.00 | 0.00 |
| Quitman County Hospital | 25 | 86 | 12.08 | 4.62 |
| Tallahatchie General Hospital & ECF | 9 | 134 | 0.00 | 4.49 |
| **General Hospital Service Area 4** | **184** | **1,470** | **12.84** | **63.97** |
| Calhoun Health Services | 10 | 64 | 19.56 | 3.28 |
| Gilmore Memorial Regional Medical Center | 16 | 169 | 7.21 | 3.36 |
| Kilmichael Hospital | 10 | 1 | 5.00 | 0.01 |
| North Mississippi Medical Center-West Point | 10 | 223 | 8.66 | 5.30 |
| Noxubee General Critical Access Hospital | 25 | 174 | 10.46 | 5.84 |
| Oktibbeha County Hospital | 10 | 2 | 11.00 | 0.06 |
| Pioneer Community Hospital of Aberdeen | 25 | 185 | 15.92 | 19.73 |
| Pioneer Community Hospital of Choctaw | 25 | 70 | 13.17 | 2.46 |
| Trace Regional Hospital | 10 | 35 | 11.66 | 1.12 |
| Tyler Holmes Memorial Hospital | 10 | 124 | 14.33 | 4.91 |
| Webster Health Services | 10 | 210 | 12.95 | 7.13 |
| Winston Medical Center | 10 | 69 | 10.94 | 2.49 |
| Yalobusha General Hospital | 13 | 144 | 21.51 | 8.28 |
| **General Hospital Service Area 5** | **186** | **1,325** | **14.04** | **50.58** |
| Hardy Wilson Memorial Hospital | 25 | 191 | 17.38 | 9.12 |
| King's Daughters Hospital-Yazoo City | 25 | 159 | 11.33 | 4.85 |
| Baptist Medical Center Leake | 10 | 156 | 13.84 | 6.05 |
| Magee General Hospital | 12 | 140 | 14.71 | 5.64 |
| Monfort Jones Memorial Hospital | 10 | 90 | 11.74 | 2.88 |
| Claiborne County Hospital | 4 | 69 | 12.06 | 2.39 |
| S.E. Lackey Critical Access Hospital | 15 | 160 | 15.09 | 6.39 |
| Scott Regional Hospital | 25 | 97 | 15.13 | 4.08 |
| Sharkey-Issaquena Community Hospital | 10 | 89 | 9.47 | 2.33 |
| Simpson General Hospital | 25 | 130 | 15.51 | 5.16 |
| Holmes County Hospital & Clinics | 25 | 44 | 14.41 | 1.70 |

**Table 5-4 (Continued)**
**Swing Bed Utilization**
**FY 2013**

| Facility | Licensed Beds | Discharges | ALOS | Average Daily Census |
|---|---|---|---|---|
| **General Hospital Service Area 6** | **141** | **1,220** | **16.37** | **54.62** |
| Alliance-Laird Hospital | 25 | 193 | 12.53 | 6.62 |
| Anderson Regional Medical Center South | 25 | 297 | 16.82 | 13.97 |
| H.C. Watkins Memorial Hospital | 25 | 198 | 21.29 | 11.99 |
| John C Stennis Memorial Hospital | 25 | 188 | 12.88 | 6.61 |
| Neshoba County General Hospital | 10 | 12 | 16.83 | 0.52 |
| Pioneer Community Hospital-Netwon | 21 | 138 | 14.57 | 5.36 |
| Wayne General Hospital | 10 | 194 | 19.11 | 9.55 |
| **General Hospital Service Area 7** | **85** | **599** | **18.69** | **28.75** |
| Beacham Memorial Hospital | 15 | 99 | 15.90 | 4.13 |
| Field Memorial Community Hospital | 10 | 123 | 14.24 | 4.89 |
| Franklin County Memorial Hospital | 25 | 177 | 30.45 | 12.74 |
| Lawerence County Hospital | 25 | 113 | 12.14 | 4.01 |
| Walthall County General Hospital | 10 | 87 | 12.72 | 2.99 |
| **General Hospital Service Area 8** | **121** | **736** | **17.23** | **34.88** |
| Covington County Medical Center | 10 | 205 | 16.32 | 9.33 |
| Greene County Hospital | 3 | 42 | 19.21 | 2.39 |
| Jasper General Hospital | 12 | 119 | 20.99 | 6.24 |
| Jeff Davis Community Hospital | 25 | 90 | 14.76 | 3.63 |
| Marion General Hospital | 49 | 192 | 19.21 | 10.37 |
| Perry County General Hospital | 22 | 88 | 11.56 | 2.93 |
| **Ganeral Hospital Service Area 9** | **59** | **318** | **22.14** | **18.38** |
| George County Hospital | 10 | 1 | 25.00 | 0.07 |
| Pearl River County Hospital | 24 | 117 | 23.54 | 7.55 |
| Stone County Hospital | 25 | 200 | 21.30 | 10.77 |
| **State Total** | **908** | **7,072** | **14.35** | **292.74** |

Source: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report, Mississippi State Department of Health

### 105.02 Certificate of Need Criteria and Standards for Swing-Bed Services

The Mississippi State Department of Health will review applications for a Certificate of Need (CON) to establish swing-bed 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.

1. **Need Criterion: The application shall document that the hospital will meet all federal regulations regarding the swing-bed concept**. However, a hospital may have more licensed beds or a higher average daily census (ADC) than the maximum number specified in federal regulations for participation in the swing-bed program.
2. The applicant shall provide a copy of the Resolution adopted by its governing board approving the proposed participation.
3. If the applicant proposes to operate and staff more than the maximum number of beds specified in federal regulations for participation in the swing-bed program, the application shall give written assurance that only private pay patients will receive swing-bed services.
4. The application shall affirm that upon receiving CON approval and meeting all federal requirements for participation in the swing-bed program, the applicant shall render services provided under the swing-bed concept to any patient eligible for Medicare (Title XVIII of the Social Security Act) who is certified by a physician to need such services.
5. The application shall affirm that upon receiving CON approval and meeting all federal requirements for participation in the swing-bed program, the applicant shall not permit any patient who is eligible for both Medicaid and Medicare or is eligible only for Medicaid to stay in the swing-beds of a hospital for more than 30 days per admission unless the hospital receives prior approval for such patient from the Division of Medicaid.
6. The application shall affirm that if the hospital has more licensed beds or a higher average daily census than the maximum number specified in federal regulations for participation in the swing-bed program, the applicant will develop a procedure to ensure that, before a patient is allowed to stay in the swing-beds of the hospital, there are no vacant nursing home beds available within a 50-mile radius (geographic area) of the hospital. The applicant shall also affirm that if the hospital has a patient staying in the swing-beds of the hospital and the hospital receives notice from a nursing home located within a 50-mile radius that there is a vacant bed available for that patient, the hospital shall transfer the swing-bed patient to the nursing home within five days, exclusive of holidays and weekends, unless the patient's physician certifies that the transfer is not medically appropriate.
7. The applicant shall provide copies of transfer agreements entered into with each nursing facility within the applicant's geographic area.
8. An applicant subject to the conditions stated in Criterion #5 shall affirm in the application that they will be subject to suspension from participation in the swing-bed program for a reasonable period of time by the Department of Health if the Department, after a hearing complying with due process, determines that the hospital has failed to comply with any of those requirements.

# THERAPEUTIC RADIATION SERVICES

## 106 Therapeutic Radiation Services

Therapeutic radiology (also called radiation oncology, megavoltage radiotherapy, or radiation therapy) is the treatment of cancer and other diseases with radiation. Radiation therapy uses high energy light beams (x-ray or gamma rays) or charged particles (electron beams or photon beams) to damage critical biological molecules in tumor cells. Radiation in various forms is used to kill cancer cells by preventing them from multiplying. Therapeutic radiation may be used to cure or control cancer, or to alleviate some of the symptoms associated with cancer (palliative care).

In radiation therapy, a non-invasive treatment can be given repetitively over several weeks to months and can be aimed specifically at the area where treatment is needed, minimizing side effects for uninvolved normal tissues. This repetitive treatment is called fractionation because a small fraction of the total dose is given each treatment. Radiotherapy can only be performed with linear accelerator (linac) technology. Conventionally administrated external beam radiation therapy gives a uniform dose of radiation to the entire region of the body affected by the tumor. Only a small variation of the dose is delivered to various parts of the tumor. Radiotherapy may not be as effective as stereotactic radiosurgery, which can give higher doses of radiation to the tumor itself.

Another type of radiation therapy used in Mississippi is brachytherapy. Unlike the external beam therapy, in which high-energy beams are generated by a machine and directed at a tumor from outside the body, brachytherapy involves placing a radioactive material directly into the body. Brachytherapy radiation implantation was performed on 1,018 patients in 18 of the state's hospitals during FY 2013.

## 107 Stereotactic Radiosurgery

Despite its name, stereotactic radiosurgery is a non-surgical procedure that uses highly focused x-rays (or in some cases, gamma rays) to treat certain types of tumors, inoperable lesions, and as a post-operative treatment to eliminate any leftover tumor tissue. Stereotactic radiosurgery treatment involves the delivery of a single high-dose – or in some cases, smaller multiple doses – of radiation beams that converge on the specific area of the brain where the tumor or other abnormality resides.

Stereotactic radiosurgery was once limited to the GammaKnife® for treating intra-cranial lesions and functional issues. With the introduction of CyberKnife® and other LINAC-based radiosurgery systems, there has been rapid growth in total-body radiosurgery. The modified LINAC radiosurgery modality is now being used to treat lung, liver, pancreas, prostate, and other body areas. Some modified full-body LINAC models use full-body frames as a guiding tool and others do not. Therefore, the term "stereotactic radiosurgery" will refer to radiosurgery regardless of whether a full-body frame is used or not. A full course of radiosurgery requires only one to five treatments versus 30 to 40 for radiotherapy.

Three basic types of stereotactic radiosurgery are in common use, each of which uses different instruments and sources of radiation:

**Cobalt 60 Based (Gamma Knife),** which uses 201 beams of highly focused gamma rays. Because of its incredible accuracy, the Gamma Knife is ideal for treating small to medium size lesions.

**Linear accelerator (LINAC) based** machines, prevalent throughout the world, deliver high-energy x-ray photons or electrons in curving paths around the patient's head. The linear accelerator can perform radiosurgery on larger tumors in a single session or during multiple sessions (fractionated stereotactic radiotherapy). Multiple manufacturers make linear accelerator machines, which have names such as: Axess®, Clinac®, Cyberknife®, Novalis®, Peacock®, TomoTherapy®, Trilogy®, or X-Knife®. According to Accuray, the CyberKnife® is the world's only robotic radiosurgery system designed to treat tumors anywhere in the body non-invasively and with sub-millimeter accuracy.

**Particle beam (photon) or cyclotron** based machines are in limited use in North America.

Table 5-5 presents the facilities offering megavoltage therapeutic radiation therapy.

## 108 Diagnostic Imaging Services

Diagnostic imaging equipment and services, except for magnetic resonance imaging, positron emission tomography, and invasive digital angiography, are reviewable under the state's Certificate of Need law only when the capital expenditure for the acquisition of the equipment and related costs exceeds $1.5 million. The provision of invasive diagnostic imaging services, i.e., invasive digital angiography, positron emission tomography, and the provision of magnetic resonance imaging services require a Certificate of Need if the proposed provider has not offered the services on a regular basis within 12 months prior to the time the services would be offered, regardless of the capital expenditure.

Equipment in this category includes, but is not limited to: ultrasound, diagnostic nuclear medicine, digital radiography, angiography equipment, computed tomographic scanning equipment, magnetic resonance imaging equipment, and positron emission tomography.

**Table 5-5**
**Facilities Reporting Megavoltage Therapeutic Radiation Services**
**by General Hospital Service Area**
**FY 2012 and FY 2013**

| Facility | Number and Type of Unit | Number of Treatments (Visits) | |
|---|---|---|---|
| | | 2012 | 2013 |
| **General Hospital Service Area 1** | | **10,152** | **8,393** |
| Baptist Memorial Hospital - DeSoto** | 21 - Lin-Acc (6-18MV) | 10,152 | 8,393 |
| **General Hospital Service Area 2** | | **16,796** | **14,423** |
| Magnolia Regional Health Center | 1 - Lin-Acc (6-18MV) | 4,535 | 3,916 |
| North Miss Medical Center | 2 - Lin-Acc (6MV & 18MV) | 12,261 | 10,507 |
| **General Hospital Service Area 3** | | **13,480** | **10,386** |
| Bethesda Cancer Center[1] | 1 - Lin-Acc (6MV) | 2,477 | 2,412 |
| Greenwood Leflore Hospital | 1 - Lin-Acc (6-18MV) | - | - |
| Delta Cancer Institute[1] | 2 - Lin-Acc (6-18MV) | 4,731 | 4,294 |
| North Central Regional Cancer Center[1] | 1 - Lin-Acc (6MV) | 6,272 | 3,680 |
| **General Hospital Service Area 4** | | **28,754** | **37,711** |
| Baptist Memorial Hospital - Golden Triangle | 1 - Lin-Acc (6 - 18MV) | 15,792 | 22,242 |
| Baptist Cancer Institute - North Miss | 1 Lin-Acc (6-18MV) | 11,083 | 13,605 |
| Cancer Care at Premier Health Complex[1] | 1 - Lin-Acc (6 - 18MV) | 1,879 | 1,864 |
| **General Hospital Service Area 5** | | **60,149** | **71,619** |
| Cancer Center of Vicksburg[1] | 1 - Lin-Acc (6-15MV) | 5,079 | 5,588 |
| Central Miss Medical Center | 2 - Lin-Acc (6MV & 18MV) | 9,115 | 9,137 |
| Miss Baptist Medical Center | 2 - Lin-Acc (6-18MV, 6*) | 23,157 | 34,590 |
| St. Dominic Hospital | 2 - Lin-Acc (6MV & 18MV) | 11,489 | 11,944 |
| University Hospital & Clinics*** | 3 - Lin-Acc (6-18MV) | 11,309 | 10,360 |
| **General Hospital Service Area 6** | | **9,671** | **8,410** |
| Anderson Regional Cancer Center | 2 - Lin-Acc (6 - 25MV, 4 -10MV) | 9,671 | 8,410 |
| **General Hospital Service Area 7** | | **9,442** | **10,017** |
| Caring River Cancer Center[1] | 1 - Lin-Acc (6-18MV) | 4,107 | 4,833 |
| Southwest Miss Regional Medical Center | 1 - Lin-Acc (6-18MV) | 5,335 | 5,184 |
| **General Hospital Service Area 8** | | **18,286** | **17,938** |
| Forrest General Hospital | 2 - Lin-Acc (6-15MV) | 14,282 | 14,447 |
| E+ Oncologics Mississippi, LLC[1] **** | 1 - Lin-Acc (6 & 10MV) | 4,004 | 3,491 |
| **General Hospital Service Area 9** | | **13,513** | **14,601** |
| Biloxi Radiation Oncology Center[1] | 1 - Lin-Acc (6MV) | - | - |
| Cedar Lake Oncology Center[1] | 1 Lin-Acc (6 & 18MV) | 2,699 | 1,821 |
| Memorial Hospital at Gulfport | 2 - Lin-Acc (6*, 6-18MV) | 4,631 | 7,349 |
| Singing River Hospital | 1 - Lin-Acc (6-18MV) | 6,183 | 5,431 |
| **State Total** | | **180,243** | **193,498** |

[1] Indicates freestanding clinics.
* 6 MV is a Robotic Cyberknife
South Central Mississippi Cancer Center changed their name to E+ Oncologics Mississippi, LLC July 2012 .
**Baptist MH-DeSoto - CON Approved Aug. 2013 for an additional linear accelerator.
***University Hosp & Clinics – Determination of Reviewability Ruling July 2010 for an additional linear accelerator.
****E+Oncologics MS, LLC changed their name to Laurel Cancer Care effective 10/2014.
Sources: Applications for Renewal of Hospital License for Calendar Years 2013 and 2014; and Fiscal Years 2012 and 2013 Annual Hospital Reports.

## 109 Certificate of Need Criteria and Standards for Therapeutic Radiation Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 109.01 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of Therapeutic Radiation Equipment, and/or the Offering of Therapeutic Radiation Services (other than Stereotactic Radiosurgery)

1. Service Areas: The Mississippi State Department of Health shall determine the need for therapeutic radiation services/units/equipment by using the General Hospital Service Areas as presented in this chapter of the *Plan*. The MSDH shall determine the need for therapeutic radiation services/units/equipment within a given service area independently of all other service areas. Map 5-1 shows the General Hospital Service Areas.

2. Equipment to Population Ratio: The need for therapeutic radiation units (as defined) is determined to be one unit per 142,592 population (see methodology in this section of the *Plan*). The MSDH will consider out-of-state population in determining need only when the applicant submits adequate documentation acceptable to the Mississippi State Department of Health, such as valid patient origin studies.

3. Limitation of New Services: When the therapeutic radiation unit-to-population ratio reaches one to 142,592 in a given general hospital service area, no new therapeutic radiation services may be approved unless the utilization of all the existing machines in a given hospital service area averaged 8,000 treatments or 320 patients per year for the two most recent consecutive years as reported on the "Renewal of Hospital License and Annual Hospital Report." For the purposes of this policy Cesium-137 teletherapy units, Cobalt-60 teletherapy units designed for use at less than 80 cm SSD (source to skin distance), old betatrons and van de Graaf Generators, unsuitable for modern clinical use, shall not be counted in the inventory of therapeutic radiation units located in a hospital service area.

4. Expansion of Existing Services: The MSDH may consider a CON application for the acquisition or otherwise control of an additional therapeutic radiation unit by an existing provider of such services when the applicant's existing equipment has exceeded the expected level of patient service, i.e., 320 patients per year or 8,000 treatments per year for the two most recent consecutive years as reported on the facility's "Renewal of Hospital License and Annual Hospital Report."

5. Equipment Designated for Backup: Therapeutic radiation equipment designated by an applicant as "backup" equipment shall not be counted in the inventory for CON purposes.

Any treatments performed on the "backup" equipment shall be attributed to the primary equipment for CON purposes.

6. Definition of a Treatment: For health planning and CON purposes a patient "treatment" is defined as one individual receiving radiation therapy during a visit to a facility which provides megavoltage radiation therapy regardless of the complexity of the treatment or the number of "fields" treated during the visit.

7. Use of Equipment or Provision of Service: Before the equipment or service can be utilized or provided, the applicant desiring to provide the therapeutic radiation equipment or service shall have CON approval or written evidence that the equipment or service is exempt from CON approval, as determined by the Mississippi State Department of Health.

## 109.02 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Therapeutic Radiation Equipment and/or the Offering of Therapeutic Radiation Services (other than Stereotactic Radiosurgery)

The Mississippi State Department of Health will review Certificate of Need applications for the acquisition or otherwise control of therapeutic radiation equipment and/or the offering of therapeutic radiation 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of therapeutic radiation equipment is reviewable if the equipment cost exceeds $1,500,000. The offering of therapeutic radiation 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.

**1. Need Criterion: The applicant shall document a need for therapeutic radiation equipment/service by complying with any one of the following methodologies:**

**a. the need methodology as presented in this section of the *Plan*;**

**b. demonstrating that all existing machines in the service area in question have averaged 8,000 treatments per year or all machines have treated an average of 320 patients per year for the two most recent consecutive years; or**

**c. demonstrating that the applicant's existing therapeutic equipment has exceeded the expected level of patients service, i.e., 320 patients per year/unit, or 8,000 treatments per year/unit for the most recent 24-month period.**

2. The applicant must document that access to diagnostic X-ray, CT scan, and ultrasound services is readily available within 15 minutes normal driving time of the therapeutic radiation unit's location.

3. An applicant shall document the following:

a. The service will have, at a minimum, the following full-time dedicated staff:

i. One board-certified radiation oncologist-in-chief

ii. One dosimetrist

iii. One certified radiation therapy technologist certified by the American Registry of Radiation Technologists

iv. One registered nurse

b. The service will have, at a minimum, access to a radiation physicist certified or eligible for certification by the American Board of Radiology.

**Note**: One individual may act in several capacities. However, the application shall affirm that when a staff person acts in more than one capacity, that staff person shall meet, at a minimum, the requirements for each of the positions they fill.

4. The applicant shall affirm that access will be available as needed to brachytherapy staff, treatment aides, social workers, dietitians, and physical therapists.

5. Applicants shall document that all physicians who are responsible for therapeutic radiation services in a facility, including the radiation oncologist-in-chief, shall reside within 60 minutes normal driving time of the facility.

6. The application shall affirm that the applicant will have access to a modern simulator capable of precisely producing the geometric relationships of the treatment equipment to a patient. This simulator must produce high quality diagnostic radiographs. The applicant shall also affirm that the following conditions will be met as regards the use of the simulator:

   a. If the simulator is located at a site other than where the therapeutic radiation equipment is located, protocols will be established which will guarantee that the radiation oncologist who performs the patient's simulation will also be the same radiation oncologist who performs the treatments on the patient.

   b. If the simulator uses fluoroscopy, protocols will be established to ensure that the personnel performing the fluoroscopy have received appropriate training in the required techniques related to simulation procedures.

      **Note**: X-rays produced by diagnostic X-ray equipment and photon beams produced by megavoltage therapy units are unsuitable for precise imaging of anatomic structures within the treatment volume and do not adequately substitute for a simulator.

7. The application shall affirm that the applicant will have access to a computerized treatment planning system with the capability of simulation of multiple external beams, display isodose distributions in more than one plane, and perform dose calculations for brachytherapy implants.

   **Note**: It is highly desirable that the system have the capability of performing CT based treatment planning.

8. The applicant shall affirm that all treatments will be under the control of a board certified or board eligible radiation oncologist.

9. The applicant shall affirm that the proposed site, plans, and equipment shall receive approval from the MSDH Division of Radiological Health before service begins.

10. The application shall affirm that the applicant will establish a quality assurance program for the service, as follows:

    a. The therapeutic radiation program shall meet, at a minimum, the physical aspects of quality assurance guidelines established by the American College of Radiology (ACR) within 12 months of initiation of the service.

    b. The service shall establish a quality assurance program which meets, at a minimum, the standards established by the American College of Radiology.

11. The applicant shall affirm understanding and agreement that failure to comply with criterion #10 (a) and (b) may result in revocation of the CON (after due process) and subsequent termination of authority to provide therapeutic radiation services.

### *109.02.01 Therapeutic Radiation Equipment/Service Need Methodology*

1. Treatment/Patient Load: A realistic treatment/patient load for a therapeutic radiation unit is 8,000 treatments or 320 patients per year.

2. Incidence of Cancer: The American Cancer Society (ACS) estimates that Mississippi will experience 15,740 new cancer cases in 2014 (excluding basal and squamous cell skin cancers and in-situ carcinomas except urinary bladder cancer). Based on a population of 3,156,054 (year 2020) as estimated by the Center for Policy Research and Planning, the cancer rate of Mississippi is 4.99 cases per 1,000 population.

3. Patients to Receive Treatment: The number of cancer patients expected to receive therapeutic radiation treatment is set at 45 percent.

4. Population to Equipment Ratio: Using the above stated data, a population of 100,000 will generate 499 new cancer cases each year. Assuming that 45 percent will receive radiation therapy, a population of 142,592 will generate approximately 320 patients who will require radiation therapy. Therefore, a population of 142,592 will generate a need for one therapeutic radiation unit.

### *109.02.02 Therapeutic Radiation Equipment Need Determination Formula*

1. Project annual number of cancer patients.

   General Hospital Service Area Population X $\frac{\text{4.99 cases*}}{\text{1,000 population}}$ = New Cancer Cases

   *Mississippi cancer incidence rate

2. Project the annual number of radiation therapy patients.

   New Cancer Cases X 45% = Patients Who Will Likely Require Radiation Therapy

3. Estimate number of treatments to be performed annually.

   Radiation Therapy Patients X 25 Treatments per Patient (Avg.) = Estimated Number of Treatments

4. Project number of megavoltage radiation therapy units needed.

   Est. # of Treatments = Projected Number of Units Needed
   8,000 Treatments per Unit

5. Determine unmet need (if any) Projected Number of Units Needed — Number of Existing Units = Number of Units Required (Excess)

**109.03 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of Stereotactic Radiosurgery Equipment and/or the Offering of Stereotactic Radiosurgery.**

1. Service Areas: The Mississippi State Department of Health shall determine the need for stereotactic radiosurgery services/units/equipment by using the actual stereotactic radiosurgery provider's service area.

2. Equipment to Population Ratio: The need for stereotactic radiosurgery units is determined to be the same as for radiotherapy, for 2020, a population of 142,592. The therapeutic radiation need determination formula is outlined in Section 109.02.02 above.

3. Accessibility: Nothing contained in these CON criteria and standards shall preclude the University of Mississippi School of Medicine from acquiring and operating stereotactic radiosurgery equipment, provided the acquisition and use of such equipment is justified by the School's teaching and/or research mission. However, the requirements listed under the section regarding the granting of "appropriate scope of privileges for access to the stereotactic radiosurgery equipment to any qualified physician" must be met.

4. Expansion of Existing Services: The MSDH may consider a CON application for the acquisition or otherwise control of an additional stereotactic radiosurgery unit by an existing provider of such services when the applicant's existing equipment has exceeded the expected level of patient service, i.e., 900 treatments per year for the two most recent consecutive years as reported on the facility's "Renewal of Hospital License and Annual Hospital Report."

5. Facilities requesting approval to add stereotactic radiosurgery services should have an established neurosurgery program and must be able to demonstrate previous radiosurgery service experience.

6. All stereotactic radiosurgery services should have written procedures and policies for discharge planning and follow-up care for the patient and family as part of the institution's overall discharge planning program.

7. All stereotactic radiosurgery services should have established protocols for referring physicians to assure adequate post-operative diagnostic evaluation for radiosurgery patients.

8. The total cost of providing stereotactic radiosurgery services projected by prospective providers should be comparable to the cost of other similar services provided in the state.

9. The usual and customary charge to the patient for stereotactic radiosurgery should be commensurate with cost.

### 109.04 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Stereotactic Radiosurgery Equipment and/or the Offering of Stereotactic Radiosurgery

The Mississippi State Department of Health will review Certificate of Need applications for the acquisition or otherwise control of stereotactic radiosurgery equipment and/or the offering of stereotactic radiosurgery 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manua*l; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of stereotactic radiosurgery equipment is reviewable if the equipment cost exceeds $1,500,000. The offering of stereotactic radiosurgery 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.

1. **Need Criterion: The applicant shall document a need for stereotactic radiosurgery equipment/service by reasonably projecting that the proposed new service will perform at least 900 stereotactic radiosurgery treatments in the third year of operation. No additional new stereotactic radiosurgery services should be approved unless the number of stereotactic radiosurgery treatments performed with existing units in the state average 900 treatments or more per year.**

2. Staffing:

   a. The radiosurgery programs must be established under the medical direction of two co-directors, one with specialty training and board certification in neurosurgery and the other with specialty training and board certification in radiation oncology, with experience in all phases of stereotactic radiosurgery.

   b. In addition to the medical co-directors, all stereotactic radiosurgery programs should have a radiation physicist who is certified in radiology, or who holds an advanced degree in physics with two to three years experience working under the direction of a radiation oncologist, and a registered nurse present for each stereotactic radiosurgery performed.

   c. The applicant shall document that the governing body of the entity offering stereotactic radiosurgery services will grant an appropriate scope of privileges for access to the stereotactic radiosurgery equipment to any qualified physician who applies for privileges. For the purpose of this criterion, "Qualified Physician" means a doctor of medicine or osteopathic medicine licensed by the State of Mississippi who possesses training in stereotactic radiosurgery and other qualifications established by the governing body.

3. Equipment:

   a. Facilities providing stereotactic radiosurgery services should have dosimetry and calibration equipment and a computer with the appropriate software for performing stereotactic radiosurgery.

   b. The facility providing stereotactic radiosurgery services should also have access to magnetic resonance imaging, computed tomography, and angiography services

# DIAGNOSTIC IMAGING SERVICES

## 110 Computed Tomographic (CT) Scanning

Should the capital expenditure for the acquisition of fixed or mobile CT scanning services, equipment, and related costs exceed $1.5 million, the CON proposal will be reviewed under the general review criteria outlined in the most recent *Certificate of Need Review Manual* adopted by the Mississippi State Department of Health and the following utilization standards:

- A proposed unit must be able to generate a minimum of 2,000 HECTs (See Table 5-6 for HECT conversion table) by the second year of operation.

- Providers desiring CT capability must be properly utilizing 20,000 general radiographic imaging procedures per year.

**Table 5-6**
**Head Equivalent Conversion Table (HECT)**

| Type of Scan | Yearly Number of Patients | Conversion Factor | HECTs* |
|---|---|---|---|
| Head without Contrast | 500 | 1.00 | 500 |
| Head with Contrast | 500 | 1.25 | 625 |
| Head with and without Contrast | 200 | 1.75 | 350 |
| Body without Contrast | 100 | 1.50 | 150 |
| Body with Contrast | 200 | 1.75 | 350 |
| Body with and without Contrast | 300 | 2.75 | 825 |

* Formula: Yearly Number of Patients X Conversion Factor = HECTs

### 110.01 Magnetic Resonance Imaging (MRI)

Magnetic resonance imaging (MRI) is a diagnostic imaging technique that employs magnetic and radio-frequency fields to produce images of the body non-invasively. Magnetic resonance imaging is similar to CT scanning in that it produces cross-sectional and digital images without potentially harmful ionizing radiation, producing an image not distorted by bone mass. The equipment and its operational specifications continue to be refined.

One hundred and four facilities (hospitals and free-standing) in Mississippi operated fixed or mobile based MRI units in FY 2013. These facilities performed a total of 258,189 MRI procedures during the year. Table 5-7 presents the location, type (fixed or mobile and number of units per facility), and utilization of MRI equipment throughout the state in 2012 and 2013.

