

Title 15 - Mississippi Department of Health
Part VIII – Office of Health Policy and Planning
Subpart 90 – Planning and Resource Development

Chapter 1 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Year 2018 Mississippi State Health Plan, Second Edition* extend from November 10, 2018, through June 30, 2019, or until superseded by a later *Plan*.

The 2018 State Health Plan, Second Edition 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 of 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 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 intellectually disabled; 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 *State Health Plan* includes data provided by the Office of Licensure and Certification via the Applications for Renewal of Hospital License, the Annual Hospital Reports, and the Report on Institutions for the Aged or Infirm. The Office of Licensure and Certification is responsible for the collection of these data through reports submitted by hospitals and healthcare facilities. These data are reported in the *Plan* as it has been provided by the Office of Licensure and Certification for health planning purposes.

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

102 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 cost containment.

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*.

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, 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 Medicaid/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.

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*.

102.01 Teaching Exception

Section 41-7-187, Mississippi Code Annotated, as amended, authorizes MSDH to develop and implement the CON program. As the Mississippi Supreme Court recognized in *Jackson HMA, LLC, et al. v. Mississippi State Department of Health, et al.*, 98 So.3d 980, 986 (Miss. 2012), through this statute and others the Legislature delegated to MSDH the authority to adopt rules and regulations “to determine when a CON is required.” Therefore, any activity or project at the University of Mississippi Medical Center principally designed to train health professionals and/or further the academic research mission of the institution, shall not require the issuance of a CON, notwithstanding any provision in Section 41-7-171 *et seq.* to the contrary, provided that any person proposing to undertake any such activity that may be subject to the CON program shall file a Determination of Reviewability, as authorized by Section 41-7-205 and the *Mississippi Certificate of Need Review Manual* or other regulations adopted by MSDH, that demonstrates the activity or project:

1. is consistent with the teaching and/or academic research mission of the applicant;
2. is undertaken in support of a program(s) accredited by the Accreditation Council for Graduate Medical Education (ACGME), Liaison Committee on Medical Education (LCME), or other academic accrediting body, including but not limited to, the Commission on Collegiate Nursing Education (CCNE), Accreditation Council for Pharmacy Education (ACPE), Commission on Dental Accreditation (CODA), and Southern Association of Colleges and Schools Commission on Colleges (SACSCOC); and
3. addresses one or more priority health need(s) of the *State Health Plan*.

103 Population for Planning

Population projections used in this *Plan* were calculated by the State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018. This plan is based on 2023 population projections.

Map 1-1 depicts the state's 2023 estimated population by county. Mississippi population projections for the years 2017 and 2023 were obtained from the State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018.

104 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.

104.01 Physicians

Mississippi had 5,744 active medical doctors, 407 osteopaths, and 68 podiatrists licensed by the Board of Medical Licensure for FY 2016 (licensing year 2017) for a total of 6,219 active licensed physicians practicing in the state. This number represents an increase of 43 physicians, or more than 0.69 percent, from FY 2015 (licensing year 2016).

Approximately 2,372 (41 percent) of the state's active medical doctors are primary care physicians, representing a ratio of one primary care physician for every 1,323 persons, based on 2023 projected population. The primary care physicians included 754 family practitioners, seventy-five (75) general practitioners, 739 internal medicine physicians, 329 obstetrical and gynecological physicians, and 475 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 116 primary care health professional shortage area (HPSA) designations. Seventy-eight (78) of the designations are single county designations. The United States Department of Health and Human Services defines a primary care 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.

104.02 Dentists

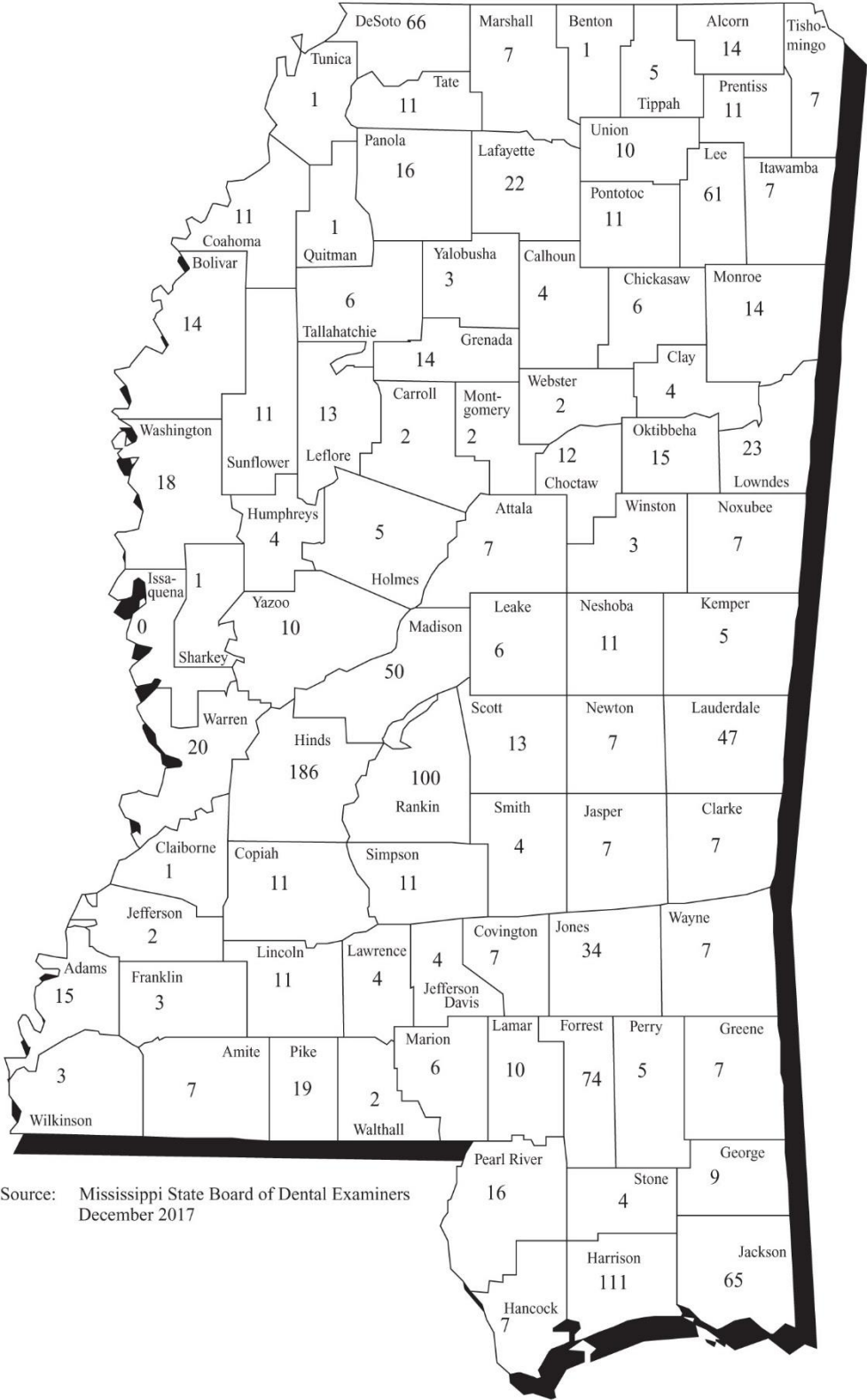
The Mississippi State Board of Dental Examiners reported 1,421 licensed (1,380 “active” and 41 “inactive”) dentists in the state as of December 2017, with 103 new dentists licensed during calendar year 2016. Based on Mississippi's 2023 projected population of 3,138,145 the state has one active dentist for every 2,274 persons.

According to the Health Resources and Services Administration’s Office of Shortage Designation (HRSA/OSD), Mississippi currently has a total of 110 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 336 active dentists in the fall of 2017, with 186 in Hinds County, 100 in Rankin County, and 50 in Madison County. The Gulf Coast region had the second largest count at 183, with 111 in Harrison County, 65 in Jackson County, and 7 in Hancock County. Combined, these two metropolitan areas contained 37.61 percent of the state's total supply of active dentists.

On the opposite end of the spectrum, six counties— Benton, Claiborne, Tate, Tunica, Sharkey, and Quitman—had only one active dentist each and one county— 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
December 2017

104.03 Nurses

Registered Nurses

The Mississippi Board of Nursing reported 52,852 registered nurses (RNs) licensed in FY 2017 with (39,897) who worked full or part-time in nursing careers. That included 21,124 in hospitals; 3,928 in community, public, or home health; 2,415 in physicians' offices; 2,233 in nursing homes; and the remainder in other nursing careers. RNs by degree in FY 2017 included, 4,802 diploma, 32,743 associates, 4,823 baccalaureate non-nursing, 23,756 baccalaureate nursing, 1,434 masters non-nursing, 23,756 masters nursing, and 391 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 2017 there were 6,959 RNs certified as APRNs, with 4,767 family nurse practitioners; 759 certified registered nurse anesthetist; and 506 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 14,015 licensed practical nurses (LPNs) licensed in FY 2017 with 10,642 who worked full or part-time in nursing careers. That included 4,500 in nursing homes; 1,091 in hospitals; 1,768 in community, public, or home health; and the remainder in other nursing careers. There were 5,238 LPNs certified for an expanded role in FY 2017, including 4,973 in intravenous therapy, 152 in hemodialysis, and 113 in both expanded roles.

104.04 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 1,987 licensed physical therapists in Mississippi as of November 17, 2017 with 1,717 residing in the state and 1,709 practicing in the state. Nine percent of the Mississippi resident physical therapists practitioners live in Hinds County, eight percent in Harrison County, eight percent in Madison County, and seven percent in Lee County for a total of 32 percent in four counties. The Board also reported 1,274 licensed physical therapist assistants, with 1,120 residing in the state and 1,112 practicing in the state.

104.05 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.

MSDH reported 1,134 licensed occupational therapists and 666 licensed occupational therapy assistants on its Mississippi roster as of November 7, 2017, with 980 of the OTs and 597 of the OTAs residing in the state.

104.06 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 2016, Mississippi issued 1,349 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 2016, the MSDH Bureau of Emergency Medical Services reported issuing a total of 1,787 EMT certifications or recertifications 1,265 Paramedics and 20 Critical Care 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 2016, BEMS certified 9 medical first responders.

Chapter 02 Long-Term Care

“Long-term care” refers to a variety of services rendered to assist a person with chronic conditions or disabilities that reduce their capacity to function independently.

Mississippi’s long-term care (nursing home and home health) patients are primarily disabled, elderly people, who make up seventeen percent (17%) percent of the 2023 projected population above age sixty-five (65). Projections place the number of people in this age group at approximately 535,379 by 2023.

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 disabling chronic conditions, which the present medical system can “manage” but not cure. As a result, Aged individuals may become dependent on medical technology and professional care providers for years - not just weeks or months.

200 Options for Long-Term Care

Community Based long-term care programs can potentially delay or prevent institutionalization. These programs, although not reviewable under Certificate of Need, drastically affect the demand for skilled nursing beds.

Community based programs 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.

201 Housing for the Elderly

Many elderly or infirmed people do not need skilled nursing care on a daily basis, but may need safe, affordable housing and assistance with one or more activities of daily living. Housing for the elderly and infirmed population 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 facilities and Personal Care Home - Assisted Living facilities. Both types of facilities provide a sheltered environment and assistance with 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 2016, the state had 181 licensed personal care homes, with a total of 5,779 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 daily meals. 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 or require their residents to sign a lifetime contract. Most facilities generally offer only independent living and personal care. Most also do not include a skilled nursing home as a part of the retirement community. Table 2-1 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
2016**

District I				District II			
County	Licensed Beds	Occupancy Rate %	Average Daily Census	County	Licensed Beds	Occupancy Rate %	Average Daily Census
Attala	30	0.00	0.00	Alcorn	69	85.00	58.66
Bolivar	137	91.17	113.06	Benton	N/A	N/A	N/A
Carroll	15	0.00	0.00	Calhoun	20	52.96	10.60
Coahoma	36	15.58	5.62	Chickasaw	18	72.98	13.14
DeSoto	479	80.79	386.98	Choctaw	14	80.98	11.34
Grenada	63	87.06	54.84	Clay	28	77.33	21.60
Holmes	N/A	N/A	N/A	Itawamba	172	64.72	111.30
Humphreys	N/A	N/A	N/A	Lafayette	260	62.92	163.60
Leflore	80	72.22	57.78	Lee	444	69.77	309.78
Montgomery	N/A	N/A	N/A	Lowndes	200	70.26	92.74
Panola	54	87.20	47.08	Marshall	46	97.34	44.78
Quitman	N/A	N/A	N/A	Monroe	83	92.00	76.34
Sunflower	50	90.98	34.58	Noxubee	33	57.19	18.86
Tallahatchie	N/A	N/A	N/A	Oktibbeha	129	70.55	38.10
Tate	90	182.74	78.64	Pontotoc	40	85.54	34.22
Tunica				Prentiss	40	55.78	22.30
Washington	152	87.54	99.80	Tippah	N/A	N/A	N/A
Yalobusha	N/A	N/A	N/A	Tishomingo	92	74.13	68.20
				Union	116	57.52	51.20
				Webster	13	0.00	0.00
				Winston	37	89.16	17.84
District Total	1,186	79.53	878.38	District Total	1,854	65.81	1,164.60

Table 2-1 (Continued)
Personal Care Home Licensed Beds, Occupancy Rates and Average Daily Census
2016

District III				District IV			
County	Licensed Beds	Occupancy Rate %	Average Daily Census	County	Licensed Beds	Occupancy Rate %	Average Daily Census
Adams	44	85.10	37.44	Clarke	55	30.16	9.04
Amite	0	0.00	0.00	Covington	36	66.84	24.06
Claiborne	5	0.00	0.00	Forrest	241	66.47	122.94
Copiah	N/A	N/A	N/A	George	81	89.80	45.78
Franklin	N/A	N/A	N/A	Greene	N/A	N/A	N/A
Hinds	531	70.81	341.30	Hancock	32	64.89	19.46
Issaquena	N/A	N/A	N/A	Harrison	505	77.66	271.82
Jefferson	N/A	N/A	N/A	Jackson	82	95.48	68.74
Lawrence	N/A	N/A	N/A	Jasper	48	36.22	17.38
Lincoln	24	46.32	3.70	Jeff Davis	N/A	N/A	N/A
Madison	588	71.66	349.74	Jones	202	60.27	92.84
Pike	98	64.61	63.32	Kemper	N/A	N/A	N/A
Rankin	430	76.40	147.46	Lamar	163	75.80	123.54
Sharkey	N/A	N/A	N/A	Lauderdale	221	38.94	71.20
Simpson	30	94.76	28.42	Leake	40	77.01	30.82
Walthall	N/A	N/A	N/A	Marion	22	59.35	13.06
Warren	73	73.27	53.48	Neshoba	53	79.48	11.92
Wilkinson	N/A	N/A	N/A	Newton	54	58.12	31.40
Yazoo	N/A	N/A	N/A	Pearl River	55	86.66	34.66
				Perry	42	94.13	39.54
				Scott	30	85.55	25.66
				Smith	N/A	N/A	N/A
				Stone	1	100.00	1.00
				Wayne	55	70.27	38.64
District Total	1,823	58.29	1,024.86	District Total	2,018	74.37	1093.50
State Total					5,779	65.41	3,557.20

Source: 2016 Report on Institutions for the Aged or Infirm; MSDH, Bureau of Health Facilities Licensure and Certification

“Continuing Care Retirement Communities” (CCRC), another type of retirement community, includes three stages: 1) independent living in a private apartment, 2) a personal care facility, and 3) 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 resident’s life. Since CCRC beds are licensed as skilled nursing facility beds, they are included in Table 2-2.

202 Nursing Facilities

As of FY 2016, Mississippi has 208 licensed skilled nursing facilities, with a total of 18,274 licensed beds. This count of licensed nursing home beds excludes the following: 120 beds operated by the Mississippi Band of Choctaw Indians; 562 licensed beds operated by the Department of Mental Health and 658 operated by the Mississippi State Veteran's Affairs Board; and 104 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 2-2 presents the projected nursing home bed need for 2018 by planning district. Both the map and table appear in the criteria and standards section of this chapter. For 2023 projections, see Table 2-2A in the Appendix.

203 Long-Term Care Beds for Individuals with Intellectual Disabilities and Developmental Disabilities

Mississippi has 2,434 licensed beds classified as Intermediate Care Facility for the Intellectually Disabled (ICF/ID). The Department of Mental Health (DMH) operates five comprehensive regional programs that contain 1,492 active licensed and staffed beds. In addition to intellectual and developmental disabilities, the residents of the DMH regional centers also have severe physical disabilities that result in residents requiring care at the nursing home level. Regular nursing facilities are not equipped to serve these individuals. Map 2-2 shows the ID/DD Long-Term Care Planning Districts and Table 2-3 presents the ID/DD nursing home bed need by Planning District. Both the map and table appear in the criteria and standards section of this chapter.

204 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.

204.01 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 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 intellectually disabled, 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 sixty (60) bed nursing facility to be added to each of twenty-six (26) counties with the greatest need between the years 2000 and 2003. The Legislature also permitted CONs for sixty (60) nursing facility beds for individuals with Alzheimer's 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 facility must submit a letter requesting that the beds be placed in abeyance. 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 sixty (60) months or more shall require a Certificate of Need prior to reopening.

- g. MSDH shall determine the need for additional nursing home care beds based on the Long Term Care Planning Districts (LTCPDs) as outlined on Map 2-1. 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: 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 State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018.
4. Bed Inventory: 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: MSDH shall not approve construction of a new or replacement nursing home care facility for less than sixty (60) beds. However, the number of beds authorized to be licensed in a new or replacement facility may be less than sixty (60) beds.
6. Definition of CCRC: See the Glossary of this *Plan*.
7. Medicare Participation: 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: 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.

204.02 Certificate of Need Criteria and Standards for Nursing Home Care Beds

If the legislative moratorium were removed or partially lifted, 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. 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 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 \$5,000,000; 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.

Need Criterion 1: Nursing Home Care Bed Need

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

Need Criterion 2: Number of Beds to be Constructed, Converted, and/or Licensed

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

Need Criterion 3: Consideration of Statistical Need

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

Need Criterion 4: Alzheimer's/Dementia Care Unit

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 MSDH for said Alzheimer's/Dementia Care Unit.

204.03 Certificate of Need Criteria and Standards for the Relocation/Transfer of Nursing Home Care Beds

Need Criterion 1: Relocation/Transfer of Nursing Home Care Beds

An applicant proposing to relocate/transfer a portion or all of an existing facility's nursing home care beds to another location shall document the relocation/transfer is within the current facility's LTCPD.

Need Criterion 2: Number of Beds to be Relocated/Transferred

The applicant shall document the number of beds to be relocated/transferred to provide nursing home care services.

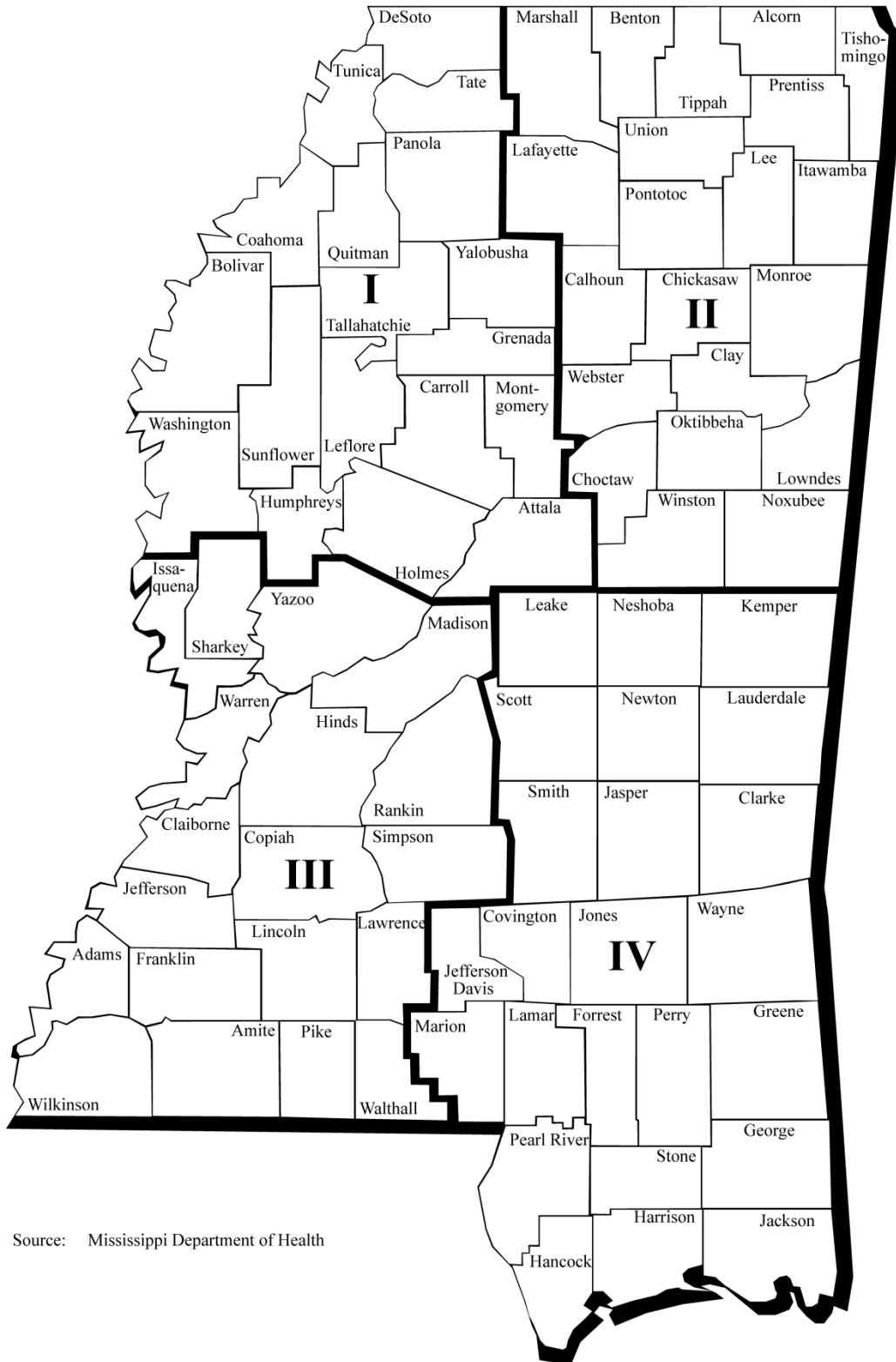
Need Criterion 3: Alzheimer's/Dementia Care Unit

Any applicant applying for the relocation/transfer of nursing home beds in an Alzheimer's/Dementia Care Unit shall affirm that the applicant shall fully comply with all licensure regulations of MSDH for said Alzheimer's/Dementia Care Unit.

204.04 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 MSDH, of the policy statements and general CON criteria and standards in the *Mississippi Certificate of Need Review Manual* 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 2-2
2018 Projected Nursing Home Bed Need¹**

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	Difference
District I	453,824	227	48,467	485	21,904	789	7,818	1,055	2,556	263	3,225	-932
District II	530,996	265	59,783	598	30,074	1,083	10,963	1,480	3,426	48	4,027	-649
District III	728,429	364	76,776	768	35,229	1,268	13,613	1,838	4,238	227	4,928	-917
District IV	901,367	451	100,344	1,003	47,755	1,719	16,195	2,186	5,360	328	6,124	-1,092
State Total	2,614,616	1,307	285,370	2,854	134,962	4,859	48,589	6,560	15,579	866	18,304	-3,591

¹ Data may not equal totals due to rounding

Note: This count of licensed nursing home beds excludes the following: 120 beds operated by the Mississippi Band of Choctaw Indians; 562 licensed beds operated by the Department of Mental Health and 658 operated by the Mississippi State Veteran's Affairs Board; and 104 beds (which are dedicated to serving patients with special rehabilitative needs, including spinal cord and closed-head injuries) operated by Mississippi Methodist Rehabilitation Center.

Sources: Mississippi State Department of Health, Division of Licensure and Certification; and Division of Health Planning and Resource Development Calculations, 2016

Population Projections: State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018.

**Table 2-2 (continued)
2018 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	Difference
Attala	15,635	8	2,205	22	1,090	39	464	63	132	0	120	12
Bolivar	24,941	12	3,229	32	1,146	41	498	67	153	60	350	-257
Carroll	8,081	4	1,439	14	668	24	190	26	68	0	60	8
Coahoma	22,821	11	2,180	22	1,064	38	427	58	129	30	178	-79
DeSoto	150,179	75	13,529	135	6,353	229	1,981	267	707	0	320	387
Grenada	17,038	9	2,354	24	1,023	37	391	53	122	10	247	-135
Holmes	15,090	8	1,559	16	708	25	285	38	87	8	148	-69
Humphreys	7,770	4	767	8	376	14	147	20	45	0	60	-15
Leflore	24,713	12	2,450	25	1,074	39	535	72	148	62	370	-284
Montgomery	7,943	4	1,261	13	572	21	231	31	68	0	120	-52
Panola	30,228	15	3,278	33	1,616	58	550	74	180	0	190	-10
Quitman	6,805	3	801	8	403	15	143	19	45	0	60	-15
Sunflower	23,831	12	2,341	23	1,011	36	403	54	126	0	246	-120
Tallahatchie	14,539	7	1,207	12	557	20	194	26	66	21	98	-53
Tate	27,054	14	3,173	32	1,320	48	398	54	147	14	120	13
Tunica	10,219	5	890	9	352	13	109	15	41	0	60	-19
Washington	37,011	19	4,314	43	1,857	67	655	88	217	58	356	-197
Yalobusha	9,926	5	1,490	15	714	26	217	29	75	0	122	-47
District Total	453,824	227	48,467	485	21,904	789	7,818	1,055	2,556	263	3,225	-932

**Table 2-2 (continued)
2018 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	Difference
Alcorn	31,797	16	4,250	43	2,130	77	681	92	227	0	264	-37
Benton	7,708	4	964	10	472	17	164	22	53	0	60	-7
Calhoun	12,099	6	1,687	17	832	30	300	41	93	0	155	-62
Chickasaw	13,194	7	1,614	16	837	30	274	37	90	0	139	-49
Choctaw	6,024	3	1,019	10	490	18	174	23	54	13	60	-19
Clay	16,022	8	2,116	21	1,016	37	414	56	122	20	160	-58
Itawamba	19,425	10	2,471	25	1,291	46	449	61	142	0	196	-54
Lafayette	48,272	24	4,036	40	2,002	72	764	103	240	0	180	60
Lee	75,014	38	7,887	79	4,124	148	1,534	207	472	0	487	-15
Lowndes	51,902	26	5,567	56	2,728	98	1,067	144	324	0	380	-56
Marshall	32,780	16	3,843	38	1,655	60	598	81	195	0	180	15
Monroe	30,279	15	3,931	39	2,110	76	769	104	234	0	332	-98
Noxubee	9,833	5	1,024	10	520	19	215	29	63	0	60	3
Oktibbeha	44,558	22	3,229	32	1,638	59	636	86	199	0	179	20
Pontotoc	28,134	14	2,919	29	1,327	48	535	72	163	0	164	-1
Prentiss	21,020	11	2,566	26	1,445	52	526	71	159	0	144	15
Tippah	19,494	10	2,350	24	1,190	43	320	43	119	0	240	-121
Tishomingo	15,693	8	2,393	24	1,230	44	411	55	132	15	178	-61
Union	23,733	12	2,834	28	1,360	49	526	71	160	0	180	-20
Webster	8,557	4	1,055	11	572	21	154	21	56	0	155	-99
Winston	15,458	8	2,028	20	1,105	40	452	61	129	0	134	-5
District Total	530,996	265	59,783	598	30,074	1,083	10,963	1,480	3,426	48	4,027	-649

**Table 2-2 (continued)
2018 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	Difference
Adams	25,395	13	3,303	33	1,598	58	670	90	194	20	254	-80
Amite	9,870	5	1,689	17	832	30	285	38	90	0	80	10
Claiborne	8,455	4	907	9	416	15	148	20	48	4	73	-29
Copiah	24,822	12	3,082	31	1,386	50	534	72	165	30	150	-15
Franklin	6,434	3	887	9	453	16	162	22	50	0	60	-10
Hinds	223,398	112	20,114	201	8,956	322	3,633	490	1,126	59	1,518	-451
Issaquena	1,032	1	115	1	77	3	19	3	7	0	0	7
Jefferson	6,261	3	669	7	341	12	126	17	39	0	60	-21
Lawrence	10,720	5	1,323	13	721	26	229	31	75	0	60	15
Lincoln	29,981	15	3,617	36	1,694	61	694	94	206	0	320	-114
Madison	99,184	50	9,932	99	4,042	146	1,834	248	542	0	455	87
Pike	34,705	17	4,161	42	1,933	70	756	102	231	0	315	-84
Rankin	134,240	67	13,893	139	6,402	230	2,148	290	727	91	502	134
Sharkey	3,927	2	489	5	224	8	116	16	31	0	54	-23
Simpson	23,158	12	2,805	28	1,385	50	503	68	157	0	180	-23
Walthall	12,563	6	1,749	17	896	32	328	44	100	8	137	-45
Warren	41,589	21	4,925	49	2,287	82	784	106	258	0	380	-122
Wilkinson	8,045	4	892	9	453	16	169	23	52	15	90	-53
Yazoo	24,650	12	2,224	22	1,133	41	475	64	139	0	240	-101
District Total	728,429	364	76,776	768	35,229	1,268	13,613	1,838	4,238	227	4,928	-917

**Table 2-2 (continued)
2018 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	Difference
Clarke	12,620	6	1,962	20	917	33	277	37	96	0	120	-24
Covington	16,503	8	1,910	19	1,068	38	402	54	120	0	120	0
Forrest	66,372	33	6,387	64	2,887	104	1,184	160	361	80	536	-255
George	20,111	10	2,236	22	1,153	42	308	42	116	0	101	15
Greene	9,842	5	1,232	12	670	24	217	29	71	0	120	-49
Hancock	38,682	19	5,206	52	2,283	82	677	91	245	29	202	14
Harrison	175,018	88	17,421	174	7,704	277	2,614	353	892	80	932	-120
Jackson	123,313	62	13,481	135	6,448	232	1,910	258	686	0	528	158
Jasper	13,706	7	1,861	19	1,006	36	340	46	108	0	110	-2
Jeff Davis	8,898	4	1,545	15	677	24	239	32	77	0	60	17
Jones	58,640	29	6,818	68	3,357	121	1,145	155	373	10	428	-65
Kemper	8,551	4	1,095	11	596	21	229	31	68	0	60	8
Lamar	54,386	27	4,732	47	2,364	85	788	106	266	3	180	83
Lauderdale	68,825	34	7,902	79	3,882	140	1,512	204	457	77	825	-445
Leake	22,840	11	2,232	22	1,060	38	384	52	124	0	143	-19
Marion	23,417	12	2,891	29	1,414	51	582	79	170	0	297	-127
Neshoba	25,816	13	2,778	28	1,278	46	530	72	158	3	340	-185
Newton	18,408	9	2,085	21	1,105	40	456	62	131	0	180	-49
Pearl River	50,628	25	6,906	69	3,080	111	946	128	333	6	306	21
Perry	10,266	5	1,307	13	686	25	194	26	69	0	60	9
Scott	24,545	12	2,473	25	1,210	44	452	61	142	0	162	-20
Smith	13,616	7	1,840	18	952	34	224	30	90	0	121	-31
Stone	18,729	9	2,035	20	890	32	228	31	93	40	103	-50
Wayne	17,635	9	2,009	20	1,068	38	357	48	116	0	90	26
District Total	901,367	451	100,344	1,003	47,755	1,719	16,195	2,186	5,360	328	6,124	-1,092

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

1. The 1993 Mississippi Legislature authorized MSDH to issue a Certificate of Need for the construction of a pediatric skilled nursing facility not to exceed sixty (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 inpatients skilled nursing care and related services for persons under twenty-one (21) years of age who require medical, nursing care, or rehabilitation services.
3. 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 ID/DD facilities contained in the *State Health Plan*, and all adopted rules, procedures, and plans of MSDH.
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 Miss. Code Ann. 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 CON. The facility must submit a letter requesting that the beds be placed in abeyance. MSDH 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.

206 Certificate of Need Criteria and Standards for Nursing Home Care Services for Intellectually Disabled and other Developmentally Disabled Individuals

206.1 Policy Statement Regarding Certificate of Need Applications for the Offering of Nursing Home Care Services for Intellectually Disabled 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 intellectually disabled (ICF/ID).
 - 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 intellectually disabled, or psychiatric residential treatment facility which is owned by the State of Mississippi and under the direction and control of the Mississippi Department of Mental Health is exempted from the requirement of the issuance of a CON 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 CON.
 - 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 CON. The facility must submit a letter requesting that the beds be placed in abeyance. MSDH 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. ID/DD Long-Term Care Planning Districts (ID/DD LTCPD): The need for additional ID/DD nursing home care beds shall be based on the ID/DD LTCPDs as outlined on Map 2-2.
 3. Bed Need: The need for ID/DD nursing home care beds is established at one bed per 1,000 population less than 65 years of age.
 4. Population Projections: MSDH shall use population projections as presented in Table 2-3 when calculating bed need.
 5. Bed Limit: No ID/DD LTCPD shall be approved for more than its proportioned share of needed ID/DD nursing home care beds. No application shall be approved which would over-bed the state as a whole.
 6. Bed Inventory: MSDH shall review the need for additional ID/DD nursing home care beds utilizing the most recent information available regarding the inventory of such beds.

206.2 Certificate of Need Criteria and Standards for Nursing Home Beds for Intellectually Disabled and Other Developmentally Disabled Individuals

If the legislative moratorium were removed or partially lifted, MSDH would review applications for ID/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. 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 MSDH; and the specific criteria and standards listed below.

Certificate of Need review is required for the offering of ID/DD nursing home care services, as defined, if the capital expenditure exceeds \$5,000,000; if the licensed bed capacity is increased through the conversion or addition of beds; or if ID/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 ID/DD nursing home care beds regardless of capital expenditure.

Need Criterion 1: ID/DD Nursing Home Care Bed Need

The applicant shall document a need for ID/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 sixty-five (65) years of age, the state as a whole must show a need; and
- b. The ID/DD Long-Term Care Planning District (LTCPD) where the proposed facility/beds/services are to be located must show a need.

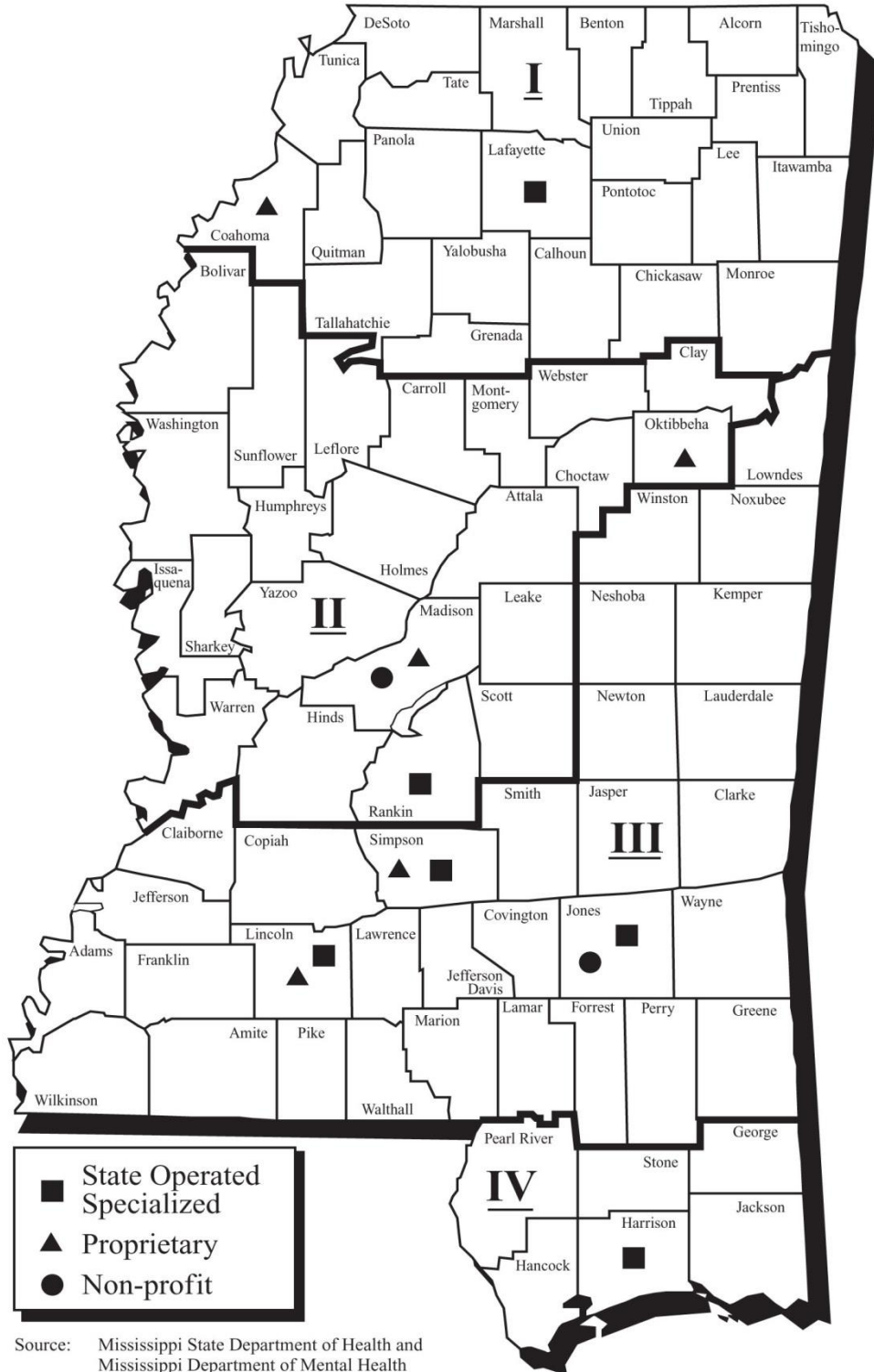
Need Criterion 2: Number of Beds to be Constructed, Converted, and/or Licensed

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

Need Criterion 3: Facilities Proposing to Add Fifteen or Less ID/DD Beds

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

Map 2-2
Intellectually Disabled/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 2-3
2018 Projected ID/DD Nursing Home Bed Need
(1 Bed per 1,000 Population Aged 65 and Under)**

	2017 Population <65	2016 Licensed Beds	Projected MR/DD Bed Need ¹	Difference ¹
Mississippi	2,614,616	2,434	2,615	181
District I	667,451	585	667	82
Alcorn	31,797		32	32
Benton	7,708		8	8
Calhoun	12,099		12	12
Chickasaw	13,194		13	13
Coahoma	22,821	132	23	-109
DeSoto	150,179		150	150
Grenada	17,038		17	17
Itawamba	19,425		19	19
Lafayette	48,272	453	48	-405
Lee	75,014		75	75
Marshall	32,780		33	33
Monroe	30,279		30	30
Panola	30,228		30	30
Pontotoc	28,134		28	28
Prentiss	21,020		21	21
Quitman	6,805		7	7
Tallahatchie	14,539		15	15
Tate	27,054		27	27
Tippah	19,494		19	19
Tishomingo	15,693		16	16
Tunica	10,219		10	10
Union	23,733		24	24
Yalobusha	9,926		10	10

¹ Data may not equal totals due to rounding.