## Table 5-7
## Location and Number of MRI Procedures by General Hospital Service Area
## FY 2012 and FY 2013

| | Type of Providers | City | County | Type of Equipment | Number of MRI Procedures | | Days/Hours of Operation |
|---|---|---|---|---|---|---|---|
| | | | | | 2012 | 2013 | 2013 |
| **General Hospital Service Area 1** | | | | | **15,818** | **15,316** | |
| Baptist Memorial Hospital - DeSoto | H | Southaven | DeSoto | F(3) | 7,388 | 7,021 | Sun.-Sat., 252 Hrs. |
| Methodist Diagnostic Center* | FS | Olive Branch | DeSoto | F | 2,054 | 1,601 | M-F, 50 Hrs. |
| Methodist Diagnostic Center* | FS | Southaven | DeSoto | F | 2,340 | 2,418 | M-F, 60 Hrs. |
| Methodist Healthcare Olive Branch Hospital | H | Southaven | DeSoto | F | - | 54 | |
| Desoto Imaging Specialists | FS | Southaven | DeSoto | F | 3,141 | 3,562 | M-F, 60 Hrs. |
| Superior MRI Services fka P&L Contracting [1] | MP | Batesville | Panola | M | 86 | - | N/A |
| Tri-Lakes Medical Center | H | Batesville | Panola | M | 809 | 660 | Tu. F, & Sat., 24 Hrs. |
| **General Hospital Service Area 2** | | | | | **35,133** | **32,523** | |
| Baptist Memorial Hospital - Booneville | H | Booneville | Prentiss | F | 972 | 974 | M-F, 40 Hrs |
| Baptist Memorial Hospital - Union | H | New Albany | Union | F | 2,800 | 2,446 | Mon-Sat., 168 Hrs. |
| Imaging Center of Gloster Creek Village | FS | Tupelo | Lee | F | 3,351 | 3,061 | M-F, 55 Hrs. |
| Magnolia Regional Health Center | H | Corinth | Alcorn | F(2) | 6,965 | 6,345 | M-Su, M-F- 110 Hrs. |
| Medical Imaging at Barnes Crossing | FS | Tupelo | Lee | F | 3,412 | 3,293 | M-F, 50 Hrs. |
| Medical Imaging at Crossover Road | FS | Tupelo | Lee | F | 2,101 | 2,023 | M-F, 40 Hrs. |
| North Miss. Medical Center | H | Tupelo | Lee | F(4) | 14,110 | 13,034 | M-Su. & M-F, 240 Hrs. |
| North Miss. Medical Center - Iuka | H | Iuka | Tishomingo | M | 1,133 | 1,048 | M-F, 40 Hrs. |
| North Mississippi Sports Medicine | FS | Tupelo | Lee | F | 289 | 299 | M-F, 40 Hrs. |
| **General Hospital Service Area 3** | | | | | **10,434** | **9,874** | |
| Bolivar Medical Center | H | Cleveland | Bolivar | M | 1,129 | 982 | M-F, 40 Hrs. |
| Delta Regional Med. Center-Main Campus | H | Greenville | Washington | F | 2,618 | 2,838 | M-F, 40 Hrs. |
| Greenwood Leflore Hospital | H | Greenwood | Leflore | F | 3,878 | 3,441 | M-F, 50+ Hrs. |
| Northwest Miss. Regional Medical Center** | H | Clarksdale | Coahoma | F | 1,789 | 1,492 | M-F, 40 Hrs. |
| South Sunflower County Hospital | H | Indianola | Sunflower | M | 528 | 472 | W., 4 Hrs. |
| Superior- North Sunflower Medical Center [1] | MP | Ruleville | Sunflower | M | 401 | 464 | M, W., 8 Hrs. |
| Tallahatchie General Hospital | H | Indianola | Sunflower | M | 91 | 185 | M, 4 Hrs. |
| **General Hospital Service Area 4** | | | | | **26,234** | **27,201** | |
| Baptist Memorial Hospital - Golden Triangle | H | Columbus | Lowndes | F(2) | 4,535 | 4,910 | M-F, 110 Hrs. |
| Baptist Memorial Hospital - North MS | H | Oxford | Lafayette | F | 2,158 | 2,624 | Sun.-Sat., 140+ Hrs. |
| Calhoun Health Services | H | Calhoun City | Calhoun | M | 286 | 293 | M. & Thr., 10 Hrs. |
| Gilmore Memorial Hospital, Inc. | H | Amory | Monroe | F | 1,211 | 1,114 | M-F, 40 Hrs. |
| Imaging Center of Columbus | FS | Columbus | Lowndes | F(2) | 5,331 | 6,051 | M-F, 80+ Hrs. |
| Imaging Ctr. of Excellence Institute - MSU | FS | Starkville | Oktibbeha | F | 1,544 | 1,452 | M-F, 40 Hrs. |
| North Miss. Medical Center - Eupora | H | Eupora | Webster | M | 907 | 795 | M-F, 40 Hrs. |
| North Miss. Medical Center - West Point | H | West Point | Clay | M | 843 | 684 | M-F, 40 Hrs. |
| Oktibbeha County Hospital | H | Starkville | Oktibbeha | F | 2,451 | 2,446 | M-F, 40 Hrs. |
| Pioneer Community Hospital | H | Aberdeen | Monroe | M | 431 | 451 | M,T & W, F, 20 Hrs. |
| Oxford Diagnostic Center | FS | Oxford | Lafayette | F | 2,981 | 3,257 | M-F, 78 Hrs. |
| Trace Regional Hospital | H | Houston | Chickasaw | M | 463 | 464 | Tu.-F, 16 Hrs. |
| Tyler Holmes Memorial Hospital | H | Winona | Montgomery | M | 322 | 272 | W, 4 Hrs. |
| University of MS Medical Center - Grenada* | H | Grenada | Grenada | F | 2,505 | 2,219 | M-F, 40 Hrs. |
| Yalobusha Hospital | H | Water Valley | Yalobusha | M | 266 | 169 | M, 3.5 Hrs. |

F – Fixed Unit
M – Mobile Unit
Type of Providers: H-Hospital, FS-Freestanding, and MP-Mobile Provider

*Carvel Imaging Center changed their name to Methodist Diagnostic Center.
**Northwest MS Regional MC was CON Approved June 2012 to convert from a mobile unit to a fixed unit.
*Grenada Lake Medical Center changed name to University of MS Medical Center – Grenada
* Methodist Diagnostic Center located in Olive Branch, MS closed in August 2013 and MRI unit has withdrawn from service.

[1] Superior fka P&LContracting,, Inc. is the approved service provider.
[2] Scott Medical Imaging is the approved service provider.

## Table 5-7 (continued)
## Location and Number of MRI Procedures by General Hospital Service Area
## FY 2012 and FY 2013

| Facility | Type of Providers | City | County | Type of Equipment | Number of MRI Procedures | | Days/Hours of Operation |
|---|---|---|---|---|---|---|---|
| | | | | | 2012 | 2013 | 2013 |
| **General Hospital Service Area 5** | | | | | **80,397** | **81,165** | |
| Baptist Medical Center - Leake, Inc. | H | Carthage | Leake | M | 238 | 205 | Tu., 4 Hrs. |
| Central MS Diagnostics | FS | Jackson | Hinds | F | 1,814 | 1,545 | M-F, 45 Hrs. |
| Central MS Medical Center | H | Jackson | Hinds | F(2) | 3,323 | 4,031 | M-F, 90+ Hrs. |
| Crossgates River Oaks Hospital | H | Brandon | Rankin | F | 1,546 | 858 | M-S, 56 Hrs. |
| Hardy Wilson Hospital | H | Hazlehurst | Copiah | M | 498 | 452 | M, Th.,& Fri. 12 Hrs. |
| King's Daughters Medical Center | H | Yazoo City | Yazoo | M | 613 | 517 | T, 4 Hrs |
| Kosciusko Medical Clinic [3] | FS | Kosciusko | Attala | F | 2,702 | 2,736 | M-F, 40+ Hrs. |
| Madison Medical Imaging, LLC | FS | Madison | Madison | F | 2,197 | 2,011 | M-F, 40 Hrs. |
| Madison Radiological Group, LLC | FS | Madison | Madison | F | 2,427 | 2,357 | M-F, 40 Hrs. |
| Madison River Oaks Hospital | H | Madison | Madison | M | CON | 19 | M, 4 Hrs |
| Magee General Hospital | H | Magee | Simpson | F | 1,039 | 989 | M-F, 40 Hrs. |
| Miss. Baptist Medical Center | H | Jackson | Hinds | F(2) | 7,944 | 7,918 | M-Sat., M-F, 104 Hrs. |
| Miss. Diagnostic Imaging Center | FS | Flowood | Rankin | F(2) | 2,850 | 3,549 | M-F, 45 Hrs. |
| Miss. Sports Medicine & Orthopedic | FS | Jackson | Hinds | F(2) | 5,487 | 6,218 | M-F, 90 Hrs. |
| Monfort Jones Memorial Hospital [3] | H | Kosciusko | Attala | - | 108 | 68 | M, F 30 Hrs. |
| Open MRI of Jackson | FS | Flowood | Rankin | F | 1,216 | 1,345 | M-F, 45 Hrs. |
| Ridgeland Diagnostic Center | FS | Ridgeland | Madison | M | 480 | 571 | T, W, & Th. 12 Hrs. |
| River Oaks Hospital | H | Flowood | Rankin | F | 4,695 | 2,796 | M-F, 50 Hrs. |
| River Region Health System | H | Vicksburg | Warren | F | 2,777 | 2,562 | M-F, 60 Hrs. |
| SE Lackey Memorial Hospital | H | Forrest | Scott | M | 595 | 661 | M, W, & Th, 24 Hrs. |
| Scott Regional Hospital | H | Morton | Scott | M | 129 | 227 | F, 4 Hrs. |
| Sharkey/Issaquena Hospital | H | Rolling Fork | Sharkey | M | 170 | 145 | Tues., 2.5 hrs. |
| Southern Diagnostic Imaging | FS | Flowood | Rankin | F | 5,907 | 5,637 | M-F, 85 Hrs. |
| SMI-Madison Specialty Clinic [2] | MP | Canton | Madison | M | 280 | 203 | Tu. & Th., 8 Hrs. |
| SMI-Simpson General Hospital [2] | MP | Mendenhall | Simpson | M | 146 | 0 | Th., 4 Hrs. |
| St. Dominic Hospital | H | Jackson | Hinds | F(4)/M(1) | 15,747 | 16,393 | M-Sun., 216 Hrs. |
| University Hospital & Health System | H | Jackson | Hinds | F(5) | 14,156 | 16,000 | M-F, Sat.-Sun. 516 Hrs. |
| Holmes County Hospital & Clinics | H | Lexington | Holmes | M | 331 | 322 | M, 6 Hrs. |
| Vicksburg Diagnostic Imaging | FS | Vicksburg | Warren | M | 982 | 830 | M-F, 40 Hrs. |
| **General Hospital Service Area 6** | | | | | **13,721** | **15,447** | |
| Anderson Regional Medical Center* | H | Meridian | Lauderdale | F*(3) | 2,640 | 4,682 | M-F, 40 Hrs. |
| H. C. Watkins Memorial Hospital | H | Quitman | Clarke | M | 231 | 180 | Tu. & Thr., 16 Hrs. |
| Imaging Center of Meridian, LLC | FS | Meridian | Lauderdale | M | 2,817 | 2,755 | M-F, 45 Hrs. |
| John C Stennis Memorial Hospital | H | DeKalb | Kemper | M | - | 35 | M-F, 45 Hrs. |
| Laird Hospital | H | Union | Newton | M | 700 | 563 | M,W, & F, 20 Hrs. |
| Neshoba County General Hospital | H | Philadelphia | Neshoba | M | 1,703 | 1,361 | M-F., 40Hrs. |
| Pioneer Community Hospital of Newton | H | Newton | Newton | M | 188 | 148 | M, 4 Hrs. |
| Regional Medical Support Center, Inc. [4] | FS | Meridian | Lauderdale | F(3) | - | - | N/A |
| Rush Medical Group [5] | FS | Meridian | Lauderdale | F(2) | 5,169 | 5,467 | M-F, 130 Hrs. |
| Wayne County Hospital | H | Waynesboro | Wayne | M | 273 | 256 | M, 4 hrs. |

F – Fixed Unit
M – Mobile Unit
Type of Providers: H-Hospital, FS-Freestanding, and MP-Mobile Provider

* Anderson RMC (ARMC) – See Page 44 for details.
[2] Scott Medical Imaging is the approved service provider.
[3] Monfont Jones Memorial Hospital shares a fixed unit with Kosciusko Medical Clinic.
[4] Regional Medical Support Center, Inc. (RMSC) performed MRIs for Anderson Regional Medical Center, Anderson Regional Medical Center-South Campus (fka Riley Memorial Hospital), & Rush Foundation Hospital. Regional Medical Support Center, Inc. performed scans for Anderson Regional Medical Center until October 24, 2010. RMSC dissolved July 2012.
[5] Rush Medical Group performs MRIs for Rush Foundation Hospital.
-John C. Stennis Memorial Hospital was CON Approved April 2013 to provide mobile MRI Services in Dekalb, Kemper County, MS.

## Table 5-7(continued)
## Location and Number of MRI Procedures by General Hospital Service Area
## FY 2012 and FY 2013

| Facility | Type of Providers | City | County | Type of Equipment | Number of MRI Procedures | | Days/Hours of Operation |
|---|---|---|---|---|---|---|---|
| | | | | | 2012 | 2013 | 2013 |
| **General Hospital Service Area 7** | | | | | **11,135** | **10,455** | |
| King's Daughters Medical Center | H | Brookhaven | Lincoln | F | 2,079 | 2,190 | M-F, 80 Hrs. |
| Open Air of Miss Lou-Natchez Reg. M.C. | H | Natchez | Adams | F(2) | 2,842 | 2,106 | M-F, 80 Hrs. |
| Natchez Regional Medical Center | MP | Natchez | Adams | F(2) | 3,029 | 2,616 | N/A |
| SMI-Lawrence County Hospital [2] | MP | Monticello | Lawrence | M | 133 | 133 | Thr. 4 Hrs. |
| SMI - Walthall County Hospital [2] | MP | Tylertown | Walthall | M | 159 | 121 | W, 4 Hrs. |
| Southwest MS Regional Medical Center | H | McComb | Pike | F | 2,893 | 3,289 | M-F, 40 Hrs. |
| **General Hospital Service Area 8** | | | | | **35,425** | **31,673** | |
| Forrest General Hospital | H | Hattiesburg | Forrest | F(2) | 5,908 | 5,172 | M-Sun., 170 Hrs. |
| Hattiesburg Clinic, P.A. | FS | Hattiesburg | Forrest | F(4) | 11,189 | 11,180 | Sat & Sun 180 & M-F 80 Hrs. |
| Jefferson Davis Comm. Hospital [6] | MP | Prentiss | Jeff Davis | M | 187 | 132 | Th., 4 Hrs. |
| Open Air MRI of Laurel | FS | Laurel | Jones | F | 3,868 | 3,681 | M-F, 50 Hrs. |
| SMI - Marion General Hospital [2] | MP | Columbia | Marion | M | 338 | 316 | Tu., 4 Hrs. |
| South Central Regional Medical Center | H | Laurel | Jones | F | 2,012 | 1,998 | M-F, 50 Hrs. |
| Southern Bone & Joint Specialist, PA | FS | Hattiesburg | Forrest | F(2) | 6,528 | 6,266 | M-Sat., 140 Hrs. |
| Southern Neurologic and Spinal Institute* | FS | Hattiesburg | Forrest | F | 2,318 | N/A | M-F, 40 Hrs. |
| Wesley Medical Center | H | Hattiesburg | Lamar | F | 3,077 | 2,928 | M-F, 50 Hrs. |
| **General Hospital Service Area 9** | | | | | **37,691** | **34,535** | |
| Biloxi Regional Medical Center | H | Biloxi | Harrison | F | 3,093 | 2,268 | M-F, 50+ Hrs. |
| Cedar Lake MRI-Open MRI LLC | FS | Gulfport | Harrison | F | 2,764 | 3,680 | M-F, 55 Hrs. |
| Coastal County Imaging Services | FS | Gulfport | Harrison | F | 1,445 | 1,260 | M& F, 45 Hrs. |
| Compass Imaging, LLC | FS | Gulfport | Harrison | F | 3,511 | 4,144 | M-F 80 Hrs. |
| Compass Imaging, LLC* | FS | D'Iberville | Harrison | M | - | 443 | Tu. & F, 8 Hrs. |
| Garden Park Medical Center | H | Gulfport | Harrison | F | 1,957 | 1,930 | M-F, 40 Hrs. |
| George County Hospital | H | Lucedale | George | F | 851 | 894 | M-F, 40 Hrs. |
| Hancock Medical Center/HMC-Imaging Center | H | Bay St. L./D.Head | Hancock | F (2) | 1,350 | 1,097 | M-F,100 Hrs. |
| Highland Community Hospital* | H | Picayune | Pearl River | M | 1,243 | 1,469 | M-Sat., 45 Hrs. |
| Memorial Hospital at Gulfport | H | Gulfport | Harrison | F(2) | 6,744 | 7,385 | M-F, 150 Hrs. |
| Ocean Springs Hospital | H | Ocean S./OS Img Ctr. | Jackson | F (2) | 4,652 | 4,291 | M-F, 115+ Hrs. |
| OMRI, Inc. dba Open MRI | MP | Ocean Springs | Jackson | M(3) | 4,228 | N/A | M, Thr. 120 & F 160 Hrs. |
| Singing River Hospital | H | Pascagoula | Jackson | F(2) M | 5,632 | 5,507 | M-F, 155+ Hrs. |
| Stone County Hospital | H | Wiggins | Stone | M | 221 | 167 | Sat., 4 Hrs. |
| **State Total** | | | | | **265,988** | **258,189** | |

F – Fixed Unit
M – Mobile Unit
Type of Providers: H-Hospital, FS-Freestanding, and MP-Mobile Provider

GSHA 6-Anderson RMC (ARMC) was CON approved 10/09 for a fixed MRI unit. Alliance Imaging performed mobile MRI services from 10/10-08/12. ARMC received approval through a Determination of Reviewability on June 2012 to acquire 3 fixed units from RMSC.
[2] Scott Medical Imaging is the approved service provider.
[6] Comprehensive Radiology Services, PLLC fka Hattiesburg Radiology Group, PLLC is the approved service provider.
Compass Imaging, LLC was CON Approved February 2013 to provide mobile MRI Services in D'Iberville, Harrison County, MS.
*Southern Neurologic and Spinal Institute fka Southern Medical Imaging.
*Highland Community Hospital received CON approval for the Acquisition of MRI Equipment and Conversion from Mobile MRI Services to Fixed MRI Services in April 2014.

Sources: Applications for Renewal of Hospital License for Calendar Years 2013 and 2014; Fiscal Year 2013 and 2014 Annual Hospital Reports; FY 2012 and FY 2013 MRI Utilization Survey

## 111 Digital Subtraction Angiography (DSA)

Digital Subtraction Angiography (DSA) is a diagnostic imaging procedure that combines a digital processing unit with equipment similar to that used for standard fluoroscopic procedures. A radiopaque dye is injected into the patient; a computer then compares the pre-injection and post-injection images and subtracts any interfering bone and tissue structures obscuring the arteries. The X-ray pictures are converted to a digital form, which can be electronically manipulated and stored. Through the electronic manipulation, the images can be enhanced and further refined to give detailed information about the patient's vascular anatomy without additional X-ray exposure.

In some cases, the use of DSA may eliminate the need for arterial catheterization, which many times carries a higher risk factor. Because the digital method is more sensitive to contrast materials, a lesser amount is generally needed in a given area, and intravenous injection of contrast may be sufficient. When required, intra-arterial injection can be done using less contrast per study.

Due to its relative safety and good patient acceptance, DSA may be performed on a repeat basis in cases where risk and cost of conventional angiography might otherwise preclude a series of follow-up studies. Such studies can provide valuable information regarding the natural history of a variety of vascular diseases and the long-term results of various therapeutic interventions. DSA also allows safer screening of the elderly, who have a high risk of cerebrovascular disease.

Most DSA studies can be performed in less than one hour and are appropriate as an outpatient procedure, whereas conventional angiography usually requires a hospital stay of one or two days. Twenty-six hospitals and one freestanding facility in the state provide DSA. During 2013, 42,885 procedures were reported.

DSA equipment performs several types of procedures. These procedures include examination of the carotid arteries, intracranial arteries, renal arteries, aortic arch, and peripheral leg arteries. A variety of anatomical and functional studies of the heart and coronary arteries are also performed.

Table 5-8 presents DSA utilization throughout the state in 2013.

**Table 5-8**
**Digital Subtraction Angiography (DSA) Utilization**
**FY 2013**

| County | Facilities | City | DSA Procedures 2011 |
|---|---|---|---|
| | **General Hospital Service Area 1** | | **4,441** |
| DeSoto | Baptist Memorial Hospital - DeSoto | Southaven | 879 |
| DeSoto | DeSoto Imaging Specialists[1] | Southaven | 3,562 |
| | **General Hospital Service Area 2** | | **8,278** |
| Alcorn | Magnolia Regional Medical Center | Corinth | 328 |
| Lee | North Mississippi Medical Center | Tupelo | 7,950 |
| | **General Hospital Service Area 3** | | **3,321** |
| Bolivar | Bolivar Medical Center | Cleveland | 724 |
| Leflore | Greenwood Leflore Hospital | Greenwood | 2,597 |
| | **General Hospital Service Area 4** | | **315** |
| Lafayette | Baptist Memorial Hospital - North Mississippi | Oxford | 142 |
| Lowndes | Baptist Memorial Hospital- Golden Triangle | Columbus | 173 |
| | **General Hospital Service Area 5** | | **19,902** |
| Hinds | Central Mississippi Medical Center | Jackson | 2,477 |
| Hinds | Mississippi Baptist Medical Center | Jackson | 3,558 |
| Hinds | St. Dominic Jackson Memorial Hospital | Jackson | 9,459 |
| Hinds | University Hospital & Health System | Jackson | 4,173 |
| Rankin | Crossgates River Oaks Hospital (Rankin MC) | Brandon | 220 |
| Rankin | River Oaks Hospital | Brandon | 15 |
| | **General Hospital Service Area 6** | | **3,130** |
| Lauderdale | Anderson Regional Medical Center | Meridian | 2,851 |
| Lauderdale | Rush Foundation Hospital | Meridian | 279 |
| | **General Hospital Service Area 7** | | **24** |
| Adams | Natchez Regional Medical Center | Natchez | 24 |
| | **General Hospital Service Area 8** | | **1,839** |
| Forrest | Forrest General Hospital | Hattiesburg | 1,663 |
| Jones | South Central Regional Medical Center | Laurel | 10 |
| Lamar | Wesley Medical Center | Hattiesburg | 166 |
| | **General Hospital Service Area 9** | | **1,635** |
| Harrison | Memorial Hospital at Gulfport | Gulfport | 1,190 |
| Jackson | Ocean Springs Hospital | Ocean Springs | 230 |
| Jackson | Singing River Hospital | Pascagoula | 215 |
| **State Total** | | | **42,885** |

[1] Indicates freestanding clinics.

Sources: Applications for Renewal of Hospital License for Calendar Years 2014; Fiscal Year 2013 Annual Hospital Report; FY 2013 DSA Utilization Survey.

## 112 Positron Emission Tomography (PET)

Positron emission tomography (PET) is a minimally invasive imaging procedure in which positron-emitting radionuclides, produced either by a cyclotron or by a radio-pharmaceutical producing generator, and a gamma camera are used to create pictures of organ function rather than structure. PET scans provide physicians a crucial assessment of the ability of specific tissues to function normally.

PET can provide unique clinical information in an economically viable manner, resulting in a diagnostic accuracy that affects patient management. PET scans provide diagnostic and prognostic patient information regarding cognitive disorders; for example, identifying the differences between Alzheimer's, Parkinson's, dementia, depression, cerebral disorders, and mild memory loss. PET scans also provide information regarding psychiatric disease, brain tumors, epilepsy, cardiovascular disease, movement disorders, and ataxia. Research shows that clinical PET may obviate the need for other imaging procedures.

PET installations generally take one of two forms: a scanner using only generator-produced tracers (basic PET unit) or a scanner with a cyclotron (enhanced PET unit). The rubidium-82 is the only generator approved by the FDA to produce radiopharmaceuticals. Rubidium limits PET services to cardiac perfusion imaging.

A PET scanner supported by a cyclotron can provide the capabilities for imaging a broader range of PET services, such as oncology, neurology, and cardiology. Manufacturers of PET equipment are providing more user-friendly cyclotrons, radiopharmaceutical delivery systems, and scanners which have drastically reduced personnel and maintenance requirements. These changes have made the cost of PET studies comparable to those of other high-technology studies.

Cardiology Associates of North Mississippi located in Tupelo, Mississippi (Lee County) has a fixed PET unit and performs Cardiac/PET procedures (pet scans/imaging of the heart). For FY 2013, Cardiology Associates of North Mississippi performed 1,596 procedures.

Table 5-9 presents the location, type (fixed or mobile), and utilization of PET equipment throughout the state in 2013.

**Table 5-9**
**Location and Number of PET Procedures by Service Area**
**FY 2013**

| Facility | Location | Type of Equipment | Number of PET Procedures |
|---|---|---|---|
| **General Hospital Service Area 1** | | | **374** |
| Baptist Memorial Hospital - DeSoto | Southhaven | M | 374 |
| **General Hospital Service Area 2** | | | **1,692** |
| Magnolia Regional Health Center | Corinth | M | 342 |
| North Mississippi Medical Center | Tupelo | F | 1,350 |
| **General Hospital Service Area 3** | | | **630** |
| Bethesda Regional Cancer Treatment Center[1] | Clarksdale | M | 159 |
| Bolivar Medical Center | Cleveland | M | 32 |
| Delta Regional Medical Center (Main Campus) | Greenville | M | 295 |
| Greenwood Leflore Hospital | Greenwood | M | 144 |
| **General Hospital Service Area 4** | | | **2,002** |
| Baptist Memorial Hospital - Golden Triangle | Columbus | F | 1,064 |
| Baptist Memorial Hospital - North Miss | Oxford | F | 701 |
| Grenada Diagnostics Radiology, LLC[1] | Grenada | M | 237 |
| **General Hospital Service Area 5** | | | **6,265** |
| Central Miss Medical Center | Jackson | F | 343 |
| Mississippi Baptist Medical Center | Jackson | F (2) | 2,930 |
| St. Dominic Hospital | Jackson | F | 1,011 |
| University Hospital & Health System | Jackson | F | 1,948 |
| Montfort Jones Memorial Hospital | Kosciusko | M | 33 |
| **General Hospital Service Area 6** | | | **285** |
| Anderson Regional Medical Center | Meridian | M | 285 |
| **General Hospital Service Area 7** | | | **652** |
| Natchez Regional Medical Center | Natchez | M | 283 |
| Southwest MS Regional Medical Center | McComb | M | 369 |
| **General Hospital Service Area 8** | | | **3,185** |
| Hattiesburg Clinic, P.A.[1] | Hattiesburg | F | 2,612 |
| South Central Regional Medical Center | Laurel | M | 455 |
| Wesley Medical Center | Hattiesburg | M | 118 |
| **General Hospital Service Area 9** | | | **1,545** |
| Biloxi Regional Medical Center | Biloxi | M | 105 |
| Garden Park Medical Center | Gulfport | M | 60 |
| Memorial Hospital at Gulfport | Gulfport | F | 668 |
| Ocean Springs Hospital | Ocean Springs | M | 327 |
| Singing River Hospital | Pascagoula | M | 385 |
| **State Total** | | | **16,630** |

[1] Indicates freestanding clinics.

NOTES: Delta Cancer Institute CON approved but CON was amended. Delta RMC (Main Campus) provides service. Cardiology Associates of North MS was CON approved in 2011 to provide Cardiac/PET services.
*Imaging Center at Bridgepoint, LLC in Tupelo (Lee County) was CON approved 12/2011 to offer PET services; however the proposed project was never completed.

Sources: Applications for Renewal of Hospital License for Calendar Years 2014; Fiscal Year 2012 Annual Hospital Report; FY 2011 PET Utilization Survey

## 112.01 Certificate of Need Criteria and Standards for Magnetic Resonance Imaging Services (MRI)

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### *112.01.01 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of Magnetic Resonance Imaging (MRI) Equipment and/or the Offering of MRI Services*

1. CON Review Requirements: The Certificate of Need process regarding the acquisition or otherwise control of MRI equipment and/or the offering of MRI services involves separate requirements for CON review: (a) an entity proposing to acquire or otherwise control MRI equipment must obtain a CON to do so if the capital expenditure for the MRI unit and related equipment exceeds $1,500,000; and (b) an entity proposing to offer MRI services which hasn't provided the service on a regular basis within the last twelve (12) months must obtain a CON before providing such services.

2. CON Approval Preference: The Mississippi State Department of Health shall give preference to those applicants proposing to enter into joint ventures utilizing mobile and/or shared equipment. However, the applicant must meet the applicable CON criteria and standards provided herein and the general criteria and standards contained in the currently approved *Mississippi Certificate of Need Review Manual*.

3. Mobile MRI: For purposes of this Plan, a mobile MRI unit is defined as an MRI unit operating at two or more host sites and that has a central service coordinator. The mobile MRI unit shall operate under a contractual agreement for the provision of MRI services at each host site on a regularly scheduled basis.

4. Conversion to Fixed: The conversion from mobile MRI service to fixed MRI service is considered the establishment of a new MRI service and requires CON review.

5. Utilization of Existing Units: No new MRI services shall be approved unless all existing MRI service in the applicant's defined service area performed an average of 1,700 MRI procedures per existing and approved MRI scanner during the most recent 12 month reporting period and the proposed new services would not reduce the utilization of existing providers in the service area.

6. Population-Based Formula: The MSDH shall use a population-based formula as presented at the end of this chapter when calculating MRI need. Also, the formula will use historical and projected use rates by service area and patient origin data. The population-based formula is based on the most recent population projections prepared by the Center for Policy Research and Planning of the Institutions of Higher Learning. The applicant shall project a reasonable population base to justify the provision of 2,700 procedures (or 1,700 procedures for rural hospitals) by the second year of operation.

7. Mobile Service Volume Proration**:** The required minimum service volumes for the establishment of services and the addition of capacity for mobile services shall be prorated on a "site by site" basis based on the amount of time the mobile services will be operational at each site.

8. Addition of a Health Care Facility: An equipment vendor who proposes to add a health care facility to an existing or proposed route must notify the Department in writing of any proposed changes, i.e., additional health care facilities or route deviations, from those presented in the Certificate of Need application prior to such change.

### *112.01.02 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Magnetic Resonance Imaging (MRI) Equipment and/or the Offering of MRI Services*

The Mississippi State Department of Health will review applications for a Certificate of Need for the acquisition or otherwise control of MRI equipment and/or the offering of MRI 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of MRI equipment is reviewable if the equipment cost is in excess of $1,500,000; if the equipment and/or service is relocated; and if the proposed provider of MRI services has not provided such services on a regular basis within the period of twelve (12) months prior to the time such services would be offered.

### *112.01.03 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of MRI Equipment*

1. **Need Criterion: The entity desiring to acquire or otherwise control the MRI equipment shall demonstrate a minimum of 2,700 procedures per year by the end of the second year of operation; provided, however, that MRI equipment exclusively servicing rural hospitals (those located outside U.S. Census Bureau Metropolitan Statistical Areas with 75 or less beds) shall be required to demonstrate a minimum of 1,700 procedures per year by the end of the second year of operation. This criterion includes both fixed and mobile MRI equipment. The applicant must show the methodology used for the projections.**

    a. **Applicants for non-hospital based MRI facilities may submit affidavits from referring physicians. MRI procedures projected in affidavits shall be based on actual MRI procedures referred during the year.**

    b. **The applicant shall document a reasonable population base to document that a minimum of 2,700 procedures will be performed per proposed MRI unit (or 1,700 procedures per year for a mobile MRI route exclusively serving rural hospitals).**

c. **The applicant shall demonstrate that all existing units within its defined service area have performed an average of 1,700 procedures for the most recent 12-month period.**

It is recognized that an applicant desiring to acquire or otherwise control an MRI unit may make or propose to make the MRI unit available to more than one provider of MRI services, some of which may be located outside of Mississippi. In such cases all existing or proposed users of the MRI unit must jointly meet the required service volume of 2,700 (or 1,700 for mobile MRI route exclusively serving rural hospitals) procedures annually. If the MRI unit in question is presently utilized by other providers of MRI services, the actual number of procedures performed by them during the most recent 12-month period and/or documented projections of physician referrals may be used.

2. In order to receive CON approval to acquire or otherwise control MRI equipment, the applicant shall provide a copy of the proposed contract and document the following:

   a. that the equipment is FDA approved;

   b. that only qualified personnel will be allowed to operate the equipment; and

   c. that if the equipment is to be rented, leased, or otherwise used by other qualified providers on a contractual basis, no fixed/minimum volume contracts will be permitted.

3. Applicants shall provide written assurance that they will record and maintain, at a minimum, the following information and make it available to the Mississippi State Department of Health:

   a. all facilities which have access to the equipment;

   b. utilization by each facility served by the equipment, e.g., days of operation, number of procedures, and number of repeat procedures;

   c. financial data, e.g., copy of contracts, fee schedule, and cost per scan; and

   d. demographic and patient origin data for each facility.

   In addition, if required by the Department, the above referenced information and other data pertaining to the use of MRI equipment will be made available to the MSDH within 15 business days of request. The required information may also be requested for entities outside of Mississippi that use the MRI equipment in question.

4. The entity desiring to acquire or otherwise control the MRI equipment must be a registered entity authorized to do business in Mississippi.

5. Before the specified equipment can be utilized, the applicant desiring to provide the MRI equipment shall have CON approval or written evidence that the equipment is exempt from CON approval, as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

### *112.01.04 Certificate of Need Criteria and Standards for the Offering of Fixed or Mobile MRI Services*

An entity proposing to offer MRI services shall obtain Certificate of Need (CON) approval before offering such services.

1. **Need Criterion: The entity desiring to offer MRI services must document that the equipment shall perform a minimum of 2,700 procedures (or 1,700 procedures for rural hospitals) by the end of the second year of operation. This criterion includes both fixed and mobile MRI equipment. The applicant must show methodology used for the projections.**

   a. **Applicants for non-hospital based MRI facilities may submit affidavits from referring physicians. MRI procedures projected in affidavits shall be based on actual MRI procedures referred during the year.**

   b. **The applicant shall document a reasonable population within its service area to justify 2,700 procedures per year per proposed MRI unit (1,700 procedures per year per proposed mobile MRI unit on a route exclusively serving rural hospitals).**

   c. **The applicant shall demonstrate that all existing units within its defined service area have performed an average of 1,700 procedures for the most recent 12-month period.**

   It is recognized that a particular MRI unit may be utilized by more than one provider of MRI services, some of which may be located outside of Mississippi. In such cases all existing or proposed providers of MRI services must jointly meet the required service volume of 2,700 (or 1,700 for mobile MRI route exclusively serving rural hospitals) procedures annually by the end of the second year of operation. If the MRI unit in question is presently utilized by other providers of MRI services, the actual number of procedures performed by them during the most recent 12-month period and/or documented projection of physician referrals may be used instead of the formula projections.

2. An applicant desiring to offer MRI services must document that a full range of diagnostic imaging modalities for verification and complementary studies will be available at the time MRI services begin. These modalities shall include, but not be limited to, computed tomography (full body), ultrasound, angiography, nuclear medicine, and conventional radiology.

3. All applicants proposing to offer MRI services shall give written assurance that, within the scope of its available services, neither the facility where the service is provided nor its participating medical personnel shall have policies or procedures which would exclude patients because of race, color, age, sex, ethnicity, or ability to pay.

4. The applicant must document that the following staff will be available:

   a. Director - A full-time, board eligible radiologist or nuclear medicine imaging physician, or other board eligible licensed physician whose primary responsibility

during the prior three years has been in the acquisition and interpretation of clinical images. The Director shall have knowledge of MRI through training, experience, or documented post-graduate education. The Director shall document a minimum of one week of full-time training with a functional MRI facility.

b. One full-time MRI technologist-radiographer or a person who has had equivalent education, training, and experience, who shall be on-site at all times during operating hours. This individual must be experienced in computed tomography or other cross-sectional imaging methods, or must have equivalent training in MRI spectroscopy.

5. The applicant shall document that when an MRI unit is to be used for experimental procedures with formal/approved protocols, a full-time medical physicist or MRI scientist (see definition in Glossary) with at least one year of experience in diagnostic imaging shall be available in the facility.

6. The applicant shall provide assurances that the following data regarding its use of the MRI equipment will be kept and made available to the Mississippi State Department of Health upon request:

   a. Total number of procedures performed

   b. Number of inpatient procedures

   c. Number of outpatient procedures

   d. Average MRI scanning time per procedure

   e. Average cost per procedure

   f. Average charge per procedure

   g. Demographic/patient origin data

   h. Days of operation

   In addition to the above data recording requirements, the facility should maintain the source of payment for procedures and the total amounts charged during the fiscal year when it is within the scope of the recording system.

7. Before the service can be provided, the CON applicant desiring to offer MRI services shall provide written evidence that the specified MRI equipment provider has received CON approval or is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

### *112.01.05 Population-Based Formula for Projection of MRI Service Volume*

$$X * Y \div 1{,}000 = V$$

***Where, X = Applicant's Defined Service area population***

***Y = Mississippi MRI Use Rate****

***V = Expected Volume***

****Use Rate shall be based on information in the State Health Plan***

## 113 Certificate of Need Criteria and Standards for Diagnostic Imaging Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 113.01 Certificate of Need Criteria and Standards for Digital Subtraction Angiography

The Mississippi State Department of Health will review applications for a Certificate of Need for the acquisition or otherwise control of Digital Subtraction Angiography (DSA) equipment and associated costs 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

Certificate of Need review is required when the capital expenditure for the purchase of Digital Subtraction Angiography equipment and associated costs exceed $1,500,000, or when the equipment is to be used for invasive procedures, i.e., the use of catheters. The offering of diagnostic imaging services of an invasive nature, i.e. invasive digital angiography, is reviewable if those services have not been provided on a regular basis by the proposed provider of such services within the period of twelve (12) months prior to the time such services would be offered.

1. **Need Criterion: The applicant for DSA services shall demonstrate that proper protocols for screening, consultation, and medical specialty backup are in place before services are rendered by personnel other than those with specialized training.**

For example, if a radiologist without specialized training in handling cardiac arrhythmia is to perform a procedure involving the heart, a cardiologist/cardiosurgeon must be available for consultation/backup.

The protocols shall include, but are not limited to, having prior arrangements for consultation/backup from:

a. a cardiologist/cardiosurgeon for procedures involving the heart;

b. a neurologist/neurosurgeon for procedures involving the brain; and

c. a vascular surgeon for interventional peripheral vascular procedures.

2. Before utilizing or providing the equipment or service, the applicant desiring to provide the digital subtraction angiography equipment or service shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by the Mississippi State Department of Health.

## 113.02 Positron Emission Tomography (PET) Equipment and Services

### *113.02.01 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of a Positron Emission Tomography (PET) Scanner and Related Equipment including Cardiac only PET Scanner*

1. CON Review Requirements: Applicants proposing the acquisition or otherwise control of a PET scanner shall obtain a CON to do so if the capital expenditure for the scanner and related equipment exceeds $1,500,000.

2. Indigent/Charity Care: An applicant shall be required to provide a "reasonable amount" of indigent/charity care as described in Chapter I of this Plan.

3. Service Areas: The state as a whole shall serve as a single service area in determining the need for a PET scanner. In the case of Cardiac only PET Scanner, the service area will be the General Hospital Service Areas.

4. Equipment to Population Ratio: The need for a PET scanner is estimated to be one scanner per 300,000 population. The MSDH will consider out-of-state population in determining need only when the applicant submits adequate documentation acceptable to the MSDH, such as valid patient origin studies. In the case of Cardiac only PET Scanner, this policy will not apply.

5. Access to Supplies: Applicants must have direct access to appropriate radio-pharmaceuticals.

6. Services and Medical Specialties Required: The proposed PET unit must function as a component of a comprehensive inpatient or outpatient diagnostic service. The proposed PET unit must have the following modalities (and capabilities) on-site or through contractual arrangements:

   a. Computed tomography - (whole body)

   b. Magnetic resonance imaging - (brain and whole body)

   c. Nuclear medicine - (cardiac, SPECT)

   d. Conventional radiography

   e. The following medical specialties during operational hours:

      i. Cardiology

      ii. Neurology

      iii. Neurosurgery

      iv. Oncology

      v. Psychiatry

      vi. Radiology

7. Hours of Operation: PET facilities should have adequate scheduled hours to avoid an excessive backlog of cases.

8. CON Approval Preference: The MSDH may approve applicants proposing to enter joint ventures utilizing mobile and/or shared equipment.

9. CON Requirements: The criteria and standards contained herein pertain to both fixed and/or mobile PET scanner equipment.

10. CON Exemption: Nothing contained in these CON criteria and standards shall preclude the University of Mississippi School of Medicine from acquiring and operating a PET scanner and a Cardiac only PET Scanner, provided the acquisition and use of such equipment is justified by the School's teaching and/or research mission. However, the requirements listed under the section regarding the granting of "appropriate scope of privileges for access to the scanner to any qualified physician" must be met. The MSDH shall not consider utilization of equipment/services at any hospital owned and operated by the state or its agencies when reviewing CON applications.

11. Addition to a Health Care Facility: An equipment vendor who proposes to add a health care facility to an existing or proposed route must notify the Department in writing of any proposed changes from those presented in the Certificate of Need application prior to such change, i.e., additional health care facilities or route deviations.

12. Equipment Registration: The applicant must provide the Department with the registration/serial number of the CON-approved PET scanner.

13. Certification: If a mobile PET scanner, the applicant must certify that only the single authorized piece of equipment and related equipment vendor described in the CON application will be utilized for the PET service by the authorized facility/facilities.

14. Conversion from mobile to fixed service: The conversion from mobile PET service site to a fixed PET service site is considered the establishment of a new service and requires CON review.

### *113.02.02 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of a Positron Emission Tomography (PET) Scanner and Related Equipment including Cardiac only PET Scanner*

The Mississippi State Department of Health will review applications for a Certificate of Need for the acquisition or otherwise control of a PET scanner and related equipment 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 Certificate of Need according to the general review criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of a PET scanner and related equipment is reviewable if the equipment cost is in excess of $1,500,000, or if the equipment is relocated. The offering of PET 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.

**1. Need Criterion:**

**a. The entity desiring to acquire or to otherwise control the PET scanner must project a minimum of 1,000 clinical procedures per year and must show the methodology used for the projection.**

**b. The applicant shall document a minimum population of 300,000 per PET scanner unit. The Division of Health Planning and Resource Development population projections shall be used. In the case of Cardiac only PET Scanner, this Criterion will not apply.**

2. The entity desiring to acquire or otherwise control the PET equipment must be a registered entity authorized to do business in Mississippi.

3. The MSDH will approve additional PET equipment in a service area with existing equipment only when it is demonstrated that the existing PET equipment in that service area is performing an average of 1,500 clinical procedures per PET unit per year (six clinical procedures per day x 250 working days per year). For purposes of this Criterion, PET and Cardiac only PET are to be evaluated separately.

4. The application shall affirm that the applicant shall receive approval from the Division of Radiological Health for the proposed site, plans, and equipment before service begins.

5. The applicant shall provide assurances that the following data regarding the PET equipment will be kept and made available to the Mississippi State Department of Health upon request:

    a. total number of procedures performed;

    b. total number of inpatient procedures (indicate type of procedure);

    c. total number of outpatient procedures (indicate type of procedure);

    d. average charge per specific procedure;

    e. hours of operation of the PET unit;

    f. days of operation per year; and

    g. total revenue and expense for the PET unit for the year.

6. The applicant shall provide a copy of the proposed contract and document that if the equipment is to be rented, leased, or otherwise used by other qualified providers on a contractual basis, no fixed/minimum volume contracts will be permitted.

7. Before the specified equipment can be utilized, the applicant desiring to provide the PET equipment shall have CON approval or written evidence that the equipment is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

### *113.02.03 Certificate of Need Criteria and Standards for the Offering of Fixed or Mobile Positron Emission Tomography (PET) Services including Cardiac only PET Scanner*

The offering of fixed or mobile PET 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.

1. Need Criterion: The entity desiring to offer PET services must document that the equipment shall perform a minimum of 1,000 clinical procedures per year and must show the methodology used for the projection.

2. It is recognized that a particular PET unit may be utilized by more than one provider of PET services, some of which may be located outside of Mississippi. In such cases all existing or proposed providers of PET services utilizing the same PET unit must jointly meet the required service volume of 1,000 procedures annually. If the PET unit in question is presently utilized by other providers of PET services, the actual number of procedures performed by them during the most recent 12-month period may be used.

3. An applicant proposing to provide new or expanded PET services must include written assurances in the application that the service will be offered in a physical environment that

conforms to federal standards, manufacturer's specifications, and licensing agencies' requirements. The following areas are to be addressed:

a. quality control and assurance of radiopharmaceutical production of generator or cyclotron-produced agents;

b. quality control and assurance of PET tomograph and associated instrumentation;

c. radiation protection and shielding; and

d. radioactive emissions to the environment.

4. The application shall affirm that the applicant shall receive approval from the Division of Radiological Health for the proposed site, plans, and equipment before service begins.

5. The applicant shall document provision of an on-site medical cyclotron for radionuclide production and a chemistry unit for labeling radiopharmaceuticals; or an on-site rubidium-82 generator; or access to a supply of cyclotron-produced radiopharmaceuticals from an off-site medical cyclotron and a radiopharmaceutical production facility within a two-hour air transport radius.

6. Applicants for PET shall document that the necessary qualified staff are available to operate the proposed unit. The applicant shall document the PET training and experience of the staff. The following minimum staff shall be available to the PET unit:

   a. If operating a fixed PET unit, one or more nuclear medicine imaging physician(s) available to the PET unit on a full-time basis (e.g., radiologist, nuclear cardiologist) who have been licensed by the state for the handling of medical radionuclides and whose primary responsibility for at least a one-year period prior to submission of the Certificate of Need application has been in acquisition and interpretation of tomographic images. This individual shall have knowledge of PET through training, experience, or documented postgraduate education. The individual shall also have training with a functional PET facility.

   b. If operating a cyclotron on site, a qualified PET radiochemist or radiopharmacist personnel, available to the facility during PET service hours, with at least one year of training and experience in the synthesis of short-lived positron emitting radiopharmaceuticals. The individual(s) shall have experience in the testing of chemical, radiochemical, and radionuclidic purity of PET radiopharmaceutical syntheses.

   c. Qualified engineering and physics personnel, available to the facility during PET service hours, with training and experience in the operation and maintenance of the PET equipment. Engineering personnel are not required on-site for mobile PET units.

   d. Qualified radiation safety personnel, available to the facility at all times, with training and experience in the handling of short-lived positron emitting nuclides. If a medical cyclotron is operated on-site, personnel with expertise in radiopharmacy, radiochemistry, and medical physics would also be required.

e. Certified nuclear medicine technologists with expertise in computed tomographic nuclear medicine imaging procedures, at a staff level consistent with the proposed center's expected PET service volume.

f. Other appropriate personnel shall be available during PET service hours which may include certified nuclear medicine technologists, computer programmers, nurses, and radio-chemistry technicians.

7. The applicant shall demonstrate how medical emergencies within the PET unit will be managed in conformity with accepted medical practice.

8. The applicant shall affirm that, in addition to accepting patients from participating institutions, facilities performing clinical PET procedures shall accept appropriate referrals from other local providers. These patients shall be accommodated to the extent possible by extending the hours of service and by prioritizing patients according to standards of need and appropriateness rather than source of referral.

9. The applicant shall affirm that protocols will be established to assure that all clinical PET procedures performed are medically necessary and cannot be performed as well by other, less expensive, established modalities.

10. Applicants will be required to maintain current listings of appropriate PET procedures for use by referring physicians.

11. The applicant shall provide assurances that the following data regarding the PET service will be kept and made available to the Mississippi State Department of Health upon request:

    a. total number of procedures performed; total number of inpatient procedures (indicate type of procedure);

    b. total number of outpatient procedures (indicate type of procedure);

    c. average charge per specific procedure;

    d. hours of operation of the PET unit;

    e. days of operation per year; and

    f. total revenue and expense for the PET unit for the year.

12. Before the specified service can be provided, the applicant desiring to offer the PET service shall provide written evidence that the specified PET equipment provider has CON approval or written evidence that the equipment is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

# CERTIFICATE OF NEED

# CRITERIA AND STANDARDS
# FOR
# CARDIAC CATHETERIZATION SERVICES

## 114 Cardiac Catheterization

Cardiac catheterization, predominately a diagnostic tool that is an integral part of cardiac evaluation, brings together two disciplines: cardiac catheterization (the evaluation of cardiac function) and angiography (X-ray demonstration of cardiac anatomy). Cardiac catheterization includes various therapeutic interventions: including but not limited to: percutaneous coronary interventions (PCI), thrombolysis of coronary clots in evolving myocardial infarctions, electrical ablation of abnormal conduction pathways, and closure of patent ductus arteriosus in infants.

Any facility performing diagnostic cardiac catheterizations without open-heart surgery capability must maintain formal referral agreements with a nearby facility to provide emergency cardiac services, including open-heart surgery. Such a facility must also delineate the steps it will take to ensure that high-risk or unstable patients are not catheterized in the facility. Additionally, a facility without open-heart surgery capability must document that more complex procedures are not performed in the facility. Such procedures include, but are not limited to: percutaneous coronary interventions (PCI), transseptal puncture, transthoracic left ventricular puncture, and myocardial biopsy.

Section 41-7-191(1)(d), Mississippi Code of 1972, as amended, requires Certificate of Need review for the establishment and/or offering of cardiac catheterization services if the proposed provider has not offered such services on a regular basis within 12 months prior to the time the services would be offered. Table 5-10 presents the utilization of cardiac catheterization services in 2013.

## Table 5-10
## Cardiac Catheterizations by Facility and Type
## by Cardiac Catherization/Open Heart Planning Area (CC/OHSPA)
## FY 2012 and FY 2013

| Facility | County | Total Adult Procedures | | Total Pediatric Procedures | | Total PTCA Procedures | | # Labs |
|---|---|---|---|---|---|---|---|---|
| | | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | 2013 |
| **CC/OHSPA 1** | | **2,928** | **2,789** | **0** | **0** | **0** | **260** | **4** |
| Baptist Memorial Hospital-DeSoto | DeSoto | 2,928 | 2,784 | 0 | 0 | 0 | 260 | 3 |
| Methodist Healthcare Olive Branch Hospital | DeSoto | - | 5 | 0 | 0 | 0 | 0 | 1 |
| **CC/OHSPA 2** | | **9,721** | **13,002** | **0** | **0** | **319** | **391** | **6** |
| Magnolia Regional Health Center | Alcorn | 2,058 | 4,728 | 0 | 0 | 128 | 167 | 2 |
| North Mississippi Medical Center | Lee | 7,663 | 8,274 | 0 | 0 | 191 | 224 | 4 |
| **CC/OHSPA 3** | | **1,188** | **1,680** | **0** | **0** | **186** | **179** | **4** |
| Delta Regional Medical Center | Washington | 830 | 944 | 0 | 0 | 186 | 179 | 2 |
| Greenwood Leflore Hospital | LeFlore | - | 0 | 0 | 0 | 0 | 0 | 1 |
| Northwest MS RMC - Main Campus* | Coahoma | 358 | 736 | 0 | 0 | 0 | 0 | 1 |
| **CC/OHSPA 4** | | **2,151** | **2,285** | 0 | 0 | **577** | **757** | **5** |
| Baptist Memorial Hospital-Golden Triangle | Lowndes | 827 | 889 | 0 | 0 | 223 | 281 | 2 |
| Baptist Memorial Hospital-N. Mississippi | Lafayette | 1,324 | 1,282 | 0 | 0 | 354 | 476 | 2 |
| UMMC Grenada* | Grenada | - | 114 | 0 | 0 | 0 | 0 | 1 |
| **CC/OHSPA 5** | | **16,434** | **15,096** | **570** | **1,681** | **2,944** | **2,289** | **22** |
| Central Mississippi Medical Center | Hinds | 1,180 | 691 | 0 | 0 | 289 | 172 | 3 |
| Mississippi Baptist Medical Center | Hinds | 4,326 | 3,757 | 0 | 0 | 1,143 | 939 | 5 |
| Rankin Cardiology Center*• | Rankin | 120 | 119 | 0 | 0 | 0 | 0 | 1 |
| River Region Health System | Warren | 1,230 | 1,536 | 0 | 0 | 314 | 241 | 3 |
| St. Dominic-Jackson Memorial Hospital | Hinds | 6,661 | 5,931 | 0 | 0 | 1,163 | 877 | 7 |
| University Hospital & Health Systems | Hinds | 2,917 | 3,062 | 570 | 1681 | 35 | 60 | 3 |
| **CC/OHSPA 6** | | **3,889** | **3,083** | **0** | **0** | **946** | **713** | **5** |
| Anderson Regional Medical Center | Lauderdale | 1,254 | 1,344 | 0 | 0 | 809 | 705 | 3 |
| Anderson Regional Medical Center -South* [1] | Lauderdale | - | - | 0 | 0 | 0 | 0 | 0 |
| Rush Foundation Hospital | Lauderdale | 2,635 | 1,739 | 0 | 0 | 137 | 8 | 2 |
| **CC/OHSPA 7** | | **1,364** | **1,271** | 0 | 0 | **310** | **288** | **4** |
| Natchez Regional Medical Center * | Adams | 399 | 257 | 0 | 0 | 0 | 0 | 1 |
| SW Miss Regional Medical Center | Pike | 965 | 1,014 | 0 | 0 | 310 | 288 | 3 |
| **CC/OHSPA 8** | | **4,367** | **4,131** | **0** | **0** | **1,267** | **1,000** | **7** |
| Forrest General Hospital | Forrest | 2,543 | 2,472 | 0 | 0 | 915 | 817 | 4 |
| South Central Regional Medical Center* | Jones | 520 | 521 | 0 | 0 | 0 | 0 | 1 |
| Wesley Medical Center | Lamar | 1,304 | 1,138 | 0 | 0 | 352 | 183 | 2 |
| **CC/OHSPA 9** | | **5,554** | **6,263** | **0** | **0** | **1,962** | **2,219** | **9** |
| Biloxi Regional Medical Center* | Harrison | 109 | 100 | 0 | 0 | 0 | 0 | 1 |
| Memorial Hospital at Gulfport | Harrison | 3,014 | 2,380 | 0 | 0 | 719 | 841 | 4 |
| Ocean Springs Hospital | Jackson | 1,377 | 2,185 | 0 | 0 | 712 | 829 | 2 |
| Singing River Hospital | Jackson | 1,054 | 1,598 | 0 | 0 | 531 | 549 | 2 |
| **State Total** | | **47,596** | **49,600** | **570** | **1,681** | **8,511** | **8,096** | **66** |

*Diagnostic Catheterizations only

•Provides Diagnostic Cardiac Catheterizations for Rankin Medical Center, Women's Hospital, and River Oaks Hospital patients, at River Oaks Hospital Campus

[1] Anderson RMC provides Diagnostic Cardiac Catheterizations for Anderson RMC- South fka Riley Hospital.

NOTE: Cardiology Associates of North MS was CON approved in 2011 to provide Cardiac/PET services.

Sources: Applications for Renewal of Hospital License for Calendar Years 2013 and 2014, and Fiscal Years 2012 and 2013 Annual Hospital Reports.

## 115 Certificate of Need Criteria and Standards for Cardiac Catheterization Services and Open-Heart Surgery Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manua*l and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 115.01 Joint Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of Cardiac Catheterization Equipment and/or the Offering of Cardiac Catheterization Services and the Acquisition of Open-Heart Surgery Equipment and/or the Offering of Open-Heart Surgery Services

Heart disease remains the leading cause of death in Mississippi as incidence rates continue to increase, particularly among the African-American population. Studies show that minorities have a higher cardiovascular death rate than whites and are less likely to receive cardiac catheterization and open-heart surgery services than are whites. The disproportionate impact on minorities' health status in general is recognized elsewhere in this *State Health Plan*.

Innovative approaches to address these problems in the cardiac area are needed. It has been shown that statistical methods, such as population base and optimum capacity at existing providers, are not accurate indicators of the needs of the underserved, nor do they address the accessibility of existing programs to the underserved. 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.

To further this goal, the MSDH adopted the following standards:

1. A minimum population base standard of 100,000;

2. The establishment of diagnostic cardiac catheterization services with a caseload of 300 diagnostic catheterization procedures;

3. The establishment of therapeutic cardiac catheterization services with a caseload of 450 diagnostic and therapeutic catheterization procedures;

4. The establishment of open-heart surgery programs with a caseload of 150 open-heart surgeries; and,

5. A minimum utilization of equipment/services at existing providers of 450 cardiac catheterizations, diagnostic and therapeutic, and when applicable, 150 open-heart surgeries.

The MSDH also adopted a provision that it shall not consider utilization of equipment/services at any hospital owned and/or operated by the state or its agencies when reviewing CON applications. The MSDH further adopted standards requiring an applicant to report information regarding catheterization and open-heart programs so as to monitor the provision of care to the medically underserved and the quality of that care.

The MSDH shall interpret and implement all standards in this *Plan* in recognition of the stated findings and so as to achieve the stated goal.

**115.02 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Otherwise Control of Cardiac Catheterization Equipment and/or the Offering of Cardiac Catheterization Services**

1. Cardiac Catheterization Services: For purposes of the following CON criteria and standards, the term "cardiac catheterization services" or "catheterization services" shall include diagnostic cardiac catheterization services and therapeutic cardiac catheterization services.

    a. Diagnostic cardiac catheterization services are defined as, and refer to, cardiac catheterization services which are performed for the purpose of diagnosing, identifying, or evaluating cardiac related illness or disease. Diagnostic cardiac catheterization services include, but are not limited to, left heart catheterizations, right heart catheterizations, left ventricular angiography, coronary procedures, and other cardiac catheterization services of a diagnostic nature.

    b. Therapeutic cardiac catheterization services are defined as, and refer to, cardiac catheterization services which are performed for the purpose of actively treating, as opposed to merely diagnosing, cardiac-related illness or disease. Therapeutic cardiac catheterization services include, but are not limited to,-all PCIs (including primary and elective), transseptal puncture, transthoracic left ventricular puncture and myocardial biopsy.

2. Open-Heart Surgery Capability: The MSDH shall not approve CON applications for the establishment of therapeutic cardiac catheterization services at any facility that does not have open-heart surgery capability; i.e., new therapeutic cardiac catheterization services may not be established and existing therapeutic cardiac catheterization services may not be extended without approved and operational open-heart surgery services in place. This policy does not preclude approval of a Certificate of Need application proposing the concurrent establishment of both therapeutic cardiac catheterization and open-heart surgery services. However, the Department may approve a qualifying applicant to perform percutaneous coronary intervention (PCI) services in a hospital without on-site cardiac surgery.

3. Service Areas: The need for cardiac catheterization equipment/services shall be determined using the nine designated Cardiac Catheterization/Open-Heart Surgery Planning Areas (CC/OHSPAs) presented in the Open Heart Surgery section of this chapter of the Plan. Map 5-2 shows the CC/OHSPAs.