Table 2-3 (continued)
2018 Projected ID/DD Nursing Home Bed Need
(1 Bed per 1,000 Population Aged 65 and Under)

	2017 Population <65	2016 Licensed Beds	Projected MR/DD Bed Need ¹	Difference ¹
District II	867,483	707	867	160
Attala	15,635		16	16
Bolivar	24,941		25	25
Carroll	8,081		8	8
Choctaw	6,024		6	6
Clay	16,022		16	16
Hinds	223,398		223	223
Holmes	15,090		15	15
Humphreys	7,770		8	8
Issaquena	1,032		1	1
Leake	22,840		23	23
Leflore	24,713		25	25
Lowndes	51,902		52	52
Madison	99,184	152	99	-53
Montgomery	7,943		8	8
Oktibbeha	44,558	140	45	-95
Rankin	134,240	415	134	-281
Scott	24,545		25	25
Sharkey	3,927		4	4
Sunflower	23,831		24	24
Warren	41,589		42	42
Washington	37,011		37	37
Webster	8,557		9	9
Yazoo	24,650		25	25

¹ Data may not equal totals due to rounding.

Table 2-3 (continued)
2018 Projected ID/DD Nursing Home Bed Need
(1 Bed per 1,000 Population Aged 65 and Under)

	2017 Population <65	2016 Licensed Beds	Projected MR/DD Bed Need ¹	Difference ¹
District III	653,201	922	653	-269
Adams	25,395		25	25
Amite	9,870		10	10
Claiborne	8,455		8	8
Clarke	12,620		13	13
Copiah	24,822		25	25
Covington	16,503		17	17
Forrest	66,372		66	66
Franklin	6,434		6	6
Greene	9,842		10	10
Jasper	13,706		14	14
Jefferson	6,261		6	6
Jefferson Davis	8,898		9	9
Jones	58,640	482	59	-423
Kemper	8,551		9	9
Lamar	54,386		54	54
Lauderdale	68,825		69	69
Lawrence	10,720		11	11
Lincoln	29,981	176	30	-146
Marion	23,417		23	23
Neshoba	25,816		26	26
Newton	18,408		18	18
Noxubee	9,833		10	10
Perry	10,266		10	10
Pike	34,705		35	35
Simpson	23,158	264	23	-241
Smith	13,616		14	14
Walthall	12,563		13	13
Wayne	17,635		18	18
Wilkinson	8,045		8	8
Winston	15,458		15	15

¹ Data may not equal totals due to rounding.

Table 2-4 (continued)
2018 Projected ID/DD Nursing Home Bed Need
(1 Bed per 1,000 Population aged 65 and Under)

	2017 Population <65	2016 Licensed Beds	Projected MR/DD Bed Need ¹	Difference 1
District IV	426,481	220	426	206
George	20,111		20	20
Hancock	38,682		39	39
Harrison	175,018	220	175	-45
Jackson	123,313		123	123
Pearl River	50,628		51	51
Stone	18,729		19	19

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 (DMH), regional Community Mental Health Centers (CMHCs) 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.

300 Mississippi Department of Mental Health

State law designates DMH 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 DMH include: (a) state-level planning and expansion of all types of mental health, intellectual/developmental disabilities and substance abuse services, (b) standard-setting and support for community mental health and intellectual/developmental disabilities 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 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 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.

301 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 2010 population estimates, DMH estimates the prevalence of serious mental illness among adults in Mississippi, ages eighteen (18) years and above, as 5.4 percent or 119,434 individuals. The same methodology estimates the national prevalence for the same age group also as 5.4 percent.

In Fiscal Year 2017, a total of 63,207 adults received mental health services through the fourteen (14) CMHCs and the state's psychiatric hospitals, including East Mississippi State Hospital's group homes and Central Mississippi Residential Center.

301.01 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 National Institute of Mental Health estimates the prevalence of any mental disorder nationally among adolescents, aged thirteen (13) to eighteen (18), is 49.5 percent with an estimated 22.2 percent having a severe impairment. The methodology adjusts for socio-economic differences across states. In Fiscal Year 2017, the public community mental health system served 34,795 children and adolescents with serious emotional disturbance. (Note: Totals might include some duplication across community mental health centers and other nonprofit programs).

301.02 National Survey on Drug Use and Health for Mississippi

According to the Substance Abuse and Mental Health Administration's (SAMHSA) *2015-2016 National Survey on Drug Use and Health* (most available data), 8.04 percent of Mississippians twelve (12) years or older were past month illicit drug users. Past month marijuana use among Mississippians twelve (12) years and older was four-six percent (46%). Approximately 36.94 percent of Mississippians twelve (12) years and older were past-month alcohol users. Past month binge alcohol use among Mississippians twelve (12) years and older was 19.21 percent.

301.03 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 2023 population projections, the results equal 56,487 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*.

302 Adult Psychiatric Services (State-Operated and Private)

Mississippi's four state-operated hospitals and eight crisis stabilization units provide the majority of inpatient psychiatric care and services throughout the state. In FY 2017, the Mississippi State Hospital at Whitfield reported a total of 154 active psychiatric licensed beds; East Mississippi State Hospital at Meridian reported 150 psychiatric licensed beds, North Mississippi State Hospital in Tupelo reported fifty (50) licensed beds, and South Mississippi State Hospital in Purvis reported forty-five (45) licensed beds. The four facilities reported 2,904 adults received acute psychiatric services at the hospitals in FY 2017, 1,141 at the Mississippi State Hospital at Whitfield, 551 at the East Mississippi State Hospital, 619 at the North Mississippi State Hospital, and 593 at the South Mississippi State Hospital. Additionally, a total of 3,129 adults were served through the eight crisis centers in FY 2017.

Because the medically indigent have difficulty accessing private psychiatric facilities in their respective communities, many private facilities have low occupancy rates. State institutions provide the majority of inpatient care for the medically indigent. To address this problem, the Legislature provided funding for seven state Crisis Intervention Centers to function as satellites to existing facilities operated by DMH. These centers are operational in Brookhaven, Corinth, Newton, Laurel, Cleveland, Grenada, Gulfport, and Batesville. DMH 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 for individuals without them being involuntarily committed.

All of the centers include sixteen (16) beds and one (1) isolation bed. The role of these centers in the regional system is to provide stabilization and treatment services to persons who are in a psychiatric crisis. Beginning July 1, 2010, DMH transitioned five (5) of the remaining state-operated crisis centers (now called Crisis Stabilization Units) to regional community mental health centers located in Batesville, Brookhaven, Cleveland, Corinth and Laurel. In 2017, DMH transitioned the remaining crisis center in Newton to Weems Community Mental Health Center. The Gulfport center is operated by Gulf Coast Mental Health (Region XIII CMHC) and is partially funded by a grant from DMH. Timber Hills operates a Crisis Stabilization Unit (CSU) in Batesville and Corinth. Region 8 Mental Health Services operates the Brookhaven CSU. Delta Community Mental Health (Region V CMHC) operates the Cleveland CSU. Pine Belt Mental Healthcare Resources operates the Laurel CSU. All CSUs accept voluntary and involuntary admissions twenty-four (24) hours a day, seven (7) days a week.

Mississippi has nineteen (19) adult psychiatric facilities, with a capacity of 636 licensed beds for adult psychiatric patients, including fifteen (15) beds held in abeyance by MSDH 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 3-1 shows utilization statistics.

**Table 3-1
Acute Adult Psychiatric Bed Utilization
FY 2016**

Facility	County	Licensed Beds	CON Beds	Abeyance Beds	Inpatient Days	Occupancy Rate (%)	ALOS
Alliance Health Center	Lauderdale	38			12,693	91.51	8.49
Alliance Healthcare System, Inc. *	Marshall	20			1,335	18.29	11.55
Baptist Memo. Hospital-Golden Triangle	Lowndes	22		13	9,462	117.83	5.34
Brentwood Behavioral Health Care	Rankin	31		2	6,208	54.87	7.39
Delta Regional Medical Center- West	Washington	9			2,188	66.61	4.14
Forrest General Hospital	Forrest	64			11,692	50.05	3.69
Garden Park Medical Center **	Harrison	9			0	0.00	0.00
Magnolia Regional Health Center	Alcorn	19			5,180	74.69	5.89
Memorial Hospital at Gulfport	Harrison	59			3,875	17.99	7.99
Merit Health Biloxi	Harrison	34			10,505	84.65	7.56
Merit Health Central	Hinds	47			10,261	59.81	4.87
Merit Health River Region	Warren	40			4,352	29.81	6.56
North Miss Medical Center	Lee	33			10,561	87.68	6.46
Panola Medical Center	Panola	25			5,771	63.24	6.30
Parkwood Behavioral HS-Olive Branch	DeSoto	42			12,424	81.04	9.49
S.E. Lackey Memorial Hospital	Scott	10			1,682	46.08	11.71
Singing River Hospital	Jackson	30			2,682	24.49	4.29
St. Dominic Jackson- Memorial Hospital	Hinds	83			17,950	59.25	5.25
University of Mississippi Medical Center	Hinds	21			7,150	93.28	5.90
Total/Average Adult Psychiatric Beds Rates		636	0	15	135,971	59.01	6.47

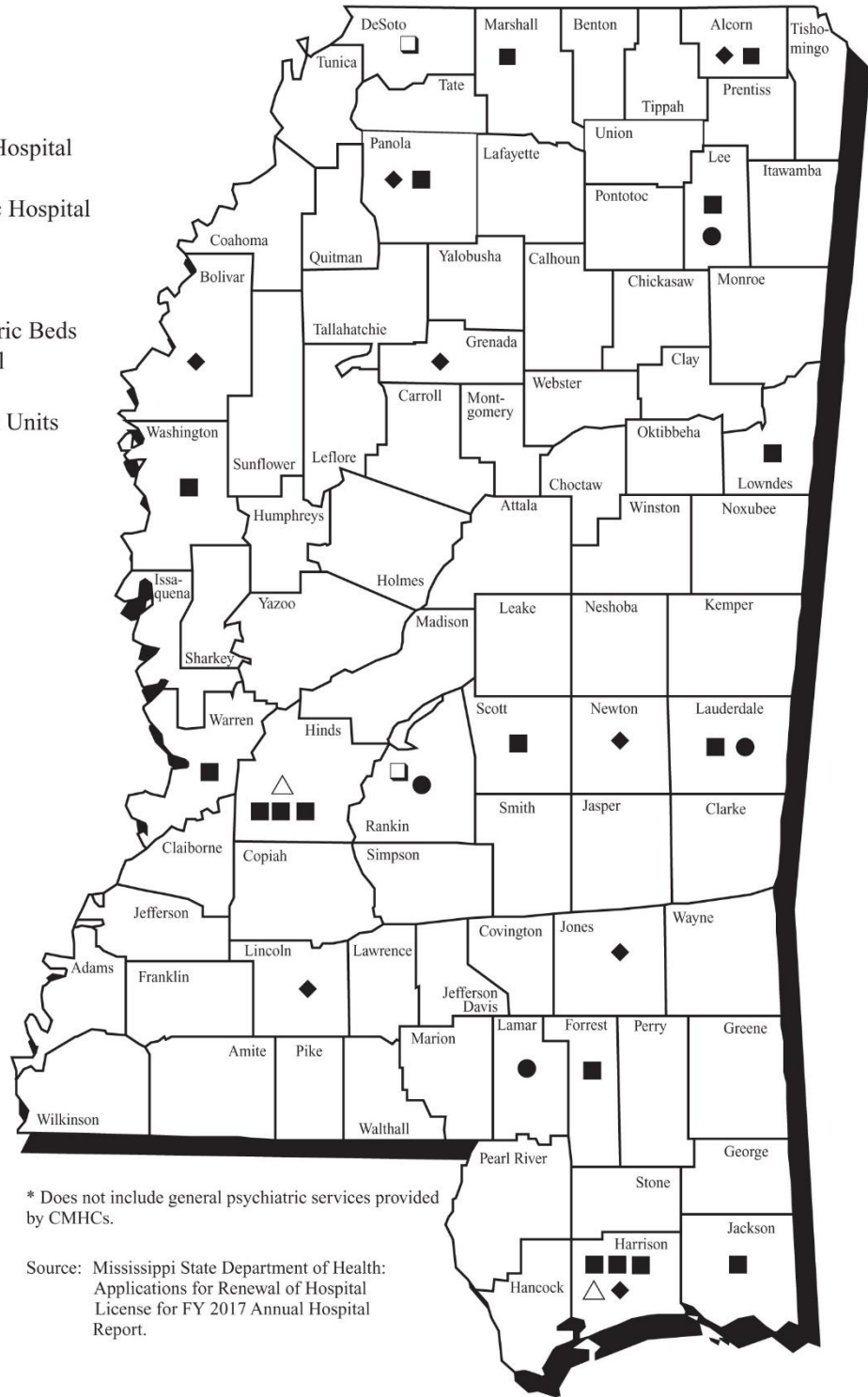
*Alliance Healthcare was CON approved in March 2018 to convert 5 Adult CDU beds to 5 Adult Acute Psychiatric Beds.

**Garden Park Medical Center was CON approved in February 2014 to establish an inpatient program for PTSD and add 9 adult psychiatric beds.

Sources: Applications for Renewal of Hospital License for FY 2016 Annual Hospital Report

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

- State Psychiatric Hospital
- Private Psychiatric Hospital
- △ Veterans Hospital
- Licensed Psychiatric Beds in General Hospital
- ◆ Crisis Stabilization Units



* Does not include general psychiatric services provided by CMHCs.

Source: Mississippi State Department of Health: Applications for Renewal of Hospital License for FY 2017 Annual Hospital Report.

303 Child/Adolescent Psychiatric Services

Ten (10) facilities, with a total of 330 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.

DMH operates a separately-licensed sixty (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 (4) and seventeen (17). East Mississippi State Hospital operates a fifty (50) bed psychiatric and chemical dependency treatment unit for adolescent males.

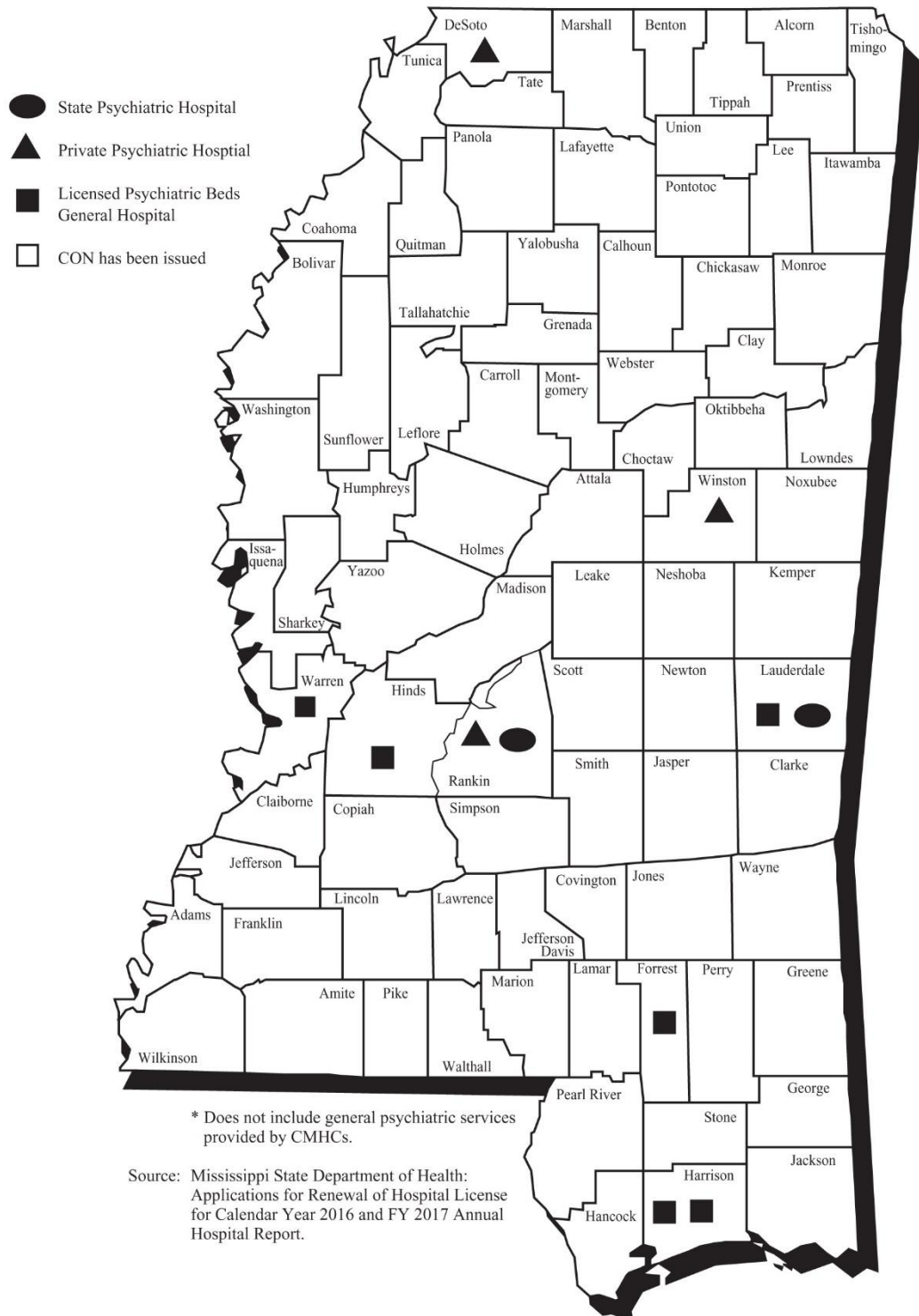
**Table 3-2
Acute Adolescent Psychiatric Bed Utilization
FY 2016**

Facility	County	Licensed Beds	CON Beds	Abeyance Beds	Inpatient Days	Occupancy Rate(%)	ALOS
Alliance Health Center	Lauderdale	30			6,931	63.30	8.59
Brentwood Behavioral Healthcare of MS	Rankin	74	15		19,718	73.00	10.21
Diamond Grove Center	Winston	25	4		7,568	82.94	9.55
Forrest General Hospital	Forrest	16			6,461	110.63	6.43
Memorial Hospital at Gulfport **	Harrison	30			3,542	32.35	5.58
Merit Health Biloxi	Harrison	11			1,141	28.42	7.13
Merit Health River Region	Warren	20			581	7.96	8.10
Oak Circle Center	Rankin	60			9822	44.85	37.87
Parkwood Behavioral Health System	DeSoto	52			11794	62.14	8.35
University of Mississippi Medical Center	Hinds	12			2,693	61.48	11.16
Total/Average Adolescent Psychiatric Beds		330	19	0	70,251	56.71	11.30

**As of May 27, 2018, Memorial Hospital at Gulfport transferred 15 CON approved beds to Brentwood Behavioral Healthcare of MS and 4 CON approved beds to Diamond Grove Center.

Sources: Applications for Renewal of Hospital License for FY 2016 Annual Hospital Report

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



304 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 seven (7) facilities are in operation with a total of 318 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.

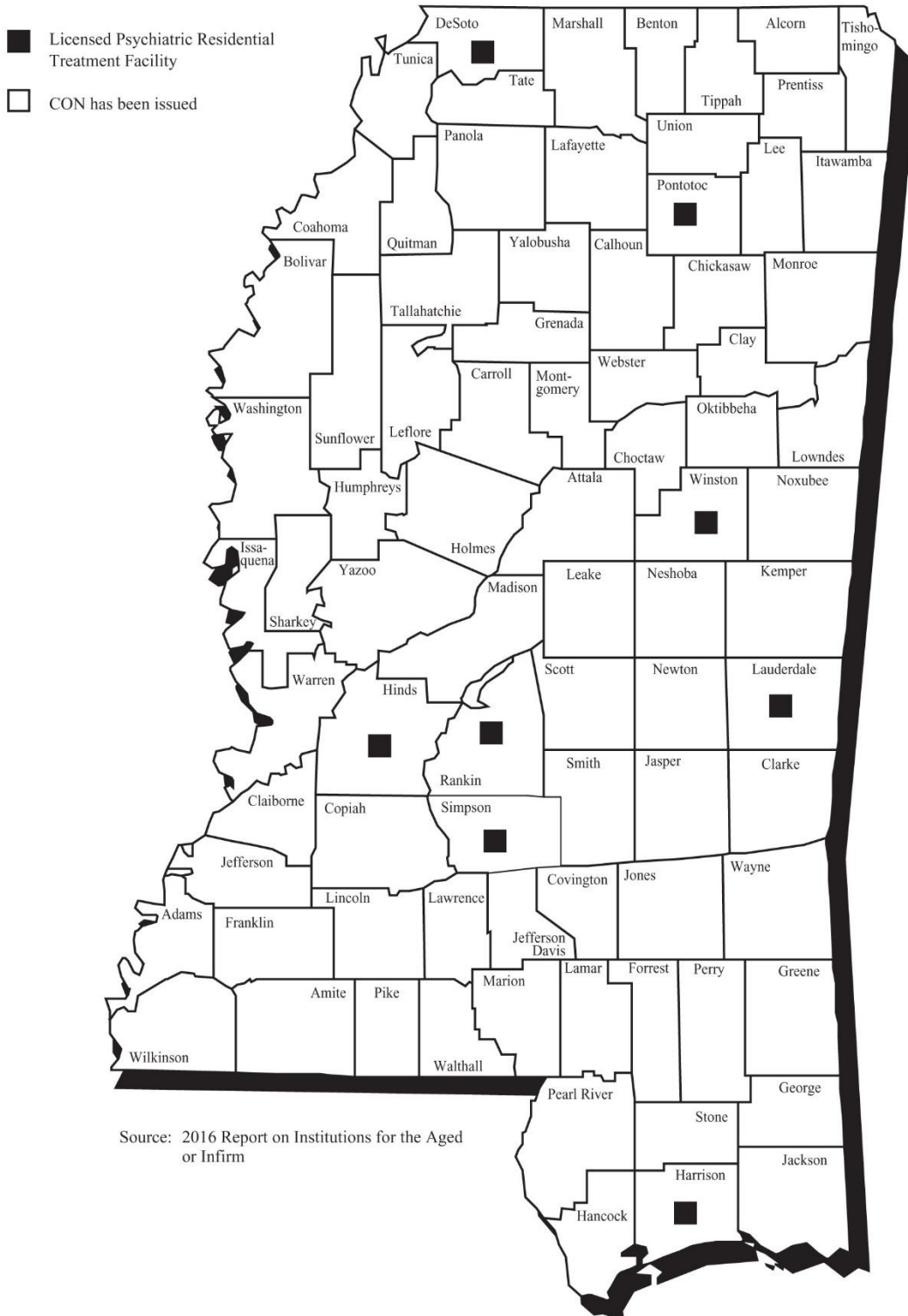
**Table 3-3
Private Psychiatric Residential Treatment Facility (PRTF)
Utilization
FY 2016**

Facility	County	Licensed Beds	CON Approved Beds	Occupancy Rate (%)	Average Daily Census
Parkwood BHS	DeSoto	40	0	94.74	37.90
Canopy Childrens Solution	Harrison	20	0	58.00	11.56
Canopy Childrens Solution - Jackson	Hinds	60	0	96.50	59.90
The Crossings	Lauderdale	60	0	100.00	60.00
Millcreek of Pontotoc	Pontotoc	51	0	100.00	51.00
Millcreek PRTF	Simpson	57	0	99.70	56.84
Diamond Grove Center	Winston	30	0	98.12	29.44
Total PRTF Beds		318			

Source: Mississippi State Department of Health, 2016 Report on Institutions for the Aged or Infirm, and Division of Health Planning and Resource Development

DMH operates a specialized thirty-two (32) bed treatment facility (ICF/IID) in Brookhaven for youth with an intellectual and/or developmental disability who are thirteen (13) years, but less than twenty-one (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 thirteen (13) years, but less than twenty-one (21) years of age, who present with a diagnosis of a severe emotional disturbance and need psychiatric residential care.

Map 3-3 Private Psychiatric Residential Treatment Facilities



Source: 2016 Report on Institutions for the Aged or Infirm

305 Alcohol and Substance Abuse Disorder Services

305.01 Alcohol and Substance Abuse Disorders

Alcohol and other drug problems cause pervasive effects: biological, psychological, and social consequences for the user; 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 substance use programs is shown on Maps 3-4 and 3-5. Each of the fourteen (14) regional community health centers provide a variety of alcohol and drug services, including residential and transitional treatment programs, along with recovery support services. Tables 3-4 and 3-5 show the utilization of these facilities for adult and adolescent chemical dependency services, respectively. A total of 615 residential treatment beds are available throughout the state. The community mental health centers (CMHCs) with whom DMH contracts are the foundation and primary service providers of the public substance use disorders services delivery system. Each CMHC serves a designated number of Mississippi counties. There are sixty-seven (67) community-based satellite centers throughout the state which allow greater access to services by the area's residents. The goal is for each CMHC to have a full range of treatment options available for citizens in its region. Other nonprofit service agencies/organizations, which make up a smaller part of the service system, also receive funding through the DMH to provide community-based services. Many of these free-standing nonprofit organizations receive additional funding from other sources such as grants from other state agencies, community service organizations, donations, etc.

Substance use disorder services usually include: (1) alcohol, tobacco, and other drug prevention services; (2) general outpatient treatment including individual, group, and family counseling; (3) recovery support (continuing care) planning and implementation services; (4) primary residential treatment services (including withdrawal management); (5) transitional residential treatment services; (6) vocational counseling and employment seeking assistance; (7) emergency services (including a 24-hour hotline); (8) educational programs targeting recovery from substance use disorders which include understanding the disease, the recovery process, relapse prevention, and anger management; (9) recreational and social activities presenting alternatives to continued substance use and emphasizing the positive aspects of recovery; (10) 10-15 week intensive outpatient treatment programs for individuals who are in need of treatment but are still able to maintain job or school responsibilities; (11) community-based residential substance use disorders treatment for adolescents; (12) specialized women's services; (13) priority treatment for pregnant/parenting women; (14) services for individuals with a co-occurring disorder of substance use disorder and serious mental illness; and, (15) employee assistance programs.

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 2016**

Facility	County	Licensed Beds	CON Approved Beds	Average Daily Census	Occupancy Rate (%)	ALOS
Alliance Health Center	Lauderdale	8		8.00	100	5
Baptist Memorial Hospital - Golden Triangle	Lowndes	8		0.00	0.00	0.00
Delta Regional Medical Center- West Campus	Washington	7		0.78	11.15	2.94
Forrest General Hospital	Forrest	8		1.85	23.08	3.58
Merit Health River Region	Warren	28		12.75	45.52	6.86
Mississippi Baptist Medical Center	Hinds	77		0.00	0.00	0.00
North Mississippi Medical Center	Lee	33		3.35	10.14	6.46
Panola Medical Center	Panola	10		4.28	42.77	4.68
Parkwood Behavioral Health System	DeSoto	14		4.85	34.66	5.97
South Central Regional Medical Center	Jones	10		5.50	54.99	4.66
St. Dominic Jackson-Memorial Hospital	Hinds	35		0.00	0.00	0.00
Total/Average Adult CDU Bed Rates		238	0	3.76	29.30	3.65

*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. MBMC has 13 beds that are not in use.

Sources: Applications for Renewal of Hospital License for FY 2016 Annual Hospital Report

**Table 3-5
Adolescent Chemical Dependency Unit
Bed Utilization
FY 2016**

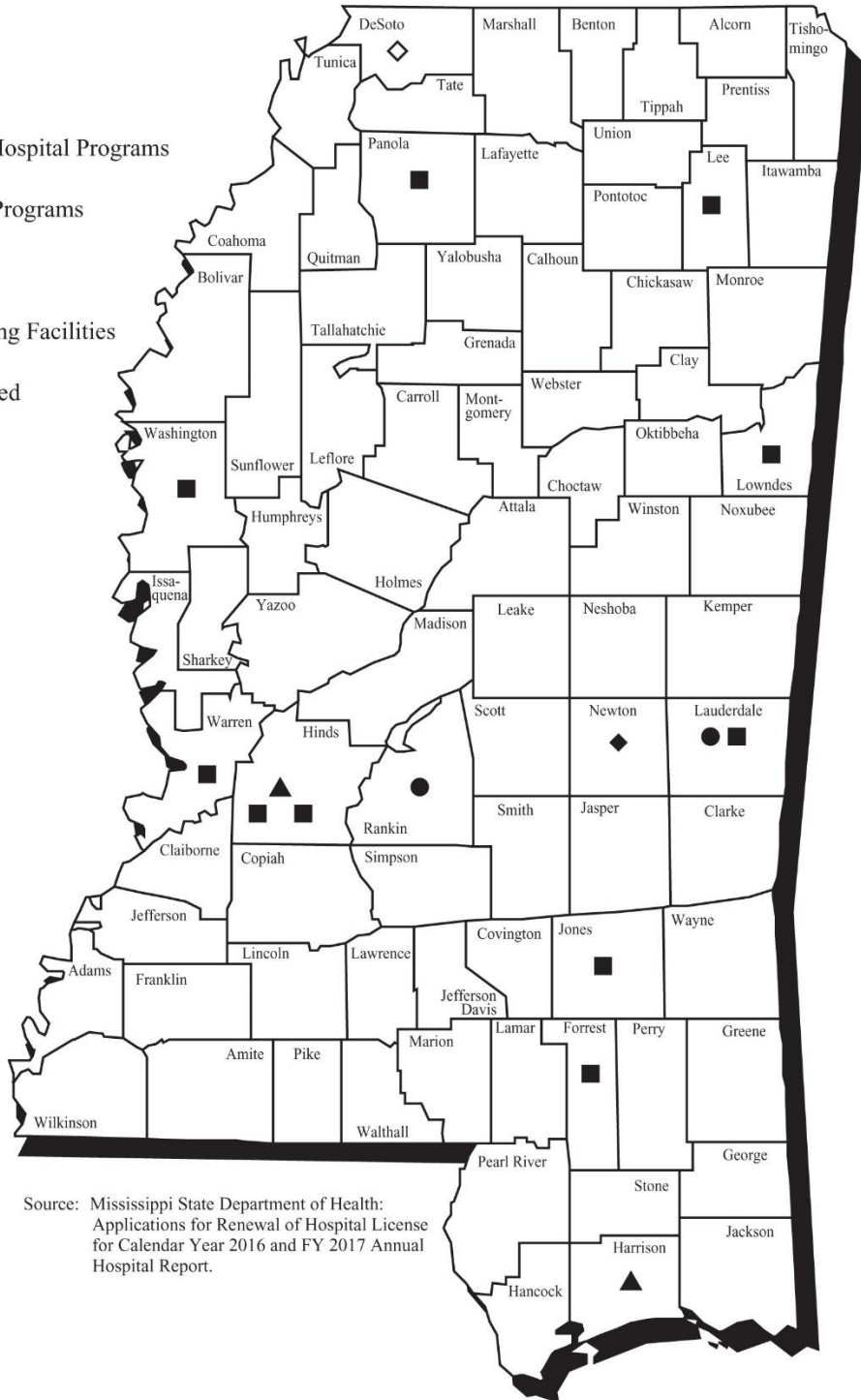
Facilities	County	Licensed Beds	CON Approved Beds	Average Daily Census	Occupancy Rate (%) *	ALOS
Memorial Hospital at Gulfport	Harrison	20		1.08	5.41	5.74
Merit Health River Region *	Warren	12		-	-	-
Mississippi Baptist Medical Center *	Hinds	20		-	-	-
Total/ Average Adolescent CDU Bed Rates		52		1.08	5.41	5.74

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

Sources: Applications for Renewal of Hospital License for FY 2016 Annual Hospital Report

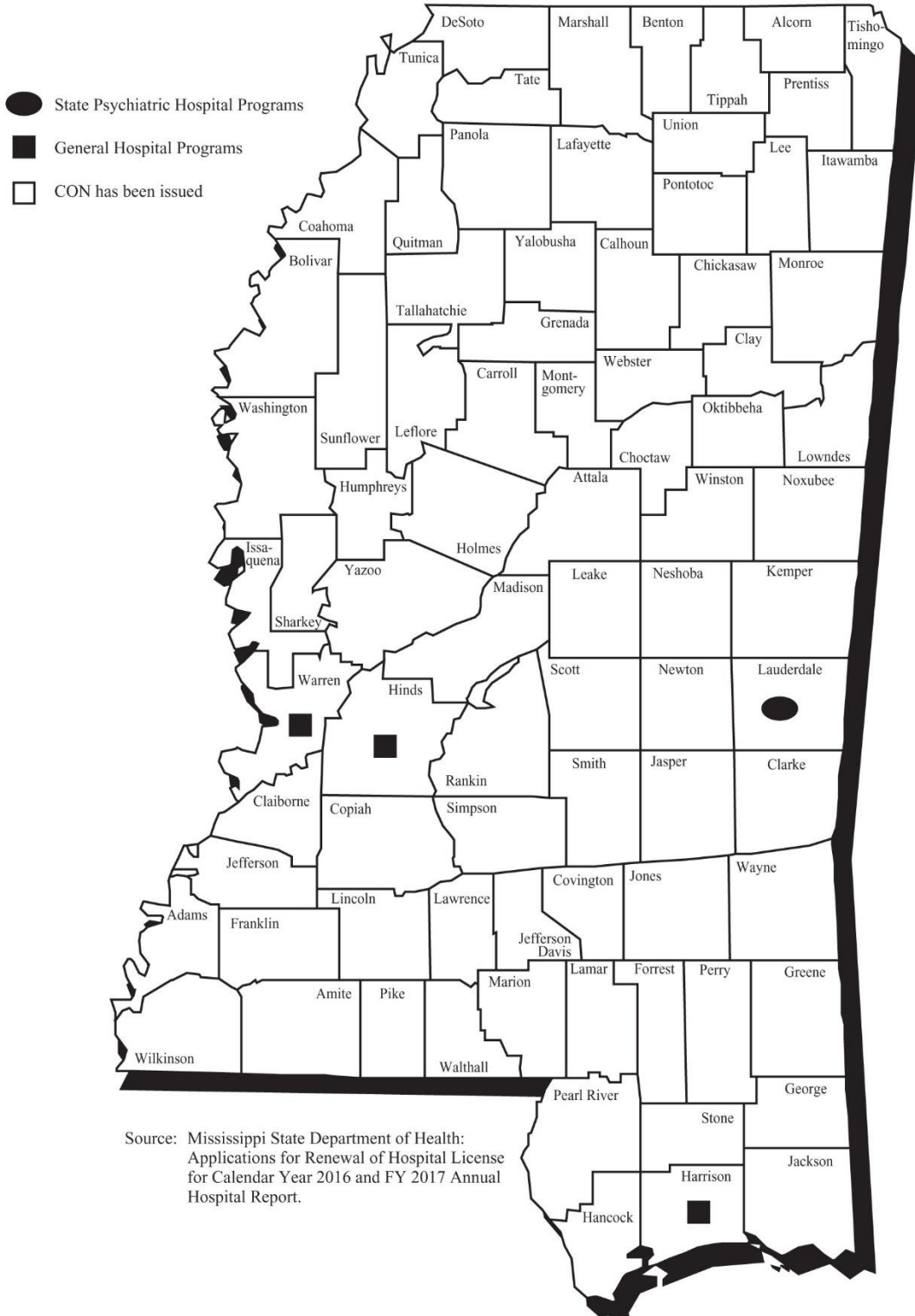
Map 3-4 Operational and Proposed Adult Chemical Dependency Programs and Facilities

- State Psychiatric Hospital Programs
- General Hospital Programs
- ▲ Veterans Hospital
- ◇ Private Freestanding Facilities
- CON has been issued



Source: Mississippi State Department of Health: Applications for Renewal of Hospital License for Calendar Year 2016 and FY 2017 Annual Hospital Report.

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



Source: Mississippi State Department of Health:
Applications for Renewal of Hospital License
for Calendar Year 2016 and FY 2017 Annual
Hospital Report.

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

Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

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

1. Indigent/Charity Care: An applicant must provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this *Plan*.
2. Mental Health Planning Areas: MSDH 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: Because DMH is a public entity and directly operates facilities providing acute psychiatric, chemical dependency, and psychiatric residential treatment facility beds, the number of licensed beds operated by DMH 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 DMH: MSDH shall solicit and take into consideration comments received from DMH 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 eighteen (18) years of age must receive treatment in units that are programmatically and physically distinct from adult (18 plus 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 thirteen (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, MSDH will allow deviations of up to twenty-five percent (25%) 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 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 fourteen (14) years of age. Therefore, of the beds determined to be needed for child/adolescent acute psychiatric services and psychiatric residential treatment facility services, twenty-five (25) beds under each category, for a total of fifty (50) beds statewide, shall be reserved exclusively for programs dedicated to children under the age of fourteen (14).
15. CON Authority: 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 CON under the authority of Section 41-7-191(1)(c).
16. Delicensed/Relicensed Beds: 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 CON. MSDH 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. Reopening a Facility: A health care facility has ceased to operate for a period of sixty (60) months or more shall require a CON prior to reopening.

306.02 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.

Need Criterion 1: Bed Need Requirements

- 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 that 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 that 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, MSDH may approve additional beds for facilities which have maintained an occupancy rate of at least eighty percent (80%) for the most recent twelve (12) month licensure reporting period or at least seventy percent (70%) 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, MSDH may approve a fifteen (15) bed acute child psychiatric unit at the University of Mississippi Medical Center for children aged four (4) to twelve (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, MSDH 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.

Need Criterion 2: Data Requirements

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 MSDH within fifteen (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 the medically indigent or charity patients that MSDH request.

Need Criterion 3: Referral/Admission of Charity/Indigent Patients

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.

Need Criterion 4: Letters of Commitment

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.

Need Criterion 5: Non-Discrimination Provision

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.

Need Criterion 6: Charity/Indigent Care

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.

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

306.03.01 Acute Psychiatric Beds for Adults

Need Criterion 1: Statistical Need for Adult Psychiatric Beds

MSDH shall base statistical need for adult acute psychiatric beds on a ratio of 0.21 beds per 1,000 population aged eighteen (18) and older for 2023 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.

Need Criterion 2: Proposed Size of Facility/Unit

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 sixty (60) beds. Hospital units should not be larger than thirty (30) beds. Patients treated in adult facilities and units should be eighteen (18) years of age or older.

Need Criterion 3: Staffing

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.

306.03.02 Acute Psychiatric Beds for Children and Adolescents**Need Criterion 1: Statistical Need for Child/Adolescent Beds**

MSDH shall base statistical need for child/adolescent acute psychiatric beds on a ratio of 0.55 beds per 1,000 population aged seven (7) to seventeen (17) for 2023 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, twenty-five (25) beds are hereby set aside exclusively for the treatment of children less than fourteen (14) years of age.

Need Criterion 2: Proposed Size of Facility/Unit

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 sixty (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 (8) to ten (10) 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 fourteen (14) years old but less than eighteen (18) years old, and a child is defined as a minor who is at least seven (7) years old but less than fourteen (14) years old.

Need Criterion 3: Staffing

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.

Need Criterion 4: Structural Design of Facility – Separation of Children and Adolescents

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.

306.03.03 Chemical Dependency Beds for Adults**Need Criterion 1: Statistical Need for Adult Chemical Dependency Beds**

MSDH shall base statistical need for adult chemical dependency beds on a ratio of 0.14 beds per 1,000 population aged eighteen (18) and older for 2023 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.

Need Criterion 2: Proposed Size of Facility/Unit

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 seventy-five (75) beds, and individual units should not be larger than thirty (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 that involves family and significant others.

Need Criterion 3: Aftercare/Follow-Up Services Provided

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.

Need Criterion 4: Type of Clients to be Treated at Facility

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.

306.03.04 Chemical Dependency Beds for Children and Adolescents

Need Criterion 1: Statistical Need for Child/Adolescent Chemical Dependency Beds

MSDH shall base statistical need for child/adolescent chemical dependency beds on a ratio of 0.44 beds per 1,000 population aged twelve (12) to seventeen (17) for 2023 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.

Need Criterion 2: Proposed Size of Facility/Unit

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 sixty (60) beds. Units shall not be larger than twenty (20) beds. The bed count of a facility or unit shall include detoxification beds.

Need Criterion 3: Provision of Home-Like Environment

Facilities or units, whether hospital-based or freestanding, should provide a home-like environment. Ideally, facilities should provide cottage-style living units housing eight (8) to ten (10) patients. Because of the special needs of children and adolescents, facilities or units which are not physically attached to a general hospital are preferred.

Need Criterion 4: Staffing

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.

Need Criterion 5: Structural Design of Facility – Separation of Children and Adolescents

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

Need Criterion 6: Aftercare/Follow-Up Services Provided

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.

306.03.05 Psychiatric Residential Treatment Facility Beds/Services

Need Criterion 1: Statistical Need for Psychiatric Residential Treatment Beds

MSDH shall base statistical need for psychiatric residential treatment beds on a ratio of 0.5 beds per 1,000 population aged five (5) to twenty-one (21) for 2023 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.

Need Criterion 2: Age Group to be Served

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).

Need Criterion 3: Structural Design of Facility

The applicant shall describe the structural design of the facility for the provision of services to children less than fourteen (14) years of age. Of the beds needed for psychiatric residential treatment facility services, twenty-five (25) beds are hereby set aside exclusively for the treatment of children less than fourteen (14) years of age. An applicant proposing to provide psychiatric residential treatment facility services to children less than fourteen (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 thirteen (13) years of age. A facility may house both categories of patients if both the physical design and staffing ratios provide for separation.

Need Criterion 4: Bed Count as Authorized by the Legislature

This criterion does not preclude more than twenty-five (25) psychiatric residential treatment facility beds being authorized for the treatment of patients less than fourteen (14) years of age. However, MSDH 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 318 licensed and CON approved beds indicated in Table 3-8 were the result of both CON approval and legislative actions).

Need Criterion 5: Proposed Size of Facility/Unit

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 fifteen (15) beds. A psychiatric residential treatment facility should not be larger than sixty (60) beds.

Need Criterion 6: Staffing

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
2025**

Bed Category and Ratio	2025 Projected Population	Projected Bed Need	Licensed Beds	Difference
Adult Psychiatric: 0.21 beds per 1,000 population aged 20+	2,282,191	479	636	-157
Child/Adolescent Psychiatric: 0.55 beds per 1,000 population aged 5 to 19	633,751	349	330	19

Source(s): Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report and State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018

**Table 3-7
Statewide Chemical Dependency Bed Need
2025**

Bed Category and Ratio	2025 Projected Population	Projected Bed Need	Licensed Beds	Difference
Adult Chemical Dependency: 0.14 beds per 1,000 population aged 20+	2,282,191	320	395	-75
Child/Adolescent Chemical Dependency: 0.44 beds per 1,000 population aged 5 to 19	633,751	279	77	202

Source(s): Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report and State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018

**Table 3-8
Statewide Psychiatric Residential
Treatment Facility Bed Need
2025**

Age Cohort	Bed Ratio per 1,000 Population	2023 Projected Population	Projected Bed Need	Licensed/CON Approved Beds	Difference
5 to 19	0.50	633,751	317	318	-1

Source(s): Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report and State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018

307 Private Distinct-Part Geriatric Psychiatric Services

During 2016, thirty-one (31) Mississippi hospitals operated certified distinct-part geriatric psychiatric units (Geropsych DPU) with a total of 393 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 64,587 inpatient days of psychiatric services to patients aged fifty-five (55) and older.

The industry standard formula for determining Geropsych DPU bed need is 0.5 beds per 1,000 population aged fifty-five (55) and over. The State Data Center of Mississippi under the University of Mississippi Center for Population Studies, projects Mississippi will have 943,320 persons aged fifty-five (55) and older by 2025. This population will need a total of 472 Geropsych DPU beds. The optimum unit size of a Geropsych unit is twelve (12) to twenty-four (24) beds. Table 3-9 shows the state's thirty-one (31) 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 2016**

Facility	County	Licensed Beds	Inpatient Days	Occupancy Rate (%)	Discharges	ALOS	Discharge Days
State Total/Average		393	62,246	43.00	5,041	13.15	58,900
General Hospital Service Area 1		34	3,442	29.76	303	11.78	3,480
North Oak Regional Medical Center	Tate	12	1,605	36.64	121	13.23	1,601
Panola Medical Center	Panola	22	1,837	22.88	182	10.32	1,879
General Hospital Service Area 2		25	4,505	48.08	324	13.38	4,428
Baptist Memorial Hospital - Booneville	Perry	15	2,987	54.56	197	14.74	2,903
Tippah County Hospital	Tippah	10	1,518	41.59	127	12.01	1,525
General Hospital Service Area 3		51	8,161	46.56	789	9.78	7,757
Bolivar Medical Center	Bolivar	12	2,572	58.72	208	10.30	2,143
Delta Regional Medical Center West Campus	Washington	14	1,291	25.26	174	7.40	1,288
Greenwood Leflore Hospital	Leflore	15	1,698	31.01	155	11.05	1,712
North Sunflower Medical Center	Sunflower	10	2,600	71.23	252	10.37	2,614
General Hospital Service Area 4		49	9,104	54.49	699	12.73	8,983
Monroe Regional Hospital	Monroe	10	2,046	56.05	150	13.68	2,052
Trace Regional Hospital	Chickasaw	18	3,428	52.18	256	13.40	3,431
University of MS Medical Center Grenada	Grenada	14	1,654	32.37	144	10.84	1,561
Winston Medical Center	Winston	7	1,976	77.34	149	13.01	1,939
General Hospital Service Area 5		104	17,554	46.50	1,148	31.17	14,834
Claiborne County Hospital	Claiborne	10	1,652	45.26	137	12.15	1,665
Merit Health Rankin	Rankin	20	4,591	62.89	378	-	-
Merit Health River Region	Warren	13	-	-	0	-	-
Mississippi Baptist Medical Center	Hinds	12	3,104	70.87	311	10.38	3,228
Mississippi State Hospital	Rankin	29	4,365	41.24	36	169.72	6,110
Sharkey - Issaquena Community Hospital	Sharkey	10	1,224	33.53	114	10.82	1,234
Simpson General Hospital	Simpson	10	2,618	71.73	172	15.10	2,597
General Hospital Service Area 6		38	6,209	45.77	546	11.34	6,235
Alliance Health Center	Lauderdale	12	1,591	36.32	164	9.89	1,622
Anderson Regional Medical Center South	Lauderdale	16	2,485	42.55	203	12.24	2,485
Neshoba County General Hospital	Neshoba	10	2,133	58.44	179	11.89	2,128
General Hospital Service Area 7		26	3,735	39.11	374	10.06	3,778
Beacham Memorial Hospital	Pike	14	2,167	42.41	217	10.35	2,246
Merit Health Natchez	Adams	12	1,568	35.80	157	9.76	1,532
General Hospital Service Area 8		32	2,778	23.40	233	7.56	2,647
Covington County Hospital	Covington	10	-	-	-	-	-
Jefferson Davis General Hospital	Jeff Davis	10	1,485	40.68	118	12.54	1,480
Merit Health Wesley	Lamar	12	1,293	29.52	115	10.15	1,167
General Hospital Service Area 9		34	6,758	53.31	625	10.51	6,758
Garden Park Medical Center	Harrison	12	3,051	69.66	266	11.48	3,054
Highland Community Hospital	Pearl River	10	1,235	33.84	152	8.05	1,223
Merit Health Biloxi	Harrison	12	2,472	56.44	207	11.99	2,481

Sources: Applications for Renewal of Hospital License for Calendar Year 2015 and FY 2016 Annual Hospital Report; Division of Health Planning and Resource Development calculations

Chapter 4 Perinatal Care

400 Natality Statistics

Mississippi experienced 37,928 live births in 2016. Of these live births, 51.2 percent (19,416) were white non-Hispanic, 41.8 percent (15,868) were black non-Hispanic, 2.6 percent (976) were other non-Hispanic and 4.4 percent (1,665) were Hispanic. A physician attended 97.8 percent of all in-hospital live births delivered in 2016 (37,928). Nurse midwife deliveries accounted for 735 live births.

More than 99 percent of the live births occurred to women 15 to 44 years of age. Births to unmarried women made up 53.2 percent (20,176) of all live births in 2016; of these, 65.6 percent (12,645) were to black women and 32.4 percent (6,250) were to white women and 4.4 percent (883) were to Hispanic women. Mothers under the age of 15 gave birth to 52 children; 67.3 percent (35) were black and 21.2 percent (11) were white and 5.8 (3) percent were Hispanic, and 5.8 (3) percent were other.

The birth rate in 2016 was 12.7 live births per 1,000 population; the fertility rate was 63.5 live births per 1,000 women aged 15-44 years.

Mississippi reported 401 fetal deaths in 2016. 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 16.7 per 1,000 live births compared to 6.0 for whites. Mothers aged 40 and older, had the highest fetal death ratio at 38.8 per 1,000 live births, followed by mothers aged, 24-29 with a ratio of 11.9. MSDH requires the reporting of fetal deaths with gestation of 20 or more weeks or fetal weight of 350 grams or more. MSDH does not report fetal death rates for an age group if there are less than 100 births.

There were 14 maternal deaths reported during 2016. Maternal mortality refers to deaths resulting from complications of pregnancies, childbirth, or the puerperium within 42 days of delivery.

401 Infant Mortality

Infant mortality remains a critical concern in Mississippi. There was a decline in the infant mortality rate to 8.6 in 2016 from 9.2 in 2015. 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: 2016 vital statistics data is the most recent available.)

Table 4-1
2016 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)	8.6	7.2	11.5	1.8
Neonatal Mortality (age under 28 days)	5.3	4.0	7.6	1.2
Postneonatal Mortality (age 28 days to one year)	3.3	3.2	3.9	0.6

Table 4-2 displays Mississippi’s infant mortality rates from 2003 to 2016, 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 2012 to 2016.

Table 4-2
Infant Mortality Rates
Mississippi, Region IV and USA – All Races
2003-2016

Year	Mississippi	Region IV	USA
2016	8.6	N/A	N/A
2015	9.2	N/A	5.9
2014	8.2	N/A	5.9
2013	9.7	N/A	5.9
2012	8.9	N/A	6
2011	9.4	N/A	N/A
2010	9.6	N/A	N/A
2009	10	N/A	N/A
2008	9.9	7.8	6.6
2007	10	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

N/A – Not Available

Source: Office of Health Informatics, Mississippi State Department of Health 2018

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

More than 97 percent of expectant mothers received some level of prenatal care in 2016. More than 70 percent (28,832) of mothers began prenatal care in the first trimester; 22.0 percent (6,592) began in the second trimester, and 6.7 percent (1,398) during the third trimester. Only 1.7 percent (495) of expectant mothers received no prenatal care prior to delivery. White mothers usually receive prenatal care much earlier in pregnancy than black mothers.

In 2016, 11.5 percent of births were low birthweight (less than 5.5 pounds – 2,500 grams) and 13.6 percent were premature (gestational age less than 37 weeks). These indicators differ markedly by maternal race: 8.3 percent of white births were low birthweight compared to 15.9 percent for blacks. The low birthweight rate for Hispanics was 7.6 percent. The premature birth rate was 10.4 percent for Hispanics, 11.6 percent for whites and 16.6 percent for blacks.

A total of 3,378 Mississippi teenagers gave birth in 2016 — 8.9 percent of the state's 37,928 live births. Teenage births increased each year from 2005 until 2008. The year 2016 saw a 1.9 percent increase from the 3,611 births recorded to teenagers in 2015. Teen pregnancy is cited as one of the major factors contributing to the school dropout rate. In addition, teenage mothers are more likely to be single parents, less likely to get prenatal care before the second trimester, are at a higher risk of having low birthweight babies, are more likely to receive public assistance, are at a greater risk to commit abuse or neglect, and are more likely to have children who will themselves become teen parents. Consequently, in 2016, 12.4 percent of teenage births were low birthweight and 12.6 percent were premature.

Of the 37,928 total births in 2016, 29,257 were associated with "at risk" mothers (77.1 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).

402 Physical Facilities for Perinatal Care

The 55 hospitals that experienced live births reported 36,930 deliveries. Three of these hospitals reported more than 2,000 obstetrical deliveries each in Fiscal Year 2016, accounting for 6,740 deliveries or 18.3 percent of the state's total hospital deliveries: Forest General Hospital with 2,320 deliveries, North Mississippi Medical Center with 2,236 deliveries, and the University of Mississippi Medical Center with 2,191 deliveries. These hospitals with a large number of deliveries are strategically located in north, central and south Mississippi. Map 4-2 shows the Perinatal Planning Areas.

Table 4-3
Utilization Data for Hospitals with Obstetrical Deliveries
FY 2015 and FY 2016

Facility	County	Number of Deliveries 2015	Number of Deliveries 2016
University of Mississippi Medical Center	Hinds	2,147	2,191
Forrest General Hospital	Forrest	2,332	2,320
North Mississippi Medical Center	Lee	2,131	2,236
Baptist Memorial Hospital-DeSoto	DeSoto	1,647	1,678
Merit Health River Oaks	Rankin	1,542	1,479
St. Dominic-Jackson Memorial Hospital	Hinds	1,472	1,560
Merit Health Wesley	Lamar	1,257	1,259
Merit Health Woman's Hospital	Rankin	1,126	1,108
Memorial Hospital at Gulfport	Harrison	1,450	1,450
Anderson Regional Medical Center	Lauderdale	1,263	1,215
Baptist Memorial Hospital - Union County	Union	940	1,020
Mississippi Baptist Medical Center	Hinds	1,756	1,706
Rush Foundation Hospital	Lauderdale	985	964
Baptist Memorial Hospital-Golden Triangle	Lowndes	932	935
OCH Regional Medical Center	Oktibbeha	888	930
Baptist Memorial Hospital - North Miss	Lafayette	945	875
South Central Regional Medical Center	Jones	904	923
Merit Health Northwest Mississippi	Coahoma	790	633
Ocean Springs Hospital	Jackson	838	800
Delta Regional Medical Center-Main Campus	Washington	726	715
Merit Health of Biloxi	Harrison	839	882
Southwest Mississippi Regional Medical Center	Pike	764	740
Merit Health River Region	Warren	709	628
Merit Health Central	Hinds	731	642
University of MS Medical Center Grenada	Grenada	410	435
King's Daughters Medical Center-Brookhaven	Lincoln	596	627
Merit Health Madison	Madison	300	309
Merit Health Natchez	Adams	181	857
Merit Health Natchez- Community Campus**	Adams	721	0
Magnolia Regional Health Center	Alcorn	702	676
Merit Health Gilmore Memorial	Monroe	610	634
Singing River Hospital	Jackson	624	631
Greenwood Leflore Hospital	Leflore	544	495

**Table 4-3
Utilization Data for Hospitals with Obstetrical Deliveries
FY 2015 and FY 2016 (continued)**

Facility	County	Number of Deliveries 2015	Number of Deliveries 2016
Garden Park Medical Center	Harrison	413	445
Bolivar Medical Center	Bolivar	389	369
North Miss Medical Center-West Point	Clay	360	319
Highland Community Hospital	Pearl River	315	291
Magee General Hospital	Simpson	277	36
South Sunflower County Hospital	Sunflower	194	199
Methodist Olive Branch Hospital	Desoto	296	371
Hancock Medical Center	Hancock	225	192
Wayne General Hospital	Wayne	215	198
George County Regional Hospital	George	258	282
North MS Medical Center- West Point	Clay	360	319
81 Medical Group	Harrison	391	371
Merit Health Rankin	Rankin	2	0
Merit Health Batesville	Panola	239	272
Baptist Medical Center-Leake	Leake	2	3
Marion General Hospital	Marion	1	1
Baptist Medical Center - Attala	Attala	0	2
Laird Hospital	Newton	0	2
Covington County Hospital	Covington	1	0
Scott Regional Hospital	Scott	1	1
Field Memorial Hospital	Wilkinson	0	2
Baptist Medical Center- Yazoo	Yazoo	2	3
H.C Watkins Memorial Hospital	Clarke	0	1
Jefferson County Hospital	Jefferson	1	0
Lawrence County Hospital	Lawrence	2	1
Choctaw Health Center	Choctaw	1	2
Pioneer Community Hospital of Choctaw	Choctaw	0	1
North Miss Medical Center- Iuka	Tishomingo	1	0
North Miss Medical Center - Eupora	Webster	1	0
North Oak Regional Medical Center	Tate	0	1
North Sunflower County Hospital	Sunflower	1	0
Tallahatchie General Hospital	Tallahatchie	1	0
Hardy Wilson Memorial Hospital	Copiah	1	0
Perry County General Hospital	Perry	1	0
University of MS Medical Center-Holmes	Holmes	1	2
Sharkey-Issaquena Community Hospital	Sharkey	1	0
S.E. Lackey Memorial Hospital	Scott	1	2
Neshoba County General Hospital	Neshoba	1	0
Noxubee General Hospital	Noxubee	0	1
Stone County Hospital	Marion	0	1
Total		37,757	37,248

Sources: Mississippi State Department of Health, Office of Health Informatics

* N/A – Denotes facility not reported on birth certificates sent to MSDH for the year.

** Facility closed in 2015.

403 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.

403.01 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): 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.
6. 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 405.03 of the State Health Plan.

7. 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.
8. 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.

403.02 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. 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 \$5,000,000 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.

Need Criterion 1: Minimum Procedures

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 403.01, Policy Statement 2, by hospital).

Need Criterion 2: Perinatal Services

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

Need Criterion 3: Staffing Requirements

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.

Need Criterion 4: Policies

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.

Need Criterion 5: Staff Required for Medical Emergency

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.

Need Criterion 6: Travel Time

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.

Need Criterion 7: Transfer of Patients in Medical Emergency

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.

Need Criterion 8: Data Requirements

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.

Need Criterion 9: Non-Discrimination Provision

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.

404 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.

404.01 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): 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: 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 405.03 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 other providers of the requested services.

404.02 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).

Need Criterion 1: Minimum Procedures

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. 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.

Applications submitted by existing providers of neonatal special care services, which seek to expand capacity by adding or converting neonatal special care beds must 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 seventy percent (70%) for the most recent two (2) years or maintained an eighty percent (80%) 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 additional or conversion of neonatal special care beds to meet projected demand balanced with optimum utilization rate for the Perinatal Planning Area.

Need Criterion 2: Minimum Bed Requirement for Single Neonatal Special Care Unit

A single neonatal special care unit (Subspecialty or Regional) that is Level 3 or greater should contain a 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.

Need Criterion 3: Travel Time

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.

Need Criterion 4: Referral Networks

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.

Need Criterion 5: Data Requirement

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.

Need Criterion 6: Non-Discrimination Provision

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.

404.03 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
2016**

Perinatal Planning Areas	Number Live Births¹	Neonatal Intensive Care Bed Need	Neonatal Intermediate Care Bed Need
PPA I	2,340	5	14
PPA II	3,955	8	24
PPA III	2,415	5	14
PPA IV	4,161	8	25
PPA V	9,715	19	58
PPA VI	2,387	5	14
PPA VII	2,235	4	13
PPA VIII	4,519	9	27
PPA IX	5,411	11	32
State Total	37,138	74	223

¹ 2016 Occurrence Data. Number of beds based upon births rounded to the nearest 1,000.

Sources: Mississippi State Department of Health, Division of Health Planning and Resource Development Calculations, 2016

Source: Bureau of Public Health Statistics

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

405.01 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

405.02 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.

405.03 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 less than 35 weeks gestation until transfer to a facility that can provide the appropriate 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 at more than 32 weeks and weighing more than 1500g who have physiological 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 convalescent care after intensive care.
4. Provide mechanical ventilation for brief duration (less than 24 hours) and/or continuous positive airway pressure.
5. Stabilize infants born before 32 weeks gestation and weighing less than 1500 grams 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 (e.g., portable x-ray machine, blood gas analyzer) and personal (e.g., 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 less than 32 weeks gestation and weighing less than 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 less than 1500 grams 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 less than 32 weeks and weighing less than 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.

405.04 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

405.05 Hospital Evaluation and Level of Care Designation

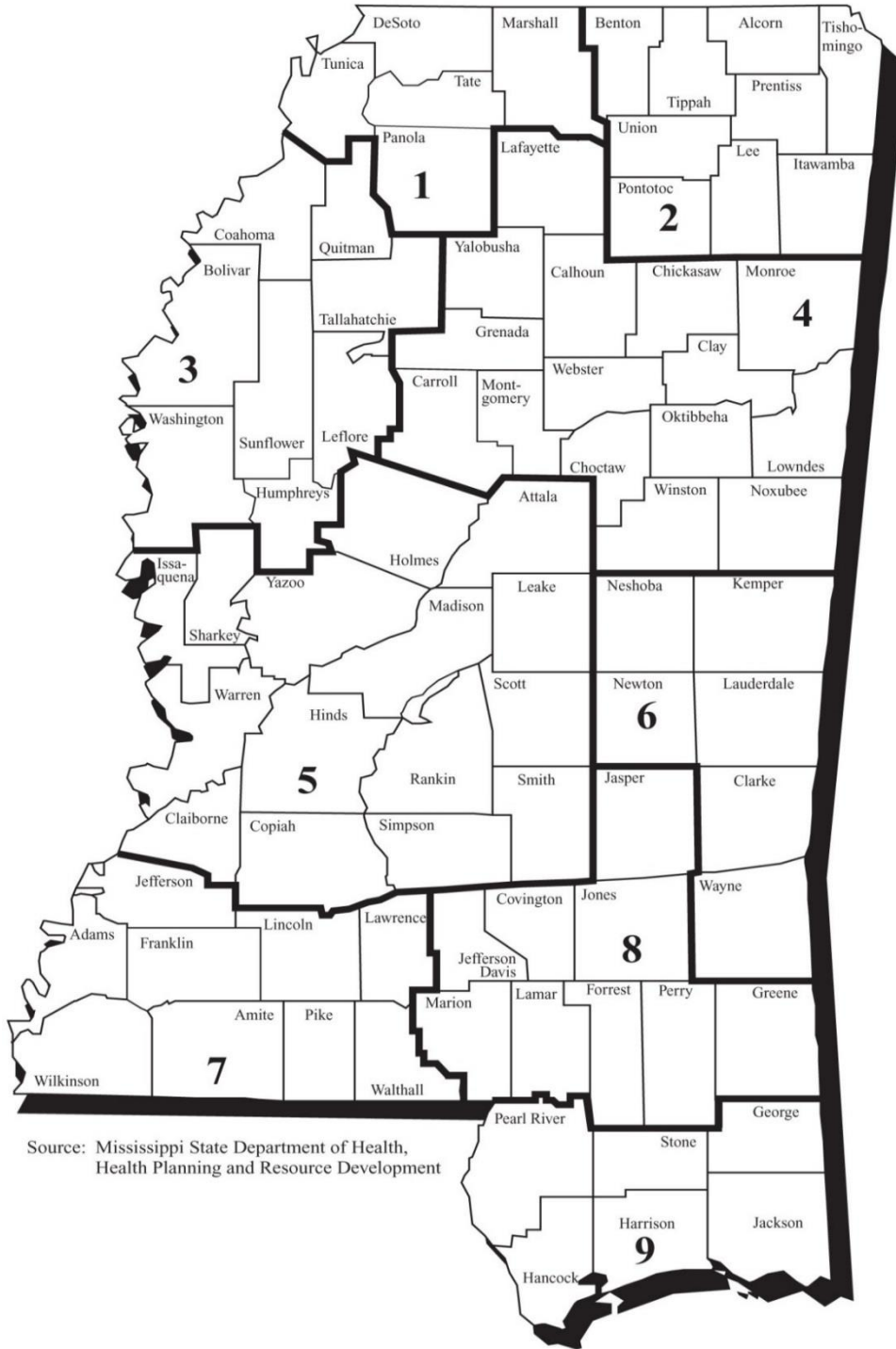
MSDH maintains the authority to evaluate hospitals offering obstetric and newborn services and designate a level of care based upon its clinical services and capacity.

References

American Academy of Pediatrics, Committee on Fetus and Newborn and American College of Obstetricians and Gynecologists Committee on Obstetric Practice, Edited by Kilpatrick, S, Papile, L., Macones, G. Guidelines for Perinatal Care, 8th Edition, Published 2017

American Academy of Pediatrics, Committee on fetus and Newborn; Levels of Neonatal Care. Pediatrics 2012; 130;587 DOI:10.1542/peds.2012-1999

Map 4-2 Perinatal Planning Area



Chapter 5 Acute Care Facilities and Services Overview

Mississippi had 112 non-federal medical/surgical hospitals in FY 2016, with a total of 13,155 licensed acute care beds (plus 573 beds held in abeyance by 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.

500 General Medical/Surgical Hospitals

When calculating the occupancy rate using total licensed bed capacity, the overall occupancy rate drops to 36.27 percent. Using these statistics and 2023 projected population totals, Mississippi had a licensed bed capacity to population ratio of 4.19 per 1,000 and an occupied bed to population ratio of 1.52 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 4768.36 leaving approximately 8377.64 unused licensed beds on any given day. Eighty (80) of the state's hospitals reported occupancy rates of less than 40 percent during FY 2016.

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 sixty (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 fifty percent (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. The fact that they arise frequently suggest the importance of reducing excess capacity where it is possible to do so and is not likely to result in problematic consequences. MSDH 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 2016**

Facility	Licensed Beds	Abeyance Beds	Average Daily Census	Occupancy Rate	Average Length of Stay
General Hospital Service Area 1	688	18	279.45	40.62	4.83
Alliance Healthcare System, Inc.	40		7.85	19.62	6.11
Baptist Memorial Hospital - DeSoto	309		145.51	47.09	4.13
Methodist Healthcare Olive Branch Hospital*	67		16.94	25.29	3.61
North Oak Regional Medical Center - Senatobia	76		11.59	15.25	5.04
Panola Medical Center	102	18	31.21	30.60	4.61
Parkwood Behavioral Health System	94		66.35	70.59	8.90
General Hospital Service Area 2	1,151	45	504.01	43.79	5.12
Baptist Memorial Hospital - Booneville	104		13.70	13.17	9.70
Baptist Memorial Hospital - Union County	145		23.52	16.22	2.89
Laird Hospital	25		1.85	7.41	3.22
Magnolia Regional Health Center	200		84.66	42.33	4.22
North Mississippi Medical Center	577		324.84	56.30	5.04
North Mississippi State Hospital	50		46.38	92.76	29.54
Pontotoc Health Services	25		1.46	5.83	2.99
Tippah County Hospital	25	45	7.60	30.40	5.54
Tishomingo Health Services, Inc.	48		5.72	11.92	3.13
General Hospital Service Area 3	983	41	292.73	29.78	4.92
Allegiance Speciality Hospital of Greenville	39		22.21	56.94	18.62
Bolivar Medical Center	164	1	29.76	18.15	3.76
Delta Regional Medical Center	195		63.61	32.62	4.71
Delta Regional Medical Center- West Campus	67	40	9.53	14.23	4.95
Greenwood - AMG Specialty Hospital	40		19.82	49.55	24.12
Greenwood Leflore Hospital	188		60.18	32.01	4.03
Medical/Demtal Facility at Parchman	56		37.93	67.73	12.05
North Sunflower Medical Center	35		22.90	65.44	7.52
Northwest Mississippi Medical Center	171		33.13	19.38	3.88
South Sunflower County Hospital	49		15.13	30.88	4.05
Tallahatchie General Hospital	18		0.74	4.09	1.58
General Hospital Service Area 4	1,255	49	324.39	25.85	4.04
Baptist Memorial Hospital - North Mississippi	204		71.26	34.93	4.06
Baptist Memorial Hospital - Calhoun	25	4	2.17	8.69	3.34
Baptist Memorial Hospital-Golden Triangle	307		88.73	28.90	4.10
Choctaw Regional Medical Center	25	0	1.55	6.21	3.14
Clay County Medical Corporation	54		8.99	16.65	3.00
Diamond Grove Center	25		20.73	82.94	9.55
Gilmore Memorial Hospital	95		19.67	20.70	3.14
Monroe Regional Hospital	35		8.21	23.46	13.34
Noxubee General Critical Access Hospital	25		6.12	24.47	3.65
Oktibbeha County Hospital	90		20.98	23.32	3.33
Trace Regional Hospital	84	0	10.25	12.20	10.98
Tyler Holmes Memorial Hospital	25		3.06	12.24	3.41
University of Mississippi Medical Center- Grenada	156	4	27.79	17.81	4.17
Webster Health Services, Inc.	38		22.53	59.30	6.17
Winston Medical Center	41	41	10.41	25.39	4.42
Yalobusha General Hospital	26		4.67	17.96	3.39

Table 5-1 (continued)
Licensed Short-Term Acute Care Hospital Beds by Service Area
FY 2016

Facility	Licensed Beds	Abeysance Beds	Average Daily Census	Occupancy Rate	Average Length of Stay
General Hospital Service Area 5	4,693	229	1,690.37	36.02	5.21
Baptist Medical Center - Attala, Inc.	25	46	3.92	15.67	1.00
Baptist Medical Center - Leake, Inc.	25		5.50	22.01	3.80
Baptist Medical Center - Yazoo, Inc.	25		5.93	23.70	4.38
Brentwood Behavioral Healthcare of MS	105		71.03	67.65	9.35
Claiborne County Hospital	32		4.53	14.14	12.15
Copiah County Medical Center	25	10	13.29	53.16	6.57
Holmes County Hospital and Clinics	25	10	2.35	9.41	2.94
Magee General Hospital	64	20	10.35	16.16	3.99
Merit Health Central	304	143	80.92	26.62	4.86
Merit Health Madison	67		11.72	17.49	3.38
Merit Health Rankin	134		35.56	26.53	3.31
Merit Health River Oaks	130		37.75	29.04	5.00
Merit Health River Region	321		80.01	24.93	5.05
Merit Health Woman's Hospital	109		10.16	9.32	2.66
Mississippi Baptist Medical Center	541		246.46	45.56	4.38
Mississippi Methodist Rehabilitation Center	44		0.00	0.00	0.00
Mississippi State Hospital	1,347		171.95	12.77	57.69
Oak Circle Center	60		26.91	44.85	37.87
Patients' Choice Medical Center of Smith County	29		5.60	19.31	12.96
Promise Hospital of Vicksburg	35		27.82	79.48	25.84
Regency Hospital of Hattiesburg	33		27.61	83.68	27.55
S.E. Lackey Memorial Hospital	35		17.82	50.90	5.34
Select Specialty Hospital - Belhaven, LLC	25		18.59	74.36	32.67
Select Specialty Hospital - Jackson	53		40.27	75.97	25.29
Scott Regional Hospital	25		2.84	11.35	3.52
Sharkey - Issaquena Community Hospital	29		6.07	20.94	4.80
Simpson General Hospital	35		11.22	32.06	6.38
St. Dominic-Jackson Memorial Hospital	500		337.82	67.56	3.73
University of Mississippi Medical Center	479		372.26	77.72	4.69
Whitfield Medical Surgical Hospital	32	11	4.13	12.92	8.08
General Hospital Service Area 6	1,088	111	490.01	45.04	5.48
Alliance Health Center**	146		64.34	44.07	8.26
Anderson Regional Medical Center	260	71	134.60	51.77	4.06
Anderson Regional Medical Center South Campus	49		6.81	13.89	12.24
East Mississippi State Hospital	151	6	114.21	75.63	8.02
H.C. Watkins Memorial Hospital	25		2.76	11.02	3.90
John C. Stennis Memorial Hospital	25		0.96	3.85	2.78
Neshoba County General Hospital	48	34	17.13	35.68	4.14
Regency Hospital of Meridian	40		26.43	66.07	26.06
Rush Foundation Hospital	215		60.99	23.37	4.07
The Specialty Hospital of Meridian	49		43.66	89.10	27.35
Wayne General Hospital	80		18.13	22.66	4.01
General Hospital Service Area 7	579	16	140.39	24.25	3.39
Beacham Memorial Hospital	31	6	13.16	42.46	5.20
Field Health System	25		4.10	16.38	3.63
Franklin County Memorial Hospital	25	10	1.17	4.69	2.91
Jefferson County Hospital	30		3.32	11.06	10.41
King's Daughters Medical Center	99		28.20	28.48	2.57
Lawrence County Hospital	25		7.04	28.15	6.48
Merit Health Natchez	159		43.27	27.22	3.83
Southwest Mississippi Regional Medical Center	160		37.54	23.46	2.90
Walthall General Hospital	25		2.59	10.36	3.51

Table 5-1 (continued)
Licensed Short-Term Acute Care Hospital Beds by Service Area
FY 2016

Facility	Licensed Beds	Abeyance Beds	Average Daily Census	Occupancy Rate	Average Length of Stay
General Hospital Service Area 8	1,180	41	513.90	43.55	4.62
Covington County Hospital	35		2.68	7.67	3.72
Forrest General Hospital	480		283.22	59.00	4.20
Greene County Hospital	7	3	0.58	8.22	2.76
Jasper General Hospital	16		0.06	0.39	4.60
Jefferson Davis General Hospital	35		5.05	14.43	7.39
Marion General Hospital	49	30	9.21	18.79	5.00
Merit Health Wesley	211		83.31	39.48	4.90
Perry County General Hospital	22	8	0.75	3.40	3.22
South Central Regional Medical Center	275		82.93	30.15	4.01
South Mississippi State Hospital	50		46.11	92.22	23.83
General Hospital Service Area 9	1,529	45	533.11	34.87	4.59
Garden Park Medical Center	130		42.13	32.41	4.31
George Regional Hospital	48		9.27	19.30	3.36
Hancock Medical Center	102		13.24	12.98	3.39
Highland Community Hospital	60	45	15.50	25.84	3.54
Memorial Hospital at Gulfport	348		185.85	53.41	4.88
Merit Health Biloxi	180		83.87	46.60	5.34
Ocean Springs Hospital	136		73.22	53.84	3.78
Pearl River County Hospital	24		0.20	0.83	2.92
Select Specialty Hospital - Gulf Coast	61		27.17	44.55	24.39
Singing River Hospital	415		79.24	19.09	3.98
Stone County Hospital	25		3.41	13.62	3.66
TOTAL	13,146	595	4,768.36	36.27	4.89

Notes: 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 *2016 Mississippi Hospital Report*.

Source: Application for Renewal of Hospital License for Calendar Year 2015 and FY 2016 Annual Hospital Report; Division of Health Planning and Resource Development, Office of Health Policy and Planning.

501 Hospital Outpatient Services

The following table shows the number of visits to hospital emergency rooms and hospital outpatient clinics in FY 2016. These statistics represent an increase over 2013's total of 4,877,339 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 2016

General Hospital Service Area	Number with Emergency Department	Number of Emergency Room Visits	Number of Hospitals with Outpatient Clinics	Number of Outpatient Clinic Visits	Total Outpatient Visits
Mississippi	84	1,931,303	76	3,698,269	5,629,572
1	5	132,004	5	74,383	206,387
2	8	203,360	7	357,607	560,967
3	7	147,798	4	248,158	395,956
4	13	219,362	12	511,299	730,661
5	19	481,425	20	1,029,974	1,511,399
6	6	114,467	7	285,068	399,535
7	8	113,616	7	208,541	322,157
8	8	190,306	6	186,975	377,281
9	10	328,965	8	796,264	1,125,229

Source: Applications for Renewals of Hospital License for Calendar Year 2015 and FY 2016 Annual Hospital Report, Mississippi State Department of Health.

502 Certificate of Need Criteria and Standards for General Acute Care Facilities

Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

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

1. Need in Counties Without a Hospital: Ten counties in Mississippi do not have a hospital: Amite, Benton, Carroll, Humphreys, Issaquena, Itawamba, Prentiss, Quitman, Smith 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.
2. Expedited Review: MSDH may consider an expedited review for CON applications that address only license code deficiencies, project cost overruns, and relocation of facilities or services.
3. Capital Expenditure: For the purposes of CON review, transactions which are separated in time but planned to be undertaken within twelve (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 twelve (12) months prior to the submission of the CON application.
4. Addition or Conversion of Beds: No health care facility shall be authorized to add any beds or convert any beds to another category of beds without a CON.
5. Beds in Abeyance: 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 CON. MSDH 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.
6. Break in Services: A health care facility that has ceased to operate for a period of sixty (60) months or more shall require a CON prior to reopening.

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

MSDH will review applications for a CON 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. MSDH will also review applications for a Certificate of Need according to the

general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of MSDH; and the specific criteria and standards listed below.

Need Criterion 1: Acute Care Hospital Need Methodology

With the exception of psychiatric, chemical dependency, and rehabilitation hospitals, MSDH will use the following methodologies to project the need for general acute care hospitals:

a. **Counties Without a Hospital**

MSDH shall determine hospital need by multiplying the state’s average annual occupied beds per 1,000 population (1.41 in FY 2013) by the estimated 2023 county population to determine the number of beds the population could utilize. A hospital with a maximum of 100 beds may be considered if the following three conditions are met: (i) the number of beds needed is 100 or more; (ii) there is strong community support for a hospital; and (iii) a hospital can be determined to be economically feasible.

b. **Counties With Existing Hospitals**

MSDH shall use the following formula to determine the need for an additional hospital in a county with an existing hospital:

$$ADC + \frac{K}{ADC}$$

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 GSAs. A hospital with a maximum of 100 beds may be considered if the following three conditions are met: (i) the number of beds needed is 100 or more; (ii) there is strong community support for a hospital; and (iii) a hospital can be determined to be economically feasible.

c. **Counties with Existing Hospitals Located in an Underdeveloped General Hospital Service Area and With a Rapidly Growing Population**

If the need methodology in b above shows that a need does not exist in that county, an Applicant may further demonstrate need for an acute care hospital not to exceed one hundred (100) beds if the county has a population in excess of 140,000 people; the county projects a population growth rate in excess of ten percent (10%) over the next ten (10) year period; and the county’s GHSA does not presently exceed a factor of three beds per 1,000 population.

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

- i. 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;
- ii. 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
- iii. 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;
- iv. Fully participate in the Trauma Care System at a level to be determined by the MSDH 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
- v. 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.

Need Criterion 2: Indigent/Charity Care

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

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

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 \$5,000,000 (for clinical health services) or \$10,000,000 (for nonclinical health services). MSDH will further review applications under the applicable statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code of 1972, as amended. 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.

Need Criterion 1: Acute Care Bed Need

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 sixty percent (60%) for the most recent two (2) years or has maintained an occupancy rate of at least seventy percent (70%) for the most recent two (2) years according to the below formula:

$$\# \text{ Observation patient days}/365/ \text{ licensed beds} + \text{ Inpatient Occupancy rate}$$

Note: *An observation patient day 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.

Need Criterion 2: 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.

Need Criterion 3: 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*.

Need Criterion 4: Cost of Project

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.

- f. 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 fifteen percent (15%). 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.
- g. If equipment costs for the project exceed the median costs for equipment of similar quality by more than fifteen percent (15%), 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.