4. CC/OHSPA Need Determination: The need for cardiac catheterization equipment/ services within a given CC/OHSPA shall be determined independently of all other CC/OHSPAs.

5. Pediatric Cardiac Catheterization: Because the number of pediatric patients requiring study is relatively small, the provision of cardiac catheterization for neonates, infants, and young children shall be restricted to those facilities currently providing the service. National standards indicate that a minimum of 150 cardiac catheterization cases should be done per year and that catheterization of infants should not be performed in facilities which do not have active pediatric cardiac-surgical programs.

6. Present Utilization of Cardiac Catheterization Equipment/Services: The MSDH shall consider utilization of existing equipment/services and the presence of valid CONs for equipment/services within a given CC/OHSPA when reviewing CON applications. The MSDH shall not consider utilization of equipment/services at any hospital owned and/or operated by the state or its agencies when reviewing CON applications. The Mississippi State Department of Health may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

7. CON Application Analysis: 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.

8. Minimum CC/OHSPA Population: A minimum population base of 100,000 is required for applications proposing the establishment of cardiac catheterization services. The total population within a given CC/OHSPA shall be used when determining the need for services. Population outside an applicant's CC/OHSPA will be considered in determining need only when the applicant submits adequate documentation acceptable to the Mississippi State Department of Health, such as valid patient origin studies.

9. Minimum Caseload: Applicants proposing to offer adult diagnostic cardiac catheterization services must be able to project a caseload of at least 300 diagnostic catheterizations per year. Applicants proposing to offer adult therapeutic cardiac catheterization services must be able to project a caseload of at least 450 catheterizations, diagnostic and therapeutic, per year.

10. Residence of Medical Staff: Cardiac catheterizations must be under the control of and performed by personnel living and working within the specific hospital area. No site shall be approved for the provision of services by traveling teams.

11. Hospital-Based: All cardiac catheterizations and open-heart surgery services shall be located in acute care hospitals. The MSDH shall not approve Certificate of Need applications proposing the establishment of cardiac catheterization/open-heart surgery services in freestanding facilities or in freestanding ambulatory surgery facilities.

## 115.03 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Diagnostic Cardiac Catheterization Equipment and/or the Offering of Diagnostic Cardiac Catheterization Services

The Mississippi State Department of Health will review applications for a Certificate of Need 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of diagnostic cardiac catheterization equipment is reviewable if the equipment costs exceed $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.

1. Need Criterion: 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. Division of Health Planning and Resource Development population projections shall be used.

2. Minimum Procedures: An applicant proposing the establishment of diagnostic cardiac catheterization services only shall demonstrate that the proposed equipment/service utilization will be a minimum of 300 diagnostic cardiac catheterizations per year by its third year of operation.

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 forty-five (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. No hospital owned and/or operated by the state or its agencies shall be considered an existing unit in the CC/OHSPA under this section. The Mississippi State Department of Health may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

4. Staffing Standards: The applicant shall document that it has, or can obtain, the ability to administer the proposed services, provide sufficiently trained and experienced professional staff, and evaluate the performance of the programs. Mississippi State Department of Health staff shall use guidelines presented in *Optimal Resources for Examination of the Heart and Lungs: Cardiac Catheterization and Radiographic Facilities*, published under the auspices of the Inter-Society Commission for Heart Disease Resources, as resource materials when reviewing these items in an application.

5. Recording and Maintenance of Data: Applicants shall provide, as required under licensure standards, written assurance that they will record and maintain utilization data for diagnostic cardiac catheterization procedures (e.g., morbidity data, number of diagnostic cardiac catheterization procedures performed, and mortality data, all reported by race, sex, and payor status) and make such data available to the Mississippi State Department of Health annually.

6. Referral Agreement: An applicant proposing the establishment of diagnostic cardiac catheterization services only shall document that a formal referral agreement with a facility for the provision of emergency cardiac services (including open-heart surgery) will be in place and operational at the time of the inception of cardiac catheterization services.

7. Patient Selection: An applicant proposing to provide diagnostic cardiac catheterization services must (a) delineate the steps which will be taken to insure that high-risk or unstable patients are not catheterized in the facility, and (b) certify that therapeutic cardiac catheterization services will not be performed in the facility unless and until the applicant has received CON approval to provide therapeutic cardiac catheterization services.

8. Regulatory Approval: Before utilizing or providing the equipment or service, the applicant desiring to provide the diagnostic cardiac catheterization equipment or service shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

### 115.04 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Therapeutic Cardiac Catheterization Equipment and/or the Offering Of Therapeutic Cardiac Catheterization Services

The Mississippi State Department of Health will review applications for a Certificate of Need for the acquisition or otherwise control of therapeutic cardiac catheterization equipment and/or the offering of therapeutic 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of therapeutic cardiac catheterization equipment is reviewable if the equipment costs exceed $1,500,000. The offering of therapeutic 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.

1. **<u>Need Criterion</u>: The applicant shall document a minimum population base of 100,000 in the CC/OHSPA where the proposed therapeutic cardiac catheterization equipment/service is to be located. Division of Health Planning and Resource Development population projections shall be used.**

2. <u>Minimum Procedures</u>: An applicant proposing the establishment of therapeutic cardiac catheterization services shall demonstrate that the proposed equipment/service utilization will be a minimum of 450 cardiac catheterizations, both diagnostic and therapeutic, per year by its third year of operation and a minimum of 100 total PCIs.

3. <u>Impact on Existing Providers</u>: An applicant proposing to acquire or otherwise control therapeutic cardiac catheterization equipment and/or offer therapeutic 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. No hospital owned and/or operated by the state or its agencies shall be considered an existing unit in the CC/OHSPA under this section. The Mississippi State Department of Health may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

4. <u>Staffing Standards</u>: The applicant shall document that it has, or can obtain, the ability to administer the proposed services, provide sufficiently trained and experienced professional staff, and evaluate the performance of the programs. Mississippi State Department of Health staff shall use guidelines presented in O*ptimal Resources for Examination of the Heart and Lungs: Cardiac Catheterization and Radiographic Facilities*, published under the auspices of the Inter-Society Commission for Heart Disease Resources, as resource materials when reviewing these items in an application.

5. <u>Staff Residency:</u> The applicant shall certify that medical staff performing therapeutic cardiac catheterization procedures shall be onsite within thirty (30) minutes.

6. <u>Recording and Maintenance of Data:</u> Applicants shall provide, as required under licensure standards, written assurance that they will record and maintain separate utilization data for diagnostic and therapeutic cardiac catheterization procedures (e.g., morbidity data, number of diagnostic and therapeutic cardiac catheterization procedures performed and mortality data, all reported by race, sex and payor status) and make that data available to the Mississippi State Department of Health annually.

7. <u>Open-Heart Surgery:</u> An applicant proposing the establishment of therapeutic cardiac catheterization services shall document that open-heart surgery services are available or will be available on-site where the proposed therapeutic cardiac catheterization services are to be offered before such procedures are performed. However, qualified applicants may submit an application to perform percutaneous coronary intervention (PCI) services in a hospital without on-site cardiac surgery. To qualify, the applicant must meet the current American College of Cardiology (ACCF), American Heart Association Task Force on Practice Guidelines (AHA) and the Society of Cardiovascular Angiography and Interventions (SCAI)-ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention and the following:

a. Perform a minimum of 50 total PCIs per year/per primary operator, including 12 primary PCIs per year/per facility.

b. Qualified operators have a life-time experience of greater than 150 total PCIs with acceptable outcomes as primary operator after completing fellowship or have completed an Interventional Cardiology fellowship.

c. Minimum of less than 120 minutes to accomplish transfer from the onset of PCI complications to cardiopulmonary bypass. The program must have a formal emergency transfer agreement with a hospital providing open heart surgery. Transporting of the patient to the receiving hospital must include the capability to provide an intra-aortic balloon pump (IABP).

d. Programs must project and annually perform a minimum of 100 total PCIs per year. New programs may demonstrate compliance in the second full year of operation and continue a two year average of 100 total PCIs per year to include at a minimum-12 primary PCIs per year. New programs should have 2 years to reach the absolute minimum volume, but after that, programs failing to reach this volume for 2 consecutive years should not remain open. The Mississippi State Department of Health has the discretion under a finding of rare or unique circumstances to grant exception to the above based on a finding of need of access and quality of care by the program.

e. New Programs must participate in the STEMI ("ST"-Segment Elevation Myocardial Infarction) Network.

f. At the present time in the United States, there is no justification for a PCI program without on-site surgery to perform only elective procedures or not provide availability to primary PCI 24 hours/365 days per year. The Mississippi State Department of Health has the discretion under a finding of rare or unique circumstances to grant exception to the above based on a finding of need of access and quality of care by the program.

8. Regulatory Approval: Before utilizing or providing the equipment or service, the applicant desiring to provide the cardiac catheterization equipment or service shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

9. Applicants Providing Diagnostic Catheterization Services: An applicant proposing the establishment of therapeutic cardiac catheterization services, who is already an existing provider of diagnostic catheterization services, shall demonstrate that its diagnostic cardiac catheterization unit has been utilized for a minimum of 300 procedures per year for the two most recent years as reflected in the data supplied to and/or verified by the Mississippi State Department of Health.

# OPEN-HEART SURGERY SERVICES

## 116 Open-Heart Surgery

Open-heart surgery, defined as any surgical procedure in which a heart-lung machine is used to maintain cardiopulmonary functioning, involves a number of procedures, including valve replacement, repair of cardiac defects, coronary bypass, heart transplantation, and artificial heart implant.

Section 41-7-191(1)(d), Mississippi Code of 1972, as amended, requires Certificate of Need review for the establishment and/or offering of open-heart surgery services if the proposed provider has not offered such services on a regular basis within 12 months prior to the time the services would be offered.

Table 5-11 presents the utilization of existing facilities. Map 5-2 in the Open Heart Surgery criteria and standards section shows the Cardiac Catheterization/Open-Heart Surgery Planning Areas (CC/OHSPAs) and the location of existing services.

**Table 5-11**
**Number of Open-Heart Surgeries by Facility and Type**
**By Cardiac Catheterization/Open Heart Surgery Planning Area (CC/OHSPA)**
**FY 2012 and FY 2013**

| Facility | County | Number of Adult Open-Heart Procedures | | Number of Pediatric Open-Heart Procedures | | Number of Pediatric Heart Procedures (Less Open-Heart) | |
|---|---|---|---|---|---|---|---|
| | | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 |
| **CC/OHSPA 1** | | **271** | **327** | **0** | **20** | **0** | **8** |
| Baptist Memorial Hospital - DeSoto | DeSoto | 271 | 260 | 0 | 0 | 0 | 0 |
| Methodist Healthcare Olive Branch Hospital | DeSoto | 0 | 67 | 0 | 20 | 0 | 8 |
| **CC/OHSPA 2** | | **763** | **826** | **0** | **0** | **0** | **0** |
| Magnolia Regional Medical Center | Alcorn | 129 | 174 | 0 | 0 | 0 | 0 |
| North MS Medical Center | Lee | 634 | 652 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 3** | | **46** | **16** | **0** | **0** | **0** | **0** |
| Delta Regional Medical Center-Main Campus | Washington | 46 | 16 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 4** | | **146** | **116** | **0** | **0** | **0** | **0** |
| Baptist Memorial Hospital-Golden Triangle | Lowndes | 54 | 55 | 0 | 0 | 0 | 0 |
| Baptist Memorial Hospital-North Mississippi | Lafayette | 92 | 61 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 5** | | **860** | **804** | **212** | **223** | **179** | **186** |
| Central MS Medical Center | Hinds | 45 | 62 | 0 | 0 | 0 | 0 |
| MS Baptist Medical Center | Hinds | 254 | 272 | 0 | 0 | 0 | 0 |
| River Region Health System | Warren | 128 | 115 | 0 | 0 | 0 | 0 |
| St. Dominic Hospital | Hinds | 285 | 190 | 0 | 0 | 0 | 0 |
| University Hospital & Health System | Hinds | 148 | 165 | 212 | 223 | 179 | 186 |
| **CC/OHSPA 6** | | **170** | **193** | **0** | **0** | **0** | **0** |
| Anderson Medical Center | Lauderdale | 106 | 127 | 0 | 0 | 0 | 0 |
| Rush Foundation Hospital | Lauderdale | 64 | 66 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 7** | | **49** | **37** | 0 | 0 | **0** | **0** |
| Southwest MS Regional Med. Center | Pike | 49 | 37 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 8** | | **692** | **731** | **0** | **0** | **0** | **0** |
| Forrest General Hospital | Forrest | 550 | 601 | 0 | 0 | 0 | 0 |
| Wesley Medical Center | Lamar | 142 | 130 | 0 | 0 | 0 | 0 |
| **CC/OHSPA 9** | | **326** | **428** | **0** | **0** | **0** | **0** |
| Memorial Hospital at Gulfport | Harrison | 115 | 156 | 0 | 0 | 0 | 0 |
| Ocean Springs Hospital | Jackson | 147 | 213 | 0 | 0 | 0 | 0 |
| Singing River Hospital | Jackson | 64 | 59 | 0 | 0 | 0 | 0 |
| **State Total** | | **3,323** | **3,478** | **212** | **243** | **179** | **194** |

Sources: Applications for Renewal of Hospital License for Calendar Years 2013 and 2014, and Fiscal Years 2012 and 2013 Annual Hospital Reports

**116.01 Policy Statement Regarding Certificate of Need Applications for the Acquisition of Open-Heart Surgery Equipment and/or the Offering of Open-Heart Surgery Services**

1. Service Areas: The need for open-heart surgery equipment/services shall be determined using the nine designated Cardiac Catheterization/Open-Heart Surgery Planning Areas (CC/OHSPAs) presented in this chapter of the Plan. Map 5-2 shows the CC/OHSPAs.

2. CC/OHSPA Need Determination: The need for open-heart surgery equipment/services within a given CC/OHSPA shall be determined independently of all other CC/OHSPAs.

3. Pediatric Open-Heart Surgery: Because the number of pediatric patients requiring open-heart surgery is relatively small, the provision of open-heart surgery for neonates, infants, and young children shall be restricted to those facilities currently providing the service.

4. Present Utilization of Open-Heart Surgery Equipment/Services: The Mississippi State Department of Health shall consider utilization of existing open-heart surgery equipment/ services and the presence of valid CONs for open-heart surgery equipment/services within a given CC/OHSPA when reviewing CON applications. The MSDH shall not consider utilization of equipment/services at any hospital owned and/or operated by the state or its agencies when reviewing CON applications. The Mississippi State Department of Health may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

5. CON Application Analysis: 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 open-heart surgery equipment and/or the offering of open-heart surgery 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.

6. Minimum CC/OHSPA Population: A minimum population base of 100,000 in a CC/OHSPA (as projected by the Division of Health Planning and Resource Development) is required before such equipment/services may be considered. The total population within a given CC/OHSPA shall be used when determining the need for services. Population outside an applicant's CC/OHSPA will be considered in determining need only when the applicant submits adequate documentation acceptable to the Mississippi State Department of Health, such as valid patient origin studies.

7. Minimum Caseload: Applicants proposing to offer adult open-heart surgery services must be able to project a caseload of at least 150 open-heart surgeries per year.

8. Residence of Medical Staff: Open-heart surgery must be under the control of and performed by personnel living and working within the specific hospital area. No site shall be approved for the provision of services by traveling teams.

## 116.02 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Open-Heart Surgery Equipment and/or the Offering of Open-Heart Surgery Services

The Mississippi State Department of Health will review applications for a Certificate of Need for the acquisition or otherwise control of open-heart surgery equipment and/or the offering of open-heart surgery 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 Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The acquisition or otherwise control of open-heart surgery equipment is reviewable if the equipment cost in excess of $1,500,000. The offering of open-heart surgery services is reviewable if the proposed provider has not provided those services on a regular basis within twelve (12) months prior to the time such services would be offered.

1. **<u>Need Criterion</u>: The applicant shall document a minimum population base of 100,000 in the CC/OHSPA where the proposed open-heart surgery equipment/service is to be located. Division of Health Planning and Resource Development population projections shall be used.**

2. <u>Minimum Procedures</u>: The applicant shall demonstrate that it will perform a minimum of 150 open-heart surgeries per year by its third year of operation.

3. <u>Impact on Existing Providers</u>: An applicant proposing to acquire or otherwise control open-heart surgery equipment and/or offer open-heart surgery services shall document that each facility offering open-heart surgery services which is (a) in the CC/OHSPA and (b) within 45 miles of the applicant, has performed a minimum of 150 procedures per year for the two most recent years as reflected in data supplied to and/or verified by the Mississippi State Department of Health. No hospital owned and/or operated by the state or its agencies shall be considered an existing unit in the CC/OHSPA under this section. The Mississippi State Department of Health may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

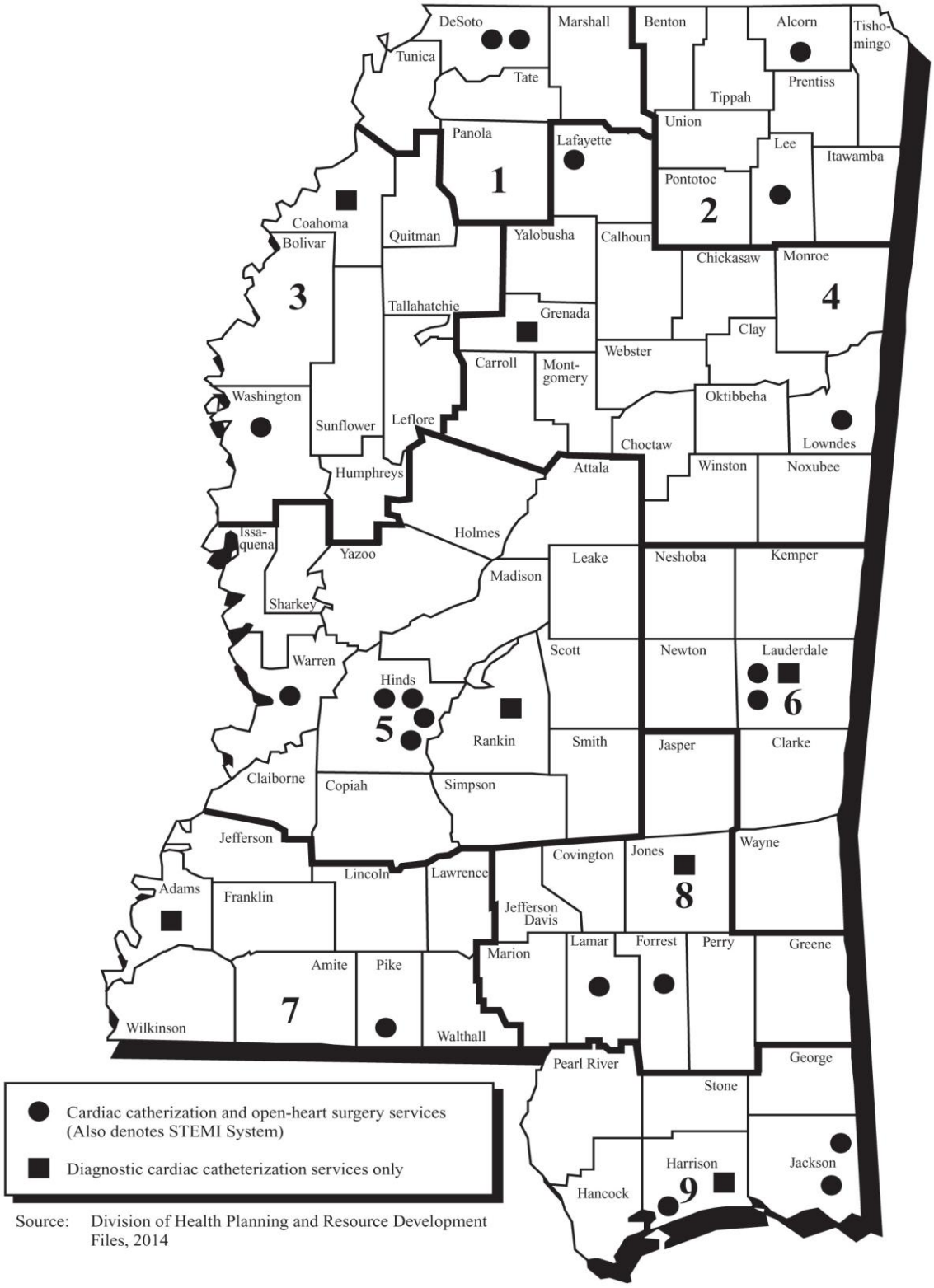
4. <u>Staffing Standard</u>s: The applicant shall document that it has, or can obtain, the ability to administer the proposed services, provide sufficiently trained and experienced professional staff, and evaluate the performance of the programs. Department of Health staff shall use guidelines presented in Optimal Resources for Examination of the Heart and Lungs: Cardiac Catheterization and Radiographic Facilities, published under the auspices of the Inter-Society Commission for Heart Disease Resources, and Guidelines and Indications for Coronary Artery Bypass Graft Surgery: A Report of the American College of Cardiology/American Heart Association Task Force on Assessment of Diagnostic and Therapeutic Cardiovascular Procedures (Subcommittee on Coronary Artery Bypass Graft Surgery), published under the auspices of the American College of Cardiology, as resource materials when reviewing these items in an application.

5. Staff Residency: The applicant shall certify that medical staff performing open-heart surgery procedures shall reside within forty-five (45) minutes normal driving time of the facility. The applicant shall document that proposed open-heart surgery procedures shall not be performed by traveling teams.

6. Recording and Maintenance of Data: Applicants shall provide, as required under licensure standards, written assurance that they will record and maintain utilization data for open-heart surgeries (e.g., morbidity data, number of open-heart surgeries performed and mortality data, all reported by race, sex, and payor status) and make such data available to the Mississippi State Department of Health annually.

7. Regulatory Approval: Before utilizing or providing the equipment or service, the applicant desiring to provide the open-heart surgery equipment or service shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by the Mississippi State Department of Health. Each specified piece of equipment must be exempt from or have CON approval.

**Map 5-2**
**Cardiac Catherization/Open Heart Surgery**
**Planning Areas (CC/OHSPA)**
**and Location of Existing/CON-Approved Services**




Source: Division of Health Planning and Resource Development Files, 2014

# SYSTEMS OF CARE

## 117 Systems of Care

The four systems that comprise Mississippi's systems of care are: Emergency Medical Services (pre-hospital care), the Trauma Care System, the ST-Elevation Myocardial Infarction (STEMI) system, and the Acute Ischemic Stroke system. Mississippi is one of only six states that have multiple acute systems of care, and is the only state that has state-wide systems for Trauma, STEMI, and Stroke.

Each system of care has five key components: an organizational structure; protocols for the treatment of patients; an advisory group process, a performance/quality improvement process, and a data system.

## 118 Emergency Medical Services

In Mississippi, the Emergency Medical Services system is extraordinary in that member services and personnel not only provide the highest standards of pre-hospital care for the citizens and visitors of Mississippi, but ensure that patients are delivered to one of the many specialized facilities in one of the state's systems of care: the Trauma Care System, the STEMI System, or the Stroke System.

### 118.01 Organization

The Emergency Medical Services Act of 1973 (Miss. Code Ann. §63-13-11) established standards for the organization of emergency services. Prior to 1974, government involvement in emergency medical services was primarily limited to providing an emergency department in the public hospital. Private operators, predominantly funeral homes, provided emergency transportation.

Within the Department of Health, the Bureau of Emergency Medical Services organizes, regulates, and maintains a statewide program to improve emergency medical care. Further, it coordinates agency resources in "all-hazard" planning and response to disasters. This includes both incidents involving weapons of mass destruction as well as natural disasters, from hurricanes on the coast to ice storms in the Delta.

EMS Services are typically provided in response to a medical emergency reported through the 9-1-1 system. A 9-1-1 call placed from any telephone is automatically routed to the appropriate designated Public Safety Answering Point (PSAP).

Once the call is received, the nature of the medical emergency is determined, the call is prioritized, appropriate personnel and equipment are dispatched, and pre-arrival instructions are given if appropriate. The dispatcher may ask a number of questions to help assess the nature and severity of the injury or illness. At times the dispatcher may give the caller specific patient care instructions to maximize the success of the injury or illness outcome.

### 118.02 Protocols

When EMS professionals are called, the injured or ill person is often transported to the hospital in an ambulance. EMS professionals work under protocols approved by physicians designated as Medical Control. The physician oversees the care of patients in EMS systems, and is knowledgeable about patient care interventions and how EMS systems deliver care. Typically the physicians work in conjunction with local EMS managers to assure quality patient care. Emergency Medical Services may be provided by a fire department, an ambulance service, a county or government-based service, a hospital, or a combination of the above. EMS professionals may be paid or serve as volunteers in the community.

### 118.03 Advisory Group

In accordance with Miss. Code Ann. § 41-59-7, the Emergency Medical Services Advisory Council (EMSAC) is created, with membership appointed by the Governor.

### 118.04 Performance Improvement

The Medical Directors' Training and Quality Assurance (MDTQA) Committee provides performance improvement review of the EMS system, and develops model protocols for adoption by EMS services. The committee is chaired by the State EMS Medical Director, a board-certified emergency physician, and membership includes physicians who provide medical control to EMS services, EMS educators, and EMS practitioners.

### 118.05 Data System

The Mississippi EMS Information System (MEMSIS) uses a web-based system hosted by ImageTrend. The ImageTrend EMS State Bridge is a pre-hospital emergency data collection, analysis and reporting system. EMS State Bridge integrates information across the entire emergency medical community, whether in the ambulance, the local station, the county or state offices. With the EMS State Bridge, ambulance services are able to satisfy reporting requirements easily, without major investment and without learning complex new technology.

The system provides:

- Data collection based upon the NHTSA V2.2.1 data set.
- The aggregation of information from various units and the possibility of sharing this with other systems and agencies.
- Electronic transport of information to other systems and agencies to improve communications and to share pertinent information.
- Standard and ad hoc reporting to turn data into useful information.
- Easy expansion through its open architecture as needs grow and evolve.
- Scalability to conform to the needs of small, medium and large services as required.

Additionally, the system is HIPAA compliant and sensitive to medical data security issues. The application meets and exceeds state and federal data privacy requirements.

## 119 Mississippi Trauma Care System

Trauma is the leading cause of death for all age groups in Mississippi from birth to age 44. Serious injury and death resulting from trauma events such as vehicle crashes, falls, and firearms claim 500 lives and disable 6,000 Mississippians each year. Trauma victims require immediate, expert attention.

### 119.01 Organization

Through the State Trauma Plan, MSDH has designated seven trauma care regions; each incorporated as a 501c-3 organization which contracts with the MSDH to administer the plan within their respective region. The State Trauma Plan includes the seven regional plans, and allows for transfer protocols between trauma facilities and for trauma patients to be transported to the "most appropriate" trauma facility for their injuries.

To increase participation in the Trauma Care System, the Mississippi Legislature enacted legislation in 2008 which required MSDH to develop regulations to require all licensed acute care hospitals to participate in the Mississippi Trauma Care System ("Play or Pay"). Hospitals must participate at a level commensurate with their capabilities, or pay a non-participation fee. Each hospital's capability to participate in the Trauma Care System is reviewed annually by the respective Trauma Care Region and the Mississippi State Department of Health, which determines the appropriate level of participation and any fee.

Trauma facility designation levels set specific criteria and standards of care that guide hospital and emergency personnel in determining the level of care a trauma victim needs, and whether that hospital can care for the patient or transfer the patient to a Trauma Center that can administer more definitive care.

**Level I Trauma Centers** must have a full range of trauma capabilities, including an emergency department, a full-service surgical suite, intensive care unit, and diagnostic imaging. Level I centers must have a residency program, ongoing trauma research, and provide 24-hour trauma service. These hospitals provide a variety of other services to comprehensively care for both trauma patients and medical patients. Level I Trauma Centers act as referral facilities for Level II, III, and IV Trauma Centers. The University of Mississippi Medical Center (UMMC) in Jackson is the only Level 1 facility in the state. Two Level I Trauma Centers border the northern and southeastern part of the state and are located in Tennessee and Alabama. Additionally, a "stand-alone: Tertiary Pediatric Trauma Center located in Tennessee participates in the system.

**Level II Trauma Centers** must be able to provide comprehensive care to the severely injured patient. These facilities must have a full range of trauma capabilities, including an emergency department, a full service surgical suite, an intensive care unit, and diagnostic imaging. Level II Trauma Centers act as referral facilities for Level III and IV Trauma Centers.

**Level III Trauma Centers** must offer general surgical and orthopedic services and have the ability to manage the initial care of multi-system trauma–patients. Transfer–protocols must be in place with Level I and II Trauma Centers for patients that exceed the Level III Trauma Center's resources.

**Level IV Trauma Centers** provide initial evaluation and assessment of injured patients. Most patients will require transfer to facilities with more resources dedicated to providing optimal care for the injured patients. Level IV Trauma Centers must have transfer protocols in place with Level I, II, and III Trauma Centers.

### 119.02 Protocols

The Trauma Care System has developed uniform trauma activation criteria for all hospitals participating in the system to insure that patients receive appropriate care, regardless of locale. In addition, the hospital activation criteria has been combined with EMS destination guidelines, using the Center for Disease Control (CDC) developed Field Triage Decision Scheme, to have a single document that identifies the severity of the patient's injuries and the appropriate destination for the patient.

### 119.03 Advisory Group

In accordance with Miss. Code Ann. § 41-59-7, a committee of the Emergency Medical Services Advisory Council (EMSAC) is created, formed from the membership of the council. This committee is designated as the Mississippi Trauma Advisory Committee (MTAC), and acts as the advisory body for trauma care system development, and provides technical support to the Department in all areas of system design, clinical standards, data collection, quality improvement, funding, and evaluation of the trauma care system.

### 119.04 Performance Improvement

A systems approach to trauma care provides the best means to protect the public from pre-mature death and prolonged disability. The development of a statewide system of care for the injured must include a mechanism to monitor, measure, assess, and improve the processes and outcome of care. The process must be a continuous, multidisciplinary effort to reduce inappropriate variation in the care of trauma patients, and improve the effectiveness of the system and its components, including pre-hospital care (communication, dispatch, medical control, triage, and transport), hospital care, inter-facility management, rehabilitative care, and mass casualty disaster response.

Statewide performance improvement (PI) consists of multiple layers of continuous monitoring and evaluation of treatment processes to identify opportunities to optimize care and improve outcomes. The continuous cycle of evaluation extends from the PI programs of EMS providers and hospitals to review committees established at the regional and state levels.

The State Trauma PI Committee is appointed by the Director of Health Protection, MSDH. The committee is independent from the MTAC and EMSAC, and membership is comprised of the following representatives:

- Trauma Surgeon
- Emergency Room Physician
- State EMS PI Committee

- Trauma Registry Committee
- One representative from each Trauma Care Region
- Nursing representative from each Trauma Center level
- Tertiary Pediatric Trauma Center
- MTAC
- Trauma Medical Directors from each Level I Trauma Center

Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. The MSDH Division of Trauma provides administrative support to the PI Committee and all meetings of the Committee, including any sub-committee meetings, are by invitation only, and are not open to the public.

**119.05 Data System**

There are four objectives of the trauma registry: performance improvement, enhanced hospital operations, injury prevention, and medical research. In July 2006, the Mississippi State Department of Health deployed "Collector" Trauma Registry software to all hospitals that participated in the Mississippi Trauma Care System. Today, every Mississippi licensed acute care facility (hospital) having an organized emergency service or department uses the Collector software to submit their data to the State Trauma Registry.

Collector is a trauma registry system that helps users meet changing requirements of collection and evaluation of trauma data for quality assurance, accreditation, management, prevention and research. Collector is a complete data management and report generating package which includes a user friendly data entry and verification system, querying capabilities and integration with expert coding software. Collector offers coding, database and analysis capabilities.

In addition to its use as the trauma registry, Collector is also used as the state's burn registry the registry for Traumatic Brain and Spinal Cord Injuries (TBI/SCI).

**120 STEMI System of Care**

ST-elevation myocardial infarction (STEMI) is a significant public health problem and carries a high risk of death and disability. The American Heart Association (AHA) estimates that as many as 400,000 people will suffer from a STEMI heart attack each year in the United States. Mississippi currently leads the nation in mortality and morbidity from cardiovascular disease.

STEMI patients should be recognized as quickly as possible to identify those eligible for thrombolytic or primary PCI therapy. Research has shown that both morbidity and mortality can be reduced by the approach of rapid interventional reperfusion within ninety (90) minutes of hospital arrival. Additional research has demonstrated that in-the-field recognition by pre-hospital providers utilizing 12-lead ECG, coupled with pre-hospital notification of the receiving facilities, can further reduce time to reperfusion, resulting in improved outcomes.

### 120.01 Organization

The STEMI System of Care is a voluntary system comprised of a number of separate components, which are organized and work together, as a system. The individual components and elements are described below:

- STEMI Regions – This component facilitates system organization, coordination, and education requirements for both practitioners and the public. Each STEMI Region (North, Central, and South) will have a regional STEMI Coordinator, who will schedule and facilitate quarterly regional meetings.
- Pre-Hospital Component – EMS units are an integral part of the STEMI System. All EMTs and Paramedics need to have a basic knowledge and awareness of the STEMI System elements and system function. Specifically, this knowledge refers to entry criteria (identification of a STEMI), triage and destination guidelines, and communication procedures. On-line and Off-line medical control physicians will also need to be involved with the STEMI System elements and system function.
- Hospital Component – Hospitals may participate in the STEMI System on a voluntary basis, but must comply with and maintain nationally accepted criteria by December 30, 2012.
- Program oversight is provided by the Mississippi State Department of Health, Bureau of EMS.

Map 5-2 identifies those hospitals participating in the STEMI System.

### 120.02 Protocols

Standard treatment protocols for both PCI centers and Non-PCI centers have been developed and published by the Mississippi Healthcare Alliance (MHCA), the practitioners' organization which initiated the development of the system of care. The current protocols may be found on the MHCA website at: http://mshealthcarealliance.org/.

### 120.03 Advisory Group

The Mississippi Healthcare Alliance (MHCA) has established a STEMI System Advisory Committee comprised of the following members:

- Cardiology (chair)
- Emergency Medicine Physician (co-chair)
- Cardiologist
- Emergency Medicine Nurse
- Hospital Administration
- STEMI Nursing
- STEMI Registry
- EMS provider (Paramedic)
- EMS Administration

### 120.04 Performance Improvement

Statewide performance improvement (PI) consists of multiple layers of continuous monitoring and evaluation of treatment processes to identify opportunities to optimize care and improve outcomes. The continuous cycle of evaluation extends from the PI programs of EMS providers and hospitals to review committees established at the regional and state levels.

The STEMI PI Committee is appointed by the Mississippi Healthcare Alliance (MHCA) and membership is comprised of the following representatives:

- Cardiology (chair)
- Emergency Medicine Physician (co-chair)
- Cardiologist (one from each region)
- Emergency Medicine Physician (one from each region)
- Representative from each PCI Center
- Non-PCI hospital representative (one from each region)
- EMS representative (one from each region)

Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. The MSDH Division of Trauma provides administrative support to the PI Committee and all meetings of the Committee, including any sub-committee meetings, are by invitation only, and are not open to the public.

### 120.05 Data System

The data system for the STEMI System of Care is the ACTION Registry-GWTG (Get With The Guidelines). The ACTION Registry-GWTG is a risk-adjusted, outcomes-based quality improvement program that focuses exclusively on high-risk STEMI/NSTEMI patients. It helps hospitals apply American College of Cardiology (ACC) and American Heart Association (AHA) clinical guideline recommendations in their facilities, and provides invaluable tools to measure care and achieve quality improvement goals. Use of the ACTION Registry-GWTG is a requirement for participation in the STEMI System of Care.

## 121 Acute Ischemic Stroke System of Care

In 2007, Mississippi had an estimated population of 2.9 million people, with over 1.6 million living in a rural community (Rural Assistance Center, 2007). Stroke is the fifth leading cause of death in Mississippi, accounting for 5.3% of all deaths (Mississippi Statistically Automated Health Resource System [MSTAHRS] Report, 2010). Much of this death is premature: nearly one in five of all stroke deaths occur in Mississippians under 65 years of age. Mississippi's stroke mortality rate is the fifth highest in the nation, ranking behind Arkansas, South Carolina, Tennessee, and Alabama. Stroke death rates in Mississippi are falling slightly faster than the national average, but remain 23.8% higher than the overall U.S. rate. Therefore, it is critical that stroke care in Mississippi be a central focus for healthcare leaders.

In Mississippi, most of the specialty physicians, like neurologists, are located in select large medical centers; therefore, access to a stroke specialist is a primary concern in stroke care. Unlike trauma and STEMI systems of care, where it is essential to get the patient to a specialty facility in the shortest amount of time, stroke care can be initiated at the rural facility in conjunction with input from a practitioner trained in stroke care, either by telephone or

telemedicine. A careful patient history and examination, laboratory analysis, and a head CT can be done at "Stroke-Ready" hospitals, allowing the timely decision to treat the patient with thrombolytic therapy at that hospital before transfer to a "Stroke Center" ("drip-n-ship") if needed for Neurological, Neurosurgical, or Neuro-interventional support.

**121.01 Organization**

The Stroke System of Care is a voluntary system comprised of a number of separate components, which are organized and work together, as a system. The individual components and elements are described below:

- Stroke Regions – This component facilitates system organization, coordination, and education requirements for both practitioners and the public. Each Stroke Region (North, Central, and South; same as the STEMI Regions) will have a regional Coordinator, who will schedule and facilitate quarterly regional meetings.
- Pre-Hospital Component – EMS units are an integral part of the STEMI System. All EMTs and Paramedics need to have a basic knowledge and awareness of the Stroke System elements and system function. Specifically, this knowledge refers to entry criteria (identification of an acute ischemic stroke), triage and destination guidelines, and communication procedures. On-line and Off-line medical control physicians will also need to be involved with the Stroke System elements and system function.
- Hospital Component – Hospitals may participate in the Stroke System on a voluntary basis.
- Program oversight is provided by the Mississippi State Department of Health, Bureau of EMS.

**121.02 Protocols**

Standard treatment protocols for Stroke Ready and Non-Stroke hospitals have been developed and published by the Mississippi Healthcare Alliance (MHCA), the practitioners' organization which initiated the development of the system of care. The current protocols may be found on the MHCA website at: http://mshealthcarealliance.org/.

The protocols are centered on the "drip-n-ship" model, where outlying hospitals identify the presence of an acute ischemic stroke through a head CT, and initiate thrombolytic therapy (tPA-Alteplase) prior to transferring the patient to a Stroke Center. EMS protocols include the use of the Cincinnati Stroke Scale to identify potential stroke victims, and the delivery to a Stroke Ready hospital for diagnosis.

**121.03 Advisory Group**

The Mississippi Healthcare Alliance (MHCA) has established a STEMI System Advisory Committee comprised of the following members:

- Neurologist (chair)
- Emergency Medicine Physician
- Emergency Medicine Nurse
- Hospital Administration
- Neurology/Interventional Neurology/Interventional Radiology/Neurosurgery
- Stroke Nursing
- Stroke Registry

- EMS provider (Paramedic)
- EMS Administration

**121.04 Performance Improvement**

Statewide performance improvement (PI) consists of multiple layers of continuous monitoring and evaluation of treatment processes to identify opportunities to optimize care and improve outcomes. The continuous cycle of evaluation extends from the PI programs of EMS providers and hospitals to review committees established at the regional and state levels.

The Stroke PI Committee is appointed by the Mississippi Healthcare Alliance (MHCA) and membership is comprised of the following representatives:

- Neurologist (chair)
- Administrative or clinical representative from each Stroke Center
- Representatives from Stroke Ready hospitals (number to be determined by the committee)
- EMS representatives from hospital-based EMS, private EMS, and public/government EMS

Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. The MSDH Division of Trauma provides administrative support to the PI Committee and all meetings of the Committee, including any sub-committee meetings, are by invitation only, and are not open to the public.

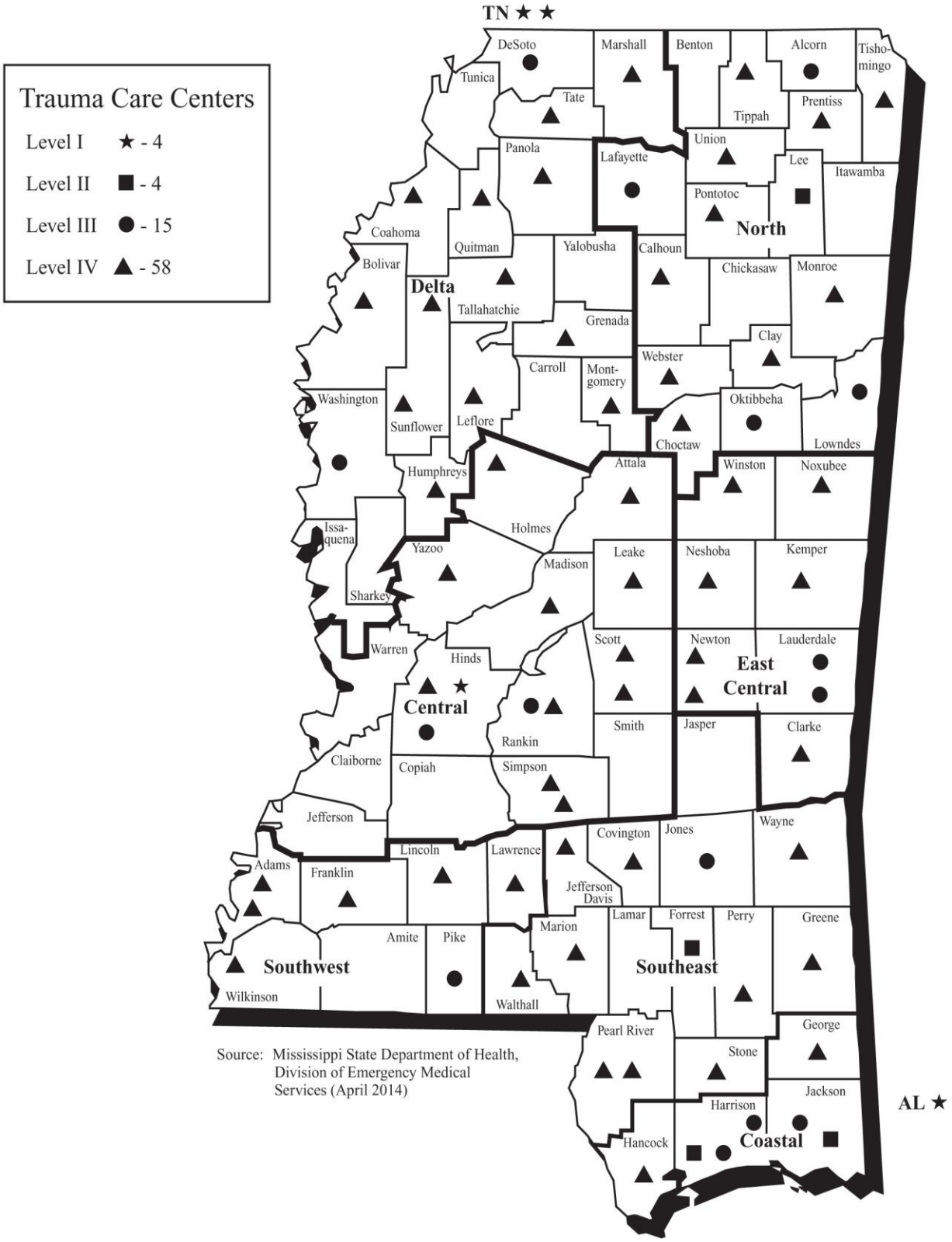
**121.05 Data System**

The American Heart Association/American Stroke Association GWTG (Get With The Guidelines) – Stroke is a performance improvement program for hospitals that uses a stroke registry to support its aims. GWTG-Stroke collects patient level data on characteristics, diagnostic testing, treatments, adherence to quality measures, and in-hospital outcomes in patients hospitalized with stroke and transient ischemic attack (TIA). Collection of comprehensive, continuous stroke data supports data analysis and the development of interventions to improve stroke care.

The primary goal of GWTG-Stroke program is to improve the quality of care and outcomes for patients hospitalized with stroke and TIA. The GWTG-Stroke registry helps achieve this goal in a variety of ways, including:

- Enabling high caliber stroke research;
- Promoting stroke center designation;
- Supporting hospital level quality improvement; and
- Driving the creation of regional stroke system

**Map 5-3**
**Mississippi Trauma Care Regions**



# CHAPTER 6

# COMPREHENSIVE MEDICAL REHABILITATION SERVICES

# Chapter 6 Comprehensive Medical Rehabilitation Services

## 100 Comprehensive Medical Rehabilitation Services

Comprehensive medical rehabilitation (CMR) services are defined as intensive care providing a coordinated multidisciplinary approach to patients with severe physical disabilities that require an organized program of integrated services. Level I facilities offer a full range of CMR services to treat disabilities such as spinal cord injury, brain injury, stroke, congenital deformity, amputations, major multiple trauma, polyarthritis, fractures of the femur, and neurological disorders. Level II facilities offer CMR services to treat disabilities other than spinal cord injury, congenital deformity, and brain injury.

The bed capacity, number of discharges, average length of stay, and occupancy rates for Level I and Level II CMR facilities are listed in Tables 6-1 and 6-2, respectively.

**Table 6-1**
**Hospital-Based Level I CMR Units**
**FY 2014**

| Facilities | Licensed Bed Capacity | Average Daily Census | Average Length of Stay | Occupancy Rate (%) |
|---|---|---|---|---|
| Baptist Memorial Hospital - DeSoto | 30 | 15.78 | 12.42 | 52.61 |
| Delta Regional Medical Center -West Campus | 24 | 7.17 | 13.07 | 44.81 |
| Forrest General Hospital | 24 | 19.4 | 15.32 | 80.84 |
| Memorial Hospital at Gulfport | 33 | 21.16 | 12.79 | 64.12 |
| Mississippi Methodist Rehab Center | 80 | 46.24 | 16.35 | 57.79 |
| North Miss Medical Center | 30 | 24.06 | 12.22 | 80.21 |
| University Hospital and Health System | 25 | 16.51 | 13.67 | 66.04 |
| **State Total** | **246** | **21.47** | **13.69** | **63.77** |

Source: 2014 Report on Hospitals, Mississippi State Department of Health

**Table 6-2**
**Hospital-Based Level II CMR Units**
**FY 2014**

| Facility | Licensed Bed Capacity | Average Daily Census | Average Length of Stay | Occupancy Rate (%) |
|---|---|---|---|---|
| Baptist Memorial Hospital - North Miss | 13 | 7.46 | 13.44 | 57.39 |
| Greenwood Leflore Hospital | 20 | 10.72 | 12.93 | 53.59 |
| Natchez Regional Medical Center | 20 | 4.24 | 13.28 | 21.21 |
| Northwest Miss Regional Med Center** | 0 | 0 | 0.00 | 0.00 |
| Anderson Regional Medical Center South | 20 | 13.36 | 11.71 | 66.79 |
| Singing River Hospital* | 20 | 16.86 | 11.50 | 84.32 |
| **TOTALS** | **93** | **8.77** | **10.48** | **47.22** |

Singing River Hospital*-CON approved February 2013 to add 8 Level II CMR beds.

Northwest Mississippi Regional Medical Center** - placed 14 Beds in abeyance September 2013.

Source: 2014 Report on Hospitals, Mississippi State Department of Health

## 101 The Need for Comprehensive Medical Rehabilitation Services

A total of 246 Level I and 93 Level II rehabilitation beds were operational in Mississippi during FY 2014. Map 6-3 at the end of this chapter shows the location of all CMR facilities in the state. The state as a whole serves as a single service area when determining the need for comprehensive medical rehabilitation beds/services. Based on the bed need formula found in the criteria and standards section of this chapter, Mississippi currently needs six Level I beds; however, needs 90 additional Level II CMR beds.

## 102 The Need for Children's Comprehensive Medical Rehabilitation Services

No universally accepted methodology exists for determining the need of children's comprehensive medical rehabilitation services. The bed need methodology in the previous section addresses need for all types of comprehensive medical rehabilitation beds, including those for children.

# CERTIFICATE OF NEED

# CRITERIA AND STANDARDS FOR COMPREHENSIVE MEDICAL REHABILITATION BEDS/SERVICES

## 103 Certificate of Need Criteria and Standards for Comprehensive Medical Rehabilitation Beds/Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 103.01 Policy Statement Regarding Certificate of Need Applications for Comprehensive Medical Rehabilitation Beds/Services

1. Definition: Comprehensive Medical Rehabilitation Services provided in a freestanding comprehensive medical rehabilitation hospital or comprehensive medical rehabilitation distinct part unit are defined as intensive care providing a coordinated multidisciplinary approach to patients with severe physical disabilities that require an organized program of integrated services. These disabilities include: stroke, spinal cord injury, congenital deformity, amputation, major multiple trauma, fractures or the femur (hip fracture), brain injury, polyarthritis, including rheumatoid arthritis, or neurological disorders, including multiple sclerosis, motor neuron disease, polyneuropathy, muscular dystrophy, and Parkinson's Disease.

2. Planning Areas: The state as a whole shall serve as a single planning area for determining the need of comprehensive medical rehabilitation beds/services.

3. Comprehensive Medical Rehabilitation Services:

   Level I - Level I comprehensive medical rehabilitation providers may provide treatment services for all rehabilitation diagnostic categories.

   Level II - Level II comprehensive medical rehabilitation providers may provide treatment services for all rehabilitation diagnostic categories except: (1) spinal cord injuries, (2) congenital deformity, and (3) brain injury.

4. CMR Need Determination: The Mississippi State Department of Health shall determine the need for Level I comprehensive rehabilitation beds/services based upon a formula of 0.08 beds per 1,000 population for the state as a whole.

   The Mississippi State Department of Health shall determine need for Level II comprehensive medical rehabilitation beds/services based upon a formula of 0.0623 beds per 1,000 population for the state as a whole. Table 6-3 shows the current need for comprehensive medical rehabilitation beds.

5. Present Utilization of Rehabilitation Services: When reviewing CON applications, the MSDH shall consider the utilization of existing services and the presence of valid CONs for services.

6. Minimum Sized Facilities/Units: Freestanding comprehensive medical rehabilitation facilities shall contain not less than 60 beds. Hospital-based Level I comprehensive medical rehabilitation units shall contain not less than 20 beds. If the established formula reveals a need for more than ten beds, the MSDH may consider a 20-bed (minimum sized) unit for approval. Hospital-based Level II comprehensive medical rehabilitation facilities are limited to a maximum of 30 beds. New Level II rehabilitation units shall not be located within a 45 mile radius of any other CMR facility.

7. Expansion of Existing CMR Beds: Before any additional CMR beds, for which CON review is required, are approved for any facility presently having CMR beds, the currently licensed CMR beds at said facility shall have maintained an occupancy rate of at least 80 percent for the most recent 12-month licensure reporting period or at least 70 percent for the most recent two years.

8. Priority Consideration: When reviewing two or more competing CON applications, the MSDH shall use the following factors in the selection process, including, but not limited to, a hospital having a minimum of 160 licensed acute care beds as of January 1, 2000; the highest average daily census of the competing applications; location of more than 45 mile radius from an existing provider of comprehensive medical rehabilitation services; proposed comprehensive range of services; and the patient base needed to sustain a viable comprehensive medical rehabilitation service.

9. Children's Beds/Services: Should a CON applicant intend to serve children, the application shall include a statement to that effect.

10. Other Requirements: Applicants proposing to provide CMR beds/services shall meet all requirements set forth in CMS regulations as applicable, except where additional or different requirements, as stated in the *State Health Plan* or in the licensure regulations, are required. Level II comprehensive medical rehabilitation units are limited to a maximum size of 30 beds and must be more than a 45 mile radius from any other Level I or Level II rehabilitation facility.

11. Enforcement: In any case in which the MSDH finds a Level II Provider has failed to comply with the diagnosis and admission criteria as set forth above, the provider shall be subject to the sanctions and remedies as set forth in Section 41-7-209 of the Mississippi Code of 1972, as amended, and other remedies available to the MSDH in law or equity.

12. Effective July 1, 1994, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need under the authority of Section 41-7-191(1)(c), unless there is a projected need for such beds in the planning district in which the facility is located.

13. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

## 103.02 Certificate of Need Criteria and Standards for Comprehensive Medical Rehabilitation Beds/Services

The MSDH will review applications for a CON for the establishment, offering, or expansion of comprehensive medical rehabilitation beds and/or services under the statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code 1972, Annotated, as amended. The MSDH will also review applications for Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

In addition, comprehensive rehabilitation services are reviewable if the proposed provider has not provided such services on a regular basis within twelve (12) months prior to the time such services would be offered. The twenty (20) bed hospital-based comprehensive medical rehabilitation facilities which are operational or approved on January 1, 2001, are *grandfathered* and shall not be required to obtain a Certificate of Need as long as the services are provided continuously by those facilities and are limited to the diagnoses set forth below for Level II comprehensive medical rehabilitation facilities.

1. **Need Criterion:**

   a. **New/Existing Comprehensive Medical Rehabilitation Beds/Service**s: The need for Level I comprehensive medical rehabilitation beds in the state shall be determined using a methodology of 0.08 beds per 1,000 population. The state as a whole shall be considered as a single planning area.

      The need for Level II comprehensive medical rehabilitation beds in the state shall be determined using a methodology of 0.0623 comprehensive medical rehabilitation beds per 1,000 population. The state as a whole shall be considered a planning area.

   b. **Projects which do not involve the addition of any CMR beds**: The applicant shall document the need for the proposed project. Documentation may consist of, but is not necessarily 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).

   **c.** **Projects which involve the addition of beds**: The applicant shall document the need for the proposed project. Exception: Notwithstanding the service specific need requirements as stated in "a" above, the MSDH may approve additional beds for facilities which have maintained an occupancy rate of at least 80 percent for the most recent 12-month licensure reporting period or at least 70 percent for the most recent two (2) years.

   d. **Level II Trauma Centers**: The applicant shall document the need for the proposed CMR project. Exception: Notwithstanding the forty-five (45) mile radius distance requirement from an existing CMR provider, the MSDH may approve the establishment of a 20-bed Level II CMR unit for any hospital without CMR beds which holds Level II Trauma care designation on July 1, 2003, as well as on the date the Certificate of Need application is filed.

e. **Conversion of Level II CMR Beds to Level I CMR Beds**: An existing Level II CMR unit may convert no more than eight (8) beds to Level I CMR status if the Lever II facility meets the following requirements:

(i) The Level II CMR unit demonstrates has maintained an occupancy rate of at least 80 percent for the most recent 12-month licensure reporting period, as reported in the Mississippi State Health Plan.

(ii) The Level II CMR unit documents the need for Level I CMR status for up to eight (8) beds by documenting that the facility expects to have a minimum of sixty (60) patient admissions annually with the three Level I rehabilitation categories: (1) spinal cord injuries, (2) congenital deformity, and (3) brain injury. The documentation will include analysis of Level II CMR unit's patient data and other patient projections to show such expected admissions.

(iii) The Level II CMR unit shall document ability to treat the additional three Level I rehabilitation categories, including but not limited to, documenting compliance with the standards for Level I CMR units, Criterion 2 (Treatment and Programs) and Criterion 3 (Staffing and Services).

(iv) The Level II facility shall obtain the written support for the project from any Level I CMR facility within a 45 mile radius of the facility. The Department shall assess the potential of the project on any adverse impact on any Level I CMR facilities operating in the state and such assessment shall be continually reviewed by the Department. The Department may revoke or suspend any Level II CMR unit operating a Level I program for non-compliance or finding of adverse impact to any Level I CMR units or programs in the state.

2. Applicants proposing to establish Level I comprehensive medical rehabilitation services shall provide treatment and programs for one or more of the following conditions:

a. stroke,

b. spinal cord injury,

c. congenital deformity,

d. amputation,

e. major multiple trauma,

f. fractures of the femur (hip fracture),

g. brain injury,

h. polyarthritis, including rheumatoid arthritis, or

i. neurological disorders, including multiple sclerosis, motor neuron disease, polyneuropathy, muscular dystrophy, and Parkinson's Disease.

Applicants proposing to establish Level II comprehensive medical rehabilitation services shall be prohibited from providing treatment services for the following rehabilitation diagnostic categories: (1) spinal cord injury, (2) congenital deformity, and (3) brain injury.

Facilities providing Level I and Level II comprehensive medical rehabilitation services shall include on their *Annual Report of Hospitals* submitted to the MSDH the following information: total admissions, average length of stay by diagnosis, patient age, sex, race, zip code, payor source, and length of stay by diagnosis.

3. Staffing and Services

a. Freestanding Level I Facilities

i. Shall have a Director of Rehabilitation who:

(1) provides services to the hospital and its inpatient clientele on a full-time basis;

(2) is a Doctor of Medicine or Osteopathy licensed under state law to practice medicine or surgery; and

(3) has had, after completing a one-year hospital internship, at least two years of training in the medical management of inpatients requiring rehabilitation services.

ii. The following services shall be provided by full-time designated staff:

(1) speech therapy

(2) occupational therapy

(3) physical therapy

(4) social services

iii. Other services shall be provided as required, but may be by consultant or on a contractual basis.

b. Hospital-Based Units

i. Both Level I and Level II hospital-based units shall have a Director of Rehabilitation who:

(1) is a Doctor of Medicine or Osteopathy licensed under state law to practice medicine or surgery;

(2) has had, after completing a one-year hospital internship, at least two years of training or experience in the medical management of inpatients requiring rehabilitation services; and

(3) provides services to the unit and its inpatients for at least 20 hours per week.

ii. The following services shall be available full time by designated staff:

(1) physical therapy

(2) occupational therapy

(3) social services

iii. Other services shall be provided as required, but may be by consultant or on a contractual basis.

### 103.03 Certificate of Need Criteria and Standards for Children's Comprehensive Medical Rehabilitation Beds/Services

Until such time as specific criteria and standards are developed, the MSDH will review CON applications for the establishment of children's comprehensive medical rehabilitation services under the general criteria and standards listed in the *Mississippi Certificate of Need Review Manual* in effect at the time of submission of the application, and the preceding criteria and standards listed.

### 103.04 Comprehensive Medical Rehabilitation Bed Need Methodology

The determination of need for Level I CMR beds/services will be based on 0.08 beds per 1,000 population in the state as a whole for the year 2020. Table 6-3 presents Level I CMR bed need.

The determination of need for Level II CMR beds/services will be based on 0.0623 beds per 1,000 population in the state as a whole for the year 2020. Table 6-3 presents Level II CMR bed need.

**Table 6-3**
**Comprehensive Medical Rehabilitation Bed Need**
**2014**

| Level | Estimated Population 2020 | Aproved CMR Beds | CMR Beds Needed | Difference |
|---|---|---|---|---|
| Level I | 3,156,054 | 246 | 252 | 6 |
| Level II * | 3,156,054 | 107 | 197 | 90 |

Level II*- Northwest Mississippi Regional Medical Center placed 14 Beds in abeyance September 2013.

Source: Applications for renewal of Hospital License for Fiscal Year 2014; *Mississippi Population Projections 2016, 2020, and 2025,* Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, February 2012.