Need Criterion 5: Project Specifications

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.

Need Criterion 6: Renovation/Expansion Justification

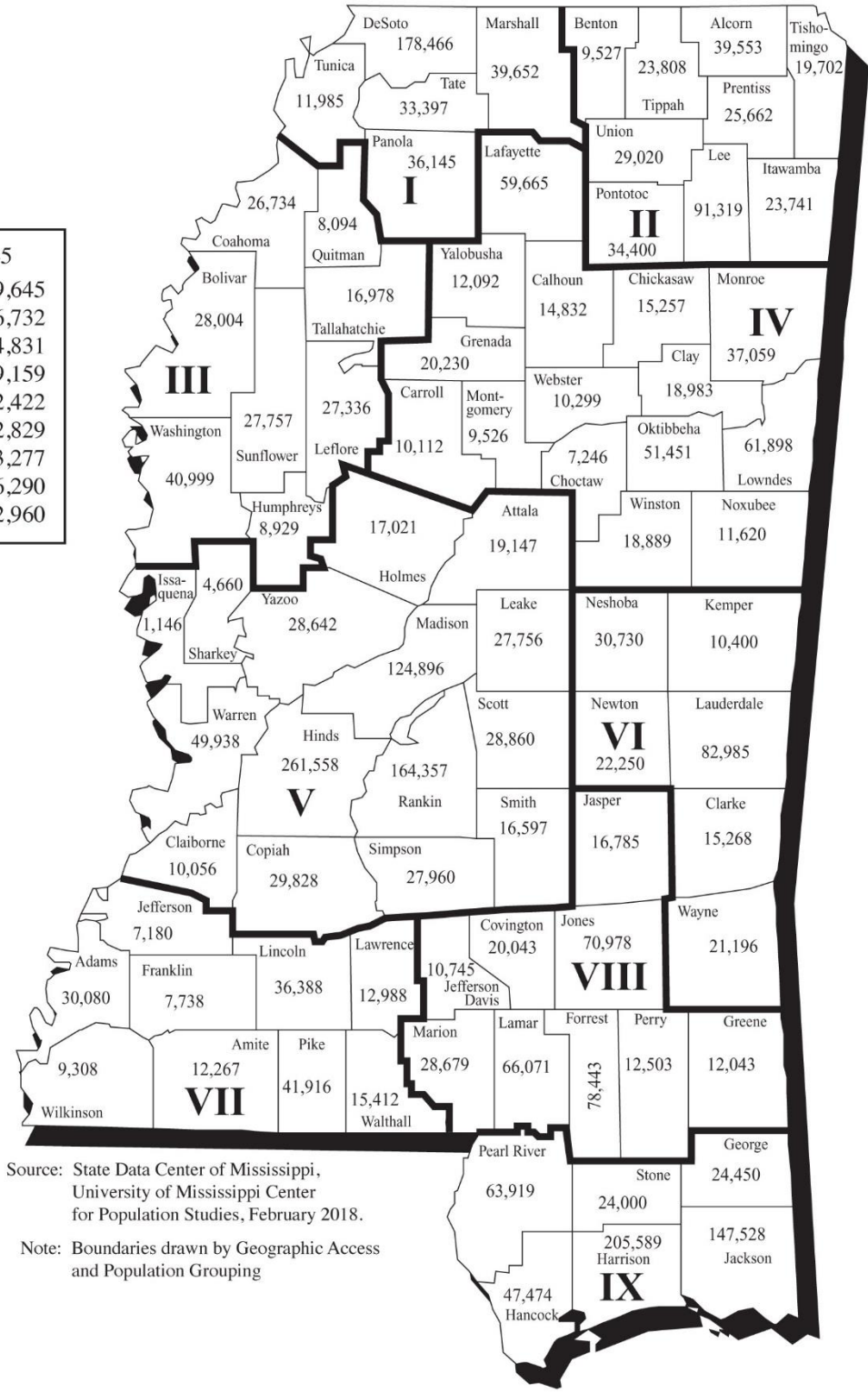
If the cost of the proposed renovation or expansion project exceeds eighty-five percent (85%) of the cost of a replacement facility, the applicant shall document their justification for rejecting the option of replacing said facility.

Need Criterion 7: Need for Service

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 2023 Population Projections

State Total - 3,138,145
Planning Area 1 - 299,645
Planning Area 2 - 296,732
Planning Area 3 - 184,831
Planning Area 4 - 359,159
Planning Area 5 - 812,422
Planning Area 6 - 182,829
Planning Area 7 - 173,277
Planning Area 8 - 316,290
Planning Area 9 - 512,960



Source: State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 2018.

Note: Boundaries drawn by Geographic Access and Population Grouping

503 Long-Term Acute Care Hospitals

A long-term acute care (LTAC) hospital is a freestanding, Medicare-certified acute care hospital with an average length of inpatient stay greater than twenty-five (25) calendar days, which is primarily engaged in providing chronic or long-term medical care to patients who do not require more than three_(3) hours of rehabilitation or comprehensive rehabilitation per day, and has a transfer agreement with an acute care medical center and a comprehensive medical rehabilitation facility. As of FY 2016, sixteen (16) long-term acute care hospitals were in operation. The following table lists specific LTAC information.

**Table 5-3
Long-Term Acute Care Hospitals
2016**

Facility	Location	Licensed Beds	Occupancy Rate	Discharges	ALOS
General Hospital Service Area 1		0	0.00	0	0.00
NONE					
General Hospital Service Area 2		0	0.00	0	0.00
NONE					
General Hospital Service Area 3		79	53.20	737	20.91
Allegiance Specialty Hospital Greenville* - Greenville		39	56.94	430	18.62
Greenwood AMG Specialty Hospital* - Greenwood		40	49.55	307	24.12
General Hospital Service Area 4		0	0.00	0	0.00
NONE					
General Hospital Service Area 5		88	77.37	962	25.51
Mississippi Hospital for Restorative Care - Jackson			0.00		0)
Promise Hospital of Vicksburg - Vicksburg		35	79.48	377	25.84
Regency Hospital of Jackson - Jackson			0.00		0.00
Select Specialty Hospital of Jackson - Jackson		53	75.97	585	25.29
General Hospital Service Area 6		89	78.75	964	26.86
Regency Hospital of Meridian - Meridian		40	66.07	370	26.06
Specialty Hospital of Meridian - Meridian		49	89.10	594	27.35
General Hospital Service Area 7		0	0.00	0	0.00
NONE					
General Hospital Service Area 8		33	83.68	365	27.55
Regency Hospital of Southern Mississippi - Hattiesburg		33	83.68	365	27.55
General Hospital Service Area 9		61	44.55	388	24.39
Select Specialty Hospital-Gulfport - Gulfport		61	44.55	388	24.39
TOTAL		350	67.14	3,416	24.99

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

Source: Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report

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

Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

504.01 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 twenty-five (25) calendar days or more.
 4. Size of Facility: Establishment of a long-term care hospital shall not be for less than twenty (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. Addition or Conversion of Beds: 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 CON 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.

504.02 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

MSDH will review applications for a CON 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. 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 MSDH; and the specific criteria and standards listed below.

Need Criterion 1: Projected Need

The applicant shall document a minimum of 450 clinically appropriate restorative care admissions with an average length of stay of twenty-five (25) days.

Need Criterion 2: Financial Feasibility

A projection of financial feasibility by the end of the third year of operation.

Need Criterion 3: Bed Licensure

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.

Need Criterion 4: Licensure

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.

Need Criterion 5: Indigent/Charity 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*.

Need Criterion 6: Project Cost

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 twelve (12) month period by more than fifteen percent (15%). 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.

Need Criterion 7: Floor Area and Space Requirements

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

1. The gross square footage of the proposed project in comparison to state and national norms for similar projects.
2. The architectural design of the existing facility if it places restraints on the proposed project.
3. Special considerations due to local conditions.

Need Criterion 8: Transfer Agreement

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

505 Swing -Bed Programs and Extended Care Services

Federal law allows rural hospitals with fewer than 100 hospital beds to utilize its beds as “swing beds” to provide post-acute extended care services. 42 C.F.R. § 482.58. Hospitals must have a Medicare provider agreement and meet several eligibility and skilled nursing facility service requirements to be granted CMS approval to provide post-hospital extended care services and to be reimbursed as a swing-bed hospital.

Swing-bed hospitals have the same Medicare coverage requirements and coinsurance provisions as nursing facilities. In addition to meeting acute care standards, swing-bed hospitals must also substantially comply with the eight skilled nursing facility services standards listed in 42 C.F.R. §482.58(b). These standards include resident rights, admission, transfer, and discharge rights, freedom from abuse, neglect, and exploitation, dental services, specialized rehabilitative services, social services, patient activities, and discharge planning. Because 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 for the elderly and others with long-term needs. If it is not possible for the patient to return home, the swing-bed hospital assists the patient and their family with nursing home placement. Ideally, the swing-bed concept should help alleviate low utilization problems in small rural hospitals and provide a new revenue source with few additional expenses while also more efficiently utilizing hospital staff during periods of low acute care occupancy.

505.01 Swing -Bed Utilization

Forty-seven (47) Mississippi hospitals and one specialty hospital participated in the swing bed program during Fiscal Year 2016. They reported 6,980 discharges from their swing beds and an average length of stay of 16.25 days.

**Table 5-4
Swing-Bed Utilization
FY 2016**

Facility	Licensed Beds	Discharges	ALOS	Average Daily Census
General Hospital Service Area 1	3	33	6.79	0.57
Alliance Health Care System	3	33	6.79	0.57
General Hospital Service Area 2	35	1047	13.97	43.84
Baptist Memorial Hospital-Union County	0	95	7.73	1.98
Laird Hospital	25	247	11.35	7.71
Pontotoc Health Services	0	343	20.22	19.29
Tippah County Hospital	10	166	16.18	7.16
Tishomingo Health Services, Inc.	10	196	14.35	7.70
General Hospital Service Area 3	66	615	28.90	23.51
Bolivar Medical Center	12	127	10.21	3.65
North Sunflower Medical Center	15	322	14.07	12.96
South Sunflower County Hospital	30	107	15.69	4.63
Tallahatchie General Hospital	9	59	75.61	2.27
General Hospital Service Area 4	151	1,782	14.65	71.71
Baptist Memorial Hospital- Calhoun	25	100	23.82	6.27
Choctaw Regional Medical Center	15	149	13.62	5.37
Clay County Medical Corporation	10	196	11.56	6.20
Gilmore Memorial Hospital	0	59	6.63	1.07
Monroe Regional Hospital	0	245	15.76	10.37
Noxubee General Critical Access Hospital	25	173	16.11	7.74
Oktibbeha County Hospital	10	124	8.79	3.06
Trace Regional Hospital	10	4	22.25	0.28
Tyler Holmes Memorial Hospital	10	140	17.15	6.87
Webster Health Services	20	349	13.50	12.81
Winston Medical Center	0	13	8.46	0.30
Yalobusha General Hospital	26	230	18.15	11.37
General Hospital Service Area 5	54	1,063	15.00	54.08
Baptist Medical Center- Attala, Inc.	0	0	0.00	7.82
Baptist Medical Center - Yazoo, Inc.	10	185	14.17	5.06
Baptist Medical Center- Leake, Inc.	25	281	17.07	12.69
Holmes County Hospital & Clinics	0	69	18.86	4.09
Magee General Hospital	12	158	17.52	7.72
Claiborne County Hospital	7	126	14.41	5.02
Scott Regional Hospital	0	83	23.43	5.14
Simpson General Hospital	0	161	14.56	6.54

Source: Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report

Table 5-4 (Continued)
Swing-Bed Utilization
FY 2016

Facility	Licensed Beds	Discharges	ALOS	Average Daily Census
General Hospital Service Area 6	115	1,018	11.51	40.86
Anderson Regional Medical Center South	25	362	16.45	16.31
H.C. Watkins Memorial Hospital	25	207	16.11	8.98
John C Stennis Memorial Hospital	25	217	11.83	7.13
Neshoba County General Hospital	10	25	11.44	0.79
Speciality Hospital of Meridan	20	0	0	0.01
Wayne General Hospital	10	207	13.20	7.64
General Hospital Service Area 7	51	518	18.82	28.50
Field Health System	16	125	16.53	5.55
Franklin County Memorial Hospital	25	194	28.21	14.79
Lawrence County Hospital	10	95	16.08	4.22
Walthall County General Hospital	0	104	14.45	3.94
General Hospital Service Area 8	57	720	17.80	34.75
Covington County Hospital	25	248	15.66	10.44
Greene County Hospital	0	75	19.80	4.07
Jasper General Hospital	12	127	20.57	6.99
Jefferson Davis Community Hospital	0	66	13.61	2.50
Marion General Hospital	20	204	19.34	10.75
General Hospital Service Area 9	0	184	18.77	13.72
George Regional Hospital	0	7	10.43	0.20
Stone County Hospital	0	177	27.11	13.52
State Total	532	6,980	16.25	311.54

Source: Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report

Note(s): According to the Applications for Renewal of Hospital License for Calendar Year 2016 and FY 2017 Annual Hospital Report: Baptist Memorial Hospital-Union County, Pontotoc Health Services, Gilmore Memorial Hospital, Monroe Regional Hospital, Winston Medical Center, Baptist Medical Center- Attala, Inc., Holmes County Hospital & Clinics, Scott Regional Hospital, Simpson General Hospital and George Regional Hospital reported zero (0) licensed Swing Beds.

505.02 Certificate of Need Criteria and Standards for Swing-Bed Services

MSDH will review applications for a 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. 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.

Need Criterion 1: Federal Requirements

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.

Need Criterion 2: Resolution Adopted for Proposed Participation

The applicant shall provide a copy of the Resolution adopted by its governing board approving the proposed participation.

Need Criterion 3: Hospitals Proposing Beds over the Maximum allowed by Federal Law

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 once the federal threshold is met.

Need Criterion 4: Medicare Recipients

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.

Need Criterion 5: Limitation on Medicare/Medicaid Patients

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 thirty (30) days per admission unless the hospital receives prior approval for such patient from the Division of Medicaid.

Need Criterion 6: Hospitals with More Licensed Beds or a Higher Average Daily Census

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 fifty (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 fifty (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.

Need Criterion 7: Transfer Agreements

The applicant shall provide copies of transfer agreements entered into with each nursing facility within the applicant's geographic area.

Need Criterion 8: Failure to Comply

An applicant subject to the conditions stated in Need 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 MSDH, after a hearing complying with due process, MSDH, determines that the hospital has failed to comply with any of those requirements.

506 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 photons (x-ray or gamma rays) or charged particles (electrons, protons or heavy nuclei) 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). Radiation therapy services does not include low energy, superficial, external beam x-ray treatment of superficial skin lesions.

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.

507 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 (5) treatments versus thirty (30) to forty (40) for radiotherapy.

Three (3) 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.

508 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 2015 and FY 2016**

Facility	County	Number of Treatments (Visits)	
		2015	2016
General Hospital Service Area 1		10,302	9,875
Baptist Memorial Hospital - DeSoto	DeSoto	10,302	9,875
General Hospital Service Area 2		17,196	14,438
Magnolia Regional Health Center	Alcorn	4,003	3,873
North Miss Medical Center	Lee	13,193	10,565
General Hospital Service Area 3		9,043	10,550
Alliance Cancer Center-Clarksdale	Coahoma	2,237	2,130
Alliance Cancer Center- Greenville	Washington	3,589	4,058
Greenwood Leflore Hospital	Leflore	3,217	4,362
General Hospital Service Area 4		24,033	22,540
Baptist Memorial Hospital - Golden Triangle	Lowndes	18,152	15,625
Baptist Memorial Hospital - North Miss	Lafayette	5,881	6,915
Cancer Care at Premier Health Complex ¹	Oktibbeha	DNS	DNS
General Hospital Service Area 5		47,484	44,916
Vicksburg Oncology Associates ¹	Warren	4,492	4,653
Merit Health Central	Hinds	7,542	6,002
Miss Baptist Medical Center	Hinds	11,561	11,472
Promise Hospital of Vicksburg	Warren	-	-
St. Dominic Jackson- Memorial Hospital	Hinds	12,937	12,015
University of Mississippi Medical Center	Hinds	10,952	10,774
General Hospital Service Area 6		1	1
Anderson Regional Cancer Center	Lauderdale	1	1
General Hospital Service Area 7		7,480	7,597
Caring River Cancer Center ¹	Adams	2,814	3,130
Southwest Miss Regional Medical Center	Pike	4,666	4,467
General Hospital Service Area 8		19,577	21,312
Forrest General Hospital	Forrest	15,580	17,281
Laurel Cancer Care ¹	Jones	3,997	3,942
Regency Hospital of Hattiesburg*	Forrest	-	-
South Central Regional Medical Center****	Jones	-	89
General Hospital Service Area 9		18,968	52,349
Cedar Lake Oncology Center ¹	Harrison	2,439	3,915
Memorial Hospital at Gulfport	Harrison	9,586	10,611
Merit Health Biloxi	Harrison	2,436	33,316
Ocean Springs Hospital**	Jackson	-	-
Select Specialty Hospital - Gulf Coast***	Harrison	-	-
Singing River Hospital**	Jackson	4,507	4,507
State Total		154,084	183,578

¹ Indicates freestanding clinics.

*Regency Hospital of Hattiesburg uses Forrest General Hospital's Linear Accelerator Machine.

**Singing River Hospital and Ocean Springs Hospital share one Linear Accelerator Machine.

***Select Specialty Hospital – Gulf Coast uses Memorial Hospital at Gulfport's Linear Accelerator Machine.

****South Central Regional Medical Center uses Laurel Cancer Care's Linear Accelerator Machine.

DNS- Did Not Submit

Sources: Applications for Renewal of Hospital License for Calendar Years 2015 and 2016

509 Certificate of Need Criteria and Standards for Therapeutic Radiation Services

Note: Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

509.01 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: MSDH shall determine the need for therapeutic radiation services equipment using the General Hospital Service Areas as presented in this chapter of the *Plan*. MSDH shall determine the need for therapeutic radiation services and 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 Section 509.02.02 of the *Plan*). MSDH will consider out-of-state population in determining need only when the applicant submits adequate documentation acceptable to MSDH, 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 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: 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. "Backup" equipment should only be utilized when the primary equipment is deemed out of service.
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 MSDH through a determination of non-reviewability.

509.02 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)

MSDH will review CON 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. 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 MSDH; 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, regardless of the capital expenditure.

Need Criterion 1: Project Need

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

- i. the need methodology as presented in this section of the *Plan*;
- ii. 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
- iii. demonstrating that the applicant's existing therapeutic equipment has exceeded the expected level of patients serviced, i.e., 320 patients per year/unit, or 8,000 treatments per year/unit for the most recent 24-month period.

Need Criterion 2: Presence of Readily Available Services

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

Need Criterion 3: Staffing Requirements

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.

Need Criterion 4: Access to Additional Staff

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

Need Criterion 5: Physician Location

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 sixty (60) minutes normal driving time of the facility.

Need Criterion 6: Access to a Modern Simulator

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 regarding the use of the simulator:

- 4. 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.
- 5. 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.

Need Criterion 7: Access to Computerized Treatment Planning System

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.

Need Criterion 8: Supervision of Treatment

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

Need Criterion 9: MSDH Division of Radiological Health Approval

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

Need Criterion 10: Quality Assurance Program

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.

Need Criterion 11: Failure to Comply

The applicant shall affirm understanding and agreement that failure to comply with Need 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.

509.02.01 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 8,130 new cancer cases in 2018. Based on a population of 3,138,145 (year 2023) as estimated by the State Data Center of Mississippi (University of Mississippi Center for Population Studies) is 2.59 cases per 1,000 population.
3. Patients to Receive Treatment: The number of cancer patients expected to receive therapeutic radiation treatment is set at forty-five percent (45%).
4. Population to Equipment Ratio: Using the above stated data, a population of 100,000 will generate 259 new cancer cases each year. Assuming that forty-five percent (45%) will receive radiation therapy, a population of 274,560 will generate approximately 320 patients who will require radiation therapy. Therefore, a population of 274,560 will generate a need for one therapeutic radiation unit.

509.02.02 Therapeutic Radiation Equipment Need Determination Formula

1. Project annual number of cancer patients:

$$\begin{array}{rcl} \text{General Hospital Service} & & \underline{2.59 \text{ cases}^*} \\ \text{Area Population} & \times & 1,000 \text{ population} = \text{New Cancer Cases} \end{array}$$

*Mississippi cancer incidence rate

2. Project the annual number of radiation therapy patients:

$$\text{New Cancer Cases} \times 45\% = \text{Patients Who Will Likely Require Radiation Therapy}$$

3. Estimate number of treatments to be performed annually:

$$\text{Radiation Therapy Patients} \times 25 \text{ Treatments per Patient (Avg.)} = \text{Estimated Number of Treatments}$$

4. Project number of megavoltage radiation therapy units needed:

$$\frac{\text{Est. \# of Treatments}}{8,000 \text{ Treatments per Unit}} = \text{Projected Number of Units Needed}$$

5. Determine unmet need (if any):

$$\text{Projected Number of Units Needed} - \text{Number of Existing Units} = \text{Number of Units Required (Excess)}$$

509.03 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: MSDH shall determine the need for stereotactic radiosurgery services and equipment by using the actual stereotactic radiosurgery provider's service area.
2. Unit-to Population Ratio: The need for stereotactic radiosurgery units is determined to be the same as for radiotherapy, for 2023 a population of 3,138,145. The therapeutic radiation need determination formula is outlined in Section 509.02.02 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 and complies with the teaching exception as outlined in Section 102.01 of this Plan. 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: 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. Addition of Services: 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. Discharge Planning Policy: 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. Referral Policy: All stereotactic radiosurgery services should have established protocols for referring physicians to assure adequate post-operative diagnostic evaluation for radiosurgery patients.
8. Service Cost Comparison: 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. Patient Cost Comparison: The usual and customary charge to the patient for stereotactic radiosurgery should be commensurate with cost.

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

MSDH will review CON 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. 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 MSDH; 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, regardless of the capital expenditure.

Need Criterion 1: Minimum Procedures

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.

Need Criterion 2: Staffing Requirements

- 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.

Need Criterion 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.

510 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.

510.01 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.

Sixty-four (64) facilities (hospitals and free-standing) in Mississippi operated fixed or mobile based MRI units in FY 2016. These facilities performed a total of data to be inserted] MRI procedures during the year. Table 5-6 presents the location, type (fixed or mobile and number of units per facility), and utilization of MRI equipment throughout the state in fiscal years 2015 and 2016.

**Table 5-6
Location and Number of MRI Procedures by General Hospital Service Area
FY 2015 and FY 2016**

	Type of Providers	County	Type of Equipment	Number of MRI Procedures		Days/Hours of Operation
				2015	2016	2016
General Hospital Service Area 1				13,436	13,416	
Baptist Memorial Hospital - DeSoto	H	DeSoto	F(3)	8,022	7,502	M-Sun.72 Hrs.
Desoto Imaging Specialists	FS	DeSoto	F	3,366	3,060	M-F, 60 Hrs.
Methodist Healthcare Olive Branch Hospital	H	DeSoto	F	1,394	2,106	M-F, 40 Hrs.
Panola Medcial Center	H	Panola	M	654	748	M, Th, F 25 Hrs.
Superior MRI Services	MP	Panola	M	-	-	N/A
General Hospital Service Area 2				29,868	31,182	
Baptist Memorial Hospital - Booneville	H	Prentiss	F	817	725	M-F, 40 Hrs
Baptist Memorial Hospital - Union	H	Union	F M(4)	2,353	2,831	Mon-Sat., 168 Hrs.
Imaging Center of Gloster Creek Village ****	FS	Lee	F			M-F,40 Hrs.
Magnolia Regional Health Center	H	Alcorn	F(2)	6,727	6,311	M-F- 40 Hrs.
Medical Imaging at Barnes Crossing	FS	Lee	F	3,664	3,595	M-F, 40 Hrs.
Medical Imaging at Crossover Road	FS	Lee	F	2,249	2,614	M-F, 40 Hrs.
North Miss. Medical Center	H	Lee	F(4)	13,217	14,327	M-F, 240 Hrs.
Tishomingo Health Services, Inc.	H	Tishomingo	M	841	779	M-F, 40 Hrs.
General Hospital Service Area 3				10,398	10,738	
Allegiance Specialty House of Greenville	H	Washington	F	61	62	M-F, 40 Hrs.
Bolivar Medical Center	H	Bolivar	M	1,038	1,208	M-F, 40 Hrs.
Delta Regional Med. Center-Main Campus	H	Washington	F	2,548	2,497	M-F, 40 Hrs.
Greenwood Leflore Hospital	H	Leflore	F	3,366	3,479	M-F, 50+ Hrs.
North Sunflower Medical Center	H	Sunflower	F	706	645	Tu, Th. 8 Hrs.
Northwest Miss. Regional Medical Center	H	Coahoma	F	1,509	1,601	M-F, 40 Hrs.
South Sunflower County Hospital	H	Sunflower	M	441	369	W., 4 Hrs.
Superior- North Sunflower Medical Center ¹	MP	Sunflower	M	517	664	Tu, Th., 8 Hrs.
Tallahatchie General Hospital	H	Tallahatchie	M	212	213	M, 4 Hrs.
General Hospital Service Area 4				21,758	22,586	
Baptist Memorial Hospital - Golden Triangle	H	Lowndes	F(2)	2,845	2,942	M-Sun, 168 Hrs.
Baptist Memorial Hospital - North MS	H	Lafayette	FM	2,698	2,759	Mon.- Sun., 168 Hrs.
Baptist Memorial Hospital - Calhoun	H	Calhoun	M	192	255	M. & Thr., 10 Hrs.
Clay County Medical Corporation	H	Clay	M	DNS	548	DNS
Gilmore Memorial Hospital, Inc.	H	Monroe	M	996	974	M-F, 40 Hrs.
Imaging Center of Columbus	FS	Lowndes	F(2)	6,156	6,496	M-F, 50 Hrs.
Imaging Ctr. of Excellence Institute - MSU	FS	Oktibbeha	F	1,396	1,600	M-F, 45 Hrs.
Monroe Regional Hospital *	H	Monroe	M	303	268	M,T, F 12 Hrs.
North Miss. Medical Center - Eupora ***	H	Webster	M	637	574	M, Tu, & W 24 Hrs.
North Miss. Medical Center - West Point	H	Clay	M	560	548	M-F, 40 Hrs.
Oktibbeha County Hospital	H	Oktibbeha	F	2,616	2,620	M-F, 40 Hrs.
Trace Regional Hospital	H	Chickasaw	M	309	316	Tu., Th. 16 Hrs.
SMI- Tyler Holmes Memorial Hospital	H	Montgomery	M	237	235	W, 4 Hrs.
University of MS Medical Center - Grenada**	H	Grenada	F	2,586	2,406	M-F, 40 Hrs.
SMI- Yalobusha Hospital	H	Yalobusha	M	227	45	W, 4 Hrs.

F- Fixed unit

M-Mobile Unit

Type of Providers: H-Hospital, FS-Freestanding, and MP- Mobile Provider

Note: ¹Indicates Superior is the approved service provider.

² Indicates Scott Medical Imaging is the approved service provider.

*Pioneer Community Hospital changed its name to Monroe Regional Hospital.

**Grenada Lake Medical Center changed its name to University of MS Medical Center-Grenada.

***Webster Health Services changed its name to North MS Medical Center- Eupora.

**** Imaging Center of Gloster Creek Village did not start data collection until February 2017.

Table 5-6 (continued)
Location and Number of MRI Procedures by General Hospital Service Area
FY 2015 and FY 2016

Facility	Type of Providers	County	Type of Equipment	Number of MRI Procedures		Days/Hours of Operation
				2015	2016	2016
General Hospital Service Area 5				81,775	91,524	
Baptist Medical Center - Attala, Inc. *	H	Attala	F	-	-	M, F 30 Hrs.
Baptist Medical Center - Leake, Inc.	H	Leake	M	325	435	Tu., 4 Hrs.
Baptist Medical Center- Yazoo, Inc.	H	Yazoo	M	572	614	Tu., Th., 8 Hrs.
Central MS Diagnostics, LLC	FS	Rankin	F	1,044	1,042	M-F, 40 Hrs.
Copiah County Medical Center	H	Copiah	M	499	391	M,W,F 12 Hrs.
King's Daughters Medical Center	H	Yazoo	F	2,650	2,831	Tues. & Th., 8 Hrs
Kosciusko Medical Clinic	FS	Attala	F	2,447	2,359	M-F, 45 Hrs.
Madison Radiological Group, LLC	FS	Madison	F	2,038	2,328	M-F, 40 Hrs.
Magee General Hospital	H	Simpson	F	706	656	M-F, 40 Hrs.
Merit Health Central	H	Hinds	F(2)	3,609	2,182	M-Sun, 90+ Hrs.
SMI- Merit Health Madison ²	H	Madison	F	220	304	M, W 8 Hrs.
Merit Health Rankin	H	Rankin	F	610	762	M-F 40 Hrs.
Merit Health River Oaks	H	Rankin	F	2,912	3,610	M-F, 50 Hrs.
Merit Health River Region	H	Warren	F	2,466	2,526	M-F, 40 Hrs.
Miss. Baptist Medical Center	H	Hinds	F(2)	7,402	8,289	M-Sat., M-F, 104 Hrs.
Miss. Diagnostic Imaging Center	FS	Rankin	F	2,233	2,237	M-F, 40 Hrs.
Mission Primary Care Clinic	FS	Warren	M	665	521	M- Th. 40 Hrs.
Miss. Sports Medicine & Orthopedic	FS	Hinds	F(2)	6,218	6,218	M-F, 90 Hrs.
Open MRI of Jackson	FS	Rankin	F	DNS	DNS	DNS
SE Lackey Memorial Hospital	H	Scott	M	526	526	M, W, & Th, 24 Hrs.
Sharkey/Issaquena Community Hospital	H	Sharkey	M	170	159	W., 4 hrs.
Southern Diagnostic Imaging	FS	Rankin	F	4,863	5,781	M-F, 80 Hrs.
SMI-Hardy Wilson Memorial Hospital ²	H	Copiah	M	469	361	M, Th.,& Fri. 12 Hrs.
SMI- Holmes County Hospital & Clinics	H	Holmes	M	0	345	Thurs., 4 Hrs.
SMI- Leake Memorial Hospital	H	Leake	M	327	429	Tu. 4 Hrs.
SMI- Madison River Oaks Medical Center	H	Madison	M	208	289	Tu. Th., 8 Hrs
SMI-Ridgeland Diagnostic Center ²	FS	Madison	M	739	627	M, W, & Th. 12 Hrs.
SMI- Scott County Hospital ²	MP	Scott	M	18	145	F, 4 Hrs.
SMI-Simpson General Hospital ²	MP	Simpson	M	28	114	Th., 4 Hrs.
St. Dominic's Jackson- Memorial Hospital	H	Hinds	F(3)/M(1)	16,421	22,807	M-Sun., 328 Hrs.
St. Dominic's Madison Medical Imaging	FS	Madison	F	2,143	2,430	M-F, 40 Hrs.
University of MS Medical Center	H	Hinds	F(6)	19,247	20,206	M-F 504 Hrs.
General Hospital Service Area 6				13,614	14,183	
Anderson Regional Medical Center **	H	Lauderdale	F(3)	4,705	4,393	M-F, 40 Hrs.
Anderson Regional Medical Center-South Campus	FS	Lauderdale	F(2)	33	26	
H. C. Watkins Memorial Hospital	H	Clarke	M	0	141	Thr., 8 Hrs.
Imaging Center of Meridian, LLC	FS	Lauderdale	M	2,698	2,825	M-F, 45 Hrs.
John C Stennis Memorial Hospital	H	Kemper	M	79	63	M-F, 45 Hrs.
Laird Hospital	H	Newton	M	449	431	M,W, & F, 20 Hrs.
Neshoba County General Hospital	H	Neshoba	F(4) M	1,342	1,507	M-F., 40Hrs.
Rush Foundation Hospital	FS	Lauderdale	F(2)	3,812	4,452	M-F, 130 Hrs.
SMI-- Newton Regional Hospital ²	MP	Newton	M	176	29	M, 4 Hrs.
SMI-Wayne General Hospital ²	MP	Wayne	M	320	316	M, 4 hrs.

F- Fixed unit

M-Mobile Unit

Type of Providers: H-Hospital, FS-Freestanding, and MP- Mobile Provider

Note: ¹Indicates Superior is the approved service provider.

² Indicates Scott Medical Imaging is the approved service provider.

*Baptist Medical Center- Attala shares an MRI with Kosciusko Medical Clinic

**Anderson Regional Medical Center South Campus uses Anderson Regional Medical Center's MRI

Table 5-6 (continued)
Location and Number of MRI Procedures by General Hospital Service Area
FY 2015 and FY 2016

Facility	Type of Providers	County	Type of Equipment	Number of MRI Procedures		Days/Hours of Operation
				2015	2016	2016
General Hospital Service Area 7				7,265	8,521	
King's Daughters Medical Center	H	Lincoln	F	2,650	2,831	M-F, 48 Hrs.
Merit Health Natchez	MP	Adams	F(2)	1,930	2,509	M-F, 50 Hrs.
SMI-Lawrence County Hospital ²	MP	Lawrence	M	5	114	W, 4 Hrs.
SMI - Walthall County Hospital ²	MP	Walthall	M	158	162	W, 4 Hrs.
Southwest MS Regional Medical Center	H	Pike	F	2,522	2,905	M-F, 40 Hrs.
General Hospital Service Area 8				31,516	32,759	
Forrest General Hospital	H	Forrest	F(2)	5,514	6,061	M-Sun., 168 Hrs.
Hattiesburg Clinic, P.A.	FS	Forrest	F(4)	11,123	11,888	M-F 40 Hrs. & Sat. 38 Hrs.
Jefferson Davis Comm. Hospital	MP	Jeff Davis	M	121	105	Th., 4 Hrs.
Merit Health Wesley	H	Lamar	F	2,426	2,325	M-F, 50 Hrs.
Open Air MRI of Laurel	FS	Jones	F	3,818	3,507	M-F, 40+ Hrs.
SMI- Marion General Hospital ²	MP	Marion	M	275	280	Tu., 4 Hrs.
South Central Regional Medical Center	H	Jones	F	2,229	2,229	M-F, 50 Hrs.
Southern Bone & Joint Specialist, PA	FS	Forrest	F(2)	6,010	6,364	M-Sat., 140 Hrs.
General Hospital Service Area 9				29,142	31,290	
Cedar Lake MRI-Open MRI LLC	FS	Harrison	F	4,565	5,170	M-Sat, 78 Hrs.
Compass Imaging, LLC	FS	Harrison	M	534	633	M. & F, 16 Hrs.
Garden Park Medical Center	H	Harrison	F	1,225	1,815	M-F, 40 Hrs.
George County Hospital	H	George	F	773	749	M-F, 40 Hrs.
Hancock Medical Center	H	Hancock	F	913	1,075	M-F, 40 Hrs.
Highland Community Hospital*	H	Pearl River	M	1,513	1,657	M-Fri, 45 Hrs.
Memorial Hospital at Gulfport	H	Harrison	F(2)	7,994	8,908	M-Sun, 154 Hrs.
Merit Health Biloxi	H	Harrison	FM	1,937	1,876	M-F, 40 Hrs.
Ocean Springs Hospital	H	Jackson	F (2)	4,296	4,135	M-F, 115+ Hrs.
OMRI, Inc. dba Open MRI	MP	Jackson	M(3)	N/A	N/A	M, Thr. 120 & F 160 Hrs.
Singing River Hospital	H	Jackson	F(2) M	5,136	5,016	M-F, 155+ Hrs.
SMI- Stone County Hospital	H	Stone	M	256	256	Tues., 4 Hrs.
State Total				238,772	256,199	

F- Fixed unit

M-Mobile Unit

Type of Providers: H-Hospital, FS-Freestanding, and MP- Mobile Provider

Note: ² Indicates Scott Medical Imaging is the approved service provider.

Sources: Applications for Renewal of Hospital License for Calendar Years 2015; Fiscal Year 2016; FY 2017 MRI Utilization Survey

511 Invasive Digital Angiography (DA)

Invasive Digital Angiography (DA) is a diagnostic and catheter based therapeutic intravascular intervention imaging procedure that combines a digital processing unit with equipment similar to that used for standard fluoroscopic procedures.

Most invasive DA studies are appropriate as an outpatient procedure in a freestanding facility, where proper protocols have been met.

512 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 5-7 presents the location, type (fixed or mobile), and utilization of PET equipment throughout the state in 2016.

**Table 5-7
Location and Number of PET Procedures by Service Area
FY 2016**

Facility	County	Type of Equipment	Number of PET Procedures
General Hospital Service Area 1			416
Baptist Memorial Hospital - DeSoto	DeSoto	M	416
General Hospital Service Area 2			1,241
Magnolia Regional Health Center	Alcorn	M	344
North Mississippi Medical Center	Lee	F	897
General Hospital Service Area 3			605
Alliance Cancer Center- Clarksdale	Coahoma	M	DNS
Delta Regional Medical Center (Main Campus)	Washington	M	428
Greenwood Leflore Hospital	Leflore	M	177
General Hospital Service Area 4			1,374
Baptist Memorial Hospital - Golden Triangle	Lowndes	F	654
Baptist Memorial Hospital - North Miss	Lafayette	F	576
University of MS Medical Center- Grenada	Grenada	M	144
General Hospital Service Area 5			5,552
Merit Health Central	Hinds	F	166
Mississippi Baptist Medical Center	Hinds	F (2)	1,264
St. Dominic Jackson- Memorial Hospital	Hinds	F	1,731
University of MS Medical Center	Hinds	F	2,391
Baptist Medical Center-- Attala *	Attala	M	-
General Hospital Service Area 6			306
Anderson Regional Medical Center	Lauderdale	M	306
General Hospital Service Area 7			645
Merit Health Natchez	Adams	M	271
Southwest MS Regional Medical Center	Pike	M	374
General Hospital Service Area 8			3,965
Forrest General Hospital	Forrest	M	8
Hattiesburg Clinic, P.A. ¹	Forrest	F (2)	3,257
South Central Regional Medical Center	Jones	M	606
Merit Health Wesley	Lamar	M	94
General Hospital Service Area 9			1,927
Merit Health Biloxi	Harrison	M	130
Garden Park Medical Center	Harrison	M	75
Memorial Hospital at Gulfport	Harrison	F	1,001
Ocean Springs Hospital	Jackson	M	345
Singing River Hospital	Jackson	M	376
State Total			16,031

Note: ¹ Indicates freestanding clinics.

*Baptist Medical Center- Attala is CON approved for a mobile PET but did not utilize the service in 2016.

Sources: Applications for Renewal of Hospital License for Calendar Years 2015; Fiscal Year 2016 Annual Hospital Report; FY 2017 PET Utilization Survey

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

Note: Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

512.01.01 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 CON 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 has not provided the service on a regular basis within the last twelve (12) months must obtain a CON before providing such services, regardless of the capital expenditure.
2. CON Approval Preference: MSDH 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 twelve (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: 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 State Data Center (University of Mississippi Center for Population Studies). 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 MSDH through the filing of a Determination of Non Reviewability 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.

512.01.02 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

MSDH will review applications for a CON 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. 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 MSDH; 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, regardless of the capital expenditure.

512.01.03 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of MRI Equipment

Need Criterion 1: Minimum Procedures/Population

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 twelve (12) month period and/or documented projections of physician referrals may be used.