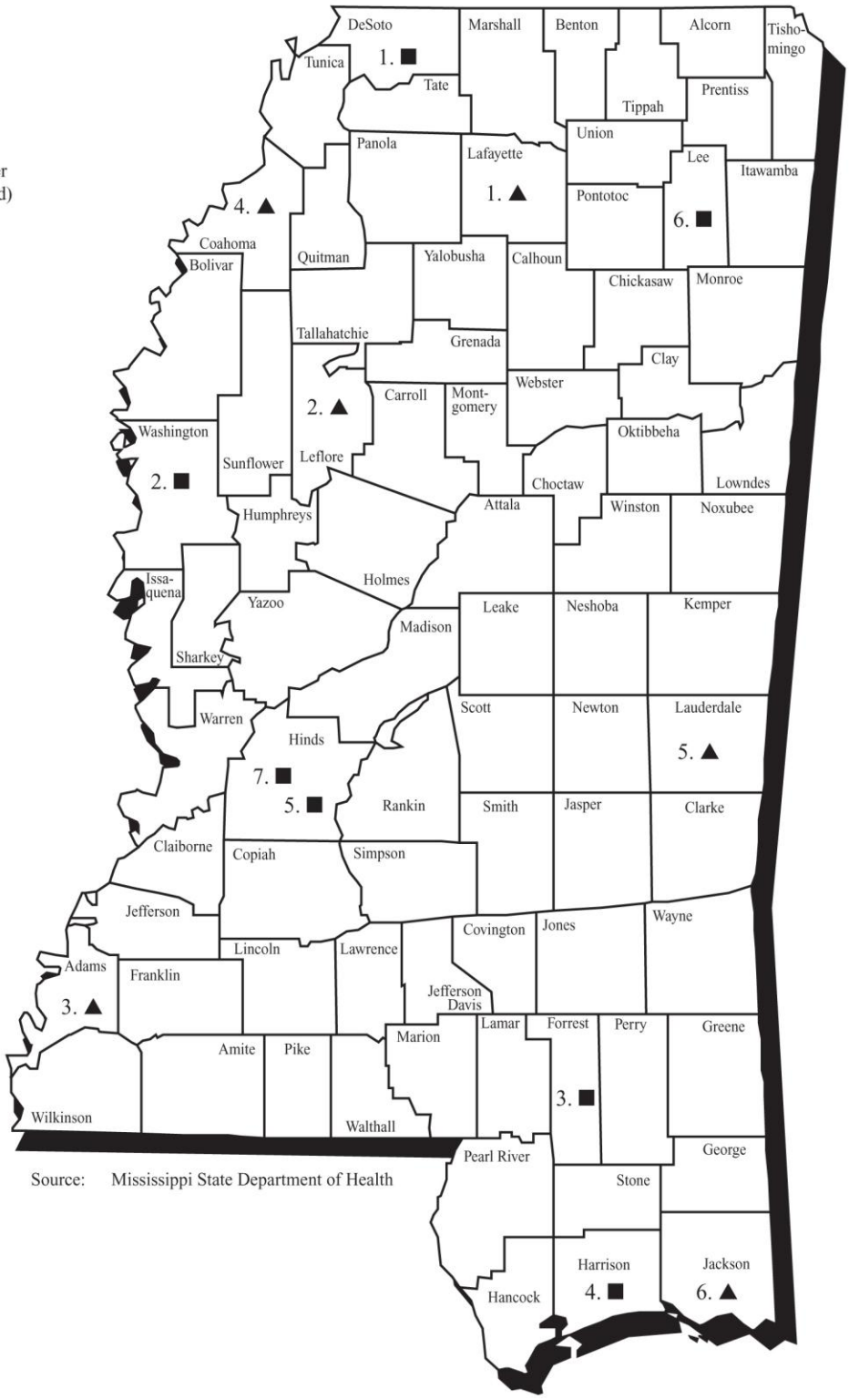
**Map 6-1**
**Location of Comprehensive**
**Medical Rehabilitation Facilities Level I and Level II**

**Level I: ■**

1. ■ Baptist Memorial Hospital
   DeSoto County
   30 Bed Unit
2. ■ Delta Regional Medical Center
   24 Bed Unit (8 CON Approved)
3. ■ Forrest General Hospital
   24 Bed Unit
4. ■ Memorial Hospital
   at Gulfport
   33 Bed Unit
5. ■ Mississippi Methodist
   Hospital and Rehabilitation
   Center
   80 Bed Unit
6. ■ North Mississippi
   Medical Center
   30 Bed Unit
   (30 CON Approved)
7. ■ University Hospital
   and Health System
   25 Bed Unit

**Level II: ▲**

1. ▲ Baptist Memorial Hospital
   North Mississippi
   13 Bed Unit
2. ▲ Greenwood Leflore Hospital
   20 Bed Unit
3. ▲ Natchez Regional
   Medical Center
   20 Bed Unit
4. ▲ Northwest MS Regional
   Medical Center
   14 Beds in Abeyance
5. ▲ Anderson Regional
   Medical Center-South
   20 Bed Unit
6. ▲ Singing River Hospital
   20 Bed Unit
   (8 CON Approved)




Source: Mississippi State Department of Health

## 104 Certificate of Need Criteria and Standards for Comprehensive Residential Medical Rehabilitation Beds/Services for Patients with Brain and Spinal Cord Injury (CR-BSCI)

Note: Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the Mississippi Certificate of Need Review Manual and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 104.01 Policy Statement Regarding Certificate of Need Applications for Comprehensive Residential Rehabilitation Beds/Services for Patients with Brain and Spinal Cord Injury

1. Definitions:

(a) Comprehensive Residential Rehabilitation Services for Patients with Brain and Spinal Cord Injury are defined as a building or place which is devoted to the provision of residential treatment and rehabilitative care in a transitional living program or a life long living program for periods of continuing for twenty-four (24) hours or longer for persons who have-brain and/or spinal cord injury.

(b) A transitional living program is treatment and rehabilitative care delivered to brain and spinal cord injury patients who require education and training for independent living with a focus on compensation for skills which cannot be restored; such care prepares clients for maximum independence, teaches necessary skills for community interaction, works with clients pre-vocational and vocational training and stresses cognitive, speech, and behavioral therapies structured to the individual needs of patients.

(c) Life long living program is treatment and rehabilitative care as shall be delivered to brain and spinal cord injury patients who have been discharged from advanced treatment and rehabilitation, but who cannot live at home independently, and who require on-going lifetime support and rehabilitation.

(d) A brain injury is a traumatic or other insult to the brain and its related parts resulting in organic damage thereto that may cause physical, intellectual, emotional, social, and/or vocational changes in a person.

(e) A spinal cord injury is a traumatic or other damage to any part of the spinal cord or nerves at the end of the spinal canal resulting in a change, either temporary or permanent, in the cord's normal motor, sensory, or automatic function.

2. Planning Areas: The state as a whole shall serve as a single planning area for determining the need of comprehensive residential rehabilitation beds/services for patients with brain and spinal cord injury.

3. Any application for a CRR-BSCI shall document for the need for such a program in the state. Any application for an expansion through the addition of beds at a CRR-BSCI shall document an occupancy rate in excess of 70 percent for the most recent two (2) years.

4. Present Utilization of Rehabilitation Services: When reviewing CON applications for CRR-BSCI, the MSDH shall consider the utilization of existing services and the presence of valid CONs for services.

5. Minimum Sized Facilities/Units: CRR-BSCI facilities shall contain not less than 6 beds nor more than 30 beds. MSDH shall give a preference for CRR-BSCI facilities that are not located within a 45 mile radius of any other CRR-BSCI facility.

6. Children's Beds/Services: Should a CON applicant intend to serve children, the application shall include a statement to that effect.

7. Other Requirements: Applicants proposing to provide CRR-BSCI beds/services shall meet all requirements set forth in CMS regulations as applicable, except where additional or different requirements, as stated in the State Health Plan or in the licensure regulations, are required. There will be no CON's issued for CRR-BSCI facilities until regulations are adopted and approved by MSDH.

8. Effective July 1, 1994, no health care facility shall be authorized to add any beds or convert any beds to another category of beds without a Certificate of Need under the authority of Section 41-7-191(1)(c), unless there is a projected need for such beds in the planning district in which the facility is located.

9. Effective March 4, 2003, if a health care facility has voluntarily delicensed some of its existing bed complement, it may later relicense some or all of its delicensed beds without the necessity of having to acquire a Certificate of Need. The Department of Health shall maintain a record of the delicensing health care facility and its voluntarily delicensed beds and continue counting those beds as part of the state's total bed count for health care planning purposes.

### 104.02 Certificate of Need Criteria and Standards for Comprehensive Residential Rehabilitation Beds/Services for Patients with Brain and Spinal Cord Injury (CRR-BSCI)

The MSDH will review applications for a CON for the establishment, offering, or expansion of comprehensive residential rehabilitation beds and/or services for patients with brain and spinal cord injury under the statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code 1972, Annotated, as amended. The MSDH will also review applications for Certificate of Need according to the general criteria listed in the Mississippi Certificate of Need Review Manual; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

In addition, comprehensive rehabilitation services are reviewable if the proposed provider has not provided such services on a regular basis within twelve (12) months prior to the time such services would be offered.

1. Need Criterion:

   a. New/Existing Comprehensive Residential Rehabilitation Beds/Services for Patients with Brain and Spinal Cord Injury: shall be determined considering the current and projected population of the state as whole and the current and project incidence of brain and spinal cord injury. The state as a whole shall be considered a planning area.

   b. Projects which do not involve the addition of any CRR-BSCI beds: The applicant shall document the need for the proposed project. Documentation may consist of, but is not necessarily 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).

   c. Projects which involve the addition of beds: The applicant shall document the need for the proposed project. MSDH may approve additional beds for facilities which have maintained an occupancy rate of at least 70 percent for the most recent two (2) years.

2. Applicants proposing to establish comprehensive residential rehabilitation services for patients with brain and spinal cord injury shall demonstrate the ability to meet all CMS and state licensure requirements.

# CHAPTER 7

# OTHER HEALTH SERVICES

# Chapter 7 Other Health Services

Other ambulatory health services consist of primary, specialty, and supportive medical services provided on an outpatient basis, in contrast to services provided in the home or to persons who are inpatients. The term ambulatory care implies that patients must travel to a location outside the home to receive services that do not require an overnight hospital stay. This chapter describes several organizations which provide ambulatory care in Mississippi. In addition, this chapter discusses home health services in Mississippi.

## 100 Ambulatory Surgery Services

During FY 2013, 72 of the state's medical/surgical hospitals reported a total of 274,834 general surgical procedures. This number included 174,198 ambulatory surgeries, almost a 0.97 percent increase of the 169,801 ambulatory surgeries performed in hospitals during 2012. The percentage of surgeries performed on an outpatient basis in hospitals has risen from 6.6 percent in 1981 to 63.4 percent in 2013. Table 7-1 displays hospital affiliated surgery data by general hospital service area.

Mississippi licenses 20 freestanding ambulatory surgery facilities. Table 7-2 shows the distribution of facilities and related ambulatory surgery data. The 20 facilities reported 79,933 procedures during fiscal year 2013. Total outpatient surgeries (hospitals and freestanding facilities combined) comprised 71.63 percent of all surgeries performed in the state. The number of procedures performed in freestanding facilities was 22.53 percent of total surgeries in 2013.

**Table 7-1**
**Selected Hospital Affiliated Ambulatory Surgery Data by General Hospital Service Area**
**FY 2013**

| General Hospital Service Area | Total Number of Surgeries | Number of Hospitals | Number of Ambulatory Surgeries | Ambulatory Surgeries / Total Surgeries (Percent of) | Number of Operating Rooms / Suites | Average[1] Number of Surgical Procedures per Day / Suite |
|---|---|---|---|---|---|---|
| **Mississippi** | **274,834** | **72** | **174,198** | **63.4** | **453** | **2.43** |
| 1 | 7,429 | 5 | 4,428 | 59.6 | 21 | 1.42 |
| 2 | 30,577 | 5 | 20,016 | 65.5 | 44 | 2.78 |
| 3 | 21,772 | 7 | 15,929 | 73.2 | 35 | 2.49 |
| 4 | 25,874 | 8 | 18,555 | 71.7 | 39 | 2.65 |
| 5 | 85,982 | 17 | 48,007 | 55.8 | 140 | 2.46 |
| 6 | 22,847 | 9 | 17,769 | 77.8 | 43 | 2.13 |
| 7 | 18,577 | 6 | 12,820 | 69.0 | 35 | 2.12 |
| 8 | 23,628 | 6 | 14,062 | 59.5 | 42 | 2.25 |
| 9 | 38,148 | 9 | 22,612 | 59.3 | 54 | 2.83 |

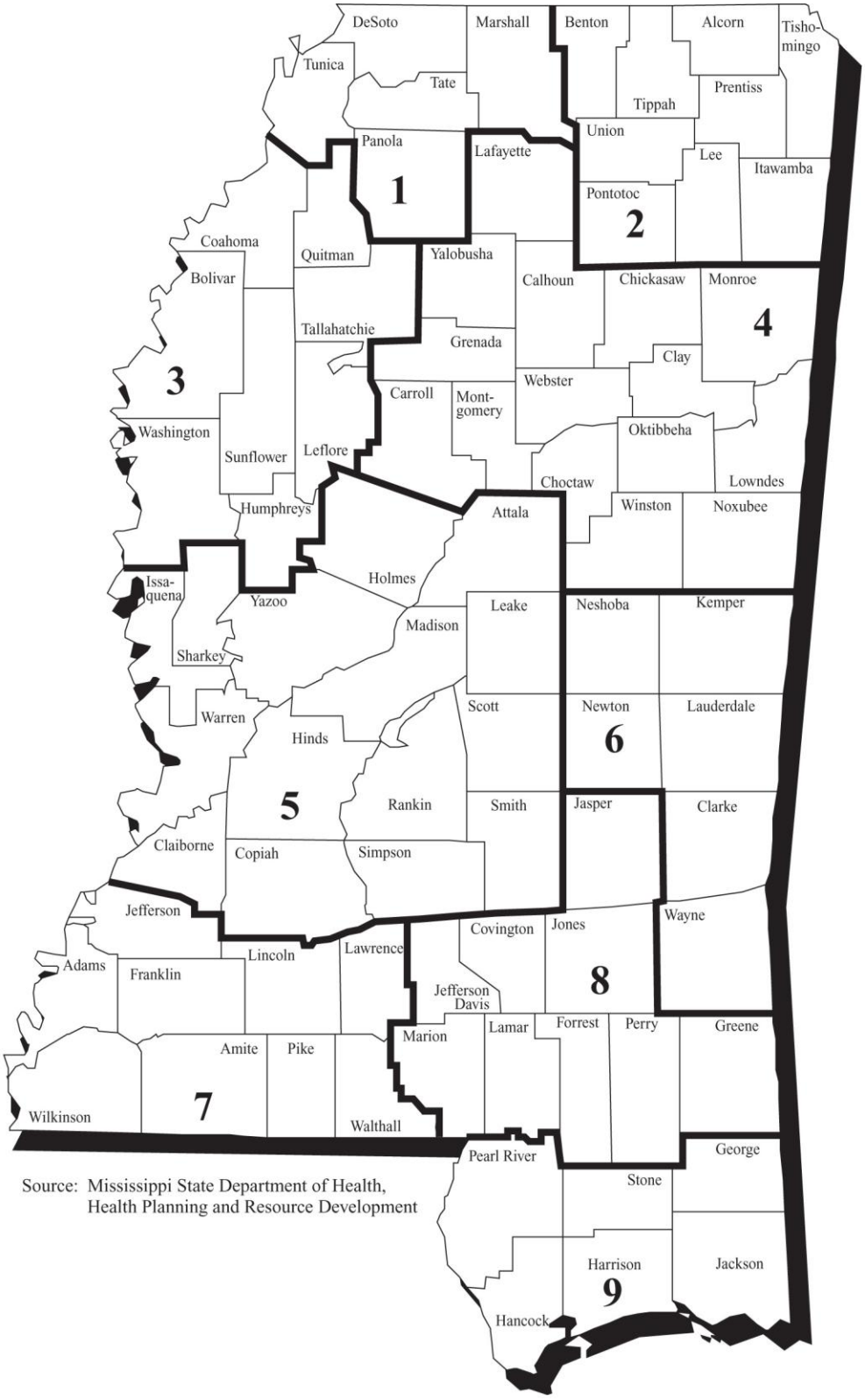
[1] Based on 250 working days per year
Source: Applications for Renewal of Hospital License for Calendar Year 2014 and FY 2013 Annual Hospital Report

**Table 7-2**
**Selected Freestanding Ambulatory Surgery Data by County**
**FY 2013**

| Ambulatory Surgery Planning Area | County | Number of Freestanding Ambulatory Surgery Centers | Number of Ambulatory Surgeries Performed | Number of Operating Rooms/Suites | Number[1] of Surgical Procedures Per Day/O.R. Suite |
|---|---|---|---|---|---|
| **(ASPAs)** | **Mississippi** | **20** | **79,933** | **81** | **3.95** |
| 1 | DeSoto | 1 | 1,962 | 3 | 2.62 |
| 2 | Lee | 1 | 6,506 | 8 | 3.25 |
| 4 | Lafayette | 1 | 3,430 | 4 | 3.43 |
| 5 | Hinds | 4 | 24,635 | 19 | 5.19 |
| 5 | Rankin | 1 | 4,201 | 5 | 3.36 |
| 6 | Lauderdale | 1 | 3,081 | 3 | 4.11 |
| 8 | Forrest | 4 | 20,593 | 16 | 5.15 |
| 8 | Jones | 1 | 1,622 | 3 | 2.16 |
| 9 | Harrison | 3 | 8,923 | 11 | 3.24 |
| 9 | Jackson | 3 | 4,980 | 9 | 2.21 |

[1] Based on 250 working days per year
Source: Survey of individual ambulatory surgery centers conducted April 2014; Division of Health Planning and Resource Development, Mississippi State Department of Health

**Map 7-1**
**Ambulatory Surgery Planning Areas**




Source: Mississippi State Department of Health,
Health Planning and Resource Development

# AMBULATORY SURGERY SERVICES

## 101 Certificate of Need Criteria and Standards for Ambulatory Surgery Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 101.01 Policy Statement Regarding Certificate of Need Applications for Ambulatory Surgery Services

1. Ambulatory Surgery Planning Areas (ASPAs): The Mississippi State Department of Health (MSDH) shall use the Ambulatory Surgery Planning Areas as outlined on Map 7-1 of this Plan for planning and Certificate of Need (CON) decisions. The need for ambulatory surgery facilities in any given ASPA shall be calculated independently of all other ASPAs.

2. Ambulatory Surgery Facility Service Areas: An applicant's Ambulatory Surgery Facility Service Area must have a population base of approximately 60,000 within 30 minutes normal driving time or 25 miles, whichever is greater, of the proposed/established facility. Note: Licensure standards require a freestanding facility to be within 15 minutes traveling time of an acute care hospital and a transfer agreement with said hospital must be in place before a CON may be issued. Additionally, the ambulatory surgery facility service area must have a stable or increasing population.

3. Definitions: The Glossary of this Plan includes the definitions in the state statute regarding ambulatory surgery services.

4. Surgeries Offered: The MSDH shall not approve single service ambulatory surgery centers. Only multi-specialty ambulatory surgery center proposals may be approved for a CON.

5. Minimum Surgical Operations: The minimum of 1,000 surgeries required to determine need is based on five (5) surgeries per operating room per day x 5 days per week x 50 weeks per year x 80 percent utilization rate.

6. Present Utilization of Ambulatory Surgery Services: The MSDH shall consider the utilization of existing services and the presence of valid CONs for services within a given ASPA when reviewing CON applications.

7. Optimum Capacity: The optimum capacity of an ambulatory surgery facility is 800 surgeries per operating room per year. The MSDH shall not issue a CON for the establishment or expansion of an additional facility(ies) unless the existing facilities within the ASPA have performed in aggregate at least 800 surgeries per operating room per year for the most recent 12-month reporting period, as reflected in data

supplied to and/or verified by the MSDH. The MSDH may collect additional information it deems essential to render a decision regarding any application. Optimum capacity is based on four (4) surgeries per operating room per day x 5 days per week x 50 weeks per year x 80 percent utilization rate.

8. Conversion of Existing Service: Applications proposing the conversion of existing inpatient capacity to hospital-affiliated ambulatory surgical facilities located within the hospital shall receive approval preference over detached or freestanding ambulatory surgical facilities if the applicant can show that such conversion is less costly than new construction and if the application substantially meets other adopted criteria.

9. Construction/Expansion of Facility: Any applicant proposing to construct a new facility or major renovation to provide ambulatory surgery must propose to build/renovate no fewer than two operating rooms.

10. Indigent/Charity Care: The applicant shall be required to provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this Plan.

### 101.02 Certificate of Need Criteria and Standards for Ambulatory Surgery Services

The MSDH will review applications for a CON for new ambulatory surgery facilities, as defined in Mississippi law, under the statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code of 1972 Annotated, as amended. The MSDH will also review applications submitted for Certificate of Need in accordance with the rules and regulations in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

The offering of ambulatory surgery services is reviewable if the proposed provider has not provided those services on a regular basis within twelve (12) months prior to the time such services would be offered. In addition, ambulatory surgery services require CON review when the establishment or expansion of the services involves a capital expenditure in excess of $2,000,000.

1. **Need Criterion: The applicant shall demonstrate that the proposed ambulatory surgery facility shall perform a minimum average of 1,000 surgeries per operating room per year.**

2. The applicant must document that the proposed Ambulatory Surgery Facility Service Area has a population base of approximately 60,000 within 30 minutes travel time.

3. An applicant proposing to offer ambulatory surgery services shall document that the existing facilities in the ambulatory surgery planning area have been utilized for a minimum of 800 surgeries per operating room per year for the most recent 12-month reporting period as reflected in data supplied to and/or verified by the Mississippi State Department of Health. The MSDH may collect additional information it deems essential to render a decision regarding any application.

4. The applicant must document that the proposed program shall provide a full range of surgical services in general surgery.

5. The applicant must provide documentation that the facility will be economically viable within two years of initiation.

6. The proposed facility must show support from the local physicians who will be expected to utilize the facility.

7. Medical staff of the facility must live within a 25-mile radius of the facility.

8. The proposed facility must have a formal agreement with a full service hospital to provide services which are required beyond the scope of the ambulatory surgical facility's programs. The facility must also have a formal process for providing follow-up services to the patients (e.g., home health care, outpatient services) through proper coordination mechanisms.

9. Indigent/Charity Care: The applicant shall affirm that the applicant will provide a "reasonable amount" of indigent/charity care by stating the amount of indigent/charity care the applicant intends to provide.

# HOME HEALTH SERVICES

## 102 Home Health Care

Mississippi licensure regulations define a home health agency as: a public or privately owned agency or organization, or a subdivision of such an agency or organization, properly authorized to conduct business in Mississippi, which is primarily engaged in providing to individuals at the written direction of a licensed physician, in the individual's place of residence, skilled nursing services provided by or under the supervision of a registered nurse licensed to practice in Mississippi, and one or more of the following additional services or items:

1. physical, occupational, or speech therapy
2. medical social services
3. home health aide services
4. other services as approved by the licensing agency
5. medical supplies, other than drugs and biologicals, and the use of medical appliances
6. medical services provided by a resident in training at a hospital under a teaching program of such hospital."

All skilled nursing services and the services listed in items 1 through 4 must be provided directly by the licensed home health agency. For the purposes of this *Plan*, "directly" means either through an agency employee or by an arrangement with another individual not defined as a health care facility in Section 41-7-173 (h), Mississippi Code 1972, as amended. The requirements of this paragraph do not apply to health care facilities which had contracts for the above services with a home health agency on January 1, 1990.

### 102.01 Home Health Status

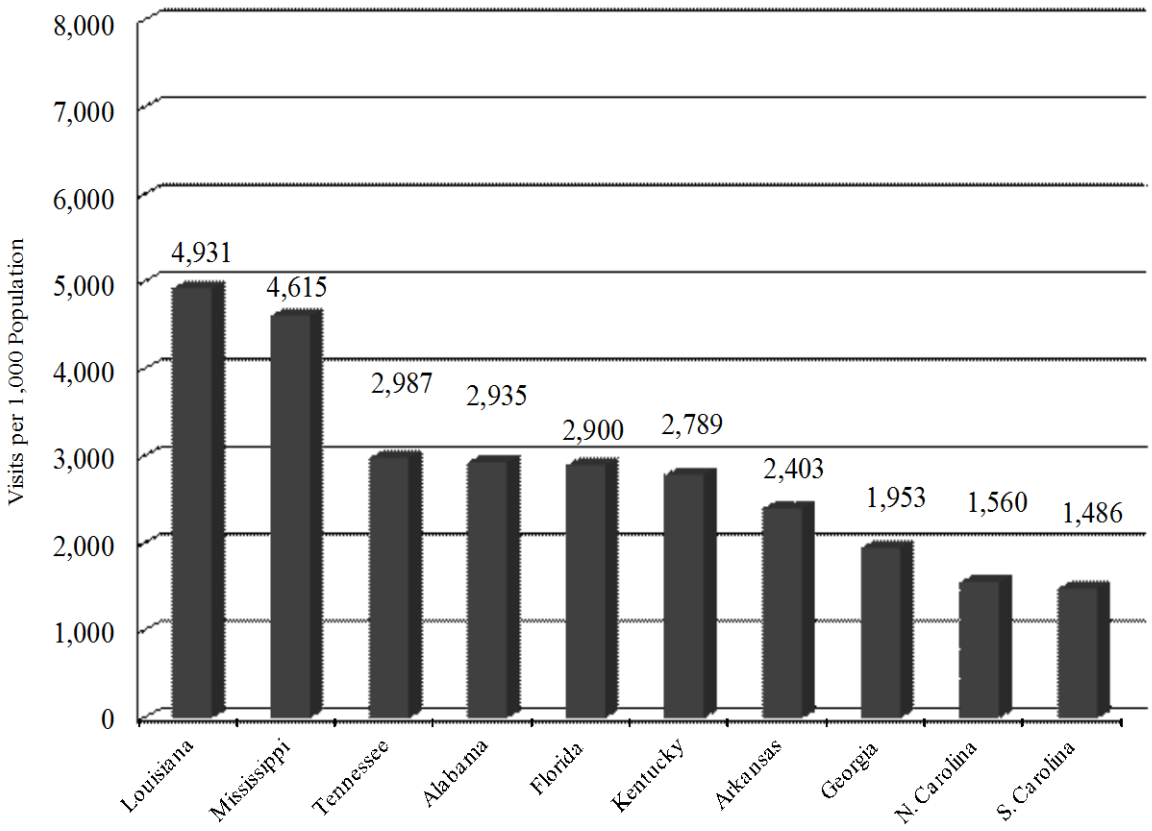
The latest Mississippi's 2012 *Report on Home Health Agencies* (the latest available) indicated that 88,408 Mississippians (non-duplicate count) received home health services during the year, an increase of 1.7 percent from the 86,923 patients served in 2012. There were 3,242,592 home health care visits made in 2012. Each patient (all payor sources) received an average of 36.68 visits. Mississippi has 9 hospital-based home health agencies, 40 freestanding agencies and 4 regional home health agencies operated by the MSDH.

**7-3**
**Medicare Home Health Statistics**
**in the Ten-State Region**
**January 1, 2012 – December 31, 2012**

| | 2020 Population 65+ | 2012 Total Medicare-Paid Home Health Visits | Medicare-Paid Home Health Visits per 1,000 Population 65+ | Total Medicare Reimbursement | Total Medicare Home Health Patients | Average Reimbursement per Patient | Average Visits per Patient |
|---|---|---|---|---|---|---|---|
| **Region Total** | **13,488,705** | **36,577,786** | **2,712** | **$5,457,514,756** | **982,613** | **$5,554** | **37** |
| Alabama | 842,607 | 2,472,715 | 2,935 | $357,498,026 | 71,395 | $5,007 | 35 |
| Arkansas | 531,028 | 1,276,081 | 2,403 | $159,990,765 | 35,483 | $4,509 | 37 |
| Florida | 5,106,857 | 14,810,817 | 2,900 | $2,194,992,017 | 355,080 | $6,182 | 42 |
| Georgia | 1,409,923 | 2,753,624 | 1,953 | $426,827,528 | 87,001 | $4,906 | 32 |
| Kentucky | 729,741 | 2,034,991 | 2,789 | $302,351,441 | 61,096 | $4,949 | 33 |
| Louisiana | 763,468 | 3,764,993 | 4,931 | $523,238,910 | 75,026 | $6,974 | 50 |
| **Mississippi** | **499,190** | **2,303,737** | **4,615** | **$341,326,801** | **55,579** | $6,141 | **41** |
| North Carolina | 1,618,578 | 2,524,479 | 1,560 | $429,220,677 | 107,916 | $3,977 | 23 |
| South Carolina | 866,250 | 1,287,463 | 1,486 | $216,977,522 | 50,935 | $4,260 | 25 |
| Tennessee | 1,121,063 | 3,348,886 | 2,987 | $505,091,069 | 83,102 | $6,078 | 40 |

Source: Palmetto GBA – Medicare Statistical Analysis Department, HCIS (Health Care Information System), May 29, 2014

**Figure 7-1**
**Total Medicare Paid Home Health Visits Per 1,000 Population**
**Aged 65+ in the Ten-State Region**
**2012**




Note: 2012 Average Home Health Visits per 1,000 Population Aged 65+ in the Ten-State Region is 2,712

## 103 Certificate of Need Criteria and Standards for Home Health Agencies/Services

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 103.01 Policy Statement Regarding Certificate of Need Applications for the Establishment of a Home Health Agency and/or the Offering of Home Health Services

1. Service Areas: The need for home health agencies/services shall be determined on a county by county basis.

2. Determination of Need: A possible need for home health services may exist in a county if for the most recent calendar year available that county had fewer home health care visits per 1,000 elderly (65+) population than the average number of visits received per 1,000 elderly (65+) in the "ten-state region" consisting of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. That number is currently 2,712 as shown in Table 7-3 (FY 2012 is most recent data available).

3. Unmet Need: If it is determined that an unmet need exists in a given county, the unmet need must be equivalent to 50 patients in each county proposed to be served. Based on 2012 data 2,712 visits approximates 40 patients.

4. All CON applications for the establishment of a home health agency and/or the offering of home health services shall be considered substantive and will be reviewed accordingly.

### 103.02 Certificate of Need Criteria and Standards for the Establishment of a Home Health Agency and/or the Offering of Home Health Services

If the present moratorium were removed or partially lifted, the MSDH would review applications for a CON for the establishment of a home health agency and/or the offering of home health 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 submitted for CON according to the general criteria as 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 development or otherwise establishment of a home health agency requires CON. The offering of home health 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.

1. **Need Criterion: The applicant shall document that a possible need for home health services exists in each county proposed to be served using the methodology contained in this section of the *Plan*.**

2. The applicant shall state the boundaries of the proposed home health service area in the application.

3. The applicant shall document that each county proposed to be served has an unmet need equal to 50 patients, using a ratio of 2,712 patient visits equals 40 patients.

4. The applicant shall document that the home office of a new home health agency shall be located in a county included in the approved service area of the new agency. An existing agency receiving CON approval for the expansion of services may establish a sub-unit or branch office if such meets all licensing requirements of the Division of Licensure.

5. The application shall document the following for each county to be served:

   a. Letters of intent from physicians who will utilize the proposed services.

   b. Information indicating the types of cases physicians would refer to the proposed agency and the projected number of cases by category expected to be served each month for the initial year of operation.

   c. Information from physicians who will utilize the proposed service indicating the number and type of referrals to existing agencies over the previous 12 months.

   d. Evidence that patients or providers in the area proposed to be served have attempted to find services and have not been able to secure such services.

   e. Projected operating statements for the first three years, including:

      i. total cost per licensed unit;

      ii. average cost per visit by category of visit; and

      iii. average cost per patient based on the average number of visits per patient.

6. Information concerning whether proposed agencies would provide services different from those available from existing agencies.

### 103.03 Statistical Need Methodology for Home Health Services

The methodology used to calculate the average number of visits per 1,000 elderly (65+) in the 10-state region is:

1. The 10-state region consists of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee.

2. The 2020 projected population aged 65 and older are estimates from each state.

3. Table 7-3 shows the average number of Medicare paid home health visits per 1,000 elderly (65+) for the 10-state region, according to 2012 data from Palmetto GBA - Medicare Statistical Analysis Department of the Centers for Medicare and Medicaid Services. Figure 7-1 shows the total number of Medicare paid home health visits per 1,000 elderly in the 10-state region.

4. In 2012, the region average of home health visits per 1,000 population aged 65 and older was 2,712. An average patient in the region received 37 home health visits. Therefore 2,712 visits equal 37 patients. Note: The Mississippi average for 2012 was 3,327 visits (Medicare reimbursed) per 1,000 population aged 65 and older, and an average patient received 38 visits.

# END STAGE RENAL DISEASE SERVICES

## 104 End Stage Renal Disease

End stage renal disease (ESRD) describes the loss of kidney function from chronic renal failure to the extent that the remaining kidney function will no longer sustain life. The kidney's function of filtering waste products from the blood and removing fluid and salts from the body is essential for life; consequently, if untreated, end stage renal disease results in death.

Treatment generally consists of either transplantation or dialysis. Dialysis consists of either peritoneal dialysis or hemodialysis. In peritoneal dialysis, the patient's own abdominal membrane is part of the "equipment". A dialyzing fluid is placed in the abdominal cavity through a plastic tube, and waste products (fluid and salts) exchange across the peritoneal membrane between the patient's blood and the dialyzing fluid. Hemodialysis is the process by which an artificial kidney machine "washes" metabolic waste products from the bloodstream and removes fluids and salts.

The kidney machine or peritoneal dialysis mimics the function normally done by the kidney. Dialysis can be done either by the patient and an assistant in the home, in a facility, or by professional staff in a hospital or limited care facility. Mississippi had 61 ESRD facilities providing maintenance dialysis services as of May 2014, and two additional facilities CON-approved but not yet operational (most recent data available). BMA of MS, Inc. d/b/a FMC-West Hinds County received CON Authority to establish a 10 Station Satellite ESRD facility in Clinton, Hinds County, MS. Map 7-1 shows the facility locations and Table 7-4 shows the number of existing and CON approved ESRD facilities by county.

Kidney transplantation is the treatment of choice for most patients with end stage renal failure. Unfortunately, suitable kidneys will probably never be available in the number that would be required to treat everyone with this mode of therapy. In kidney transplantation, a healthy kidney is removed from a donor and placed into an ESRD patient. Donors for kidney transplantation may come either from a close relative, such as a sibling or parent, or from an emotionally connected donor, such as a spouse or close associate. Kidneys may also be obtained from cadaver donors who have the closest matching tissue type. Living donors are preferred because they function longer than cadaver kidneys – 30 years for a living donor versus 15 years for a cadaver kidney.

The University of Mississippi Medical Center, the only kidney transplant program in the state, performed 103 cadaver and 0 living-donor transplants during the calendar year 2013. It is certified by membership in the United Network of Organ Sharing, a private agency under contract from the Health Care Financing Administration. Transplant results are comparable to those with transplant programs with similar population basis and can be viewed on the Internet under www.ustransplants.org. Approximately, 100 additional transplants in Mississippi residents are performed in neighboring states.

**Table 7-4**
**Number of Existing and CON Approved ESRD Facilities by County**

| ESRD Facilities by County | Number of Certified and CON Approved Stations |
|---|---|
| **Adams** | **29** |
| RCG of Natchez | 29 |
| **Alcorn** | **22** |
| RCG of Corinth | 22 |
| **Attala** | **20** |
| FMC Kosciusko | 20 |
| **Bolivar** | **60** |
| Fresenius Medical Care | 28 |
| RCG of Cleveland | 32 |
| **Claiborne** | **10** |
| FMC - Port Gibson | 10 |
| **Clarke** | **9** |
| Pachuta Dialysis Unit | 9 |
| **Coahoma** | **40** |
| RCG of Clarksdale | 40 |
| **Copiah** | **25** |
| FMC Hazlehurst | 13 |
| Hazelhurst Dialysis fka NRI of Hazlehurst | 12 |
| **Covington** | **21** |
| Collins Dialysis Unit - Collins | 21 |
| **DeSoto** | **50** |
| FMC Southaven | 50 |
| **Forrest** | **60** |
| Hattiesburg Clinic Dialysis Unit | 60 |
| **George** | **16** |
| Lucedale Dialysis | 16 |
| **Grenada** | **29** |
| RCG of Grenada | 29 |
| **Hancock** | **12** |
| FMC-South Miss Kidney Center - Diamondhead | 12 |

FY 2013 Annual ESRD Dialysis Utilization Survey conducted April 2014.

[1] CON Approved but not yet licensed

**Table 7-4 (Continued)**
**Number of Existing and CON Approved ESRD Facilities by County**

| ESRD Facilities by County | Number of Certified and CON Approved Stations |
|---|---|
| **Harrison** | **90** |
| FMC-South Mississippi Center of Biloxi | 20 |
| FMC-South Miss Kidney Center - Diamondhead/Gulfport | 20 |
| FMC-South Miss Kidney Center - Orange Grove | 18 |
| FMC-South Miss Kidney Center - D'Iberville | 12 |
| FMC-South Miss Kidney Center - North Gulfport | 20 |
| **Hinds** | **201** |
| FMC Jackson | 38 |
| FMC Southwest Jackson | 31 |
| Davita Jackson North fka NRI - Jackson North | 46 |
| Davita Jackson South fka NRI - Jackson South | 28 |
| Davita Jackson Southwest fka NRI-Jackson Southwest | 17 |
| University MS Medical Center Hospital and Clinics Outpatient Dialysis - Jackson | 35 |
| University Pediatric & ESRD Adult Outpatient Clinic | 6 |
| **Holmes** | **21** |
| Davita RCG of Lexington fka NRI - Lexington | 21 |
| **Humphreys** | **9** |
| RCG of Belzoni | 9 |
| **Jackson** | **42** |
| Davita Ocean Springs Dialysis | 16 |
| Davita Singing River Dialysis | 26 |
| **Jasper** | **21** |
| Bay Springs Dialysis Unit - Bay Springs | 21 |
| **Jefferson** | **8** |
| DRG Fayette | 8 |
| **Jones** | **34** |
| Laurel Dialysis Center - Laurel | 34 |
| **Kemper** | **6** |
| BMA, Inc. d/b/a FMC-Dekalb [1] **(opened 12/2013)** | 6 |
| **Lafayette** | **28** |
| RCG Oxford | 28 |
| **Lauderdale** | **61** |
| RCG of Meridian | 61 |
| **Lawrence** | **18** |
| Silver Creek Dialysis | 18 |
| **Leake** | **15** |
| Renal Care Group of Carthage fka NRI of Carthage | 15 |

[1] CON Approved but not yet licensed

**Table 7-4 (Continued)**
**Number of Existing and CON Approved ESRD Facilities by County**

| ESRD Facilities by County | Number of Certified and CON Approved Stations |
|---|---|
| **Lee** | **50** |
| RCG of Tupelo | 50 |
| **Leflore** | **34** |
| RCG of Greenwood | 34 |
| **Lincoln** | **32** |
| RCG of Brookhaven | 32 |
| **Lowndes** | **37** |
| RCG of Columbus | 37 |
| **Madison** | **35** |
| FMC Canton | 18 |
| Canton Renal Center | 17 |
| **Marion** | **30** |
| Columbia Dialysis Unit - Columbia | 30 |
| **Marshall** | **20** |
| RCG of Holly Springs | 20 |
| **Monroe** | **32** |
| RCG of Aberdeen | 32 |
| **Montgomery** | **15** |
| RCG of Winona | 15 |
| **Neshoba** | **36** |
| RCG of Philadelphia | 36 |
| **Newton** | **16** |
| RCG of Newton | 16 |
| **Noxubee** | **24** |
| RCG of Macon | 24 |
| **Oktibbeha** | **25** |
| RCG of Starkville | 25 |
| **Panola** | **24** |
| RCG of Sardis | 24 |
| **Pearl River** | **20** |
| Pearl River Dialysis Center - Picayune | 20 |

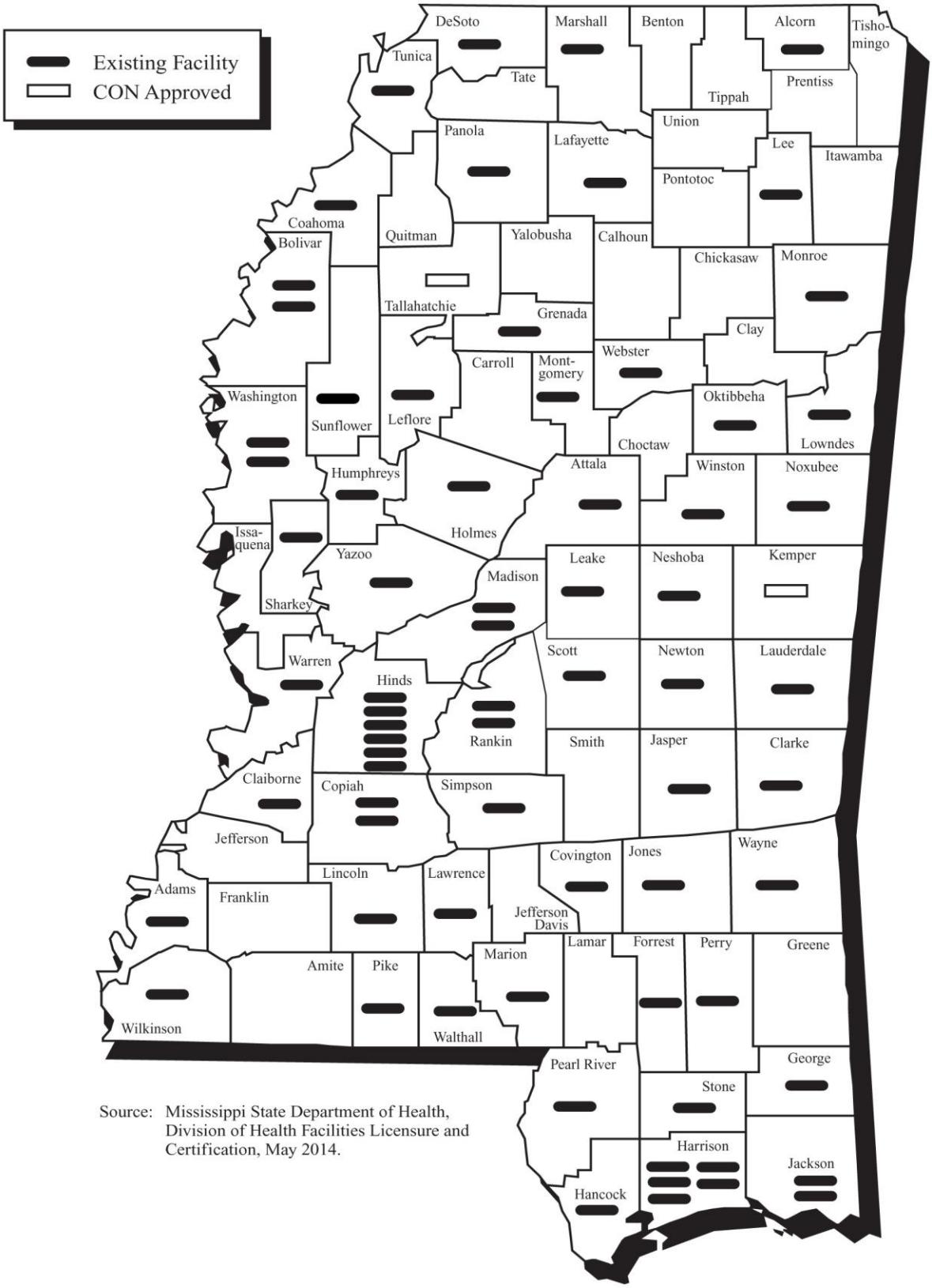
[1] CON Approved but not yet licensed

**Table 7-4 (Continued)**
**Number of Existing and CON Approved ESRD Facilities by County**

| ESRD Facilities by County | Number of Certified and CON Approved Stations |
|---|---|
| **Perry** | **20** |
| Richton Dialysis Unit | 20 |
| **Pike** | **32** |
| FMC of McComb | 32 |
| **Rankin** | **45** |
| FMC Dialysis Services of Rankin County-Brandon | 21 |
| NRI-Brandon | 24 |
| **Scott** | **18** |
| Davita Brandon fka Central Dialysis Unit of Forest | 18 |
| **Sharkey** | **13** |
| RCG of Mayersville | 13 |
| **Simpson** | **17** |
| FMC of Magee | 17 |
| **Stone** | **12** |
| Wiggins Dialysis Unit | 12 |
| **Sunflower** | **21** |
| RCG of Indianola | 21 |
| **Tallahatchie** | **6** |
| Healthcare Engineers - Charleston[1] | 6 |
| **Tunica** | **12** |
| Tunica Dialysis | 12 |
| **Walthall** | **20** |
| Tylertown Dialysis Unit | 20 |
| **Warren** | **23** |
| RCG of Vicksburg | 23 |
| **Washington** | **47** |
| Mid-Delta Kidney Center, Inc (Peritoneal -9) | 9 |
| RCG of Greenville | 38 |
| **Wayne** | **15** |
| Waynesboro Renal Dialysis Unit | 15 |
| **Webster** | **14** |
| RCG of Europa | 14 |
| **Wilkinson** | **17** |
| RCG of Centerville | 17 |
| **Winston** | **17** |
| RCG of Louisville | 17 |
| **Yazoo** | **21** |
| FMC Yazoo City | 21 |
| **State Total** | **1,757** |

[1] CON Approved but not yet licensed

**Map 7-2**
**End Stage Renal Disease Facilities**




Source: Mississippi State Department of Health, Division of Health Facilities Licensure and Certification, May 2014.

## 104 Certificate of Need Criteria and Standards for End Stage Renal Disease Facilities

**Note:** Should the Mississippi State Department of Health receive a Certificate of Need application regarding the acquisition and/or otherwise control of major medical equipment or the provision of a service for which specific CON criteria and standards have not been adopted, the application shall be deferred until the Department of Health has developed and adopted CON criteria and standards. If the Department has not developed CON criteria and standards within 180 days of receiving a CON application, the application will be reviewed using the general CON review criteria and standards presented in the *Mississippi Certificate of Need Review Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

### 104.01 Policy Statement Regarding Certificate of Need Applications for the Establishment of End Stage Renal Disease (ESRD) Facilities

1. Establishment of an ESRD Facility: The provision or proposed provision of maintenance dialysis services constitutes the establishment of an ESRD facility 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.

2. Annual Review Cycle: The MSDH shall accept and process CON applications proposing the establishment of ESRD facilities in accordance with the following review cycle:

   a. Applications may be submitted only during the period beginning July 1 and ending September 1 (5:00 p.m.) each year.

   b. All applications received during this period (July 1 through September 1 each year) which are deemed "complete" by October 1 of the year of submission, will be entered into the 90-day review cycle (October-December cycle).

   c. The State Health Officer will make CON decisions on "complete" applications in the month of December each year.

   d. Any CON application received other than in accordance with the above review cycle shall not be accepted by the Department, but shall be returned to the applicant.

3. Type of Review: CON applications for ESRD services shall be considered substantive as defined under the appropriate *Mississippi State Health Plan*, and "complete" competing applications from the same ESRD Facility Service Area shall be batched.

4. ESRD Facility Service Area: An ESRD Facility Service Area is defined as the area within a thirty (30) mile radius of an existing or proposed ESRD facility. ESRD Facility Service Areas, including the Service Areas of existing facilities which overlap with the proposed Service Area, shall be used for planning purposes.

5. CON Approval: A CON application for the establishment of an ESRD facility shall be considered for approval only when each individual facility within an applicant's

proposed ESRD Facility Service Area has maintained, at a minimum, an annual or prorated utilization rate of 80 percent as verified by the MSDH. The 12 months prior to the month of submission of the CON application shall be used to determine utilization, if such information is available and verifiable by the Department.

6. Need Threshold: For planning and CON purposes a need for an additional ESRD facility may exist when each individual operational ESRD station within a given ESRD Facility Service Area has maintained an annual utilization rate of 80 percent, i.e. an average of 749 dialyses per station per year. The need threshold may be adjusted to the appropriate need utilization based on the actual shifts in existence in the service area.

7. Utilization Definitions:

   a. Full Utilization: For planning and CON purposes, full (100 percent) utilization is defined as an average of 936 dialyses per station per year.

   b. Optimum Utilization: For planning and CON purposes, optimum (65 percent) utilization is defined as an average of 608 dialyses per station per year.

   c. Need Utilization: For planning and CON purposes, need (80 percent) utilization is defined as an average of 749 dialyses per station per year.

These utilization definitions are based upon three (3) shifts per day six (6) days per week, or eighteen (18) shifts per week. Only equipment (peritoneal or hemodialysis) that requires staff assistance for dialysis and is in operation shall be counted in determining the utilization rate. Utilization of equipment in operation less than twelve (12) months shall be prorated for the period of time in actual use.

8. Outstanding CONs: ESRD facilities that have received CON approval but are not operational shall be considered to be operating at 50 percent, which is the minimum utilization rate for a facility the first year of operation.

9. Utilization Data: The Department may use any source of data, subject to verification by the Department, it deems appropriate to determine current utilization or projected utilization of services in existing or proposed ESRD facilities. The source of data may include, but is not limited to, Medicare Certification records maintained by the Division of Health Facilities Licensure and Certification, ESRD Network #8 data, and Centers for Medicare and Medicaid Services (CMS) data.

10. Minimum Expected Utilization: It is anticipated that a new ESRD facility may not be able to reach optimum utilization (608 percent) of ten ESRD stations during the initial phase of operation. Therefore, for the purposes of CON approval, an application must demonstrate how the applicant can reasonably expect to have 50 percent utilization of a minimum of ten ESRD stations by the end of the first full year of operation and 65 percent utilization by the end of the third full year of operation.

11. Minimum Size Facility: No CON application for the establishment of a new ESRD facility shall be approved for less than ten (10) stations.

12. Expansion of Existing ESRD Facilities: Existing ESRD facilities may add ESRD stations without certificate of need review, as long as the facility does not add, over a period of two (2) years, more than the greater of ~~four (4)~~ six (6) stations or 15% of the facility's current number of certified stations.

13. Home Dialysis Programs: Each existing ESRD facility may establish or relocate one home dialysis program to any location within a 5-mile radius of the existing facility without certificate of need review; provided, however, that the facility shall submit an application for determination of non-reviewability prior to the establishment of the home dialysis program. If such established or relocated the home dialysis program is a freestanding program, the freestanding home dialysis program shall document that it has a back-up agreement for the provision of any necessary dialysis services with the existing ESRD facility. If an existing ESRD facility wants to create, either through establishment or relocation, more than one (1) home dialysis programs, the project shall be subject to CON review as the establishment of a new ESRD facility.

14. Establishment of Satellite ESRD Facilities: Any existing ESRD facility which reaches a total of 30 ESRD stations, may establish a ~~ten (10)~~ twelve (12) station satellite facility. ~~If~~ A certificate of need must be obtained by the facility prior to the establishment of the satellite facility. An ESRD facility may apply for a CON for more than one (1) satellite facility.

15. Non-Discrimination: An applicant shall affirm that within the scope of its available services, neither the facility nor its staff shall have policies or procedures which would exclude patients because of race, color, age, sex, or ethnicity.

16. Indigent/Charity Care: An applicant shall be required to provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this *Plan*.

17. Staffing: The facility must meet, at a minimum, the requirements and qualifications for staffing as contained in 42 CFR § 494.140. In addition, the facility must meet all staffing requirements and qualifications contained in the service specific criteria and standards.

18. Federal Definitions: The definitions contained in 42 CFR Subpart A § 494.10 shall be used as necessary in conducting health planning and CON activities.

19. Affiliation with a Renal Transplant Center: ESRD facilities shall be required to enter into a written affiliation agreement with a renal transplant center.

20. Treatment of Acute Renal Failure (ARF) Patients: An ESRD facility may seek authority, by filing a determination request, to add designated stations to its facility in order to provide dialysis services to ARF patients. The applicant must certify in its filing that the designated stations will only provide dialysis to ARF patients. Should the Department approve such designated stations, the ESRD facility will be required to report the designated stations utilization annually to the Department for review so that the Department may determine the need for the continued use of the designated stations. For purposes of this section, "acute renal failure patients" shall mean those patients needing dialysis that is unrelated to a diagnosis of ESRD.

## 104.02 Certificate of Need Criteria and Standards for End Stage Renal Disease (ESRD) Facilities

The Mississippi State Department of Health will review applications for a Certificate of Need for the establishment of an ESRD facility 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 Certificate of Need according to the general criteria as listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of the Mississippi State Department of Health; and the specific criteria and standards listed below.

When a provider proposes to offer ESRD services in an ESRD facility service area where he does not currently provide services or proposes to transfer an existing ESRD unit(s) from a current location into a different ESRD facility service area, it will constitute the establishment of a new ESRD health care facility. (Note: The transfer of dialysis stations from an existing ESRD facility to any other location is a relocation of a health care facility or portion thereof and requires Certificate of Need review. Likewise, new dialysis stations placed into service at a site separate and distinct from an existing ESRD facility constitutes the establishment of a new health care facility and requires Certificate of Need review. Dialysis stations placed into service in an individual patient's home or residence, solely for the treatment of the individual patient concerned, are exempt from this regulation.)

### 104.02.01 Establishment of an End Stage Renal Disease (ESRD) Facility

1. **Need Criterion for Establishment of New ESRD Facilities: An applicant proposing the establishment of a limited care renal dialysis facility or the relocation of a portion of an existing ESRD facility's dialysis stations to another location shall demonstrate, subject to verification by the Mississippi State Department of Health, that each individual existing ESRD facility in the proposed ESRD Facility Service Area has maintained a minimum annual utilization rate of eighty (80) percent.**

2. Need Criterion for Expansion of Existing ESRD Facilities:

   a. In the event that an existing ESRD facility proposes to add more than the greater of ~~four (4)~~ six (6) stations or 15% of the facility's current number of certified stations within a two-year period, then the facility must apply for a certificate of need, and shall document that it has maintained a minimum annual utilization rate of ~~65%~~ 55% for the 12 months prior to the month of the submission of the CON application. NOTE: ESRD Policy Statements 2, 4, 5 and 6, and Need Criterion 1, do not apply to applications for the expansion of existing ESRD facilities.

   b. Expansion of Satellite ESRD Facilities: In the event that a satellite ESRD facility proposes to add additional stations then the facility must apply for a certificate of need. In doing so, it shall document that it has maintained a minimum annual utilization rate of fifty-five percent (55%) for twelve (12) months prior to the month of the prior to the month of the submission of the CON application. NOTE: ESRD Policy Statements 2, 4, 5, and 6, and Need Criterion 1, do not apply to applications for the expansion of existing ESRD facilities.

3. Need Criterion for Establishment of ESRD Satellite Facilities: In order for a 30 station ESRD facility to be approved for the establishment of a ~~ten (10)~~ twelve (12) station satellite facility through the transfer and relocation of existing stations within a five mile radius or less from the existing facility, the facility must (a) document that it has maintained a minimum annual utilization rate of 55% for the 12 months prior to the month of the submission of the CON application; (b) justify the need for the project, which may include, but is not limited to, physical or space limitations at the existing facility; and (c) document that it is more cost effective to establish a satellite facility than to expand the existing facility. If the proposed satellite facility will be established at a location between a five and twenty-five mile radius of the existing facility, the facility must (a) document that it has maintained a minimum annual utilization rate of 55% for the 12 months prior to the month of the submission of the CON application; (b) justify the need for the project, which may include, but is not limited to, physical or space limitations at the existing facility; and (c) document that it is more cost effective to establish a satellite facility than to expand the existing facility; and (d) demonstrate that the proposed satellite facility's location is not within thirty miles of an existing facility without obtaining the existing facility's written support. NOTE: ESRD Policy Statements 2, 4, 5 and 6, and Need Criterion 1, do not apply to applications for the establishment of satellite ESRD facilities. An ESRD satellite facility established under this Need Criterion 3 shall not be used or considered for purposes of establishing or determining an ESRD Facility Service Area. An ESRD facility may apply for a CON for more than one (1) satellite facility.

4. Number of Stations: The applicant shall state the number of ESRD stations that are to be located in the proposed facility. No new facility shall be approved for less than ten (10) dialysis stations.

5. Minimum Utilization: The application shall demonstrate that the applicant can reasonably expect to meet the minimum utilization requirements as stated in ESRD Policy Statement #10.

6. Minimum Services: The application shall affirm that the facility will provide, at a minimum, social, dietetic, and rehabilitative services. Rehabilitative services may be provided on a referral basis.

7. Access to Needed Services: The application shall affirm that the applicant will provide for reasonable access to equipment/facilities for such needs as vascular access and transfusions required by stable maintenance ESRD patients.

8. Hours of Operation: The application shall state the facility's hours of operation each day of the week. The schedule should accommodate patients seeking services after normal working hours.

9. Home Training Program: The application shall affirm that the applicant will make a home training program available to those patients who are medically eligible and receptive to such a program. The application shall affirm that the applicant will counsel all patients on the availability of and eligibility requirements to enter the home/self-dialysis program.

10. Indigent/Charity Care: The application shall affirm that the applicant will provide a "reasonable amount" of indigent/charity care. The application shall also state the amount of indigent/charity care the applicant intends to provide.

11. Facility Staffing: The application shall describe the facility's staffing by category (i.e., registered nurse, technologist, technician, social worker, dietician) as follows:

    a. Qualifications (minimum education and experience requirements)

    b. Specific Duties

    c. Full Time Equivalents (FTE) based upon expected utilization

12. Staffing Qualifications: The applicant shall affirm that the staff of the facility will meet, at a minimum, all requirements and qualifications as stated in 42 CFR, Subpart D § 494.140.

13. Staffing Time:

    a. The applicant shall affirm that when the unit is in operation, at least one (1) R.N. will be on duty. There shall be a minimum of two (2) persons for each dialysis shift, one of whom must be an R.N.

    b. The applicant shall affirm that the medical director or a designated physician will be on-site or on-call at all times when the unit is in operation. It is desirable to have one other physician to supplement the services of the medical director.

    c. The applicant shall affirm that when the unit is not in operation, the medical director or designated physician and a registered nurse will be on-call.

14. Data Collection: The application shall affirm that the applicant will record and maintain, at a minimum, the following utilization data and make this data available to the Mississippi State Department of Health as required. The time frame for the submission of the utilization data shall be established by the Department.

    a. Utilization data, e.g., days of operation, shifts, inventory and classification of all stations, number of patients in dialysis, transplanted, or expired.

    b. The number of charity/indigent patients (as defined in this *Plan*) served by the facility and the number of dialysis procedures provided to these patients free of charge or at a specified reduced rate.

15. Staff Training: The application shall affirm that the applicant will provide an ongoing program of training in dialysis techniques for nurses and technicians at the facility.

16. Scope of Privileges: The applicant shall affirm that the facility shall provide access to doctors of medicine or osteopathic medicine licensed by the State of Mississippi who possess qualifications established by the governing body of the facility.

17. Affiliation with a Renal Transplant Center: The applicant shall affirm that within one year of commencing operation the facility will enter into an affiliation agreement with a transplantation center. The written agreement shall describe the relationship between the transplantation facility and the ESRD facility and the specific services that the transplantation center will provide to patients of the ESRD facility. The agreement must include at least the following:

    a. time frame for initial assessment and evaluation of patients for transplantation,

    b. composition of the assessment/evaluation team at the transplant center,

    c. method for periodic re-evaluation,

    d. criteria by which a patient will be evaluated and periodically re-evaluated for transplantation, and

    e. signatures of the duly authorized persons representing the facilities and the agency providing the services.

    f. Furthermore, the application shall affirm that the applicant understands and agrees that failure to comply with this criterion may (after due process) result in revocation of the Certificate of Need.