Need Criterion 2: Equipment Requirements

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.

Need Criterion 3: Data Requirements

Applicants shall provide written assurance that they will record and maintain, at a minimum, the following information and make it available to MSDH:

- 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 fifteen (15) business days of request. The required information may also be requested for entities outside of Mississippi that use the MRI equipment in question.

Need Criterion 4: Business Registration

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

Need Criterion 5: CON Approval/Exemption for MRI Equipment

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 MSDH through a determination of reviewability. Each specified piece of equipment must be exempt from or have CON approval.

512.01.04 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.

Need Criterion 1: Minimum Procedures/Population

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.

Need Criterion 2: Availability of Diagnostic Imaging Modalities

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.

Need Criterion 3: Non-Discrimination

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 nor procedures which would exclude patients because of race, color, age, sex, ethnicity, or ability to pay.

Need Criterion 4: Staffing Requirements

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.

Need Criterion 5: Experimental Procedures

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.

Need Criterion 6: Data Requirements

The applicant shall provide assurances that the following data regarding its use of the MRI equipment will be kept and made available to MSDH 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.

Need Criterion 7: CON Approval/Exemption for MRI Equipment

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 through a determination of non-reviewability. Each specified piece of equipment must be exempt from or have CON approval.

512.01.05 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

513 Certificate of Need Criteria and Standards for Diagnostic and Therapeutic Imaging Services

Note: Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

513.01 Digital Angiography Equipment and Services

513.01.01 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Control of Digital Angiography Equipment and/or the Offering of Invasive Digital Angiography Services

1. Digital Angiography Equipment and Services in Ambulatory Surgery Centers: Applicants proposing the acquisition or otherwise control of Digital Angiography equipment and/or the offering of invasive digital angiography services in a single specialty ambulatory surgery center must apply for a certificate of need before providing such services.

513.01.02 Certificate of Need Criteria and Standards for Invasive Digital Angiography in a Hospital

MSDH will review applications for a CON for the acquisition or otherwise control of Digital Angiography (DA) 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. 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 MSDH; and the specific criteria and standards listed below.

CON review is required when the capital expenditure for the purchase of Digital 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 and therapeutic intravascular intervention 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 regardless of the capital expenditure.

Need Criterion 1: Staffing Requirements

The applicant for invasive DA services shall demonstrate that proper protocols for screening 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/cardiothoracic surgeon must be available for backup.

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

- a. a cardiologist/cardiothoracic surgeon for procedures involving the heart;
- b. a neurologist/neurosurgeon for procedures involving the brain; and
- c. a vascular surgeon, cardiologist, radiologist or nephrologist credentialed and accredited for interventional peripheral vascular procedures.

Need Criterion 2: CON Exemption

Before utilizing or providing the equipment or service, the applicant desiring to provide the digital angiography equipment or invasive DA services shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by MSDH through a determination of reviewability.

513.01.03 Certificate of Need Criteria and Standards for Invasive Digital Angiography (DA) in a Freestanding Facility

Need Criterion 1: Staffing Requirements

- a. The applicant for invasive DA services shall demonstrate that proper protocols for screening and medical specialty backup are in place before services are rendered by personnel other than those with specialized training. The protocols shall include, but are not limited to, having prior arrangements for consultation/backup from a vascular surgeon, cardiologist, radiologist or nephrologist credentialed and accredited for interventional peripheral vascular procedures.
- b. Identify physicians in the group and state which physicians(s) will perform intravascular interventions using DA. Certify that:
 - i. Each physician will maintain medical staff privileges at a full service hospital; or
 - ii. At least one member of the physician group has staff privileges at a full service hospital and will be available at the facility or on call within a 30-minute travel time of the full service hospital during the hours of operation of the facility.

Need Criterion 2: Types of Procedures

- a. Procedures in a freestanding facility are generally non-emergent nor life threatening in nature and require a patient stay of less than 24 consecutive hours. The procedures shall not be of a type that:
 - i. Generally result in blood loss of more than ten percent of estimated blood volume in a patient with a normal hemoglobin;
 - ii. Require major or prolonged intracranial, intrathoracic, abdominal, or major joint replacement procedures, except for laparoscopic procedures; or
 - iii. Involve major blood vessels.
 1. Major blood vessels are defined as the group of critical arteries and veins including the aorta, coronary arteries, pulmonary arteries, superior and inferior vena cava, pulmonary veins, carotid arteries, and any intra-cerebral artery or vein.
- b. Percutaneous endovascular interventions of the peripheral vessels not excluded in a.iii.1. above are permitted to be performed in a freestanding facility. These procedures are defined as procedures performed without open direct visualization of the target vessel, requiring only needle puncture of an artery or vein followed by insertion of catheters, wires,

or similar devices which are then advanced through the blood vessels using imaging guidance. Once the catheter reaches the intended location, various maneuvers to address the diseased area may be performed which include, but are not limited to, injection of contrast for imaging, ultrasound of the vessel, treatment of vessels with angioplasty, arterectomy, covered or uncovered stenting, intentional occlusion of vessels or organs (embolization), and delivering of medications, radiation, or other energy such as laser, radiofrequency, or cryo.

Need Criterion 3: Transfer Agreement

The applicant must certify that the proposed facility will have a formal transfer agreement with a full service hospital to provide services which are required beyond the scope of the freestanding facility's programs.

Need Criterion 4: CON Exemption

Before utilizing or providing the equipment or service, the applicant desiring to provide the digital angiography equipment or invasive DA services shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by MSDH through a determination of reviewability.

513.02 Positron Emission Tomography (PET) Equipment and Services

513.02.01 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 1 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. MSDH will consider out-of-state population in determining need only when the applicant submits adequate documentation acceptable to 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 units 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 operations 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: MSDH may approve applicants proposing to enter 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 and complies with the teaching exception as outlined in section 102.02 of this Plan. 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. 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 MSDH by submitting a determination of reviewability for any proposed changes from those presented in the CON 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.

513.02.02 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

MSDH 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. 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 MSDH; 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, regardless of the capital expenditure.

Need Criterion 1: Minimum Procedures/Population

- 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.

Need Criterion 2: Business Registration

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

Need Criterion 3: Approval of Additional PET Equipment

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.

Need Criterion 4: Division of Radiological Health Approval

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.

Need Criterion 5: Data Requirements

The applicant shall provide assurances that the following data regarding the PET equipment will be kept and made available to MSDH 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.

Need Criterion 6: Fixed/Minimum Value Contracts

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.

Need Criterion 7: CON Approval/Exemption for PET Equipment

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 MSDH. Each specified piece of equipment must be exempt from or have CON approval.

513.02.03 Certificate of Need Criteria and Standards for 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.

Need Criterion 1: Minimum Procedures

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.

Need Criterion 2: PET Equipment Utilized by Multiple Providers

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.

Need Criterion 3: Quality Control and Environmental Requirements

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.

Need Criterion 4: Division of Radiological Health Approval

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.

Need Criterion 5: Provision of On-Site Medical Cyclotron

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.

Need Criterion 6: Staffing Requirements

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 CON 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.

Need Criterion 7: Management of Medical Emergencies

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

Need Criterion 8: Accommodating Referred Patients

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.

Need Criterion 9: Medical Necessity

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.

Need Criterion 10: Notification of Procedures Offered

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

Need Criterion 11: Data Requirements

The applicant shall provide assurances that the following data regarding the PET service will be kept and made available to MSDH 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.

Need Criterion 12: CON Approval/Exemption for PET Equipment

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 MSDH through a determination of reviewability. Each specified piece of equipment must be exempt from or have CON approval.

514 Cardiac Catheterization

Cardiac catheterization is an integral part of cardiac evaluation and 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 patients are not catheterized in the facility. Additionally, a facility without open-heart surgery capability must document that more complex procedures, except for percutaneous coronary interventions (PCI) as provided herein, are not performed in the facility. Such procedures include, but are not limited to: transseptal puncture, transthoracic left ventricular puncture, myocardial biopsy, trans catheter aortic valve replacement (TAVR), and left atrial occlusion devices.

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 5-8 presents the utilization of cardiac catheterization services in Fiscal Years 2015 and 2016.

Table 5-8
Cardiac Catheterizations by Facility and Type
by Cardiac Catheterization/Open Heart Planning Area (CC/OHSPA)
FY 2015 and FY 2016

Facility	County	Total Adult Procedures		Total Pediatric Procedures		Total PTCA Procedures	
		2015	2016	2015	2016	2015	2016
CC/OHSPA 1		2,092	2,497	0	0	872	1,154
Baptist Memorial Hospital-DeSoto	DeSoto	2,060	2,226	0	0	870	767
Methodist Healthcare Olive Branch Hospital	DeSoto	32	271	0	0	2	387
CC/OHSPA 2		6,545	6,464	0	0	464	386
Magnolia Regional Health Center	Alcorn	3,285	2,949	0	0	99	73
North Mississippi Medical Center	Lee	3,260	3,515	0	0	365	313
North Mississippi State Hospital*	Lee	0	0	0	0	0	0
CC/OHSPA 3		1,242	1,138	0	0	143	152
Allegiance Specialty Hospital of Greenville	Washington	0	0	0	0	0	0
Delta Regional Medical Center	Washington	752	780	0	0	143	152
Greenwood Leflore Hospital*	LeFlore	95	75	0	0	0	0
Northwest Mississippi Medical Center*	Coahoma	395	283	0	0	0	0
CC/OHSPA 4		2,394	2,634	0	0	749	748
Baptist Memorial Hospital-Golden Triangle	Lowndes	1,118	1,225	0	0	311	359
Baptist Memorial Hospital-N. Mississippi	Lafayette	1,167	1,266	0	0	438	389
UMMC Grenada*	Grenada	109	143	0	0	0	0
CC/OHSPA 5		24,302	20,046	1,573	1,895	2,937	3,446
Merit Health Central	Hinds	668	668	0	0	149	149
Merit Health River Oaks*	Rankin	0	0	0	0	125	125
Mississippi Baptist Medical Center	Hinds	4,275	4,449	0	0	1,259	1,367
Merit Health River Region	Warren	2,023	808	0	0	273	0
Promise Hospital of Vicksburg	Warren	0	0	0	0	0	0
Select Specialty Hospital- Belhaven, LLC	Hinds	0	0	0	0	0	0
Select Specialty Hospital - Jackson	Hinds	0	0	0	0	0	0
St. Dominic-Jackson Memorial Hospital	Hinds	10,052	11,596	0	0	911	782
University of MS Medical Center	Hinds	7,284	2,525	1,573	1,895	220	1,023
CC/OHSPA 6		932	845	0	0	10	8
Anderson Regional Medical Center	Lauderdale	0	0	0	0	0	0
Anderson Regional Medical Center -South*	Lauderdale	0	0	0	0	0	0
Rush Foundation Hospital	Lauderdale	932	845	0	0	10	8
CC/OHSPA 7		949	811	0	0	34	22
Merit Health Natchez*	Adams	0	0	0	0	0	0
SW Miss Regional Medical Center	Pike	949	811	0	0	34	22
CC/OHSPA 8		3,968	5,177	0	0	1,363	1,689
Forrest General Hospital	Forrest	2,716	3,413	0	0	1,058	1226
Regency Hospital of Hattiesburg*	Forrest	0	0	0	0	0	0
South Central Regional Medical Center*	Jones	0	564	0	0	0	0
Merit Health Wesley	Lamar	1,252	1,200	0	0	305	463
CC/OHSPA 9		5,092	4,878	0	0	2,621	2,382
Merit Health Biloxi*	Harrison	50	15	0	0	0	0
Memorial Hospital at Gulfport	Harrison	2,679	2,744	0	0	1,112	1,074
Ocean Springs Hospital	Jackson	1,382	1,250	0	0	940	816
Select Specialty Hospital-Gulf Coast	Harrison	0	0	0	0	0	0
Singing River Hospital	Jackson	981	869	0	0	569	492
State Total		47,581	44,490	1,573	1,895	9,193	9,987

* Diagnostic Catheterization Only

Source: Applications for Renewal of Hospital License for Calendar Year 2015/2016; FY 2016/2017 Annual Hospital Report

515 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 Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

515.01 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/or 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. However, it should be noted that the State has seen a decrease in mortality rates in the last few years. From 2004 to 2013, the mortality rate for African American women decreased by 25% per 100,000 and the total mortality rate decreased by 19.6% per 100,000. 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.

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. 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.

MSDH shall interpret and implement all standards in this Plan in recognition of the stated findings and so as to achieve the stated goal.

515.02 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 three levels of cardiac catheterization services an applicant may provide: diagnostic cardiac catheterization services, percutaneous coronary intervention (PCI) in a hospital without on-site cardiac surgery, or therapeutic cardiac catheterization services.
 - d. 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.
 - e. Percutaneous coronary intervention (PCI) services in a hospital without on-site cardiac surgery are defined as, and refer to, those therapeutic cardiac catheterization services involving primary and elective PCIs but not involving transseptal puncture, transthoracic left ventricular puncture, myocardial biopsy, and any other procedure that is currently defined as a structural heart disease procedure.
 - f. 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, myocardial biopsy, and any procedure that is currently defined as a structural heart disease procedure.
2. Open-Heart Surgery Capability: 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. This policy also does not preclude approval of a Certificate of Need application to perform percutaneous coronary intervention (PCI) services in a hospital without on-site cardiac surgery or in a Cardiac Ambulatory Surgical Facility as defined in 515.06.
3. Service Areas: The State has 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. 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.

5. Present Utilization of Cardiac Catheterization Equipment/Services: 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. 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. MSDH may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.
6. Minimum Caseload: Applicants for a diagnostic cardiac catheterization Certificate of Need must be able to project a caseload of at least 300 diagnostic catheterizations per year per year by the end of the third year of operation. Applicants for a therapeutic cardiac catheterization Certificate of Need must be able to project a caseload of at least 450 catheterizations, diagnostic and therapeutic, per year by the end of the third year of operation. Applicant for a Certificate of Need to provide PCI services in a hospital without on-site cardiac surgery must be able to project a caseload of at least 300 catheterizations, diagnostic and PCI, with at least 100 being PCIs, per year by the end of the third year of operation.
7. 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.
8. Hospital-Based: All cardiac catheterizations and open-heart surgery services shall be located in acute care hospitals or in a Cardiac Ambulatory Surgical Facility, subject to the policy statements and need criteria and standards set forth in Sections 515.06 and 515.07 of this State Health Plan.
9. Conversion of Existing Therapeutic Cardiac Catheterization Services to PCI Services in a Hospital without On-Site Cardiac Surgery Capabilities: A hospital currently providing therapeutic cardiac catheterization services may convert their cardiac catheterization program to provide PCI services in the hospital without on-site cardiac surgery capability without certificate of need review; provided, however, that the facility shall submit an application for determination of non-reviewability prior to eliminating on-site cardiac surgery. The hospital must attest in the application for determination of non-reviewability that it will meet the CON criteria and standards as set out in Rule 515.04 of this *Plan*. If, at any time, the hospital goes 12 consecutive months of providing PCI services without on-site cardiac surgery, the hospital wants to convert back to a therapeutic cardiac catheterization program, the hospital must submit a certificate of need application for review.

515.03 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. 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, regardless of the capital expenditure.

Need Criterion 1: 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.

Need Criterion 2: 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.

Need Criterion 3: 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.

Need Criterion 4: 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.

Need Criterion 5: 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 patients are not catheterized in the facility, and (b) certify that therapeutic cardiac catheterization services and/or PCI services in a hospital without on-site cardiac surgery will not be performed in the facility unless and until the applicant has received CON approval to provide said services.

Need Criterion 6: 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.

515.04 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Therapeutic Cardiac Catheterization Equipment for the Performance of PCI Services in a Hospital Without On-Site Cardiac Surgery and/or the Offering Of PCI Services in a Hospital Without On-Site Cardiac Surgery

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 for the performance or offering of PCI services in a hospital without on-site cardiac surgery under the applicable statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code of 1972, as amended. 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 for the performance of PCI services in a hospital without on-site cardiac surgery is reviewable if the equipment costs exceed \$1,500,000. The offering of PCI services in a hospital without on-site cardiac surgery 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, regardless of the capital expenditure.

Need Criterion 1: Minimum Procedures

An applicant proposing the establishment of PCI services in a hospital without on-site cardiac surgery shall demonstrate that the proposed equipment/service utilization will be a minimum of 300 cardiac catheterizations, both diagnostic and PCI, with at least 100 being total PCIs, per year by its third year of operation. Applicants must certify they will submit volume data to demonstrate and verify the utilization of the service at a minimum of every three (3) years.

Need Criterion 2: Staffing Requirements

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.

Need Criterion 3: Staff Residency

The applicant shall certify that medical staff performing PCI procedures shall be onsite within thirty (30) minutes.

Need Criterion 4: Recording and Maintenance of Data

In addition to the certification in Need Criterion 1, applicants shall provide, as required under licensure standards, written assurance that they will record and maintain separate utilization data for diagnostic and PCI catheterization procedures (e.g., morbidity data, number of diagnostic cardiac catheterization and PCI 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.

Need Criterion 5: Open-Heart Surgery

An applicant proposing the establishment of PCI services without on-site cardiac surgery shall:

- a. Document that open-heart surgery services will be available through a formal emergency transfer agreement to a hospital providing open heart surgery. Such transfer must be done at a minimum of less than 120 minutes to accomplish transfer from the onset of PCI

complications to cardiopulmonary bypass. Transporting of the patient to the receiving hospital must include the capability to provide an intra-aortic balloon pump (IABP).

- b. Programs must project and annually perform a minimum of 100 total PCIs per year to include at a minimum 12 primary PCIs per year by the end of the third year of operation. New programs should have three years to reach the absolute minimum volume, but after that, programs failing to reach this volume for two consecutive years should not remain open. MSDH has the discretion under a finding of rare or unique circumstances to grant an exception to the above based on a finding of need of access and quality of care by the program.
- c. Certify that the proposed primary operators for the service have a life-time experience of greater than 150 total PCIs with acceptable outcomes as primary operator after completing a cardiology fellowship. Successful completion of an Interventional Cardiology fellowship is considered adequate certification.
- d. New and Existing Programs must actively participate in the STEMI (“ST”-Segment Elevation Myocardial Infarction) Network, including, but not limited to, the submission of data to the STEMI databank.
- e. At the present time, 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.
- f. Certify that the Applicant will provide educational programs to underserved patient populations (low income, racial and ethnic minorities, women, Medicaid eligible, and handicapped persons) with the goal of decreasing cardiac mortality rates in such populations.
- g. Certify that the applicant will provide a reasonable amount of charity care.
- h. Certify that the applicant will hold monthly multi-disciplinary meetings to evaluate patient outcomes, review quality improvement data, and to identify and implement solutions for any operational issues.
- i. Certify that the following guideline from the Society of Cardiovascular Angiography and Interventions (SCAI)-ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention or such sections’ update(s), if applicable, at the time of filing the certificate of need application will be met:
 - (i) Certify the applicant will have available in the catheterization lab the equipment in Section 4.1.1 entitled “Equipment” and that such will be routinely tested;
 - (ii) Certify the availability of adequate staff in the catheterization lab as set forth in Section 4.1.2 entitled “Staffing” and that such staff will be certified on both basic life support and advanced cardiovascular life support;
 - (iii) Certify that “time-out” procedures will be implemented as discussed in Section 4.1.3 entitled “‘Time-Out’ Procedures”; and

- (iv) Certify that the applicant will operate a quality improvement program and participate in a national PCI registry as discussed in Section 7.1 entitled “Quality Performance: Recommendations”

Need Criterion 6: Applicants for PCI Services in a Hospital without On-Site Cardiac Surgery Capabilities Currently Providing Diagnostic Catheterization Services

In addition to Need Criteria 1-5, an applicant proposing the establishment of PCI services in a hospital without open heart surgery capabilities, 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 or that its primary operators for the service have a life-time experience of greater than 250 total procedures (including both diagnostic catheterizations and PCIs) with acceptable outcomes after completing a cardiology fellowship. Successful completion of an Interventional Cardiology fellowship is considered adequate certification.

Need Criterion 7: 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.

515.05 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. 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.

Need Criterion 1: Minimum Procedures:

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, of which at least 100 should be PCIs, per year by its third year of operation.

Need Criterion 2: 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.

Need Criterion 3: Staff Residency

The applicant shall certify that medical staff performing therapeutic cardiac catheterization procedures shall be onsite within thirty (30) minutes.

Need Criterion 4: Recording and Maintenance of Data

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.

Need Criterion 5: Open-Heart Surgery

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.

Need Criterion 6: 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.

Need Criterion 7: Applicants for Therapeutic Cardiac Catheterization Currently Providing Diagnostic Catheterization Services or PCI Services in a Hospital without On-Site Cardiac Surgery

In addition to Need Criteria 1-6, an applicant proposing the establishment of therapeutic cardiac catheterization services, who is already an existing provider of diagnostic catheterization services and/or PCI services in a hospital without on-site cardiac surgery, shall demonstrate that it has provided a minimum of 300 procedures (including both diagnostic catheterizations and PCIs) 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.

515.06 Policy Statement Regarding Certificate of Need Applications for the Establishment of Cardiac Ambulatory Surgical Facilities

1. Definitions. For purposes of this Policy Statement and the Certificate of Need Criteria and Standards for the Establishment of Cardiac Ambulatory Surgical Facilities, the following definitions shall apply.
 - a. “Cardiac Ambulatory Surgical Facility (CASF)” means an ambulatory surgical facility which is established and operated for the purpose of providing cardiac catheterization procedures. A JV-CASF (as defined below) is a type of CASF.
 - b. “Joint Venture Cardiac Ambulatory Surgical Facility (JV-CASF)” means a CASF which is jointly owned by (i) an acute care hospital which offers cardiac catheterization services and PCI services, and (ii) one or more cardiologists who are licensed to practice medicine by the

Mississippi State Board of Medical Licensure, or a group practice comprised of such cardiologists.

2. Offering of Cardiac Catheterization Services. Cardiac catheterization services may be performed only in (a) an acute care hospital, (b) a hospital-owned CASF, or (c) a JV-CASF. Exception: The MSDH may consider an application for a CASF which does not have hospital ownership if the applicant obtains and provides to MSDH a written letter of support for the proposed project from all acute care hospitals which offer cardiac catheterization services and/or PCI services and are located within a 25-mile radius of the proposed facility. A CASF must maintain appropriate third-party accreditation. A CASF must be located within twenty-five (25) miles of an acute care hospital that provides cardiac catheterization services and PCI services. In order to encourage local ownership and operation of joint ventures and CASFs, a CASF with hospital ownership must be located within a 25-mile radius of the main campus of the acute care hospital that has an ownership interest in the JV-CASF and/or the hospital-owned CASF.
3. Types of Procedures. A CASF or JV-CASF may perform only those cardiac catheterization procedures which have been approved by the federal Centers for Medicare and Medicaid Services (“CMS”) in an ambulatory surgical center. Primary (i.e., acute infarct) PCIs shall not be performed in a CASF.
4. Multispecialty and Single-Specialty Ambulatory Surgical Facilities. Cardiac catheterization procedures may be performed in a multispecialty ambulatory surgical facility, or in a single-specialty ambulatory surgical facility if they meet the need criteria and standards for the establishment of a CASF (as set forth in Policy Statement 2). The multispecialty ambulatory surgical facility or single-specialty ambulatory surgical facility which proposes to offer cardiac catheterization services and which does not have hospital ownership must be located within twenty-five (25) miles of an acute care hospital that provides cardiac catheterization services and PCI services. The MSDH may consider an application to offer cardiac catheterization services by a multispecialty ambulatory surgical facility or a single-specialty ambulatory surgical facility which does not have hospital ownership if the applicant obtains and provides to the MSDH a written letter of support for the proposed project from all hospitals which offer cardiac catheterization services and PCI services and are located within a 25-mile radius of the proposed project.
5. CON-Exempt Single-Specialty CASFs Prohibited. The MSDH shall not grant any determination of reviewability that exempts a single-specialty cardiac ambulatory surgical facility from certificate of need review. All single-specialty CASFs must obtain a certificate of need from the MSDH prior to the commencement of operations or services.
6. Application of Policy Statement. In reviewing CON applications for the establishment of a CASF, the MSDH shall apply the policies set forth in Section 515.02 of this State Health Plan (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).

515.07 Certificate of Need Criteria and Standards for the Establishment of Cardiac Ambulatory Surgical Facilities

The Mississippi State Department of Health will review applications for a Certificate of Need for the establishment of Cardiac Ambulatory Surgical Facilities (CASFs and JV-CASFs) under the applicable statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code of 1972, as amended. 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.

Need Criterion 1: Minimum Procedures

An applicant proposing the establishment of a CASF shall demonstrate that the proposed service utilization will be a minimum of 300 cardiac catheterization procedures, diagnostic and therapeutic, per year, by the third year of operation. Applicants must certify they will submit volume data to demonstrate and verify the utilization of the service at a minimum of every three (3) years.

Need Criterion 2: Minimum Population

The applicant must document that the proposed Cardiac Catheterization/Open-Heart Surgery Planning Area (Map 5-2) has a population base of at least 60,000 within thirty (30) minutes travel time of the facility.

Need Criterion 3: Minimum Number of Procedure Rooms

All CASFs shall establish and have available for service no fewer than two (2) procedure rooms used exclusively for cardiac catheterization and PCI services.

Need Criterion 4: Financial Feasibility

The applicant must provide documentation that the CASF will be economically viable within two (2) years of commencement of services.

Need Criterion 5: Letters of Support

The applicant must show support from the cardiologists who will be expected to utilize the CASF.

Need Criterion 6: 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. The applicant shall also certify that all cardiologists and providers who perform cardiac catheterization and/or PCI procedures in the CASF will maintain active medical staff and clinical privileges at an acute care hospital with which the facility has a formal emergency transfer agreement (as required by Need Criterion 8).

Need Criterion 7: Recording and Maintenance of Data

In addition to the certification in Need Criterion 1, applicants shall provide, as required under licensure standards, written assurance that they will record and maintain separate utilization data for diagnostic cardiac catheterization and PCI procedures (e.g., morbidity data, number of diagnostic cardiac catheterization and PCI 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.

Need Criterion 8: Service Specific

An applicant proposing the establishment of a CASF shall:

- a. Document that open-heart surgery services will be available through a formal emergency transfer agreement to a hospital providing open heart surgery. Such transfer must be done at a minimum of less than 120 minutes to accomplish transfer from the onset of PCI complications to cardiopulmonary bypass. Transporting of the patient to the receiving hospital must include the capability to provide a ventricular support device, such as an intra-aortic balloon pump (IABP), or an Impella.
- b. Certify that the proposed primary operators performing PCI's have a life time experience of greater than 150 total PCIs with acceptable outcomes as primary operator after completing a cardiology fellowship. Successful completion of an Interventional Cardiology fellowship is considered adequate certification.
- c. The CASF shall participate in and submit quality data to the appropriate cardiac catheterization registries.
- d. Certify that the applicant will hold quarterly multi-disciplinary meetings to evaluate patient outcomes, review quality improvement data, and to identify and implement solutions for any operational issues.
- e. Certify that the following guideline from the Society of Cardiovascular Angiography and Interventions (SCAI)-ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention or such sections' update(s), if applicable, at the time of filing the certificate of need application will be met:
 - i. Certify the applicant will have available in the catheterization lab the equipment in Section 4.1.1 entitled "Equipment" and that such will be routinely tested;
 - ii. Certify the availability of adequate staff in the catheterization lab as set forth in Section 4.1.2 entitled "Staffing" and that such staff will be certified on both basic life support and advanced cardiovascular life support;
 - iii. Certify that "time-out" procedures will be implemented as discussed in Section 4.1.3 entitled "'Time-Out' Procedures"; and
 - iv. Certify that the applicant will operate a quality improvement program and participate in a national PCI registry as discussed in Section 7.1 entitled "Quality Performance: Recommendations"

Need Criterion 9: Medicaid Participation

All CASFs shall participate in the Mississippi Medicaid program.

Need Criterion 10: Indigent/Charity Care

The applicant shall certify that the CASF will provide Medicaid and indigent/charity care, including care to underinsured patients, of no less than five percent (5%) of the total volume of procedures performed at the CASF. Each approved facility shall report the total volume of indigent/charity care to the MSDH Office of Health Policy and Planning annually and shall publish their indigent/charity care policy to their facility website.

Need Criterion 11: Regulatory Approval

Before utilizing the equipment or providing the service, the applicant desiring to establish a CASF 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.

516 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 twelve (12) months prior to the time the services would be offered.

Table 5-9 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 5-9
Number of Open-Heart Surgeries by Facility and Type
By Cardiac Catheterization/Open Heart Surgery Planning Area (CC/OHSPA)
FY 2015 and FY 2016

Facility	County	Number of Adult Open-Heart Procedures		Number of Pediatric Open-Heart Procedures	
		2015	2016	2015	2016
CC/OHSPA 1		247	262	1	1
Baptist Memorial Hospital - DeSoto	DeSoto	246	261	0	0
Methodist Healthcare Olive Branch Hospital	DeSoto	1	1	1	1
CC/OHSPA 2		789	848	0	4
Magnolia Regional Medical Center	Alcorn	162	141	0	0
North MS Medical Center	Lee	627	707	0	4
CC/OHSPA 3		4	4	4	4
Delta Regional Medical Center-Main Campus	Washington	4	4	4	4
CC/OHSPA 4		51	43	4	4
Baptist Memorial Hospital-Golden Triangle	Lowndes	50	42	0	0
Baptist Memorial Hospital-North Mississippi	Lafayette	1	1	4	4
CC/OHSPA 5		670	653	237	371
Merit Health Central	Hinds	65	46	0	0
MS Baptist Medical Center	Hinds	1	1	4	4
Merit Health River Region	Warren	65	50	4	4
Promise Hospital of Vicksburg	Warren	3	3	4	4
Select Specialty Hospital- Belhaven, LLC	Hinds	2	0	4	0
Select Specialty Hospital- Jackson	Hinds	0	0	0	0
St. Dominic Hospital	Hinds	311	338	0	0
University of MS Medical Center	Hinds	223	215	221	359
CC/OHSPA 6		145	195	4	4
Anderson Regional Medical Center	Lauderdale	102	142	4	4
Rush Foundation Hospital	Lauderdale	43	53	0	0
The Specialty Hospital of Meridian	Lauderdale	0	0	0	0
CC/OHSPA 7		1	1	4	4
Southwest MS Regional Med. Center	Pike	1	1	4	4
CC/OHSPA 8		530	467	0	0
Forrest General Hospital	Forrest	530	467	0	0
Merit Health Wesley	Lamar	0	0	0	0
CC/OHSPA 9		375	358	0	4
Memorial Hospital at Gulfport	Harrison	186	169	0	4
Ocean Springs Hospital	Jackson	151	151	0	0
Select Specialty Hospital - Gulf Coast	Harrison	0	0	0	0
Singing River Hospital	Jackson	38	38	0	0
State Total		2,812	2,831	254	392

Source: Applications for Renewal of Hospital License for Calendar Year 2015/2016; FY 2016/2017 Annual Hospital Report

516.01 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: MSDH 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. 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. MSDH 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, MSDH 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 MSDH, 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.

516.02 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

MSDH will review applications for a CON 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. 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 MSDH; 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, regardless of the capital expenditure.

Need Criterion 1: Minimum Population

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.

Need Criterion 2: Minimum Procedures

The applicant shall demonstrate that it will perform a minimum of 150 open-heart surgeries per year by its third year of operation.

Need Criterion 3: Impact on Existing Providers:

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 forty-five (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 MSDH. 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. MSDH may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

Need Criterion 4: Staffing Requirements

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. MSDH 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.

Need Criterion 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.

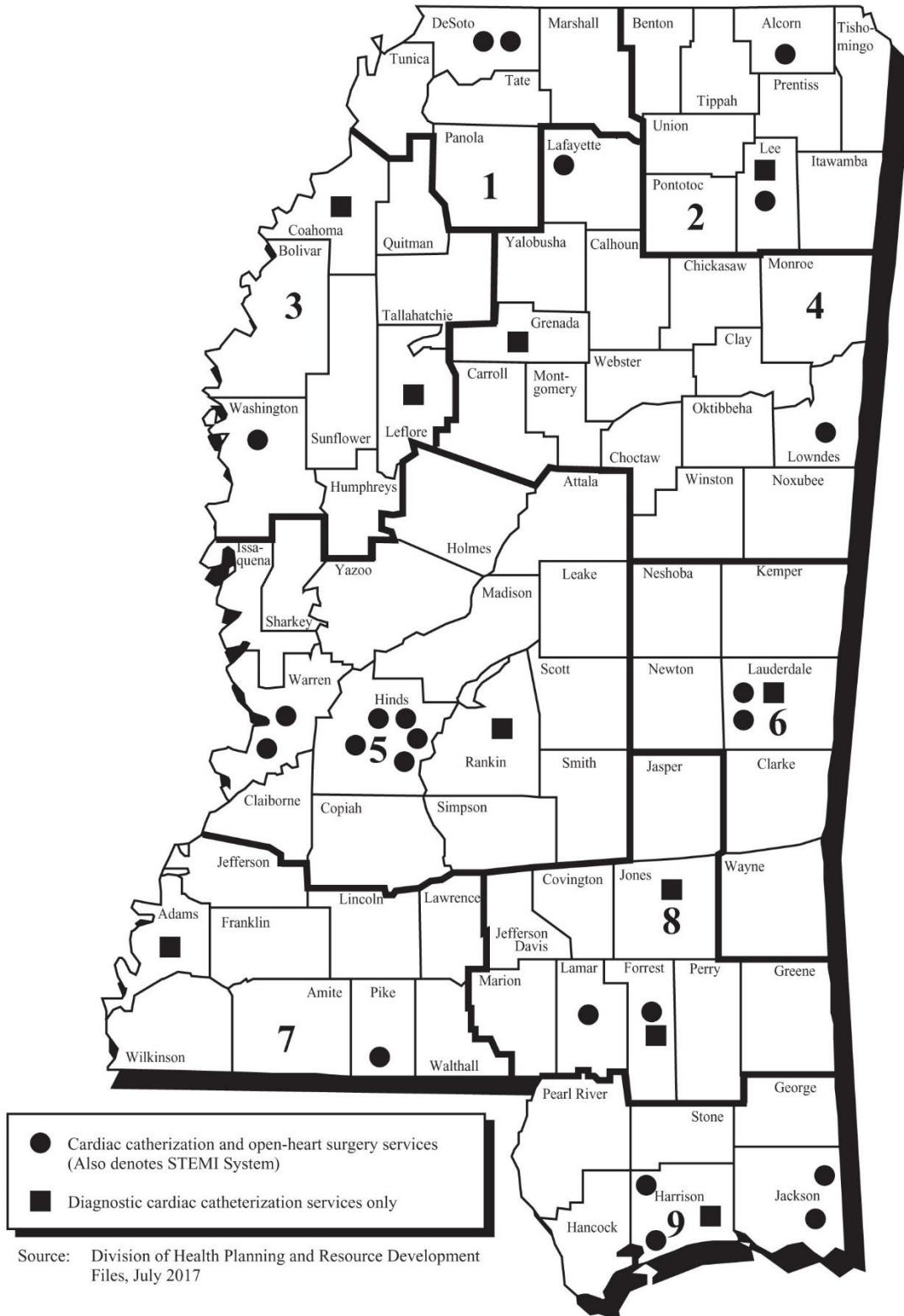
Need Criterion 6: Data Requirements

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 MSDH annually.

Need Criterion 7: CON Approval/Exemption for Open-Heart Surgery Equipment/Service

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 MSDH through a determination of reviewability. Each specified piece of equipment must be exempt from or have CON approval.

Map 5-2
Cardiac Catheterization/Open-Heart Surgery
Planning Areas (CC/OHSPA)
and Location of Existing/CON-Approved Services



Source: Division of Health Planning and Resource Development Files, July 2017

517 Systems of Care

There are three systems of care: the Trauma Care System, the ST-Elevation Myocardial Infarction (STEMI) System, and the Stroke System. Mississippi is one of only six states that has multiple acute systems of care, and is the only state that has statewide systems for trauma, STEMI, and stroke.

Each system of care has five key components: an organizational structure, protocols for the transport and transfer of patients, an advisory group process, a performance/quality improvement process, and a data collection system. These components work together to accomplish the ultimate goal of the systems – to deliver the right patient to the right hospital the first time, an approach shown to improve outcomes.

518 Emergency Medical Services

In Mississippi, the Emergency Medical Services (EMS) system is extraordinary in that ninety-nine percent (99%) of the state's population is covered by paramedic level agencies. EMS provides services not only to certified prehospital personnel but also provides the highest standards of prehospital healthcare to the citizens and visitors of Mississippi ensuring, patients are delivered to the right hospital the first time.

518.01 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 MSDH, 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 in response to disasters. This includes 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.

518.02 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 Off Line Medical Control. The physician oversees the care of patients in EMS systems and is knowledgeable about out-of-hospital patient care interventions and delivery systems. Typically the physicians work in conjunction with local EMS managers to assure quality patient care. EMS may be provided by a fire department, a private ambulance service, a county or government-based service, a hospital-based service, or a combination of the above. EMS professionals may be paid or serve as volunteers in the community.

518.03 Advisory Group

In accordance with Miss. Code Ann. § 41-59-7, the Emergency Medical Services Advisory Council (EMSAC) was created, with membership appointed by the Governor.

518.04 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, and EMS practitioners.

518.05 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, 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. 153155

The system provides for:

- Data collection based upon the NHTSA V2.2.1 data set. Data will be migrated to the NHTSA V3.4 data set in FY2018.
- The aggregation of information from various units and services with the possibility of sharing secured data with other systems and agencies.
- Electronic transport of information to improve communications.
- Standard and ad hoc reporting for using data to support evidence based practices.
- 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.

519 Mississippi Trauma Care System

Trauma is the leading cause of death for all age groups in Mississippi from birth to age forty-four (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.

519.01 Organization

Miss. Code Ann. §41-59-5 (5), establishes MSDH as the lead agency to develop a uniform, non-fragmented, inclusive statewide Trauma Care System, that provides excellent patient care. Through the State Trauma Plan, MSDH has designated seven trauma care regions; each incorporated as a 501c-3 organization which contracts with MSDH to administer the plan within their respective region. The State Trauma Plan includes the seven regional plans, 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 (House Bill 1405) in 2008, which required MSDH to develop regulations mandating all licensed acute-care

facilities 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 to the Trauma Care Trust Fund. Each hospital’s capability to participate in the Trauma Care System is reviewed annually by their respective Trauma Care Region and MSDH, which determines the appropriate level of participation and any associated 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 surgical residency program, ongoing trauma research, and provide 24-hour trauma service. These hospitals provide a variety of other services to comprehensively care for trauma 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 I 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/trauma surgery and orthopedic surgery 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.

519.02 Protocols

The Trauma Care System has developed uniform trauma activation criteria for all hospitals participating in the system to ensure that patients receive appropriate care, regardless of locale. EMS Field Destination Guidelines, based on the Center for Disease Control (CDC) Field Triage Decision Scheme, provide for the transport of trauma patients to the most appropriate facility. The approved Trauma Activation Criteria, based on the publication *Resources for Optimal Care of the Injured Patient*, provide the criteria used by trauma center staff for trauma team activation.