### 104.02.02 Establishment of a Renal Transplant Center

1. **Need Criterion: The applicant shall document that the proposed renal transplant center will serve a minimum population of 3.5 million people.**

2. The applicant shall document that the proposed facility will provide, at a minimum, the following:

    a. medical-surgical specialty services required for the care of ESRD transplant patients;

    b. acute dialysis services;

    c. an organ procurement system;

    d. an organ preservation program; and

    e. a tissue typing laboratory.

3. The applicant shall document that the facility will perform a minimum of 25 transplants annually.

# GLOSSARY

# Glossary

**Accessibility** — a measure of the degree to which the health care delivery system inhibits or facilitates an individual's ability to receive its services, including geographic, architectural, transportation, social, time, and financial considerations.

**Ambulatory Surgery** — surgical procedures that are more complex than office procedures performed under local anesthesia but less complex than major procedures requiring prolonged post-operative monitoring and hospital care to ensure safe recovery and desirable results. General anesthesia is used in most cases. The patient must arrive at the facility and expect to be discharged on the same day. Ambulatory surgery shall be performed only by physicians or dentists licensed to practice in the state of Mississippi.

Examples of procedures performed include, but are not limited to:

- Tonsillectomies and adenoidectomies
- Nasal polypectomy
- Submucosa resection
- Some cataract procedures
- Cosmetic procedures
- Breast biopsy
- Augmentation mammoplasty
- Hand surgery
- Cervical conization
- Laparoscopy and tubal sterilization
- Circumcision
- Urethral dilation
- Simple hernia repairs
- Stripping and ligation of varicose veins

**Ambulatory Surgical Facility** — a publicly or privately owned institution which is primarily organized, constructed, renovated, or otherwise established for the purpose of providing elective surgical treatment of outpatients whose recovery, under normal and routine circumstances, will not require inpatient care. Such facility as herein defined does not include the offices of private physicians or dentists whether practicing individually or in groups, but does include organizations or facilities primarily engaged in such outpatient surgery, whether using the name "ambulatory surgical facility" or a similar or different name. Such organization or facility, if in any manner considered to be operated or owned by a hospital or a hospital holding, leasing, or management company, either for-profit or not-for-profit, is required to comply with all Mississippi State Department of Health ambulatory surgical licensure standards governing a hospital affiliated facility as adopted under Section 41-9-1 et seq., Mississippi Code of 1972, provided that such organization or facility does not intend to seek federal certification as an ambulatory surgical facility as provided for 42 CFR, Parts 405 and 416. Further, if such organization or facility is to be operated or owned by a hospital or a hospital holding, leasing, or management company and intends to seek federal certification as an

ambulatory facility, then such facility is considered to be freestanding and must comply with all Mississippi State Department of Health ambulatory surgical licensure standards governing a freestanding facility. If such organization or facility is to be owned or operated by an entity or person other than a hospital or hospital holding, leasing, or management company, then such organization or facility must comply with all Mississippi Department of Health ambulatory surgical facility standards governing a freestanding facility.

**Bed Need Methodologies** — quantitative approaches to determining present and future needs for inpatient beds.

**Capital Improvements** — costs other than construction which will yield benefits over a period of years. Examples of capital improvements are painting, refurbishing, and land improvements, such as improving driveways, fences, parking lots, and sprinkler systems.

**Capitalized Interest** — interest incurred during the construction period, which is included in debt borrowing.

**Construction Formulas** —

**New Construction/Renovation**
(Prorated Project):

$$\text{Cost/square foot} = \frac{A+C+D+(E+F+G(A\%^{*}))}{\text{New Const. Square Feet}}$$

$$\text{Cost/square foot} = \frac{B+(E+F+G(B\%))^{**}+H}{\text{Renov. Square Feet}}$$

**New Construction**
(No Renovation Involved):

$$\text{Cost/square foot} = \frac{A+C+D+E+F+G}{\text{Square Feet}}$$

**Renovation**
(No New Construction):

$$\text{Cost/square foot} = \frac{B+C+E+F+G+H}{\text{Square Feet}}$$

When:

| | |
|---|---|
| A = New Construction | E = Fees |
| B = Renovation | F = Contingency |
| C = Fixed Equipment | G = Capitalized Interest |
| D = Site Preparation | H = Capital Improvement |

*A% - refers to the percentage of square feet allocated to new construction.

**B% - refers to the percentage of square feet allocated to renovation.

Example: ABC Health Care's project for construction/renovation consists of 10,000 square feet of new construction and 9,000 square feet of renovation, for a total of 19,000 square feet.

$$A\% = \frac{10{,}000}{19{,}000} \text{ or } 53\%$$

$$B\% = \frac{9{,}000}{19{,}000} \text{ or } 47\%$$

**Continuing Care Retirement Community** — a comprehensive, cohesive living arrangement for the elderly which is offered under a contract that lasts for more than one year or for the life of the resident and describes the service obligations of the CCRC and the financial obligations of the resident. The contract must obligate the CCRC to provide, at a minimum, room, board, and nursing care to an individual not related by consanguinity or affinity to the provider furnishing such care. The contract explicitly provides for full lifetime nursing home care as required by the resident. The resident may be responsible for the payment of some portion of the costs of his/her nursing home care, and the CCRC sponsor is responsible for the remaining costs as expressly set forth in the contract. Depletion of the contractee's personal resources does not affect the contribution of the CCRC sponsor.

**Conversion** — describes a major or proportional change that a health care facility undertakes in its overall mission, such as the change from one licensure category to another, from one organizational tax status to another, or from one type of health care facility to another.

**Cost Containment** — the control of the overall costs of health care services within the health care delivery system.

**Criteria** — guidelines or pre-determined measurement characteristics on which judgment or comparison of need, appropriateness, or quality of health services may be made.

**Distinct Part Skilled Nursing Unit -** Medicare eligible certified units which meet the current definition of "Distinct Part of an Institution as SNF" as defined in the current Medicare Part A Intermediary Manual by the Centers for Medicare and Medicaid Services (CMS) of the U.S. Department of Health and Human Services.

**Existing Provider** — an entity that has provided a service on a regular basis during the most recent 12-month period.

**Facilities** — collectively, all buildings constructed for the purpose of providing health care (including hospitals, nursing homes, clinics, or health centers, but not including physician offices); encompasses physical plant, equipment, and supplies used in providing health services.

**Feasibility Study** — a report prepared by the chief financial officer, CPA or an independent recognized firm of accountants demonstrating that the cash flow generated from the operation of the facility will be sufficient to complete the project being financed and to pay future annual debt service. The study includes the financial analyst's opinion of the ability of the facility to undertake the debt obligation and the probable effect of the expenditure on present and future operating costs.

**Freestanding Ambulatory Surgical Facility** — a separate and distinct facility or a separate and distinct organized unit of a hospital owned, leased, rented, or utilized by a hospital or other persons for the primary purpose of performing ambulatory surgery procedures. Such facility must be separately licensed as herein defined and must comply with all licensing standards promulgated by the Mississippi State Department of Health regarding a freestanding ambulatory surgical facility. Further, such facility must be a separate, identifiable entity and must be physically, administratively, and financially independent and distinct from other operations of any other health facility and shall maintain a separate organized medical and administrative staff. Furthermore, once licensed as a freestanding ambulatory surgical facility, such facility shall not become a component of any other health facility without securing a Certificate of Need to do so.

**Group Home** — a single dwelling unit whose primary function is to provide a homelike residential setting for a group of individuals, generally 8 to 20 persons, who neither live in their own home nor require institutionalization. Group homes are used as a vehicle for normalization.

**Habilitation** — the combined and coordinated use of medical, social, educational, and vocational measures for training individuals who are born with limited functional ability as contrasted with people who have lost abilities because of disease or injury.

**Home Health Agency** — certain services must be provided directly by a licensed home health agency and must include all skilled nursing services; physical, occupational, or speech therapy; medical social services; part-time or intermittent services of a home health aide; and other services as approved by the licensing agency for home health agencies. In this instance, "directly" means either through an agency employee or by an arrangement with another individual not defined as a health care facility.

**Hospital Affiliated Ambulatory Surgical Facility** — a separate and distinct organized unit of a hospital or a building owned, leased, rented, or utilized by a hospital and located in the same county in which the hospital is located for the primary purpose of performing ambulatory surgery procedures. Such facility is not required to be separately licensed and may operate under the hospital's license in compliance with all applicable requirements of Section 41-9-1 et seq.

**Limited Care Renal Dialysis Facility** — a health care facility which provides maintenance or chronic dialysis services on an ambulatory basis for stable ESRD patients. The limited care renal dialysis facility is considered a substitute for home dialysis to be used by patients who cannot dialyze at home. The facility provides follow-up and back-up services for home dialysis patients.

**Magnetic Resonance Imaging (MRI) Scientist** — a professional with similar skills and job qualifications as a medical physicist, who holds a comparable degree in an allied science, such as chemistry or engineering, and shows similar experience as the medical physicist with medical imaging and MRI imaging spectroscopy.

**Market Share** — historical data used to define a primary or secondary geographic service area, i.e. patient origin study, using counties, zip codes, census tracts.

**Observation Bed** — a licensed, acute care bed on the premise of a licensed, short-term, acute care facility. The hospital bed shall be used by a physician and/or nursing/medical staff to periodically monitor/evaluate a patient's medical condition. A bed that is occupied by a patient who is admitted to the hospital for a period of 23 hours and 59 minutes or ≤ (less than) 48 hours will be counted as an observation bed. Also, the status of a patient will be documented by a physician as an <u>outpatient</u>.

**Observation Services** — a well-defined set of specific, clinically appropriate services, which include ongoing short term treatment, assessment, and reassessment, that are furnished while a decision is being made regarding whether patients will require further treatment as hospital inpatients or if they are able to be discharged from the hospital. Observation services begin at the clock time <u>documented in the patient's medical record</u>, which coincides with the time that observation services are initiated in accordance with a <u>physician's order</u> for observation services. In most cases, a beneficiary (patient) may not remain in observation status for more than 24 or 48 hours. The hospital status of a patient will be documented as an <u>outpatient until</u> the physician writes an order to admit a person as an inpatient. Billing and coding of physician services are expected to be billed consistent with the patient's status as an outpatient or an inpatient.

General standing orders for observation services following all outpatient surgery are not recognized. Hospitals should not report postoperative monitoring during a standard recovery period (e.g., 4-6 hours) as observation care, services because those hours may be considered recovery room services.

**Occupancy Rate** — measure of average percentage of hospital beds occupied; determined by dividing available bed-days (bed capacity) by patient days actually used during a specified time period.

**Outpatient Facility** — a medical institution designed to provide a limited or full spectrum of health and medical services (including health education and maintenance services, preventive services, diagnosis, treatment, and rehabilitation) to individuals who do not require hospitalization or institutionalization.

**Pediatric Skilled Nursing Facility** — a pediatric skilled nursing facility is an institution or a distinct part of an institution that is primarily engaged in providing to inpatients skilled nursing care and related services for persons under 21 years of age who require medical, nursing care, or rehabilitation services for the rehabilitation of injured, disabled, or sick persons.

**Policy Statement** — a definite course of action selected in light of given conditions to guide and determine present and future decisions.

**Positron Emission Tomography (PET)** — a non-invasive imaging procedure in which positron-emitting radionuclides, that are produced either by a cyclotron or a radiopharmaceutical producing generator, and a nuclear camera are used to create pictures of organ function rather than structure. PET, therefore, has the potential for providing unique, clinically important information about disease processes. Key applications for PET are in coronary artery disease and myocardial infarction, epilepsy, cerebral gliomas, and dementia.

**Radiation Therapy** — the use of ionizing radiations for the treatment of tumors.

**Renal Dialysis Center** — a health care facility which provides dialysis services to hospital patients who require such services. The dialysis provided in a renal dialysis center functions primarily as a backup program for ESRD patients dialyzing at home or in a limited care facility who are placed in a hospital. A renal dialysis center may also serve as an initial dialysis setting for newly diagnosed ESRD patients who are in the hospital. A center may also provide acute dialysis services as needed.

**Renal Transplant Center** — a health care facility which provides direct transplant and other medical-surgical specialty services required for the care of the ESRD transplant patient. Services provided include, but are not limited to, acute renal dialysis, organ procurement system, organ preservation program, and tissue typing laboratory.

**Standard** — a quantitative level to be achieved regarding a particular criterion to represent acceptable performance as judged by the agency establishing the standard.

**Therapeutic Radiation Services** — therapeutic radiation treatments/procedures delivered through the use of a linear accelerator or 60Co teletherapy unit.

**Therapeutic Radiation Unit/Equipment** — a linear accelerator or 60Co teletherapy unit. This equipment is also commonly referred to as a "megavoltage therapeutic radiation unit/equipment."

# APPENDIX

# NURSING HOME BED NEED

# 2020

## Table 2-3A
## 2020 Projected Nursing Home Bed Need[1]

| State of Mississippi | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Long-Term Care Planning District** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| District I | 496,626 | 248 | 51,737 | 517 | 30,285 | 1,090 | 15,643 | 2,112 | 3,968 | 177 | 3,076 | 715 |
| District II | 492,597 | 246 | 57,424 | 574 | 37,819 | 1,361 | 20,806 | 2,809 | 4,991 | 48 | 3,825 | 1,118 |
| District III | 724,285 | 362 | 81,025 | 810 | 45,481 | 1,637 | 24,559 | 3,315 | 6,125 | 52 | 4,518 | 1,555 |
| District IV | 880,964 | 440 | 102,734 | 1,027 | 64,346 | 2,316 | 34,549 | 4,664 | 8,448 | 298 | 5,156 / 182 | 2,812 |
| **State Total** | **2,594,472** | **1,297** | **292,920** | **2,929** | **177,931** | **6,406** | **95,557** | **12,900** | **23,532** | **575** | **16,575 / 182** | **6,200** |

[1] Data may not equal totals due to rounding

**Note**: Licensed beds do not include 719 beds operated by the Department of Mental Health, 120 beds operated by the Mississippi Band of Choctaw Indians, 600 beds operated by the Mississippi Veteran's Affairs Board, 60 beds operated by the Mississippi Methodist Rehabilitation Center for the treatment of patients with special disabilities, including persons with spinal cord and closed-head injuries and ventilator-dependent patients, or 574 beds licensed to continuing care retirement communities (CCRC).

Sources: Mississippi State Department of Health, Division of Licensure and Certification; and Division of Health Planning and Resource Development Calculations, 2014

Population Projections: *Mississippi Population Projections 2016, 2020, and 2025*. Center for Policy Research and Planning, Mississippi Institutions of Higher Learning, September 2008

## Table 2-3A (continued)
## 2020 Projected Nursing Home Bed Need

| District I | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Attala | 16,091 | 8.05 | 1,953 | 19.53 | 1,489 | 53.60 | 861 | 116.24 | 197 | 0 | 120 | 77 |
| Bolivar | 29,339 | 14.67 | 3,498 | 34.98 | 1,888 | 67.97 | 962 | 129.87 | 247 | 60 | 290 | -103 |
| Carroll | 7,324 | 3.66 | 1,195 | 11.95 | 802 | 28.87 | 401 | 54.14 | 99 | 0 | 60 | 39 |
| Coahoma | 20,425 | 10.21 | 2,485 | 24.85 | 1,470 | 52.92 | 795 | 107.33 | 195 | 8 | 170 | 17 |
| DeSoto | 189,592 | 94.80 | 16,462 | 164.62 | 8,995 | 323.82 | 4,102 | 553.77 | 1,137 | 0 | 320 | 817 |
| Grenada | 19,183 | 9.59 | 2,303 | 23.03 | 1,543 | 55.55 | 869 | 117.32 | 205 | 10 | 237 | -42 |
| Holmes | 15,752 | 7.88 | 1,420 | 14.20 | 860 | 30.96 | 486 | 65.61 | 119 | 10 | 128 | -19 |
| Humphreys | 7,119 | 3.56 | 931 | 9.31 | 507 | 18.25 | 294 | 39.69 | 71 | 0 | 60 | 11 |
| Leflore | 28,414 | 14.21 | 2,579 | 25.79 | 1,480 | 53.28 | 810 | 109.35 | 203 | 8 | 402 | -207 |
| Montgomery | 8,348 | 4.17 | 1,186 | 11.86 | 872 | 31.39 | 510 | 68.85 | 116 | 0 | 120 | -4 |
| Panola | 30,817 | 15.41 | 3,153 | 31.53 | 1,963 | 70.67 | 1,069 | 144.32 | 262 | 0 | 190 | 72 |
| Quitman | 5,879 | 2.94 | 549 | 5.49 | 372 | 13.39 | 209 | 28.22 | 50 | 0 | 60 | -10 |
| Sunflower | 21,836 | 10.92 | 2,070 | 20.70 | 1,093 | 39.35 | 571 | 77.09 | 148 | 2 | 242 | -96 |
| Tallahatchie | 9,437 | 4.72 | 1,321 | 13.21 | 877 | 31.57 | 480 | 64.80 | 114 | 21 | 77 | 16 |
| Tate | 24,541 | 12.27 | 2,700 | 27.00 | 1,624 | 58.46 | 834 | 112.59 | 210 | 0 | 120 | 90 |
| Tunica | 10,617 | 5.31 | 1,065 | 10.65 | 524 | 18.86 | 247 | 33.35 | 68 | 0 | 60 | 8 |
| Washington | 40,315 | 20.16 | 5,477 | 54.77 | 2,927 | 105.37 | 1,569 | 211.82 | 392 | 58 | 298 | 36 |
| Yalobusha | 11,597 | 5.80 | 1,390 | 13.90 | 999 | 35.96 | 574 | 77.49 | 133 | 0 | 122 | 11 |
| **District Total** | **496,626** | **248.31** | **51,737** | **517.37** | **30,285** | **1,090.26** | **15,643** | **2,111.81** | **3,968** | **177** | **3,076** | **715** |

## Table 2-3A (continued)
## 2020 Projected Nursing Home Bed Need

| District II | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Alcorn | 29,801 | 14.90 | 3,873 | 38.73 | 2,794 | 100.58 | 1,507 | 203.45 | 358 | 0 | 264 | 94 |
| Benton | 6,702 | 3.35 | 812 | 8.12 | 635 | 22.86 | 363 | 49.01 | 83 | 0 | 60 | 23 |
| Calhoun | 10,574 | 5.29 | 1,520 | 15.20 | 1,125 | 40.50 | 650 | 87.75 | 149 | 0 | 155 | -6 |
| Chickasaw | 14,359 | 7.18 | 1,757 | 17.57 | 1,182 | 42.55 | 652 | 88.02 | 155 | 0 | 139 | 16 |
| Choctaw | 6,689 | 3.34 | 1,063 | 10.63 | 694 | 24.98 | 392 | 52.92 | 92 | 13 | 47 | 32 |
| Clay | 15,888 | 7.94 | 2,155 | 21.55 | 1,235 | 44.46 | 723 | 97.61 | 172 | 20 | 140 | 12 |
| Itawamba | 18,872 | 9.44 | 2,193 | 21.93 | 1,559 | 56.12 | 816 | 110.16 | 198 | 0 | 196 | 2 |
| Lafayette | 38,776 | 19.39 | 3,228 | 32.28 | 2,088 | 75.17 | 1,181 | 159.44 | 286 | 0 | 180 | 106 |
| Lee | 70,950 | 35.48 | 8,130 | 81.30 | 4,876 | 175.54 | 2,608 | 352.08 | 644 | 0 | 347 | 297 |
| Lowndes | 46,336 | 23.17 | 6,026 | 60.26 | 3,621 | 130.36 | 1,917 | 258.80 | 473 | 0 | 320 | 153 |
| Marshall | 31,568 | 15.78 | 3,534 | 35.34 | 2,184 | 78.62 | 1,104 | 149.04 | 279 | 0 | 180 | 99 |
| Monroe | 29,146 | 14.57 | 3,818 | 38.18 | 2,648 | 95.33 | 1,490 | 201.15 | 349 | 0 | 332 | 17 |
| Noxubee | 8,946 | 4.47 | 1,073 | 10.73 | 622 | 22.39 | 335 | 45.23 | 83 | 0 | 60 | 23 |
| Oktibbeha | 38,771 | 19.39 | 3,300 | 33.00 | 2,088 | 75.17 | 1,124 | 151.74 | 279 | 0 | 179 | 100 |
| Pontotoc | 26,996 | 13.50 | 2,905 | 29.05 | 1,825 | 65.70 | 1,036 | 139.86 | 248 | 0 | 164 | 84 |
| Prentiss | 20,188 | 10.09 | 2,507 | 25.07 | 1,869 | 67.28 | 1,035 | 139.73 | 242 | 0 | 144 | 98 |
| Tippah | 17,430 | 8.72 | 2,018 | 20.18 | 1,449 | 52.16 | 806 | 108.81 | 190 | 0 | 240 | -50 |
| Tishomingo | 14,626 | 7.31 | 2,037 | 20.37 | 1,598 | 57.53 | 912 | 123.12 | 208 | 15 | 163 | 30 |
| Union | 24,030 | 12.02 | 2,603 | 26.03 | 1,749 | 62.96 | 988 | 133.38 | 234 | 0 | 180 | 54 |
| Webster | 7,065 | 3.53 | 887 | 8.87 | 665 | 23.94 | 396 | 53.46 | 90 | 0 | 155 | -65 |
| Winston | 14,884 | 7.44 | 1,985 | 19.85 | 1,313 | 47.27 | 771 | 104.09 | 179 | 0 | 180 | -1 |
| **District Total** | **492,597** | **246.30** | **57,424** | **574.24** | **37,819** | **1,361.48** | **20,806** | **2,808.81** | **4,991** | **48** | **3,825** | **1,118** |

## Table 2-3A (continued)
## 2020 Projected Nursing Home Bed Need

| District III | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Adams | 22,067 | 11.03 | 3,622 | 36.22 | 2,310 | 83.16 | 1,329 | 179.42 | 310 | 20 | 234 | 56 |
| Amite | 10,516 | 5.26 | 1,450 | 14.50 | 1,032 | 37.15 | 539 | 72.77 | 130 | 0 | 80 | 50 |
| Claiborne | 9,359 | 4.68 | 943 | 9.43 | 473 | 17.03 | 283 | 38.21 | 69 | 18 | 59 | -8 |
| Copiah | 25,248 | 12.62 | 2,860 | 28.60 | 1,736 | 62.50 | 963 | 130.01 | 234 | 0 | 180 | 54 |
| Franklin | 6,495 | 3.25 | 880 | 8.80 | 581 | 20.92 | 335 | 45.23 | 78 | 0 | 60 | 18 |
| Hinds | 208,563 | 104.28 | 23,595 | 235.95 | 12,366 | 445.18 | 6,615 | 893.03 | 1,678 | 14 | 1,399 | 265 |
| Issaquena | 1,062 | 0.53 | 110 | 1.10 | 76 | 2.74 | 38 | 5.13 | 9 | 0 | 0 | 9 |
| Jefferson | 7,060 | 3.53 | 803 | 8.03 | 442 | 15.91 | 249 | 33.62 | 61 | 0 | 60 | 1 |
| Lawrence | 10,999 | 5.50 | 1,302 | 13.02 | 820 | 29.52 | 476 | 64.26 | 112 | 0 | 60 | 52 |
| Lincoln | 29,871 | 14.94 | 3,616 | 36.16 | 2,328 | 83.81 | 1,331 | 179.69 | 315 | 0 | 320 | -5 |
| Madison | 102,068 | 51.03 | 9,303 | 93.03 | 4,758 | 171.29 | 2,619 | 353.57 | 669 | 0 | 275 | 394 |
| Pike | 33,647 | 16.82 | 3,972 | 39.72 | 2,456 | 88.42 | 1,435 | 193.73 | 339 | 0 | 285 | 54 |
| Rankin | 146,614 | 73.31 | 15,404 | 154.04 | 8,244 | 296.78 | 4,107 | 554.45 | 1,079 | 0 | 410 | 669 |
| Sharkey | 3,783 | 1.89 | 606 | 6.06 | 305 | 10.98 | 168 | 22.68 | 42 | 0 | 54 | -12 |
| Simpson | 22,837 | 11.42 | 2,650 | 26.50 | 1,652 | 59.47 | 927 | 125.15 | 223 | 0 | 180 | 43 |
| Walthall | 12,863 | 6.43 | 1,415 | 14.15 | 978 | 35.21 | 555 | 74.93 | 131 | 0 | 137 | -6 |
| Warren | 39,327 | 19.66 | 5,245 | 52.45 | 2,940 | 105.84 | 1,479 | 199.67 | 378 | 0 | 380 | -2 |
| Wilkinson | 8,527 | 4.26 | 897 | 8.97 | 562 | 20.23 | 323 | 43.61 | 77 | 0 | 105 | -28 |
| Yazoo | 23,379 | 11.69 | 2,352 | 23.52 | 1,422 | 51.19 | 788 | 106.38 | 193 | 0 | 240 | -47 |
| **District Total** | **724,285** | **362.14** | **81,025** | **810.25** | **45,481** | **1,637.32** | **24,559** | **3,315.47** | **6,125** | **52** | **4,518** | **1,555** |

## Table 2-3A (continued)
## 2020 Projected Nursing Home Bed Need

| District IV | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Population 0 - 64** | **Bed Need (0.5/1,000)** | **Population 65 - 74** | **Bed Need (10/1,000)** | **Population 75 - 84** | **Bed Need (36/1,000)** | **Population 85+** | **Bed Need (135/1,000)** | **Total Bed Need** | **# Beds in Abeyance** | **Licensed/CON Approved Beds** | **Difference** |
| Clarke | 13,053 | 6.53 | 1,833 | 18.33 | 1,240 | 44.64 | 695 | 93.83 | 163 | 0 | 120 | 43 |
| Covington | 18,940 | 9.47 | 1,993 | 19.93 | 1,398 | 50.33 | 773 | 104.36 | 184 | 0 | 120 | 64 |
| Forrest | 76,116 | 38.06 | 6,447 | 64.47 | 4,197 | 151.09 | 2,367 | 319.55 | 573 | 100 | 386 | 87 |
| George | 23,340 | 11.67 | 2,397 | 23.97 | 1,430 | 51.48 | 688 | 92.88 | 180 | 0 | 79 / 41 | 60 |
| Greene | 10,646 | 5.32 | 1,186 | 11.86 | 731 | 26.32 | 363 | 49.01 | 93 | 0 | 120 | -27 |
| Hancock | 39,628 | 19.81 | 5,435 | 54.35 | 3,636 | 130.90 | 1,918 | 258.93 | 464 | 29 | 140 | 295 |
| Harrison | 156,334 | 78.17 | 19,550 | 195.50 | 11,865 | 427.14 | 6,311 | 851.99 | 1,553 | 60 | 742 | 699 |
| Jackson | 115,300 | 57.65 | 14,617 | 146.17 | 8,595 | 309.42 | 4,211 | 568.49 | 1,082 | 0 | 528 | 554 |
| Jasper | 14,835 | 7.42 | 1,764 | 17.64 | 1,155 | 41.58 | 657 | 88.70 | 155 | 0 | 110 | 45 |
| Jeff Davis | 9,741 | 4.87 | 1,333 | 13.33 | 902 | 32.47 | 485 | 65.48 | 116 | 0 | 60 | 56 |
| Jones | 56,837 | 28.42 | 6,712 | 67.12 | 4,446 | 160.06 | 2,552 | 344.52 | 600 | 10 | 418 | 172 |
| Kemper | 7,795 | 3.90 | 979 | 9.79 | 632 | 22.75 | 369 | 49.82 | 86 | | 60 | 26 |
| Lamar | 52,145 | 26.07 | 4,882 | 48.82 | 2,630 | 94.68 | 1,319 | 178.07 | 348 | 3 | 177 | 168 |
| Lauderdale | 62,209 | 31.10 | 7,723 | 77.23 | 4,965 | 178.74 | 2,858 | 385.83 | 673 | 47 | 525 / 21 | 80 |
| Leake | 21,557 | 10.78 | 2,328 | 23.28 | 1,502 | 54.07 | 886 | 119.61 | 208 | 0 | 143 | 65 |
| Marion | 21,267 | 10.63 | 2,613 | 26.13 | 1,598 | 57.53 | 952 | 128.52 | 223 | 0 | 297 | -74 |
| Neshoba | 27,246 | 13.62 | 2,961 | 29.61 | 1,940 | 69.84 | 1,094 | 147.69 | 261 | 3 | 217 | 41 |
| Newton | 19,177 | 9.59 | 2,163 | 21.63 | 1,511 | 54.40 | 899 | 121.37 | 207 | 0 | 180 | 27 |
| Pearl River | 54,348 | 27.17 | 6,526 | 65.26 | 4,128 | 148.61 | 2,065 | 278.78 | 520 | 6 | 240 / 120 | 154 |
| Perry | 10,134 | 5.07 | 1,187 | 11.87 | 758 | 27.29 | 386 | 52.11 | 96 | 0 | 60 | 36 |
| Scott | 23,844 | 11.92 | 2,764 | 27.64 | 1,676 | 60.34 | 925 | 124.88 | 225 | 0 | 140 | 85 |
| Smith | 12,617 | 6.31 | 1,606 | 16.06 | 1,108 | 39.89 | 593 | 80.06 | 142 | 0 | 121 | 21 |
| Stone | 16,394 | 8.20 | 1,764 | 17.64 | 994 | 35.78 | 497 | 67.10 | 117 | 40 | 83 | -6 |
| Wayne | 17,461 | 8.73 | 1,971 | 19.71 | 1,309 | 47.12 | 686 | 92.61 | 168 | 0 | 90 | 78 |
| **District Total** | **880,964** | **440.48** | **102,734** | **1,027.34** | **64,346** | **2,316.46** | **34,549** | **4,664.12** | **8,448** | **298** | **5,156 / 182** | **2,812** |