519.03 Advisory Committee

In accordance with Miss. Code Ann. § 41-59-7, the Mississippi Trauma Advisory Committee (MTAC) was created as a committee of the Emergency Medical Services Advisory Council (EMSAC). This committee is comprised of members of EMSAC, appointed by the Governor. The committee acts as the advisory body for trauma care system development, and provides technical support to MSDH in all areas of trauma care

system design, trauma standards, data collection and evaluation, continuous quality improvement, trauma care system funding, and evaluation of the trauma care system and trauma care programs.

519.04 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 MSDH Director of Health Protection. The committee is independent from MTAC and EMSAC. The PI Committee is chaired by the state Trauma System of Care Medical Director. Membership shall include, but may not be limited to, representatives from the following areas:

- Emergency Medicine
- 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
- Trauma Medical Directors from each Level I Trauma Center

The PI Committee establishes specific statewide performance measures. Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. MSDH Division of Trauma provides administrative support to the PI Committee and all meetings of the Committee, PI Committee meetings are by invitation only and are not open to the public.

519.05 Data System

There are four objectives of the trauma registry: performance improvement, enhanced hospital operations, injury prevention, and medical research. In July 2006, MSDH 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 and the registry for Traumatic Brain and Spinal Cord Injuries (TBI/SCI).

520 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.

520.01 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, Paramedics, on-line and off-line medical control physicians need to have a basic knowledge and awareness of the STEMI System Plan elements and system function. Specifically, this knowledge refers to the alert criteria (identification of a STEMI), and communication procedures.
- Hospital Component – Hospitals may participate in the STEMI System on a voluntary basis but must meet the criteria prescribed in the STEMI Standards to be designated as a STEMI Receiving or STEMI Referral Center.
- Program oversight is provided by MSDH's Bureau of Acute Care Systems.

Map 5-2 identifies those hospitals participating in the STEMI System.

520.02 Protocols

Standard treatment protocols for both STEMI Receiving Centers and STEMI Referral 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/>.

520.03 Advisory Group

The STEMI Advisory Committee meets quarterly. Membership is comprised of the following membership categories as prescribed by the STEMI System of Care Plan:

- Cardiology Co-Chairman

- Emergency Medicine Co-Chairman
- Emergency Medicine Representative – Northern Region
- Emergency Medicine Representative – Central Region
- Emergency Medicine Representative – Southern Region
- Emergency Nursing Representative – Northern Region
- Emergency Nursing Representative – Central Region
- Emergency Nursing Representative – Southern Region
- Hospital Administration Representative – Northern Region
- Hospital Administration Representative – Central Region
- Hospital Administration Representative – Southern Region
- Cardiology Representative – Northern Region
- Cardiology Representative – Central Region
- Cardiology Representative – Southern Region
- STEMI Nursing Representative – Northern Region
- STEMI Nursing Representative – Central Region
- STEMI Nursing Representative – Southern Region
- Southern Regional STEMI Coordinator
- Registry Representative – Northern Region
- Registry Representative – Central Region
- Registry Representative – Southern Region
- EMS Provider Representative – Northern Region
- EMS Provider Representative – Central Region
- EMS Provider Representative – Southern Region
- EMS Administration Representative – Northern Region
- EMS Administration Representative – Central Region
- EMS Administration Representative – Southern Region
- Northern Regional STEMI Coordinator
- Central Regional STEMI Coordinator
- Southern Regional STEMI Coordinator
- American Heart Association Representative

520.04 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 meets quarterly. Membership is comprised of the following:

- Cardiology Chair
- Emergency Medicine Vice Chair
- Cardiologist(one from each region)
- Emergency Department Physician (one from each region)
- Representative from each PCI hospital (minimum of one per region)
- Non-PCI hospital representative (minimum of one per region)
- EMS Representatives (minimum of three)

The PI Committee establishes specific system-wide performance measures. Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. The MSDH Bureau of Acute Care Systems provides administrative support to the PI Committee and all meetings of the Committee. PI committee meetings, are by invitation only, and are not open to the public.

520.05 Data System

The data system for the STEMI System of Care is the ACTION Registry-GWTG (Get With The Guidelines) system. 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.

521 Acute Ischemic Stroke System of Care

Mississippi ranks fourth in the nation in occurrence of death from the immediate and long-term effects of stroke. Moreover, stroke continues to be the fifth leading cause of death and a leading cause of disability in Mississippi. However, eighty-three percent (83%) of stroke occurrences in Calendar Year 2015 were potentially treatable ischemic strokes. The primary goal of the Mississippi Stroke System of Care is to get the patient suffering from a stroke to an appropriate hospital so that patients who are candidates for thrombolytic and interventional therapies may receive appropriate care in a timely manner. This approach is supported by research that shows early thrombolytics for ischemic stroke and interventional therapy for large vessel occlusion improve outcomes in patients suffering from these types of stroke. Therefore, the Stroke System of Care has focused on early recognition of strokes by educating individuals to call 911 when a stroke occurs, minimizing door to CT times and ensuring early administration of thrombolytics.

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 a rural facility in conjunction with input from a nurse 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 and Ship”) if needed for neurological, neurosurgical, or neuro-interventional support.

521.01 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) 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 MSDH’s Bureau of Acute Care Systems.

521.02 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 and 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 their delivery to a Stroke Ready hospital for diagnosis.

521.03 Advisory Group

The Stroke Advisory Committee meets quarterly. Membership is comprised of the following as prescribed in the Stroke System of Care Plan:

- Chairperson
- Emergency Medicine Representative – Northern Region
- Emergency Medicine Representative – Central Region
- Emergency Medicine Representative – Southern Region
- Emergency Nursing Representative – Northern Region
- Emergency Nursing Representative – Central Region
- Emergency Nursing Representative – Southern Region
- Hospital Administration Representative – Northern Region
- Hospital Administration Representative – Central Region
- Hospital Administration Representative – Southern Region
- Neurology Representative – Northern Region
- Neurology Representative – Central Region
- Neurology Representative – Southern Region
- Stroke Nursing Representative – Northern Region
- Stroke Nursing Representative – Central Region
- Stroke Nursing Representative – Southern Region

- Registry Representative – Northern Region
- Registry Representative – Central Region
- Registry Representative – Southern Region
- EMS Provider Representative – Northern Region
- EMS Provider Representative – Central Region
- EMS Provider Representative – Southern Region
- EMS Administration Representative – Northern Region
- EMS Administration Representative – Central Region
- EMS Administration Representative – Southern Region
- Northern Regional STROKE Coordinator
- Central Regional STROKE Coordinator
- Southern Regional STROKE Coordinator
- American Heart Association Representative

521.04 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 meets quarterly and is appointed by the State Health Officer. Membership is comprised of the following:

- Neurology Chair
- Emergency Medicine Vice Chair
- Neurologist (one from each region)
- One Emergency Department Physician (one from each region)
- Representative from each stroke participating hospital (minimum of one per region)
- EMS representative (minimum of three)

Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. The MSDH Bureau of Acute Care Systems provides administrative support to the PI Committee and all meetings of the Committee. PI Committee meetings are by invitation only and are not open to the public.

521.05 Data System

The American Heart Association/American Stroke Association GWTG (Get With The Guidelines) – Stroke Program 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 on 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.

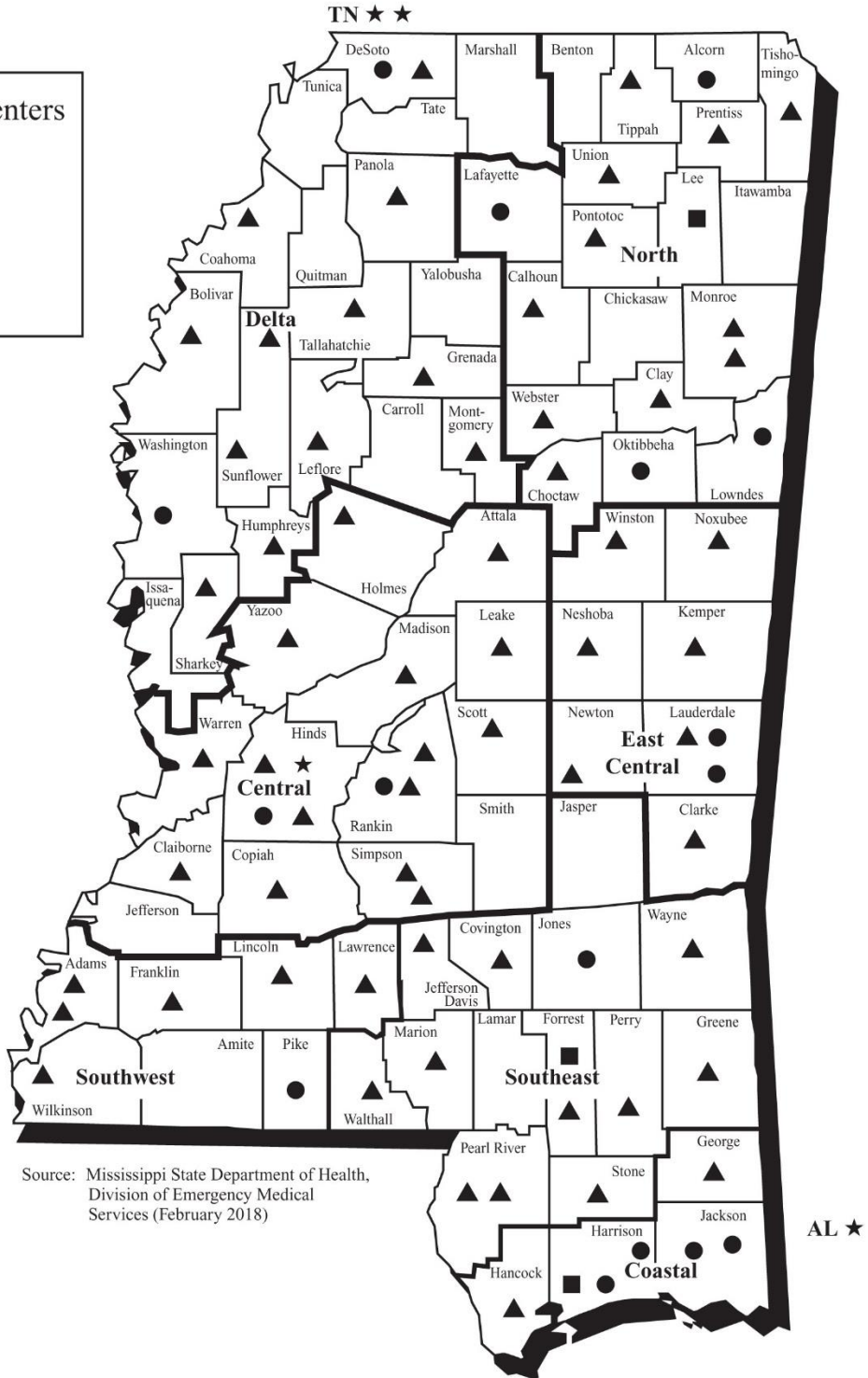
The primary goal of GWTG-Stroke program is to improve the quality of care and outcomes for patients hospitalized with stroke and TIA. The GWTG-Stroke registry helps achieve this goal in a variety of ways, including:

- Enabling high caliber stroke research;

- Promoting stroke center designation;
- Supporting hospital level quality improvement; and
- Driving the creation of a regional stroke system

Map 5-3
Mississippi Trauma Care Regions

Trauma Care Centers	
Level I	★ - 4
Level II	■ - 3
Level III	● - 16
Level IV	▲ - 62



Source: Mississippi State Department of Health,
 Division of Emergency Medical
 Services (February 2018)

Chapter 6 Comprehensive Medical Rehabilitation Services

600 Comprehensive Medical Rehabilitation Services

Comprehensive medical rehabilitation (CMR) services are an intensive care service that treats patients with severe physical disabilities by providing a coordinated multidisciplinary approach that requires 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 2017

Facilities	Licensed Bed Capacity	Average Daily Census	Average Length of Stay	Occupancy Rate (%)
Baptist Memorial Hospital - DeSoto	30	17.06	12.49	56.86
Delta Regional Medical Center -West Campus	24	8.16	12.26	34.00
Forrest General Hospital	24	16.37	14.46	68.23
Memorial Hospital at Gulfport	33	22.91	12.19	69.41
Mississippi Methodist Rehab Center	80	55.75	16.21	69.69
North Miss Medical Center	30	23.95	13.58	79.85
University Hospital and Health System*	0	0.00	0.00	0.00
State Total	221	20.60	11.60	54.01

Source: Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report

Note(s): According to the Applications for Renewal of Hospital License for Calendar Year 2016 and FY 2017 Annual Hospital Report, University Hospital and Health System* reported zero (0) Level 1 CMR Bed Units.

**Table 6-9
Hospital-Based Level II CMR Units
FY 2017**

Facility	Licensed Bed Capacity	Average Daily Census	Average Length of Stay	Occupancy Rate (%)
Baptist Memorial Hospital - North Miss	13	4.99	10.80	38.36
Greenwood Leflore Hospital	20	12.08	12.63	60.40
Merit Health Natchez f/k/a Natchez Regional Medical Center	20	7.41	12.63	37.03
Northwest MS Regional Medical Center*	0	0	0.00	0.00
Anderson Regional Medical Center South	20	13.29	11.34	66.47
Singing River Hospital*	20	15.54	12.73	77.71
TOTALS	93	8.89	10.02	46.66

Source: Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report

Note(s): Singing River Hospital was CON approved February 2013 to add 8 Level II CMR Beds. Singing River Hospital currently has a Six Month Extension for the completion of the proposed project. Northwest MS Regional Medical Center place 14 Beds in abeyance September 2013.

601 The Need for Comprehensive Medical Rehabilitation Services

A total of 221 Level I and 93 Level II rehabilitation beds were operational in Mississippi during FY 2017. 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 30 Level I beds and needs 103 additional Level II CMR beds

602 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.

603 Certificate of Need Criteria and Standards for Comprehensive Medical Rehabilitation Beds/Services

603.01 Policy Statement Regarding Certificate of Need Applications for Comprehensive Medical Rehabilitation Beds/Services

1. Definition: Comprehensive Medical Rehabilitation (CMR) Services provided in a freestanding CMR hospital or a CMR distinct part unit are defined as an intensive care service 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 of 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 CMR beds/services.
3. CMR Services:

Level I - Level I CMR providers may provide treatment services for all rehabilitation diagnostic categories.

Level II - Level II CMR 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: MSDH shall determine the need for Level I CMR beds/services based upon a formula of 0.08 beds per 1,000 population for the state as a whole.

MSDH shall determine need for Level II CMR 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 CMR beds.
5. Present Utilization of Rehabilitation Services: When reviewing CON applications, MSDH shall consider the utilization of existing services and the presence of valid CONs for services.
6. Minimum Sized Facilities/Units: Freestanding CMR facilities shall contain not less than 60 beds. Hospital-based Level I CMR units shall contain not less than 20 beds. If the established formula reveals a need for more than ten beds, MSDH may consider a twenty (20) bed (minimum sized) unit for approval. Hospital-based Level II CMR facilities are limited to a maximum of thirty (30) beds. New Level II rehabilitation units shall not be located within a forty-five (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

eighty percent (80%) for the most recent twelve (12) month licensure reporting period or at least seventy percent (70%) for the most recent two (2) years.

8. Priority Consideration: When reviewing two or more competing CON applications, 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 CMR services; proposed comprehensive range of services; and the patient base needed to sustain a viable CMR 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 CMR units are limited to a maximum size of thirty (30) beds and must be more than a forty-five (45) mile radius from any other Level I or Level II rehabilitation facility.
11. Enforcement: In any case in which 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 MSDH in law or equity.
12. Addition/Conversion of Beds: 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 CON 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. Delicensed Beds: 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 CON. MSDH 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.

603.02 Certificate of Need Criteria and Standards for Comprehensive Medical Rehabilitation Beds/Services

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. 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 MSDH, 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 were 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.

Need Criterion 1: Projected Need

- a. New/Existing CMR Beds/Services: The need for Level I CMR_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 CMR 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 CMR Beds: The applicant shall document the need for the proposed project.

Exception: Notwithstanding the service specific need requirements as stated in "a" above, MSDH may approve additional beds for facilities which have maintained an occupancy rate of at least eighty percent (80%) for the most recent twelve (12)month licensure reporting period or at least seventy percent (70%) 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, MSDH may approve the establishment of a twenty (20) bed Level II CMR unit for any hospital without CMR beds which held a Level II Trauma care designation on July 1, 2003, as well as on the date the Certificate of Need CON application is filed.

- e. Conversion of Level II CMR Beds to Level I CMR Beds: Notwithstanding any other policy statement, standard or criterion, including, but not limited to, Need Criterion 1(a) above, an existing Level II CMR unit may convert no more than eight (8) beds to Level I CMR status if the Level II facility meets the following requirements:
 - (i) The Level II CMR unit demonstrates high utilization by documenting that it has maintained an occupancy rate of at least eighty percent (80%) for the most recent

twelve (12) month licensure reporting period or at least seventy percent (70%) for the most recent two (2) years, as reported in the Mississippi State Health Plan.

- (ii) The Level II CMR unit establishes the need for Level I CMR status for no more than eight (8) beds by documenting that the facility expects to have a minimum of sixty (60) patient admissions annually with one or more of the following rehabilitation diagnostic categories: spinal cord injuries, congenital deformity, and/or brain injury. This documentation may include, without limitation, the Level II CMR unit's patient data or any other data or documentation acceptable to MSDH.
- (iii) The Level II CMR unit shall document compliance with the standards for Level I CMR units set forth below in 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.

Need Criterion 2: Level 1 CMR Services

Applicants proposing to establish Level I CMR 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 neurological disorders, including multiple sclerosis, motor neuron disease, polyneuropathy, muscular dystrophy, and Parkinson's Disease.

Applicants proposing to establish Level II CMR 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 CMR services shall include on their *Annual Report of Hospitals* submitted to MSDH the following: total admissions, average length of stay by diagnosis, patient age, sex, race, zip code, payor source, and length of stay by diagnosis.

Need Criterion 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 (1) year hospital internship, at least two (2) 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 a 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 (1) year hospital internship, at least two (2) 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 twenty (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 a consultant or on a contractual basis.

603.03 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 CMR 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.

603.04 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 2023. 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 2023. Table 6-3 presents Level II CMR bed need.

**Table 6-3
Comprehensive Medical Rehabilitation Bed Need
2017**

Level	Estimated Population 2023	Approved CMR Beds	CMR Beds Need	Difference
Level I	3,138,145	221	251	30
Level II	3,138,145	93	196	103

Source(s): Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report. State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018.

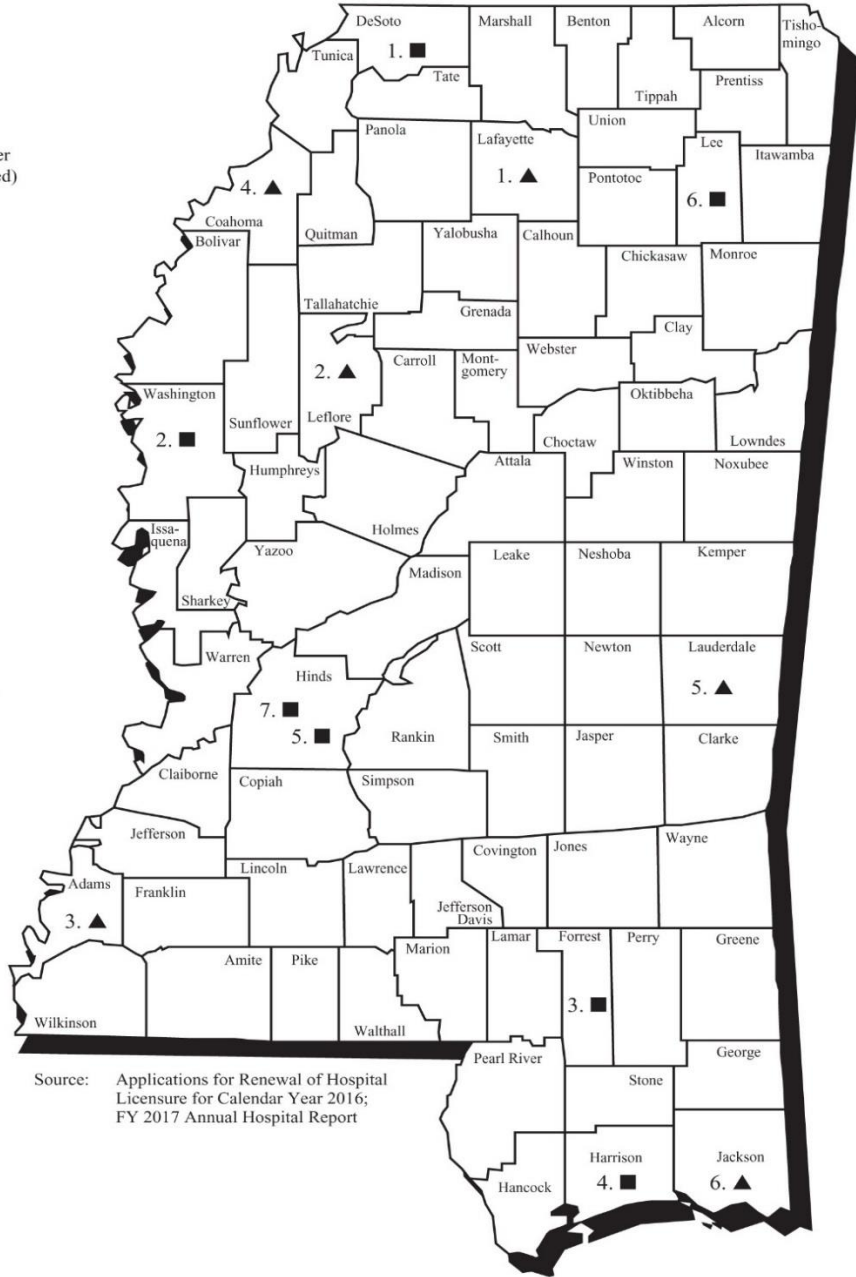
Map 6-1 Location of Comprehensive Medical Rehabilitation Facilities Level I and Level II

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
- 7. ■ University Hospital
and Health System

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: Applications for Renewal of Hospital Licensure for Calendar Year 2016; FY 2017 Annual Hospital Report

604 Certificate of Need Criteria and Standards for Comprehensive Medical Residential Medical Rehabilitation Beds/Services for Patients with Traumatic Brain Injury (CRMR-TBI)

604.01 Policy Statement Regarding Certificate of Need Applications for Comprehensive Residential Medical Rehabilitation Beds/Services for Patients with Traumatic Brain Injury

1. Definitions:
 - (a) Comprehensive Residential Medical Rehabilitation Services (CRMR) for Patients with a Traumatic Brain Injury (TBI) are defined as a place which is devoted to the provision of residential treatment and rehabilitative care in a transitional living program or a lifelong living program for periods of twenty-four (24) hours or longer for persons who have traumatic brain injury.
 - (b) A transitional living program is treatment and rehabilitative care delivered to traumatic brain 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) Lifelong living program is treatment and rehabilitative care to traumatic brain injury patients who have been discharged from advanced treatment and rehabilitation facilities, but who cannot live at home independently, and who require on-going lifetime support and rehabilitation.
 - (d) A TBI is a traumatic harm 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.
2. Planning Areas: The state as a whole shall serve as a single planning area for determining the need of CRMR beds/services for patients with a TBI.
3. Any application for a CRMR-TBI shall document the need for such a program in the state. Any application for an expansion through the addition of beds at a CRMR-TBI shall document an occupancy rate in excess of seventy percent (70%) for the most recent two (2) years.
4. Present Utilization of Rehabilitation Services: When reviewing CON applications for CRMR-TBI, MSDH shall consider the utilization of existing services and the presence of valid CONs for services.
5. Minimum Sized Facilities/Units: CRMR-TBI facilities shall contain not less than six (6) beds and no more than thirty (30) beds. MSDH shall give a preference for CRMR-TBI facilities that are not located within a forty-five (45) mile radius of any other CRMR-TBI 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 CRMR-TBI 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.
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 CON 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 CON. MSDH 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.

604.02 Certificate of Need Criteria and Standards for Comprehensive Residential Medical Rehabilitation Beds/Services for Patients with Traumatic Brain Injury (CRMR-TBI)

MSDH will review applications for a CON for the establishment, offering, or expansion of CRMR beds and/or services for patients with TBI under the statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code 1972, Annotated, as amended. 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 MSDH; 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.

Need Criterion 1: Projected Need

- a. New/Existing CRMR Beds/Services for Patients with TBI: shall be determined considering the current and projected population of the state as whole and the current and projected incidence of TBIs. The state as a whole shall be considered a planning area.
- b. Projects which do Not Involve the Addition of any CRMR-TBI 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 seventy percent (70%) for the most recent two (2) years.

Need Criterion 2: Federal/State Requirements

Applicants proposing to establish CRMR services for patients with TBI shall demonstrate the ability to meet all CMS and state licensure requirements.

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.

700 Ambulatory Surgery Services

During FY 2016, the state's medical/surgical hospitals reported a total of 277,138 general surgical procedures. This number included 186,324 ambulatory surgeries, almost a 6.96 percent increase of the 174,198 ambulatory surgeries performed in hospitals during 2013. The percentage of surgeries performed on an outpatient basis in hospitals has risen from 63.4 percent in 2013 to 67.2 percent in 2016. Table 7-1 displays hospital affiliated surgery data by general hospital service area.

Mississippi licenses 19 freestanding ambulatory surgery facilities. Table 7-2 shows the distribution of facilities and related ambulatory surgery data. The 19 facilities reported 85,842 procedures during fiscal year 2016. Total outpatient surgeries (hospitals and freestanding facilities combined) comprised 99.05 percent of all surgeries performed in the state. The number of procedures performed in freestanding facilities was 30.97 percent of total surgeries in 2016.

Table 7-1
Selected Hospital Affiliated Ambulatory Surgery Data by General Hospital Service Area
FY 2016

General Hospital Service Area	Total Number of Surgeries	Number of Ambulatory Surgeries	Ambulatory Surgeries / Total Surgeries (Percentage)	Number of Operating Rooms / Suites	Average Number of Surgical Procedures per Day / Suite
Mississippi	277,138	186,324	67.2	467	2.37
1	7,810	4,751	60.8	19	1.64
2	32,386	20,805	64.2	46	2.82
3	18,887	14,483	76.7	31	2.44
4	24,964	17,536	70.2	44	2.27
5	88,863	57,891	65.1	153	2.32
6	22,442	16,367	72.9	40	2.24
7	17,680	16,317	92.3	35	2.02
8	23,617	14,472	61.3	43	2.20
9	40,489	23,702	58.5	56	2.89

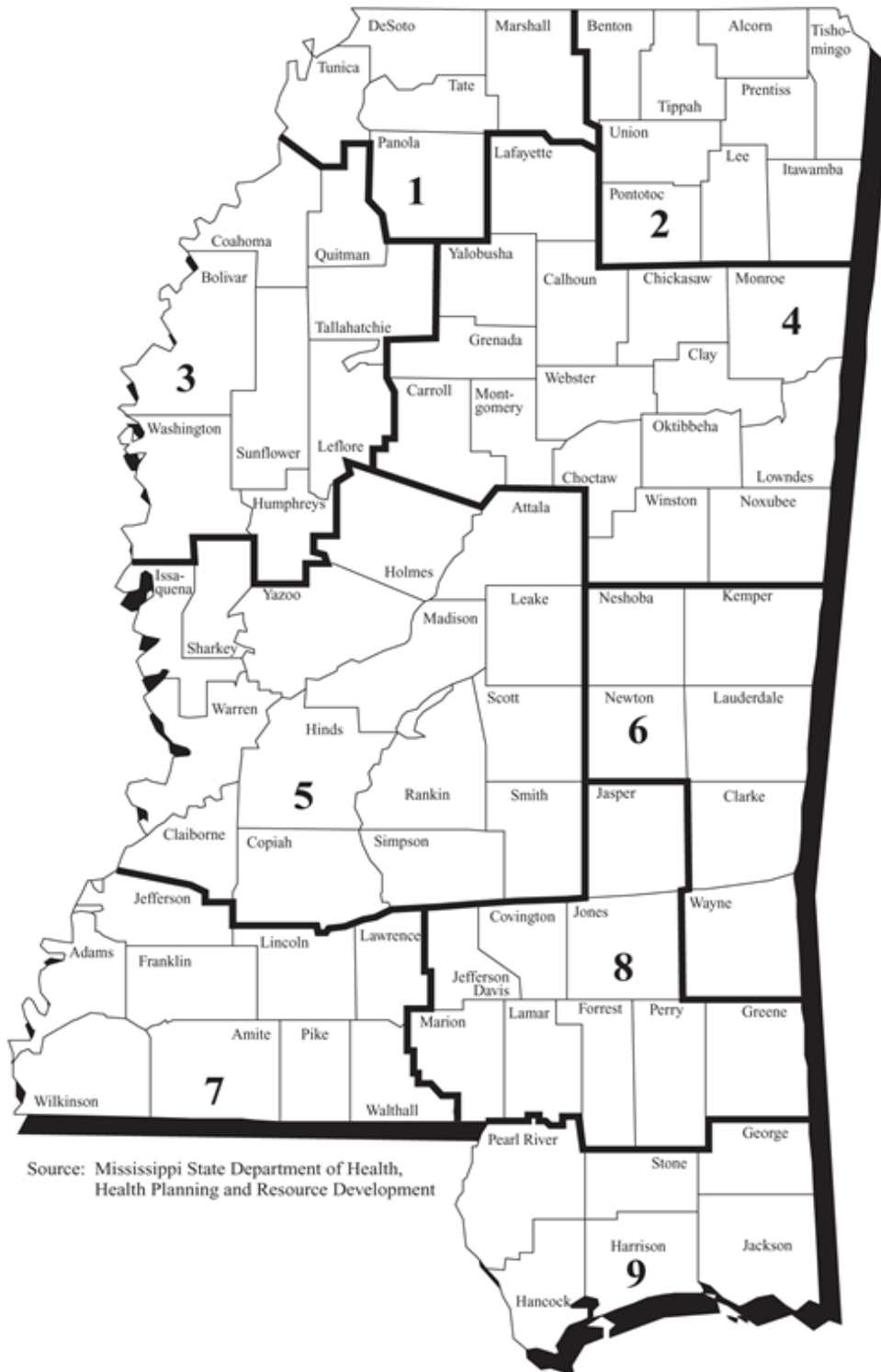
**Table 7-2
Selected Freestanding Ambulatory Surgery Data by County
FY 2016**

Ambulatory Surgery Planning Area	County	Number of Freestanding Ambulatory Surgery Centers	Number of Ambulatory Surgeries Performed	Number of Operating Rooms/Suites	Number of Surgical Procedures Per Day/O.R. Suite
(ASPAs)	Mississippi	19	85,842	77	4.46
1	DeSoto	1	2,165	3	2.89
2	Lee	1	7,883	8	3.94
4	Lafayette	1	3,609	4	3.61
5	Hinds	3	23,415	13	7.20
5	Rankin	2	11,973	10	4.79
6	Lauderdale	1	4,345	3	5.79
8	Forrest	4	19,907	16	4.98
8	Jones	1	1,603	4	1.60
9	Harrison	2	5,299	7	3.03
9	Jackson	3	5,643	9	2.51

Based on 250 working days per year

Source: Survey of individual ambulatory surgery centers conducted April 2018; 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

701 Certificate of Need Criteria and Standards for Ambulatory Surgery Services

Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

701.01 Policy Statement Regarding Certificate of Need Applications for Ambulatory Surgery Services

1. Ambulatory Surgery Planning Areas (ASPAs): MSDH shall use the Ambulatory Surgery Planning Areas as outlined on Map 7-1 of this Plan for planning and 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 thirty (30) minutes normal driving time or twenty-five (25) miles, whichever is greater, of the proposed/established facility. Note: Licensure standards require a freestanding facility to be within fifteen (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: 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 five (5) days per week x fifty (50) weeks per year x eighty percent (80%) utilization rate.
6. Present Utilization of Ambulatory Surgery Services: 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. 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 twelve (12) month reporting period, as reflected in data supplied to and/or verified by MSDH. 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 five (5) days per week x fifty (50) weeks per year x eighty-percent (80%) 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 (2) 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.

701.02 Certificate of Need Criteria and Standards for Ambulatory Surgery Services

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. MSDH will also review applications submitted for CON in accordance with the rules and regulations in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of MSDH; and the specific criteria and standards listed below.

Ambulatory surgery services require CON review when the establishment or expansion of the services involves a capital expenditure in excess of \$5,000,000. In addition, 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, regardless of the capital expenditure.

Need Criteria 1: Minimum Surgeries

The applicant shall demonstrate that the proposed ambulatory surgery facility shall perform a minimum average of 1,000 surgeries per operating room per year.

Need Criteria 2: Minimum Population

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.

Need Criteria 3: Present Utilization of Ambulatory Surgery Services

The 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 twelve (12) month reporting period as reflected in data supplied to and/or verified by MSDH. MSDH may collect additional information it deems essential to render a decision regarding any application.

Need Criteria 4: Affirmation of Provision of Surgical Services

The applicant must affirm that the proposed program shall provide a full range of surgical services in general surgery.

Need Criteria 5: Financial Feasibility

The applicant must provide documentation that the facility will be economically viable within two (2) years of initiation.

Need Criteria 6: Letters of Support

The proposed facility must show support from the local physicians who will be expected to utilize the facility.

Need Criteria 7: Staffing Requirements

Medical staff of the facility must live within a twenty-five (25) mile radius of the facility.

Need Criteria 8: Transfer Agreements/Follow-Up Services

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.

Need Criteria 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.

702 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; or
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.

702.01 Home Health Status

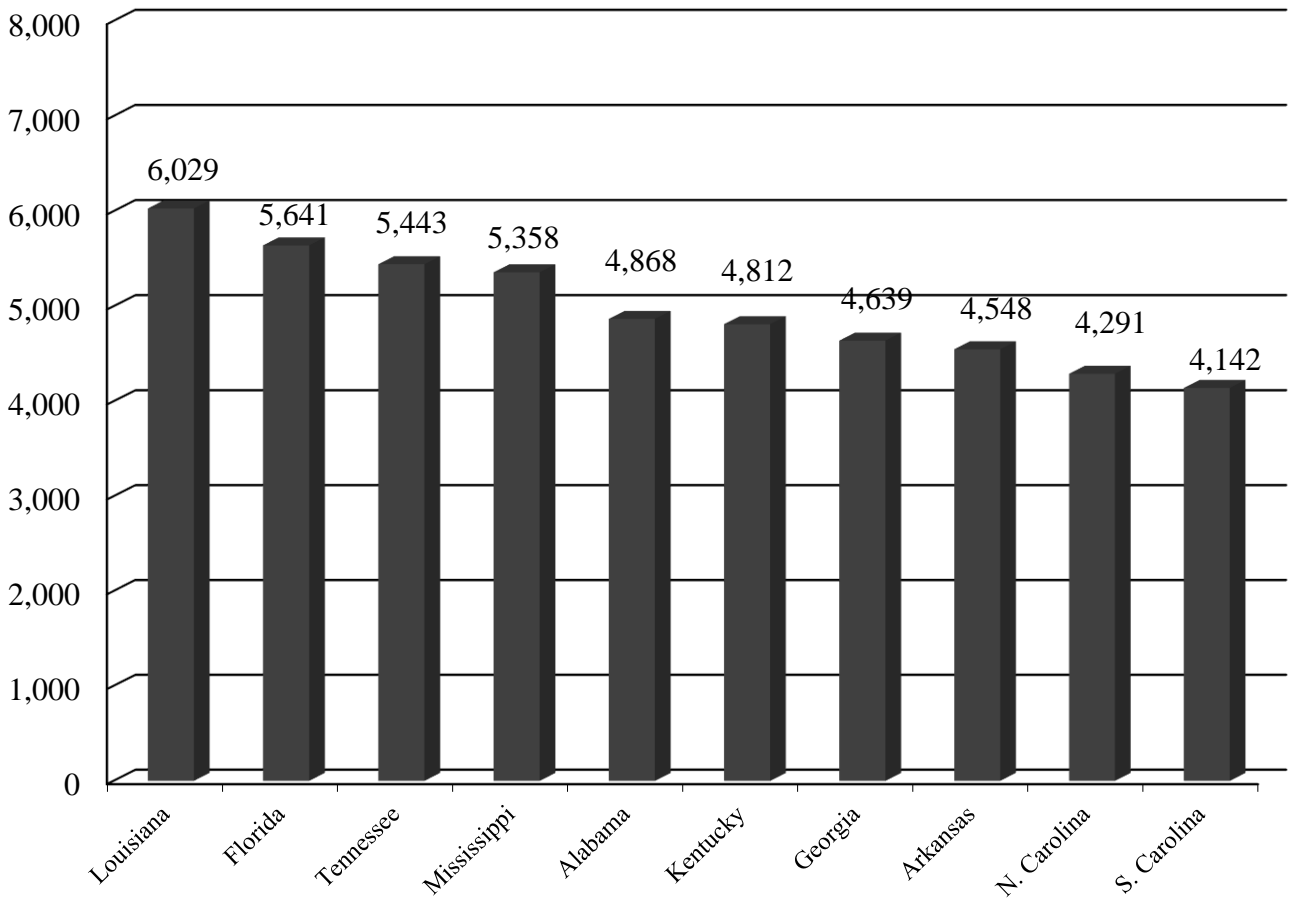
The 2016 *Report on Home Health Agencies* (the latest available) indicated that 56,051 Mississippians received home health services during the year. The reported noted there were 2,024,397 home health care visits made in 2016 in Mississippi. Each patient (all payor sources) received an average of thirty-four (34) visits.

Table 7-3
Medicare Home Health Statistics
in the Ten-State Region
January 1, 2016 – December 31, 2016

	2016 Total Home Health Visits	Total Home Health Claims	Total Home Health Payments	Total Home Health Patients	Average Home Health Payment per Patient	Average Visits per Patient
Region Total	31,749,241	1,837,640	\$4,867,820,107	945,751	\$5,147	34
Alabama	2,593,834	152,665	361,674,479	74,299	\$4,868	35
Arkansas	1,225,853	71,340	168,094,540	36,963	\$4,548	33
Florida	12,150,926	611,951	1,855,186,730	328,895	\$5,641	37
Georgia	2,383,617	147,280	392,174,285	84,532	\$4,639	28
Kentucky	1,798,752	112,715	278,384,370	57,858	\$4,812	31
Louisiana	2,925,397	185,354	406,847,630	67,485	\$6,029	43
Mississippi	2,024,397	133,948	300,330,665	56,051	\$5,358	36
North Carolina	2,654,532	174,679	457,761,772	106,679	\$4,291	25
South Carolina	1,418,020	93,116	243,526,027	58,798	\$4,142	24
Tennessee	2,573,913	154,592	403,839,609	74,191	\$5,443	35

Source: Palmetto GBA – Medicare Statistical Analysis Department, HCIS (Health Care Information System), December 2017

Figure 7-1
Medicare - Average Home Health Payments



Source: Palmetto GBA – Medicare Statistical Analysis Department, HCIS (Health Care Information System), December 2017

703 Certificate of Need Criteria and Standards for Home Health Agencies/Services

Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

703.01 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 31,794,241 as shown in Table 7-3 (2016 is the 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 fifty (50) patients in each county proposed to be served. Based on 2016 data 31,749,241 visits approximates a Region Total of thirty four (34) visits per patient.
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.

703.02 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, 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. 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 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.

Need Criteria 1: Establishment of Need

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*.

Need Criteria 2: Home Health Service Area Boundaries

The applicant shall state the boundaries of the proposed home health service area in the application.

Need Criteria 3: Unmet Need

The applicant shall document that each county proposed to be served has an unmet need equal to fifty (50) patients, using a ratio of 31,749,241 patient total home health visits equals approximately 34 average visits per patient.

Need Criteria 4: Home Office of New Home Health Agency

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.

Need Criteria 5: Application Requirements

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 twelve (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.

Need Criteria 6: Difference in Existing Services Already Provided

Information concerning whether proposed agencies would provide services different from those available from existing agencies.

703.03 Statistical Need Methodology for Home Health Services

The methodology used to calculate the average number of visits per 1,000 elderly (65+) in the ten state region consist of the following:

1. The ten-state region consists of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee.
2. The 2023 projected population aged 65 and older estimates from each state.
3. Table 7-3 showing the average number of Medicare paid home health visits for the ten-state region, according to 2016 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 payments in the ten-state region.
4. In 2016, the region average of home health visits was 31,749,241. An average patient in the region received thirty-four (34) home health visits. Therefore 31,749,241, visits equal 34 patients. Note: The Mississippi average for 2016 was 2,024,397 visits (Medicare reimbursed) and an averaged patient received thirty-six (36) visits.

704 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.

ESRD treatment generally consists of either a kidney transplant or dialysis. Dialysis treatment consists of either peritoneal dialysis or hemodialysis. Peritoneal dialysis, uses a dialyzing fluid which is placed in the abdominal cavity through a plastic tube (catheter), 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.

Both hemodialysis and peritoneal dialysis mimic the function normally performed by the kidney. Dialysis can be done by the patient and an assistant in the home, in a facility, or by professional staff in a hospital or limited care facility. Mississippi has 74 ESRD facilities and 10 Satellite ESRD facilities providing maintenance dialysis services as of FY 2018 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 – thirty (30) years for a living donor versus fifteen (15) years for a cadaver kidney.

The University of Mississippi Medical Center, the only kidney transplant program in the state, performed 103 cadaver and zero 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	31
RCG of Natchez	31
Alcorn	22
RCG of Corinth	22
Attala	20
FMC Kosciusko	20
Bolivar	32
Fresenius Kidney Care	32
Claiborne	10
Fresenius Kidney Care - Port Gibson	10
Clarke	13
Pachuta Dialysis Unit	13
Clay	14
FMC- West Point	14
Coahoma	40
RCG of Clarksdale	40
Copiah	30
BMA Hazlehurst	13
Hazlehurst Dialysis	17
Covington	23
Collins Dialysis Unit	23
DeSoto	49
Fresenius Kidney Care *	49
Forrest	60
Hattiesburg Dialysis Unit	60
George	16
Lucedale Dialysis	16
Grenada	28
RCG of Grenada	28
Hancock	20
FMC- South Miss Kidney Center - Diamondhead (Bay St. Louis)	20

FY 2018 Annual ESRD Dialysis Utilization Survey Conducted May 2018

*Satellite ESRD Facility

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	101
FMC-South Miss Kidney Center - Biloxi	19
FMC-South Miss Kidney Center - Gulfport	20
FMC-South Miss Kidney Center - Orange Grove	30
FMC-South Miss Kidney Center - D'Iberville	12
FMC-South Miss Kidney Center - North Gulfport	20
Hinds	252
FMC- Jackson *	38
FMC- Mid Mississippi*	12
FMC Southwest Jackson	33
FMC - West Hinds County *	14
Davita Jackson North	46
Davita Jackson South	28
Davita Jackson Southwest	18
University MS Medical Center Outpatient Hemodialysis	40
University MS Medical Center Pediatric Nephrology Facility	23
Holmes	22
Davita Renal Care of Lexington	22
Humphreys	9
RCG of Belzoni	9
Itawamba	13
Davita Itawamba County Dialysis	13
Jackson	45
Davita Ocean Springs Dialysis	17
Davita Singing River Dialysis	28
Jasper	21
Bay Springs Dialysis Unit - Bay Springs	21
Jones	38
Laurel Dialysis Unit	38
Kemper	10
FMC-Kemper County	10
Lafayette	28
RCG Oxford	28
Lamar	14
West Hattiesburg Clinic Dialysis *	14
Lauderdale	75
Fresenius Kidney Care- Meridian	65
FMC- Lauderdale County *	10
Lawrence	18
Silver Creek Dialysis Unit	18
Leake	15
RCG- Carthage	15

FY 2018 Annual ESRD Dialysis Utilization Survey Conducted May 2018

*Satellite ESRD Facility

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	60
RCG of Tupelo	50
Lee County Dialysis *	10
Leflore	34
RCG of Greenwood	34
Lincoln	32
RCG of Brookhaven	32
Lowndes	49
RCG of Columbus	35
FMC - Lowndes *	14
Madison	40
FMC Canton	18
Canton Renal Center	22
Marion	30
Columbia Dialysis Unit	30
Marshall	20
RCG of Holly Springs	20
Monroe	32
RCG of Aberdeen	32
Montgomery	15
RCG of Winona	15
Neshoba	53
Fresenius Kidney Care - Pearl River	39
Fresenius Kidney Care- Neshoba County	14
Newton	16
FMC- Newton	16
Noxubee	21
RCG of Macon	21
Oktibbeha	25
RCG of Starkville	25
Panola	30
RCG of Sardis	30
Pearl River	20
Picayune Dialysis Unit	20

FY 2018 Annual ESRD Dialysis Utilization Survey Conducted May 2018

*Satellite ESRD Facility

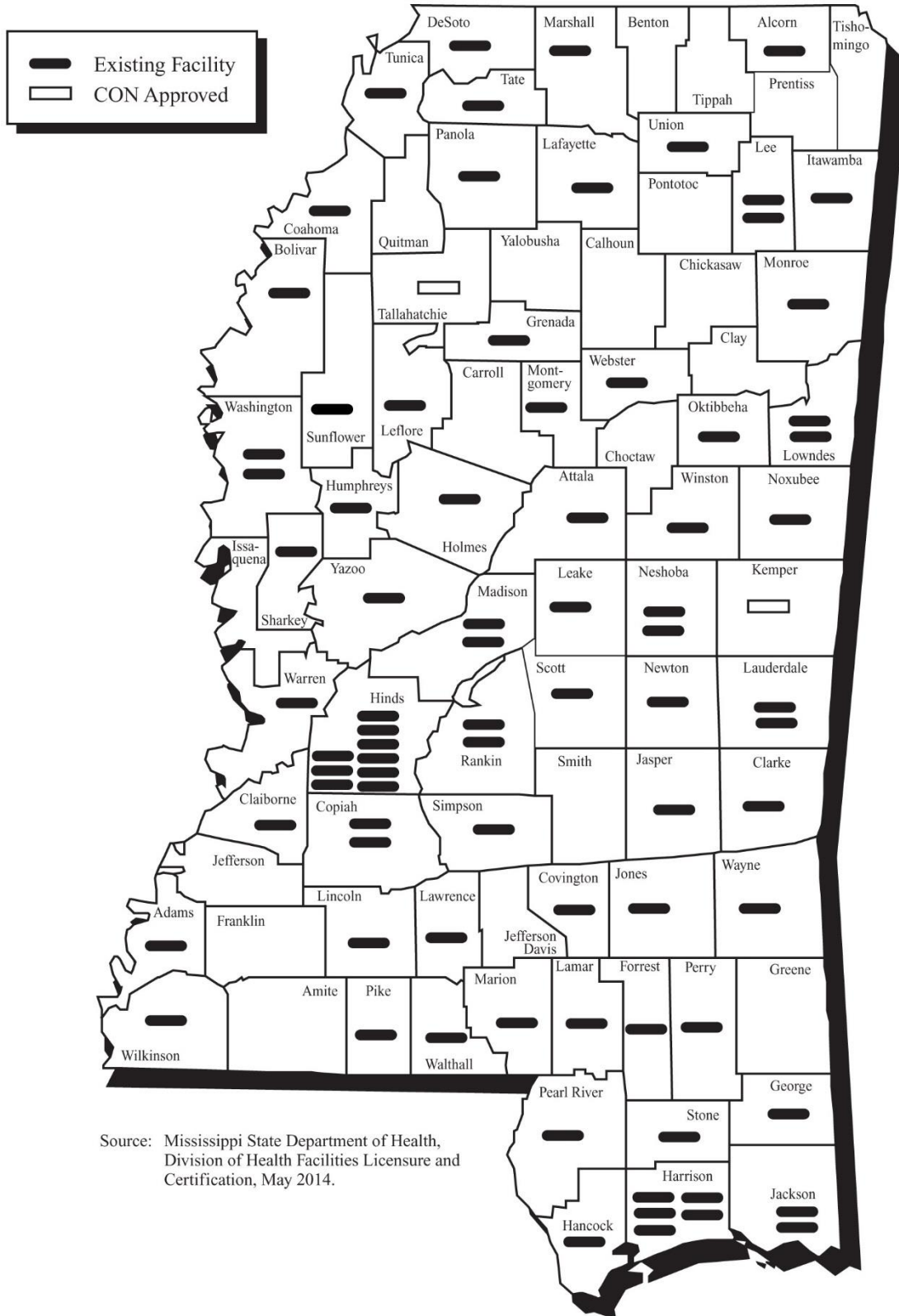
**Table 7-4 (continued)
Number of Existing and CON Approved ESRD Facilities by County**

ESRD Facilities by County	Number of Certified and CON Approved Stations
Perry	20
Richton Dialysis Unit	20
Pike	32
RCG of McComb	32
Rankin	59
Fresenius Kidney Care-Rankin County	35
Davita Brandon	24
Scott	18
FMC - Forest	18
Sharkey	13
FMC-Rolling Fork	13
Simpson	18
FMC - Magee	18
Stone	12
Wiggins Dialysis Unit	12
Sunflower	21
RCG of Indianola	21
Tate	10
RCG- Senatobia	10
Tunica	24
RCG- Tunica *	24
Union	25
Fresenius Kidney Care- Central New Albany *	25
Walthall	21
Tylertown Dialysis Unit	21
Warren	21
Fresenius Kidney Care	21
Washington	52
Mid-Delta Kidney Center	9
Fresenius Kidney Care- Greenville	43
Wayne	19
Waynesboro Renal Dialysis Unit	19
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	1,980

FY 2018 Annual ESRD Dialysis Utilization Survey Conducted May 2018

*Satellite ESRD Facility

Map 7-2 End Stage Renal Disease Facilities



Source: Mississippi State Department of Health, Division of Health Facilities Licensure and Certification, May 2014.

704 Certificate of Need Criteria and Standards for End Stage Renal Disease Facilities

MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

704.01 Policy Statement Regarding Certificate of Need Application 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. Type of Review: CON applications for ESRD services shall be considered substantive as defined under the appropriate *Mississippi State Health Plan*.
3. 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.
4. Utilization Definitions: 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.
 - 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.
5. 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.
6. 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.

7. Minimum Expected Utilization: It is anticipated that a new ESRD facility may not be able to reach optimum utilization (65 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.
8. Minimum Size Facility: No CON application for the establishment of a new ESRD facility shall be approved for less than ten (10) stations.
9. Expansion of Existing ESRD Facilities: Existing ESRD facilities may add ESRD stations as follows:
 - a. An existing ESRD facility with a CMS star rating of 1 or 2, may add ESRD stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than four (4) stations.
 - b. An existing ESRD facility with a CMS star rating of 3, may add ESRD stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than six (6) stations.
 - c. An existing ESRD facility with a CMS star rating of 4 or 5, may add ESRD stations without certificate of need review, as long as the facility does not add, over the period of one (1) year, more than eight (8) stations.

Note: An ESRD facility that has not yet been given a CMS star rating may add ESRD stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than four (4) stations.

10. Home Dialysis Programs: Each existing ESRD facility may establish or relocate a home dialysis program to any location within a 10-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 dialysis program. If such established or relocated 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 two home dialysis program, the project shall be subject to CON review as the establishment of a new ESRD facility. Existing freestanding home dialysis programs may add home training stations as follows:
 - a. An existing freestanding home dialysis facility with a CMS star rating of 1 or 2, may add home training stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than four (4) stations.
 - b. An existing freestanding home dialysis facility with a CMS star rating of 3, may add home training stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than six (6) stations.
 - c. An existing ESRD facility with a CMS star rating of 4 or 5, may add home training stations without certificate of need review, as long as the facility does not add, over the period of one (1) year, more than eight (8) stations.

Note: An existing freestanding home dialysis facility that has not yet been given a CMS star rating may add home training stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than eight (8) stations.

11. Establishment of Satellite ESRD Facilities: Any existing ESRD facility which reaches a total of 30 ESRD stations, may establish a ten (10) station satellite facility. If a proposed satellite ESRD facility is to be located more than one (1) mile from the existing facility, a certificate of need must be obtained by the facility prior to the establishment of the satellite facility.
12. 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.
13. 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*.
14. 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.
15. Federal Definitions: The definitions contained in 42 CFR § 494.10 shall be used as necessary in conducting health planning and CON activities.
16. Affiliation with a Renal Transplant Center: ESRD facilities shall be required to enter into a written affiliation agreement with a renal transplant center.

704.02 Certificate of Need Criteria and Standards for End Stage Renal Disease (ESRD) Facilities

MSDH will review applications for a CON 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. MSDH will also review applications for CON according to the general criteria as listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of MSDH; 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 CON 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 CON 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).

704.02.01 Establishment of an End Stage Renal Disease (ESRD) Facility

Need Criterion 1: 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.

Need Criterion 2: For Expansion of Existing ESRD Facilities

- a. Expansion of Existing ESRD Facilities – Non-Satellite: In the event that an existing ESRD facility (that is not a satellite facility less than two (2) years in existence) proposes to add more stations than what is outlined in ESRD Policy Statement 9, then the facility must apply for a certificate of need, and shall document that it has maintained, or can project a minimum annual utilization rate of sixty-five percent (65%) for the 12 months prior to the month of the submission of the CON application. NOTE: ESRD Policy Statements 3 and Need Criteria 1, do not apply to applications for the expansion of existing ESRD facilities.

- b. Expansion of Existing ESRD Facilities – Satellite: In the event that an existing ESRD facility (that is a satellite facility in operation two years or less), proposes to add more stations than what is outlined in ESRD Policy Statement 9, then the facility must apply for a certificate of need, and shall document that it has maintained or can project through, for example, but not necessarily limited to, patient support letters, the distance between the patient's residence or transportation source and the facility, and/or transportation or patient support concerns, a minimum annual utilization rate of sixty-five percent (65%). NOTE: ESRD Policy Statement 3 and Need Criteria 1 do not apply to applications for the expansion of existing ESRD facilities.

Need Criterion 3: For Establishment of ESRD Satellite Facilities

In order for a thirty (30) station ESRD facility to be approved for the establishment of a ten (10) 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 fifty-five percent (55%) for the twelve (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 thirty (30) mile radius of the existing facility, the facility must (a) document that it has maintained a minimum annual utilization rate of fifty-five percent (55%) for the twelve (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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 8: 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

704.02.02 Establishment of a Renal Transplant Center

Need Criterion 1:

The applicant shall document that the proposed renal transplant center will serve a minimum population of 3.5 million people.

Need Criterion 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.

Need Criterion 3:

The applicant shall document that the facility will perform a minimum of 25 transplants annually.

Glossary

Accessibility — a measure of the degree to which the health care delivery system inhibits or facilitates an individual's ability to receive 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 that is primarily organized, constructed, renovated, or otherwise established for the purpose of providing elective surgical treatment to outpatients whose recovery, under normal and routine circumstances, will not require inpatient care. Such facilities as herein defined do 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 in 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 State 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 contractor's personal resources does not affect the contribution of the CCRC sponsor.

Conversion — 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 — maintaining control of expenses within the health care delivery system to prevent and reduce unnecessary spending.

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 are a “distinct part” (i.e. distinguishable from the larger institution and fiscally separate for cost reporting purposes) of an institution that is certified to provide Skilled Nursing Facility services as by the Centers for Medicare and Medicaid Services (CMS).

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 \leq (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 outpatient.

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 documented in the patient's medical record, which coincides with the time that observation services are initiated in accordance with a physician's order 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 outpatient until 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

**Table 2-2A
2023 Projected Nursing Home Bed Need**

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	Difference
District I	444,312	222	54,720	547	25,844	930	8,076	1,090	2,790	263	3,225	-698
District II	530,592	265	66,816	668	34,641	1,247	11,534	1,557	3,738	48	4,027	-337
District III	729,593	365	90,826	908	41,638	1,499	14,261	1,925	4,697	227	4,928	-458
District IV	898,269	449	114,375	1,144	55,403	1,995	17,245	2,328	5,915	328	6,124	-537
State Total	2,602,766	1,301	326,737	3,267	157,526	5,671	51,116	6,901	17,140	866	18,304	-2,030

**Table 2-2A (continued)
2023 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	Difference
Attala	15,122	8	2,351	24	1,216	44	458	62	137	0	120	17
Bolivar	22,632	11	3,463	35	1,462	53	447	60	159	60	350	-251
Carroll	7,541	4	1,532	15	826	30	213	29	78	0	60	18
Coahoma	22,673	11	2,452	25	1,181	43	428	58	136	30	178	-72
DeSoto	153,028	77	15,307	153	7,853	283	2,278	308	820	0	320	500
Grenada	16,051	8	2,597	26	1,201	43	381	51	129	10	247	-128
Holmes	14,131	7	1,848	18	769	28	273	37	90	8	148	-66
Humphreys	7,472	4	902	9	413	15	142	19	47	0	60	-13
Leflore	22,839	11	2,844	28	1,177	42	476	64	146	62	370	-286
Montgomery	7,293	4	1,381	14	630	23	222	30	70	0	120	-50
Panola	30,020	15	3,656	37	1,868	67	601	81	200	0	190	10
Quitman	6,616	3	879	9	448	16	151	20	49	0	60	-11
Sunflower	23,378	12	2,796	28	1,185	43	398	54	136	0	246	-110
Tallahatchie	14,799	7	1,365	14	624	22	190	26	69	21	98	-50
Tate	27,604	14	3,659	37	1,697	61	437	59	170	14	120	36
Tunica	10,363	5	1,065	11	440	16	117	16	47	0	60	-13
Washington	33,368	17	4,952	50	2,040	73	639	86	226	58	356	-188
Yalobusha	9,382	5	1,671	17	814	29	225	30	81	0	122	-41
District Total	444,312	222	54,720	547	25,844	930	8,076	1,090	2,790	263	3,225	-698

**Table 2-2A (continued)
2023 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	Difference
Alcom	31,857	16	4,452	45	2,515	91	729	98	249	0	264	-15
Benton	7,708	4	1,112	11	534	19	173	23	58	0	60	-2
Calhoun	11,776	6	1,813	18	943	34	300	41	98	0	155	-57
Chickasaw	12,264	6	1,813	18	901	32	279	38	94	0	139	-45
Choctaw	5,420	3	1,094	11	553	20	179	24	58	13	60	-15
Clay	14,895	7	2,531	25	1,144	41	413	56	130	20	160	-50
Itawamba	19,221	10	2,571	26	1,479	53	470	63	152	0	196	-44
Lafayette	51,625	26	4,821	48	2,391	86	828	112	272	0	180	92
Lee	75,871	38	8,964	90	4,818	173	1,666	225	526	0	487	39
Lowndes	51,375	26	6,253	63	3,171	114	1,099	148	351	0	380	-29
Marshall	32,484	16	4,554	46	1,976	71	638	86	219	0	180	39
Monroe	29,733	15	4,118	41	2,392	86	816	110	252	0	332	-80
Noxubee	9,628	5	1,210	12	568	20	214	29	66	0	60	6
Oktibbeha	45,075	23	3,824	38	1,885	68	667	90	219	0	179	40
Pontotoc	28,884	14	3,383	34	1,587	57	546	74	179	0	164	15
Prentiss	20,806	10	2,680	27	1,617	58	559	75	171	0	144	27
Tippah	19,481	10	2,605	26	1,368	49	354	48	133	0	240	-107
Tishomingo	15,374	8	2,496	25	1,396	50	436	59	142	15	178	-51
Union	23,759	12	3,130	31	1,585	57	546	74	174	0	180	-6
Webster	8,293	4	1,217	12	621	22	168	23	61	0	155	-94
Winston	15,063	8	2,175	22	1,197	43	454	61	134	0	134	0
District Total	530,592	265	66,816	668	34,641	1,247	11,534	1,557	3,738	48	4,027	-337

**Table 2-2A (continued)
2023 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	Difference
Adams	23,788	12	3,945	39	1,694	61	653	88	200	20	254	-74
Amite	9,114	5	1,899	19	959	35	295	40	98	0	80	18
Claiborne	8,385	4	1,047	10	460	17	164	22	53	4	73	-24
Copiah	24,013	12	3,644	36	1,628	59	543	73	180	30	150	0
Franklin	6,007	3	1,073	11	488	18	170	23	54	0	60	-6
Hinds	223,835	112	23,598	236	10,511	378	3,614	488	1,214	59	1,518	-363
Issaquena	919	0	133	1	70	3	24	3	8	0	0	8
Jefferson	5,878	3	810	8	358	13	134	18	42	0	60	-18
Lawrence	10,458	5	1,490	15	780	28	260	35	83	0	60	23
Lincoln	29,575	15	4,167	42	1,944	70	702	95	221	0	320	-99
Madison	104,295	52	13,312	133	5,295	191	1,994	269	645	0	455	190
Pike	34,073	17	4,885	49	2,208	79	750	101	247	0	315	-68
Rankin	138,052	69	15,884	159	7,945	286	2,476	334	848	91	502	255
Sharkey	3,724	2	577	6	253	9	106	14	31	0	54	-23
Simpson	22,741	11	3,089	31	1,593	57	537	72	172	0	180	-8
Walthall	12,086	6	1,953	20	1,026	37	347	47	109	8	137	-36
Warren	40,732	20	5,660	57	2,699	97	847	114	288	0	380	-92
Wilkinson	7,570	4	1,082	11	485	17	171	23	55	15	90	-50
Yazoo	24,348	12	2,578	26	1,242	45	474	64	147	0	240	-93
District Total	729,593	365	90,826	908	41,638	1,499	14,261	1,925	4,697	227	4,928	-458

**Table 2-2A (continued)
2023 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	Difference
Clarke	11,779	6	2,148	21	1,049	38	292	39	105	0	120	-15
Covington	16,375	8	2,070	21	1,174	42	424	57	128	0	120	8
Forrest	66,720	33	7,129	71	3,434	124	1,160	157	385	80	536	-231
George	20,312	10	2,373	24	1,390	50	375	51	135	0	101	34
Greene	9,736	5	1,299	13	767	28	241	33	78	0	120	-42
Hancock	38,237	19	5,791	58	2,732	98	714	96	272	29	202	41
Harrison	173,385	87	20,587	206	8,908	321	2,709	366	979	80	932	-33
Jackson	122,360	61	15,394	154	7,597	273	2,177	294	783	0	528	255
Jasper	13,279	7	2,027	20	1,106	40	373	50	117	0	110	7
Jeff Davis	8,037	4	1,647	16	818	29	243	33	83	0	60	23
Jones	58,233	29	7,813	78	3,736	134	1,196	161	403	10	428	-35
Kemper	8,243	4	1,263	13	655	24	239	32	73		60	13
Lamar	56,866	28	5,477	55	2,829	102	899	121	306	3	180	123
Lauderdale	67,871	34	9,200	92	4,391	158	1,523	206	490	77	825	-412
Leake	23,604	12	2,567	26	1,183	43	402	54	134	0	143	-9
Marion	23,076	12	3,419	34	1,585	57	599	81	184	0	297	-113
Neshoba	25,603	13	3,161	32	1,446	52	520	70	167	3	340	-176
Newton	18,337	9	2,221	22	1,241	45	451	61	137	0	180	-43
Pearl River	51,207	26	7,855	79	3,790	136	1,067	144	385	6	306	73
Perry	10,059	5	1,420	14	786	28	238	32	80	0	60	20
Scott	24,295	12	2,726	27	1,373	49	466	63	152	0	162	-10
Smith	13,186	7	2,082	21	1,057	38	272	37	102	0	121	-19
Stone	20,095	10	2,488	25	1,143	41	274	37	113	40	103	-30
Wayne	17,374	9	2,218	22	1,213	44	391	53	127	0	90	37
District Total	898,269	449	114,375	1,144	55,403	1,995	17,245	2,328	5,915	328	6,124	-537

Title 15 - Mississippi Department of Health
Part VIII – Office of Health Policy and Planning
Subpart 90 – Planning and Resource Development

Chapter 1 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 2018 Mississippi State Health Plan, Second Edition* extend from November 10, 2018, through June 30, 2019, or until superseded by a later *Plan*.

The 2018 State Health Plan, Second Edition 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 of 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 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 intellectually disabled; 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 *State Health Plan* includes data provided by the Office of Licensure and Certification via the Applications for Renewal of Hospital License, the Annual Hospital Reports, and the Report on Institutions for the Aged or Infirm. The Office of Licensure and Certification is responsible for the collection of these data through reports submitted by hospitals and healthcare facilities. These data are reported in the *Plan* as it has been provided by the Office of Licensure and Certification for health planning purposes.

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

102 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 cost containment.

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*.

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, 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 Medicaid/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.

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*.

102.01 Teaching Exception

Section 41-7-187, Mississippi Code Annotated, as amended, authorizes MSDH to develop and implement the CON program. As the Mississippi Supreme Court recognized in *Jackson HMA, LLC, et al. v. Mississippi State Department of Health, et al.*, 98 So.3d 980, 986 (Miss. 2012), through this statute and others the Legislature delegated to MSDH the authority to adopt rules and regulations “to determine when a CON is required.” Therefore, any activity or project at the University of Mississippi Medical Center principally designed to train health professionals and/or further the academic research mission of the institution, shall not require the issuance of a CON, notwithstanding any provision in Section 41-7-171 *et seq.* to the contrary, provided that any person proposing to undertake any such activity that may be subject to the CON program shall file a Determination of Reviewability, as authorized by Section 41-7-205 and the *Mississippi Certificate of Need Review Manual* or other regulations adopted by MSDH, that demonstrates the activity or project:

1. is consistent with the teaching and/or academic research mission of the applicant;
2. is undertaken in support of a program(s) accredited by the Accreditation Council for Graduate Medical Education (ACGME), Liaison Committee on Medical Education (LCME), or other academic accrediting body, including but not limited to, the Commission on Collegiate Nursing Education (CCNE), Accreditation Council for Pharmacy Education (ACPE), Commission on Dental Accreditation (CODA), and Southern Association of Colleges and Schools Commission on Colleges (SACSCOC); and
3. addresses one or more priority health need(s) of the *State Health Plan*.

103 Population for Planning

Population projections used in this *Plan* were calculated by the State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018. This plan is based on 2023 population projections.

Map 1-1 depicts the state's 2023 estimated population by county. Mississippi population projections for the years 2017 and 2023 were obtained from the State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018.

104 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.

104.01 Physicians

Mississippi had 5,744 active medical doctors, 407 osteopaths, and 68 podiatrists licensed by the Board of Medical Licensure for FY 2016 (licensing year 2017) for a total of 6,219 active licensed physicians practicing in the state. This number represents an increase of 43 physicians, or more than 0.69 percent, from FY 2015 (licensing year 2016).

Approximately 2,372 (41 percent) of the state's active medical doctors are primary care physicians, representing a ratio of one primary care physician for every 1,323 persons, based on 2023 projected population. The primary care physicians included 754 family practitioners, seventy-five (75) general practitioners, 739 internal medicine physicians, 329 obstetrical and gynecological physicians, and 475 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 116 primary care health professional shortage area (HPSA) designations. Seventy-eight (78) of the designations are single county designations. The United States Department of Health and Human Services defines a primary care 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.

104.02 Dentists

The Mississippi State Board of Dental Examiners reported 1,421 licensed (1,380 “active” and 41 “inactive”) dentists in the state as of December 2017, with 103 new dentists licensed during calendar year 2016. Based on Mississippi's 2023 projected population of 3,138,145 the state has one active dentist for every 2,274 persons.

According to the Health Resources and Services Administration’s Office of Shortage Designation (HRSA/OSD), Mississippi currently has a total of 110 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 336 active dentists in the fall of 2017, with 186 in Hinds County, 100 in Rankin County, and 50 in Madison County. The Gulf Coast region had the second largest count at 183, with 111 in Harrison County, 65 in Jackson County, and 7 in Hancock County. Combined, these two metropolitan areas contained 37.61 percent of the state's total supply of active dentists.

On the opposite end of the spectrum, six counties— Benton, Claiborne, Tate, Tunica, Sharkey, and Quitman—had only one active dentist each and one county— 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.

104.03 Nurses

Registered Nurses

The Mississippi Board of Nursing reported 52,852 registered nurses (RNs) licensed in FY 2017 with (39,897) who worked full or part-time in nursing careers. That included 21,124 in hospitals; 3,928 in community, public, or home health; 2,415 in physicians' offices; 2,233 in nursing homes; and the remainder in other nursing careers. RNs by degree in FY 2017 included, 4,802 diploma, 32,743 associates, 4,823 baccalaureate non-nursing, 23,756 baccalaureate nursing, 1,434 masters non-nursing, 23,756 masters nursing, and 391 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 2017 there were 6,959 RNs certified as APRNs, with 4,767 family nurse practitioners; 759 certified registered nurse anesthetist; and 506 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 14,015 licensed practical nurses (LPNs) licensed in FY 2017 with 10,642 who worked full or part-time in nursing careers. That included 4,500 in nursing homes; 1,091 in hospitals; 1,768 in community, public, or home health; and the remainder in other nursing careers. There were 5,238 LPNs certified for an expanded role in FY 2017, including 4,973 in intravenous therapy, 152 in hemodialysis, and 113 in both expanded roles.

104.04 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 1,987 licensed physical therapists in Mississippi as of November 17, 2017 with 1,717 residing in the state and 1,709 practicing in the state. Nine percent of the Mississippi resident physical therapists practitioners live in Hinds County, eight percent in Harrison County, eight percent in Madison County, and seven percent in Lee County for a total of 32 percent in four counties. The Board also reported 1,274 licensed physical therapist assistants, with 1,120 residing in the state and 1,112 practicing in the state.

104.05 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.

MSDH reported 1,134 licensed occupational therapists and 666 licensed occupational therapy assistants on its Mississippi roster as of November 7, 2017, with 980 of the OTs and 597 of the OTAs residing in the state.

104.06 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 2016, Mississippi issued 1,349 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 2016, the MSDH Bureau of Emergency Medical Services reported issuing a total of 1,787 EMT certifications or recertifications 1,265 Paramedics and 20 Critical Care 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 2016, BEMS certified 9 medical first responders.

Chapter 02 Long-Term Care

“Long-term care” refers to a variety of services rendered to assist a person with chronic conditions or disabilities that reduce their capacity to function independently.

Mississippi’s long-term care (nursing home and home health) patients are primarily disabled, elderly people, who make up seventeen percent (17%) percent of the 2023 projected population above age sixty-five (65). Projections place the number of people in this age group at approximately 535,379 by 2023.

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 disabling chronic conditions, which the present medical system can “manage” but not cure. As a result, Aged individuals may become dependent on medical technology and professional care providers for years - not just weeks or months.

200 Options for Long-Term Care

Community Based long-term care programs can potentially delay or prevent institutionalization. These programs, although not reviewable under Certificate of Need, drastically affect the demand for skilled nursing beds.

Community based programs 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.

201 Housing for the Elderly

Many elderly or infirmed people do not need skilled nursing care on a daily basis, but may need safe, affordable housing and assistance with one or more activities of daily living. Housing for the elderly and infirmed population 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 facilities and Personal Care Home - Assisted Living facilities. Both types of facilities provide a sheltered environment and assistance with 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 2016, the state had 181 licensed personal care homes, with a total of 5,779 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 daily meals. 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 or require their residents to sign a lifetime contract. Most facilities generally offer only independent living and personal care. Most also do not include a skilled nursing home as a part of the retirement community. Table 2-1 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
2016**

District I				District II			
County	Licensed Beds	Occupancy Rate %	Average Daily Census	County	Licensed Beds	Occupancy Rate %	Average Daily Census
Attala	30	0.00	0.00	Alcorn	69	85.00	58.66
Bolivar	137	91.17	113.06	Benton	N/A	N/A	N/A
Carroll	15	0.00	0.00	Calhoun	20	52.96	10.60
Coahoma	36	15.58	5.62	Chickasaw	18	72.98	13.14
DeSoto	479	80.79	386.98	Choctaw	14	80.98	11.34
Grenada	63	87.06	54.84	Clay	28	77.33	21.60
Holmes	N/A	N/A	N/A	Itawamba	172	64.72	111.30
Humphreys	N/A	N/A	N/A	Lafayette	260	62.92	163.60
Leflore	80	72.22	57.78	Lee	444	69.77	309.78
Montgomery	N/A	N/A	N/A	Lowndes	200	70.26	92.74
Panola	54	87.20	47.08	Marshall	46	97.34	44.78
Quitman	N/A	N/A	N/A	Monroe	83	92.00	76.34
Sunflower	50	90.98	34.58	Noxubee	33	57.19	18.86
Tallahatchie	N/A	N/A	N/A	Oktibbeha	129	70.55	38.10
Tate	90	182.74	78.64	Pontotoc	40	85.54	34.22
Tunica				Prentiss	40	55.78	22.30
Washington	152	87.54	99.80	Tippah	N/A	N/A	N/A
Yalobusha	N/A	N/A	N/A	Tishomingo	92	74.13	68.20
				Union	116	57.52	51.20
				Webster	13	0.00	0.00
				Winston	37	89.16	17.84
District Total	1,186	79.53	878.38	District Total	1,854	65.81	1,164.60

Table 2-1 (Continued)
Personal Care Home Licensed Beds, Occupancy Rates and Average Daily Census
2016

District III				District IV			
County	Licensed Beds	Occupancy Rate %	Average Daily Census	County	Licensed Beds	Occupancy Rate %	Average Daily Census
Adams	44	85.10	37.44	Clarke	55	30.16	9.04
Amite	0	0.00	0.00	Covington	36	66.84	24.06
Claiborne	5	0.00	0.00	Forrest	241	66.47	122.94
Copiah	N/A	N/A	N/A	George	81	89.80	45.78
Franklin	N/A	N/A	N/A	Greene	N/A	N/A	N/A
Hinds	531	70.81	341.30	Hancock	32	64.89	19.46
Issaquena	N/A	N/A	N/A	Harrison	505	77.66	271.82
Jefferson	N/A	N/A	N/A	Jackson	82	95.48	68.74
Lawrence	N/A	N/A	N/A	Jasper	48	36.22	17.38
Lincoln	24	46.32	3.70	Jeff Davis	N/A	N/A	N/A
Madison	588	71.66	349.74	Jones	202	60.27	92.84
Pike	98	64.61	63.32	Kemper	N/A	N/A	N/A
Rankin	430	76.40	147.46	Lamar	163	75.80	123.54
Sharkey	N/A	N/A	N/A	Lauderdale	221	38.94	71.20
Simpson	30	94.76	28.42	Leake	40	77.01	30.82
Walthall	N/A	N/A	N/A	Marion	22	59.35	13.06
Warren	73	73.27	53.48	Neshoba	53	79.48	11.92
Wilkinson	N/A	N/A	N/A	Newton	54	58.12	31.40
Yazoo	N/A	N/A	N/A	Pearl River	55	86.66	34.66
				Perry	42	94.13	39.54
				Scott	30	85.55	25.66
				Smith	N/A	N/A	N/A
				Stone	1	100.00	1.00
				Wayne	55	70.27	38.64
District Total	1,823	58.29	1,024.86	District Total	2,018	74.37	1093.50
State Total					5,779	65.41	3,557.20

Source: 2016 Report on Institutions for the Aged or Infirm; MSDH, Bureau of Health Facilities Licensure and Certification

“Continuing Care Retirement Communities” (CCRC), another type of retirement community, includes three stages: 1) independent living in a private apartment, 2) a personal care facility, and 3) 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 resident’s life. Since CCRC beds are licensed as skilled nursing facility beds, they are included in Table 2-2.

202 Nursing Facilities

As of FY 2016, Mississippi has 208 licensed skilled nursing facilities, with a total of 18,274 licensed beds. This count of licensed nursing home beds excludes the following: 120 beds operated by the Mississippi Band of Choctaw Indians; 562 licensed beds operated by the Department of Mental Health and 658 operated by the Mississippi State Veteran's Affairs Board; and 104 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 2-2 presents the projected nursing home bed need for 2018 by planning district. Both the map and table appear in the criteria and standards section of this chapter. For 2023 projections, see Table 2-2A in the Appendix.

203 Long-Term Care Beds for Individuals with Intellectual Disabilities and Developmental Disabilities

Mississippi has 2,434 licensed beds classified as Intermediate Care Facility for the Intellectually Disabled (ICF/ID). The Department of Mental Health (DMH) operates five comprehensive regional programs that contain 1,492 active licensed and staffed beds. In addition to intellectual and developmental disabilities, the residents of the DMH regional centers also have severe physical disabilities that result in residents requiring care at the nursing home level. Regular nursing facilities are not equipped to serve these individuals. Map 2-2 shows the ID/DD Long-Term Care Planning Districts and Table 2-3 presents the ID/DD nursing home bed need by Planning District. Both the map and table appear in the criteria and standards section of this chapter.

204 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.

204.01 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 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 intellectually disabled, 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 sixty (60) bed nursing facility to be added to each of twenty-six (26) counties with the greatest need between the years 2000 and 2003. The Legislature also permitted CONs for sixty (60) nursing facility beds for individuals with Alzheimer's 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 facility must submit a letter requesting that the beds be placed in abeyance. 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 sixty (60) months or more shall require a Certificate of Need prior to reopening.

- g. MSDH shall determine the need for additional nursing home care beds based on the Long Term Care Planning Districts (LTCPDs) as outlined on Map 2-1. 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: 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 State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018.
 4. Bed Inventory: 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: MSDH shall not approve construction of a new or replacement nursing home care facility for less than sixty (60) beds. However, the number of beds authorized to be licensed in a new or replacement facility may be less than sixty (60) beds.
 6. Definition of CCRC: See the Glossary of this *Plan*.
 7. Medicare Participation: 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: 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.

204.02 Certificate of Need Criteria and Standards for Nursing Home Care Beds

If the legislative moratorium were removed or partially lifted, 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. 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 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 \$5,000,000; 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.

Need Criterion 1: Nursing Home Care Bed Need

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

Need Criterion 2: Number of Beds to be Constructed, Converted, and/or Licensed

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

Need Criterion 3: Consideration of Statistical Need

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

Need Criterion 4: Alzheimer's/Dementia Care Unit

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 MSDH for said Alzheimer's/Dementia Care Unit.

204.03 Certificate of Need Criteria and Standards for the Relocation/Transfer of Nursing Home Care Beds

Need Criterion 1: Relocation/Transfer of Nursing Home Care Beds

An applicant proposing to relocate/transfer a portion or all of an existing facility's nursing home care beds to another location shall document the relocation/transfer is within the current facility's LTCPD.

Need Criterion 2: Number of Beds to be Relocated/Transferred

The applicant shall document the number of beds to be relocated/transferred to provide nursing home care services.

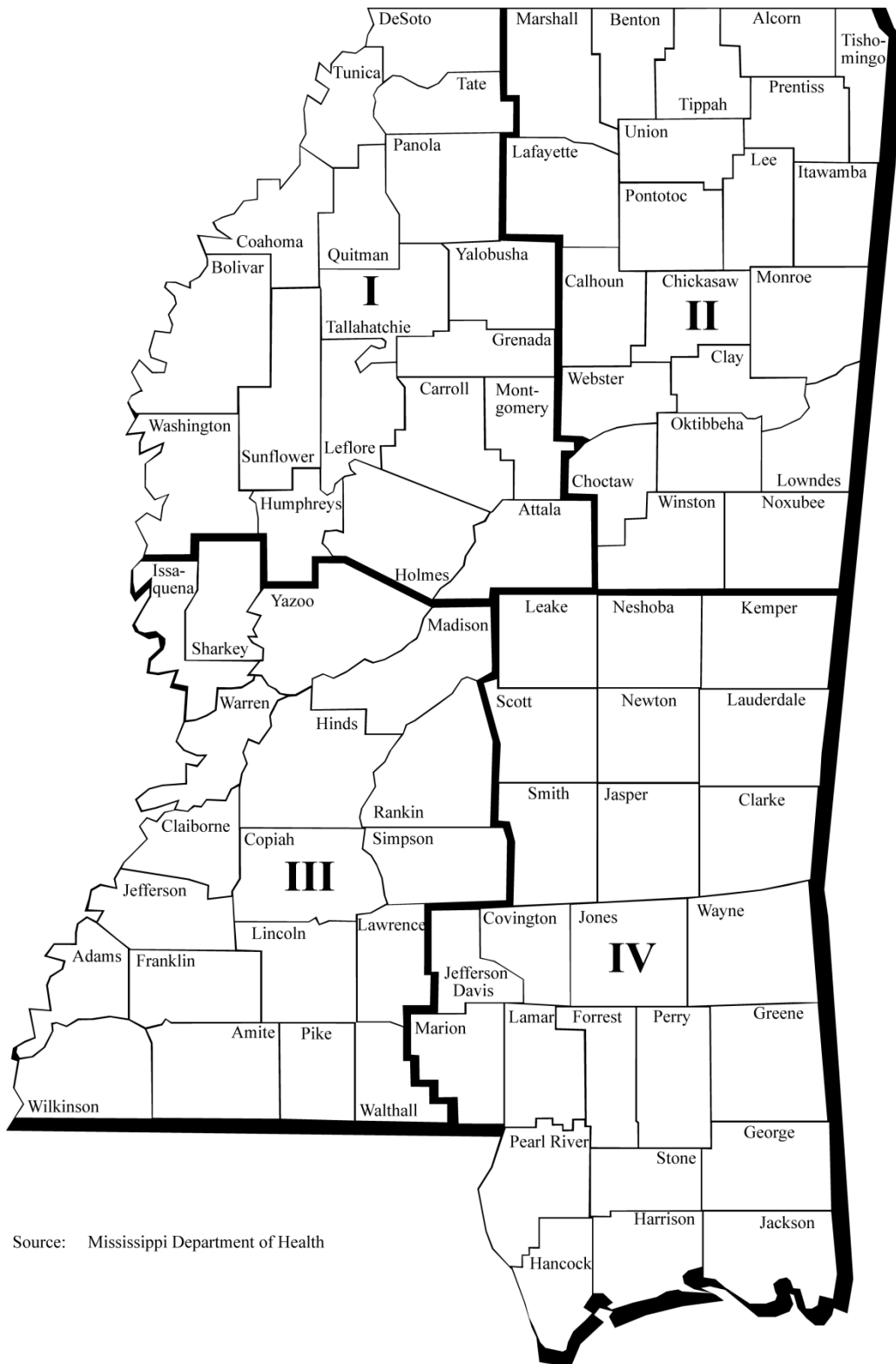
Need Criterion 3: Alzheimer's/Dementia Care Unit

Any applicant applying for the relocation/transfer of nursing home beds in an Alzheimer's/Dementia Care Unit shall affirm that the applicant shall fully comply with all licensure regulations of MSDH for said Alzheimer's/Dementia Care Unit.

204.04 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 MSDH, of the policy statements and general CON criteria and standards in the *Mississippi Certificate of Need Review Manual* 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 2-2
2018 Projected Nursing Home Bed Need¹**

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	Difference
District I	453,824	227	48,467	485	21,904	789	7,818	1,055	2,556	263	3,225	-932
District II	530,996	265	59,783	598	30,074	1,083	10,963	1,480	3,426	48	4,027	-649
District III	728,429	364	76,776	768	35,229	1,268	13,613	1,838	4,238	227	4,928	-917
District IV	901,367	451	100,344	1,003	47,755	1,719	16,195	2,186	5,360	328	6,124	-1,092
State Total	2,614,616	1,307	285,370	2,854	134,962	4,859	48,589	6,560	15,579	866	18,304	-3,591

¹ Data may not equal totals due to rounding

Note: This count of licensed nursing home beds excludes the following: 120 beds operated by the Mississippi Band of Choctaw Indians; 562 licensed beds operated by the Department of Mental Health and 658 operated by the Mississippi State Veteran's Affairs Board; and 104 beds (which are dedicated to serving patients with special rehabilitative needs, including spinal cord and closed-head injuries) operated by Mississippi Methodist Rehabilitation Center.

Sources: Mississippi State Department of Health, Division of Licensure and Certification; and Division of Health Planning and Resource Development Calculations, 2016

Population Projections: State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018.

**Table 2-2 (continued)
2018 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	Difference
Attala	15,635	8	2,205	22	1,090	39	464	63	132	0	120	12
Bolivar	24,941	12	3,229	32	1,146	41	498	67	153	60	350	-257
Carroll	8,081	4	1,439	14	668	24	190	26	68	0	60	8
Coahoma	22,821	11	2,180	22	1,064	38	427	58	129	30	178	-79
DeSoto	150,179	75	13,529	135	6,353	229	1,981	267	707	0	320	387
Grenada	17,038	9	2,354	24	1,023	37	391	53	122	10	247	-135
Holmes	15,090	8	1,559	16	708	25	285	38	87	8	148	-69
Humphreys	7,770	4	767	8	376	14	147	20	45	0	60	-15
Leflore	24,713	12	2,450	25	1,074	39	535	72	148	62	370	-284
Montgomery	7,943	4	1,261	13	572	21	231	31	68	0	120	-52
Panola	30,228	15	3,278	33	1,616	58	550	74	180	0	190	-10
Quitman	6,805	3	801	8	403	15	143	19	45	0	60	-15
Sunflower	23,831	12	2,341	23	1,011	36	403	54	126	0	246	-120
Tallahatchie	14,539	7	1,207	12	557	20	194	26	66	21	98	-53
Tate	27,054	14	3,173	32	1,320	48	398	54	147	14	120	13
Tunica	10,219	5	890	9	352	13	109	15	41	0	60	-19
Washington	37,011	19	4,314	43	1,857	67	655	88	217	58	356	-197
Yalobusha	9,926	5	1,490	15	714	26	217	29	75	0	122	-47
District Total	453,824	227	48,467	485	21,904	789	7,818	1,055	2,556	263	3,225	-932

**Table 2-2 (continued)
2018 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	Difference
Alcorn	31,797	16	4,250	43	2,130	77	681	92	227	0	264	-37
Benton	7,708	4	964	10	472	17	164	22	53	0	60	-7
Calhoun	12,099	6	1,687	17	832	30	300	41	93	0	155	-62
Chickasaw	13,194	7	1,614	16	837	30	274	37	90	0	139	-49
Choctaw	6,024	3	1,019	10	490	18	174	23	54	13	60	-19
Clay	16,022	8	2,116	21	1,016	37	414	56	122	20	160	-58
Itawamba	19,425	10	2,471	25	1,291	46	449	61	142	0	196	-54
Lafayette	48,272	24	4,036	40	2,002	72	764	103	240	0	180	60
Lee	75,014	38	7,887	79	4,124	148	1,534	207	472	0	487	-15
Lowndes	51,902	26	5,567	56	2,728	98	1,067	144	324	0	380	-56
Marshall	32,780	16	3,843	38	1,655	60	598	81	195	0	180	15
Monroe	30,279	15	3,931	39	2,110	76	769	104	234	0	332	-98
Noxubee	9,833	5	1,024	10	520	19	215	29	63	0	60	3
Oktibbeha	44,558	22	3,229	32	1,638	59	636	86	199	0	179	20
Pontotoc	28,134	14	2,919	29	1,327	48	535	72	163	0	164	-1
Prentiss	21,020	11	2,566	26	1,445	52	526	71	159	0	144	15
Tippah	19,494	10	2,350	24	1,190	43	320	43	119	0	240	-121
Tishomingo	15,693	8	2,393	24	1,230	44	411	55	132	15	178	-61
Union	23,733	12	2,834	28	1,360	49	526	71	160	0	180	-20
Webster	8,557	4	1,055	11	572	21	154	21	56	0	155	-99
Winston	15,458	8	2,028	20	1,105	40	452	61	129	0	134	-5
District Total	530,996	265	59,783	598	30,074	1,083	10,963	1,480	3,426	48	4,027	-649

**Table 2-2 (continued)
2018 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	Difference
Adams	25,395	13	3,303	33	1,598	58	670	90	194	20	254	-80
Amite	9,870	5	1,689	17	832	30	285	38	90	0	80	10
Claiborne	8,455	4	907	9	416	15	148	20	48	4	73	-29
Copiah	24,822	12	3,082	31	1,386	50	534	72	165	30	150	-15
Franklin	6,434	3	887	9	453	16	162	22	50	0	60	-10
Hinds	223,398	112	20,114	201	8,956	322	3,633	490	1,126	59	1,518	-451
Issaquena	1,032	1	115	1	77	3	19	3	7	0	0	7
Jefferson	6,261	3	669	7	341	12	126	17	39	0	60	-21
Lawrence	10,720	5	1,323	13	721	26	229	31	75	0	60	15
Lincoln	29,981	15	3,617	36	1,694	61	694	94	206	0	320	-114
Madison	99,184	50	9,932	99	4,042	146	1,834	248	542	0	455	87
Pike	34,705	17	4,161	42	1,933	70	756	102	231	0	315	-84
Rankin	134,240	67	13,893	139	6,402	230	2,148	290	727	91	502	134
Sharkey	3,927	2	489	5	224	8	116	16	31	0	54	-23
Simpson	23,158	12	2,805	28	1,385	50	503	68	157	0	180	-23
Walthall	12,563	6	1,749	17	896	32	328	44	100	8	137	-45
Warren	41,589	21	4,925	49	2,287	82	784	106	258	0	380	-122
Wilkinson	8,045	4	892	9	453	16	169	23	52	15	90	-53
Yazoo	24,650	12	2,224	22	1,133	41	475	64	139	0	240	-101
District Total	728,429	364	76,776	768	35,229	1,268	13,613	1,838	4,238	227	4,928	-917

**Table 2-2 (continued)
2018 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	Difference
Clarke	12,620	6	1,962	20	917	33	277	37	96	0	120	-24
Covington	16,503	8	1,910	19	1,068	38	402	54	120	0	120	0
Forrest	66,372	33	6,387	64	2,887	104	1,184	160	361	80	536	-255
George	20,111	10	2,236	22	1,153	42	308	42	116	0	101	15
Greene	9,842	5	1,232	12	670	24	217	29	71	0	120	-49
Hancock	38,682	19	5,206	52	2,283	82	677	91	245	29	202	14
Harrison	175,018	88	17,421	174	7,704	277	2,614	353	892	80	932	-120
Jackson	123,313	62	13,481	135	6,448	232	1,910	258	686	0	528	158
Jasper	13,706	7	1,861	19	1,006	36	340	46	108	0	110	-2
Jeff Davis	8,898	4	1,545	15	677	24	239	32	77	0	60	17
Jones	58,640	29	6,818	68	3,357	121	1,145	155	373	10	428	-65
Kemper	8,551	4	1,095	11	596	21	229	31	68	0	60	8
Lamar	54,386	27	4,732	47	2,364	85	788	106	266	3	180	83
Lauderdale	68,825	34	7,902	79	3,882	140	1,512	204	457	77	825	-445
Leake	22,840	11	2,232	22	1,060	38	384	52	124	0	143	-19
Marion	23,417	12	2,891	29	1,414	51	582	79	170	0	297	-127
Neshoba	25,816	13	2,778	28	1,278	46	530	72	158	3	340	-185
Newton	18,408	9	2,085	21	1,105	40	456	62	131	0	180	-49
Pearl River	50,628	25	6,906	69	3,080	111	946	128	333	6	306	21
Perry	10,266	5	1,307	13	686	25	194	26	69	0	60	9
Scott	24,545	12	2,473	25	1,210	44	452	61	142	0	162	-20
Smith	13,616	7	1,840	18	952	34	224	30	90	0	121	-31
Stone	18,729	9	2,035	20	890	32	228	31	93	40	103	-50
Wayne	17,635	9	2,009	20	1,068	38	357	48	116	0	90	26
District Total	901,367	451	100,344	1,003	47,755	1,719	16,195	2,186	5,360	328	6,124	-1,092

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

1. The 1993 Mississippi Legislature authorized MSDH to issue a Certificate of Need for the construction of a pediatric skilled nursing facility not to exceed sixty (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 inpatients skilled nursing care and related services for persons under twenty-one (21) years of age who require medical, nursing care, or rehabilitation services.
3. 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 ID/DD facilities contained in the *State Health Plan*, and all adopted rules, procedures, and plans of MSDH.
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 Miss. Code Ann. 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 CON. The facility must submit a letter requesting that the beds be placed in abeyance. MSDH 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.

206 Certificate of Need Criteria and Standards for Nursing Home Care Services for Intellectually Disabled and other Developmentally Disabled Individuals

206.1 Policy Statement Regarding Certificate of Need Applications for the Offering of Nursing Home Care Services for Intellectually Disabled 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 intellectually disabled (ICF/ID).
 - 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 intellectually disabled, or psychiatric residential treatment facility which is owned by the State of Mississippi and under the direction and control of the Mississippi Department of Mental Health is exempted from the requirement of the issuance of a CON 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 CON.
 - 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 CON. The facility must submit a letter requesting that the beds be placed in abeyance. MSDH 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. ID/DD Long-Term Care Planning Districts (ID/DD LTCPD): The need for additional ID/DD nursing home care beds shall be based on the ID/DD LTCPDs as outlined on Map 2-2.
 3. Bed Need: The need for ID/DD nursing home care beds is established at one bed per 1,000 population less than 65 years of age.
 4. Population Projections: MSDH shall use population projections as presented in Table 2-3 when calculating bed need.
 5. Bed Limit: No ID/DD LTCPD shall be approved for more than its proportioned share of needed ID/DD nursing home care beds. No application shall be approved which would over-bed the state as a whole.
 6. Bed Inventory: MSDH shall review the need for additional ID/DD nursing home care beds utilizing the most recent information available regarding the inventory of such beds.

206.2 Certificate of Need Criteria and Standards for Nursing Home Beds for Intellectually Disabled and Other Developmentally Disabled Individuals

If the legislative moratorium were removed or partially lifted, MSDH would review applications for ID/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. 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 MSDH; and the specific criteria and standards listed below.

Certificate of Need review is required for the offering of ID/DD nursing home care services, as defined, if the capital expenditure exceeds \$5,000,000; if the licensed bed capacity is increased through the conversion or addition of beds; or if ID/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 ID/DD nursing home care beds regardless of capital expenditure.

Need Criterion 1: ID/DD Nursing Home Care Bed Need

The applicant shall document a need for ID/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 sixty-five (65) years of age, the state as a whole must show a need; and
- b. The ID/DD Long-Term Care Planning District (LTCPD) where the proposed facility/beds/services are to be located must show a need.

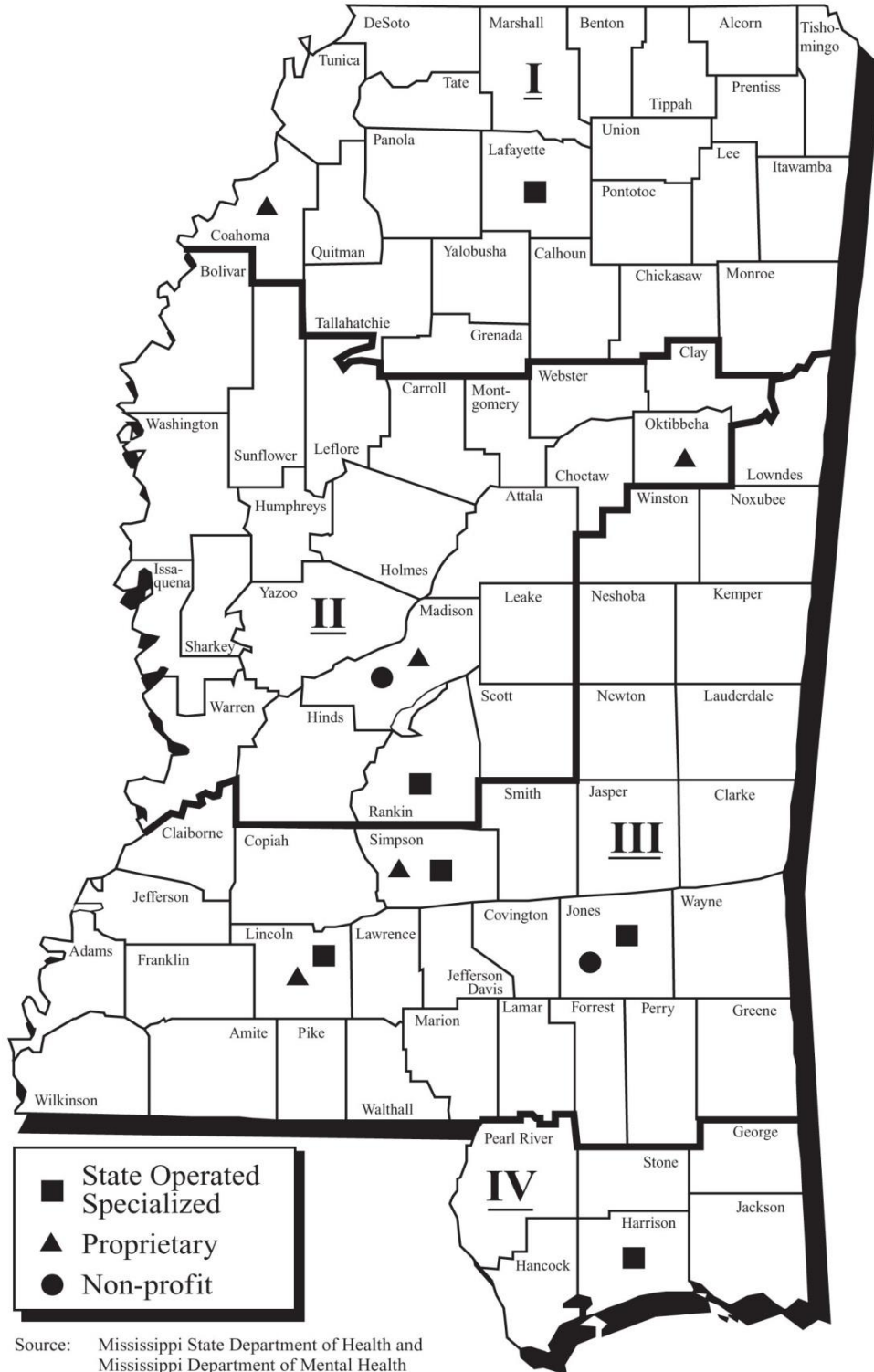
Need Criterion 2: Number of Beds to be Constructed, Converted, and/or Licensed

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

Need Criterion 3: Facilities Proposing to Add Fifteen or Less ID/DD Beds

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

Map 2-2
Intellectually Disabled/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 2-3
2018 Projected ID/DD Nursing Home Bed Need
(1 Bed per 1,000 Population Aged 65 and Under)

	2017 Population <65	2016 Licensed Beds	Projected MR/DD Bed Need ¹	Difference ¹
Mississippi	2,614,616	2,434	2,615	181
District I	667,451	585	667	82
Alcorn	31,797		32	32
Benton	7,708		8	8
Calhoun	12,099		12	12
Chickasaw	13,194		13	13
Coahoma	22,821	132	23	-109
DeSoto	150,179		150	150
Grenada	17,038		17	17
Itawamba	19,425		19	19
Lafayette	48,272	453	48	-405
Lee	75,014		75	75
Marshall	32,780		33	33
Monroe	30,279		30	30
Panola	30,228		30	30
Pontotoc	28,134		28	28
Prentiss	21,020		21	21
Quitman	6,805		7	7
Tallahatchie	14,539		15	15
Tate	27,054		27	27
Tippah	19,494		19	19
Tishomingo	15,693		16	16
Tunica	10,219		10	10
Union	23,733		24	24
Yalobusha	9,926		10	10

¹ Data may not equal totals due to rounding.

Table 2-3 (continued)
2018 Projected ID/DD Nursing Home Bed Need
(1 Bed per 1,000 Population Aged 65 and Under)

	2017 Population <65	2016 Licensed Beds	Projected MR/DD Bed Need ¹	Difference ¹
District II	867,483	707	867	160
Attala	15,635		16	16
Bolivar	24,941		25	25
Carroll	8,081		8	8
Choctaw	6,024		6	6
Clay	16,022		16	16
Hinds	223,398		223	223
Holmes	15,090		15	15
Humphreys	7,770		8	8
Issaquena	1,032		1	1
Leake	22,840		23	23
Leflore	24,713		25	25
Lowndes	51,902		52	52
Madison	99,184	152	99	-53
Montgomery	7,943		8	8
Oktibbeha	44,558	140	45	-95
Rankin	134,240	415	134	-281
Scott	24,545		25	25
Sharkey	3,927		4	4
Sunflower	23,831		24	24
Warren	41,589		42	42
Washington	37,011		37	37
Webster	8,557		9	9
Yazoo	24,650		25	25

¹ Data may not equal totals due to rounding.

Table 2-3 (continued)
2018 Projected ID/DD Nursing Home Bed Need
(1 Bed per 1,000 Population Aged 65 and Under)

	2017 Population <65	2016 Licensed Beds	Projected MR/DD Bed Need ¹	Difference ¹
District III	653,201	922	653	-269
Adams	25,395		25	25
Amite	9,870		10	10
Claiborne	8,455		8	8
Clarke	12,620		13	13
Copiah	24,822		25	25
Covington	16,503		17	17
Forrest	66,372		66	66
Franklin	6,434		6	6
Greene	9,842		10	10
Jasper	13,706		14	14
Jefferson	6,261		6	6
Jefferson Davis	8,898		9	9
Jones	58,640	482	59	-423
Kemper	8,551		9	9
Lamar	54,386		54	54
Lauderdale	68,825		69	69
Lawrence	10,720		11	11
Lincoln	29,981	176	30	-146
Marion	23,417		23	23
Neshoba	25,816		26	26
Newton	18,408		18	18
Noxubee	9,833		10	10
Perry	10,266		10	10
Pike	34,705		35	35
Simpson	23,158	264	23	-241
Smith	13,616		14	14
Walthall	12,563		13	13
Wayne	17,635		18	18
Wilkinson	8,045		8	8
Winston	15,458		15	15

¹ Data may not equal totals due to rounding.

Table 2-4 (continued)
2018 Projected ID/DD Nursing Home Bed Need
(1 Bed per 1,000 Population aged 65 and Under)

	2017 Population <65	2016 Licensed Beds	Projected MR/DD Bed Need ¹	Difference 1
District IV	426,481	220	426	206
George	20,111		20	20
Hancock	38,682		39	39
Harrison	175,018	220	175	-45
Jackson	123,313		123	123
Pearl River	50,628		51	51
Stone	18,729		19	19

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 (DMH), regional Community Mental Health Centers (CMHCs) 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.

300 Mississippi Department of Mental Health

State law designates DMH 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 DMH include: (a) state-level planning and expansion of all types of mental health, intellectual/developmental disabilities and substance abuse services, (b) standard-setting and support for community mental health and intellectual/developmental disabilities 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 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 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.

301 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 2010 population estimates, DMH estimates the prevalence of serious mental illness among adults in Mississippi, ages eighteen (18) years and above, as 5.4 percent or 119,434 individuals. The same methodology estimates the national prevalence for the same age group also as 5.4 percent.

In Fiscal Year 2017, a total of 63,207 adults received mental health services through the fourteen (14) CMHCs and the state's psychiatric hospitals, including East Mississippi State Hospital's group homes and Central Mississippi Residential Center.

301.01 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 National Institute of Mental Health estimates the prevalence of any mental disorder nationally among adolescents, aged thirteen (13) to eighteen (18), is 49.5 percent with an estimated 22.2 percent having a severe impairment. The methodology adjusts for socio-economic differences across states. In Fiscal Year 2017, the public community mental health system served 34,795 children and adolescents with serious emotional disturbance. (Note: Totals might include some duplication across community mental health centers and other nonprofit programs).

301.02 National Survey on Drug Use and Health for Mississippi

According to the Substance Abuse and Mental Health Administration's (SAMHSA) *2015-2016 National Survey on Drug Use and Health* (most available data), 8.04 percent of Mississippians twelve (12) years or older were past month illicit drug users. Past month marijuana use among Mississippians twelve (12) years and older was four-six percent (46%). Approximately 36.94 percent of Mississippians twelve (12) years and older were past-month alcohol users. Past month binge alcohol use among Mississippians twelve (12) years and older was 19.21 percent.

301.03 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 2023 population projections, the results equal 56,487 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*.

302 Adult Psychiatric Services (State-Operated and Private)

Mississippi's four state-operated hospitals and eight crisis stabilization units provide the majority of inpatient psychiatric care and services throughout the state. In FY 2017, the Mississippi State Hospital at Whitfield reported a total of 154 active psychiatric licensed beds; East Mississippi State Hospital at Meridian reported 150 psychiatric licensed beds, North Mississippi State Hospital in Tupelo reported fifty (50) licensed beds, and South Mississippi State Hospital in Purvis reported forty-five (45) licensed beds. The four facilities reported 2,904 adults received acute psychiatric services at the hospitals in FY 2017, 1,141 at the Mississippi State Hospital at Whitfield, 551 at the East Mississippi State Hospital, 619 at the North Mississippi State Hospital, and 593 at the South Mississippi State Hospital. Additionally, a total of 3,129 adults were served through the eight crisis centers in FY 2017.

Because the medically indigent have difficulty accessing private psychiatric facilities in their respective communities, many private facilities have low occupancy rates. State institutions provide the majority of inpatient care for the medically indigent. To address this problem, the Legislature provided funding for seven state Crisis Intervention Centers to function as satellites to existing facilities operated by DMH. These centers are operational in Brookhaven, Corinth, Newton, Laurel, Cleveland, Grenada, Gulfport, and Batesville. DMH 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 for individuals without them being involuntarily committed.

All of the centers include sixteen (16) beds and one (1) isolation bed. The role of these centers in the regional system is to provide stabilization and treatment services to persons who are in a psychiatric crisis. Beginning July 1, 2010, DMH transitioned five (5) of the remaining state-operated crisis centers (now called Crisis Stabilization Units) to regional community mental health centers located in Batesville, Brookhaven, Cleveland, Corinth and Laurel. In 2017, DMH transitioned the remaining crisis center in Newton to Weems Community Mental Health Center. The Gulfport center is operated by Gulf Coast Mental Health (Region XIII CMHC) and is partially funded by a grant from DMH. Timber Hills operates a Crisis Stabilization Unit (CSU) in Batesville and Corinth. Region 8 Mental Health Services operates the Brookhaven CSU. Delta Community Mental Health (Region V CMHC) operates the Cleveland CSU. Pine Belt Mental Healthcare Resources operates the Laurel CSU. All CSUs accept voluntary and involuntary admissions twenty-four (24) hours a day, seven (7) days a week.

Mississippi has nineteen (19) adult psychiatric facilities, with a capacity of 636 licensed beds for adult psychiatric patients, including fifteen (15) beds held in abeyance by MSDH 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 3-1 shows utilization statistics.

**Table 3-1
Acute Adult Psychiatric Bed Utilization
FY 2016**

Facility	County	Licensed Beds	CON Beds	Abeyance Beds	Inpatient Days	Occupancy Rate (%)	ALOS
Alliance Health Center	Lauderdale	38			12,693	91.51	8.49
Alliance Healthcare System, Inc. *	Marshall	20			1,335	18.29	11.55
Baptist Memo. Hospital-Golden Triangle	Lowndes	22		13	9,462	117.83	5.34
Brentwood Behavioral Health Care	Rankin	31		2	6,208	54.87	7.39
Delta Regional Medical Center- West	Washington	9			2,188	66.61	4.14
Forrest General Hospital	Forrest	64			11,692	50.05	3.69
Garden Park Medical Center **	Harrison	9			0	0.00	0.00
Magnolia Regional Health Center	Alcorn	19			5,180	74.69	5.89
Memorial Hospital at Gulfport	Harrison	59			3,875	17.99	7.99
Merit Health Biloxi	Harrison	34			10,505	84.65	7.56
Merit Health Central	Hinds	47			10,261	59.81	4.87
Merit Health River Region	Warren	40			4,352	29.81	6.56
North Miss Medical Center	Lee	33			10,561	87.68	6.46
Panola Medical Center	Panola	25			5,771	63.24	6.30
Parkwood Behavioral HS-Olive Branch	DeSoto	42			12,424	81.04	9.49
S.E. Lackey Memorial Hospital	Scott	10			1,682	46.08	11.71
Singing River Hospital	Jackson	30			2,682	24.49	4.29
St. Dominic Jackson- Memorial Hospital	Hinds	83			17,950	59.25	5.25
University of Mississippi Medical Center	Hinds	21			7,150	93.28	5.90
Total/Average Adult Psychiatric Beds Rates		636	0	15	135,971	59.01	6.47

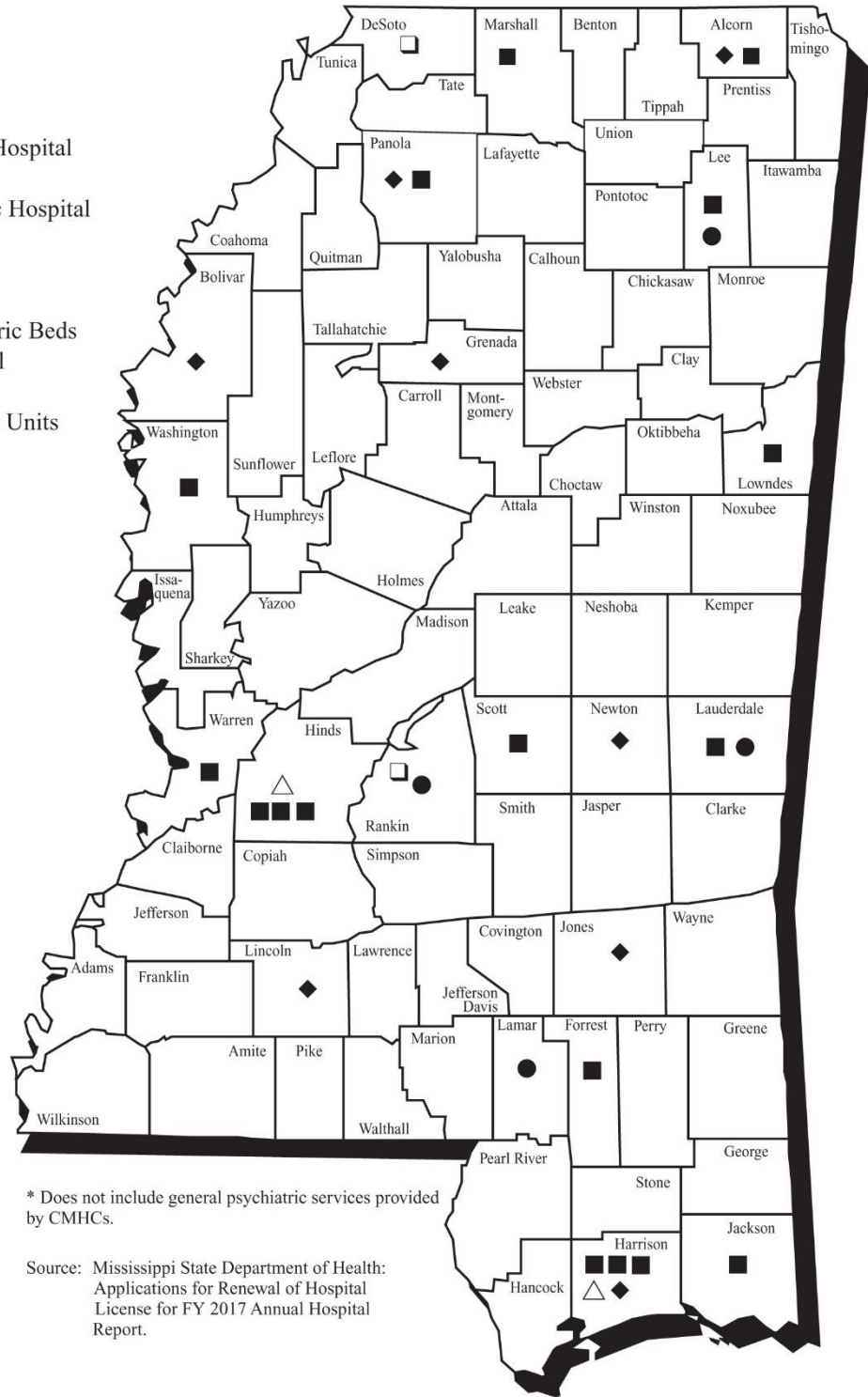
*Alliance Healthcare was CON approved in March 2018 to convert 5 Adult CDU beds to 5 Adult Acute Psychiatric Beds.

**Garden Park Medical Center was CON approved in February 2014 to establish an inpatient program for PTSD and add 9 adult psychiatric beds.

Sources: Applications for Renewal of Hospital License for FY 2016 Annual Hospital Report

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

- State Psychiatric Hospital
- Private Psychiatric Hospital
- △ Veterans Hospital
- Licensed Psychiatric Beds in General Hospital
- ◆ Crisis Stabilization Units



* Does not include general psychiatric services provided by CMHCs.

Source: Mississippi State Department of Health: Applications for Renewal of Hospital License for FY 2017 Annual Hospital Report.

303 Child/Adolescent Psychiatric Services

Ten (10) facilities, with a total of 330 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.

DMH operates a separately-licensed sixty (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 (4) and seventeen (17). East Mississippi State Hospital operates a fifty (50) bed psychiatric and chemical dependency treatment unit for adolescent males.

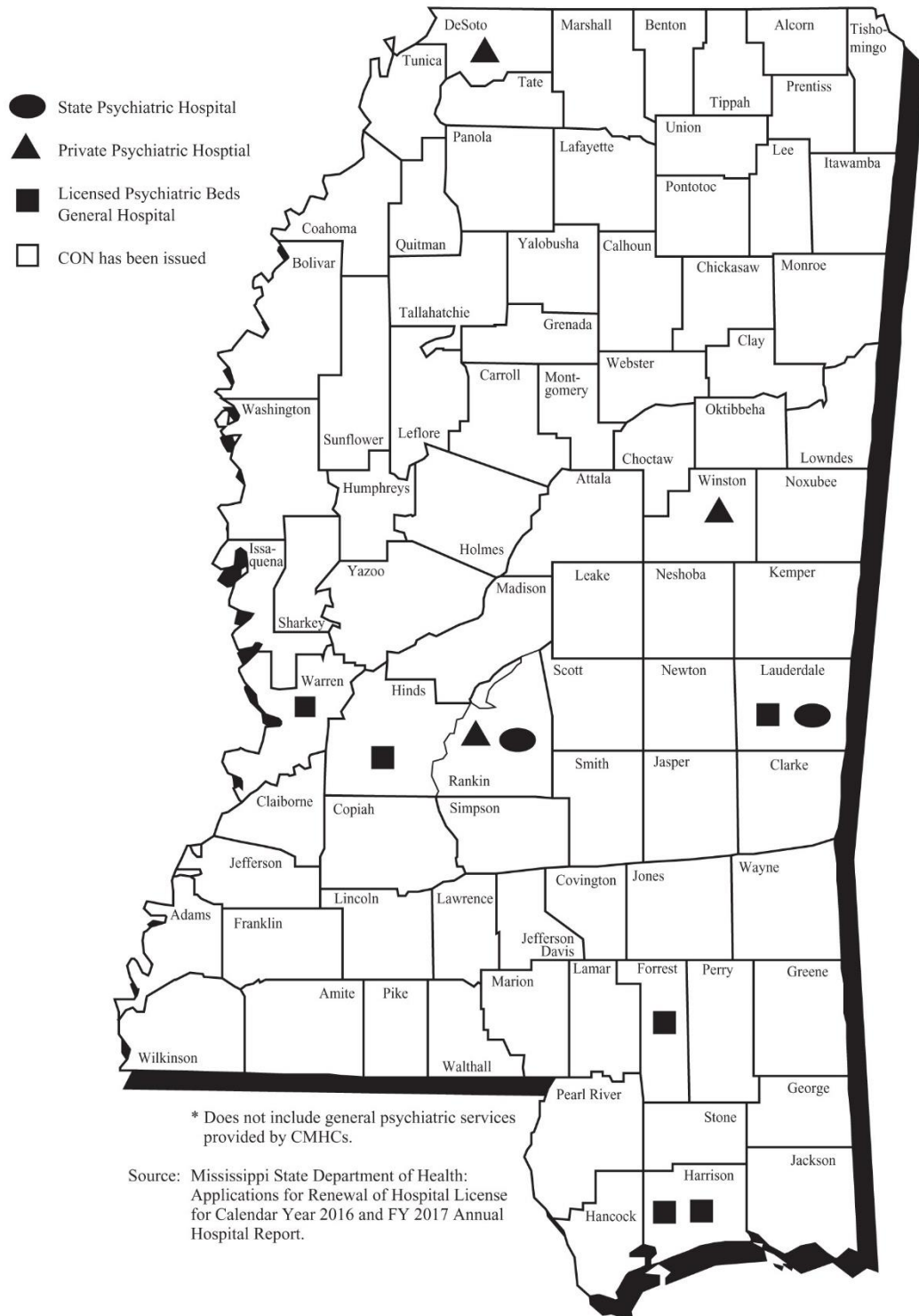
**Table 3-2
Acute Adolescent Psychiatric Bed Utilization
FY 2016**

Facility	County	Licensed Beds	CON Beds	Abeyance Beds	Inpatient Days	Occupancy Rate(%)	ALOS
Alliance Health Center	Lauderdale	30			6,931	63.30	8.59
Brentwood Behavioral Healthcare of MS	Rankin	74	15		19,718	73.00	10.21
Diamond Grove Center	Winston	25	4		7,568	82.94	9.55
Forrest General Hospital	Forrest	16			6,461	110.63	6.43
Memorial Hospital at Gulfport **	Harrison	30			3,542	32.35	5.58
Merit Health Biloxi	Harrison	11			1,141	28.42	7.13
Merit Health River Region	Warren	20			581	7.96	8.10
Oak Circle Center	Rankin	60			9822	44.85	37.87
Parkwood Behavioral Health System	DeSoto	52			11794	62.14	8.35
University of Mississippi Medical Center	Hinds	12			2,693	61.48	11.16
Total/Average Adolescent Psychiatric Beds		330	19	0	70,251	56.71	11.30

**As of May 27, 2018, Memorial Hospital at Gulfport transferred 15 CON approved beds to Brentwood Behavioral Healthcare of MS and 4 CON approved beds to Diamond Grove Center.

Sources: Applications for Renewal of Hospital License for FY 2016 Annual Hospital Report

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



304 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 seven (7) facilities are in operation with a total of 318 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.

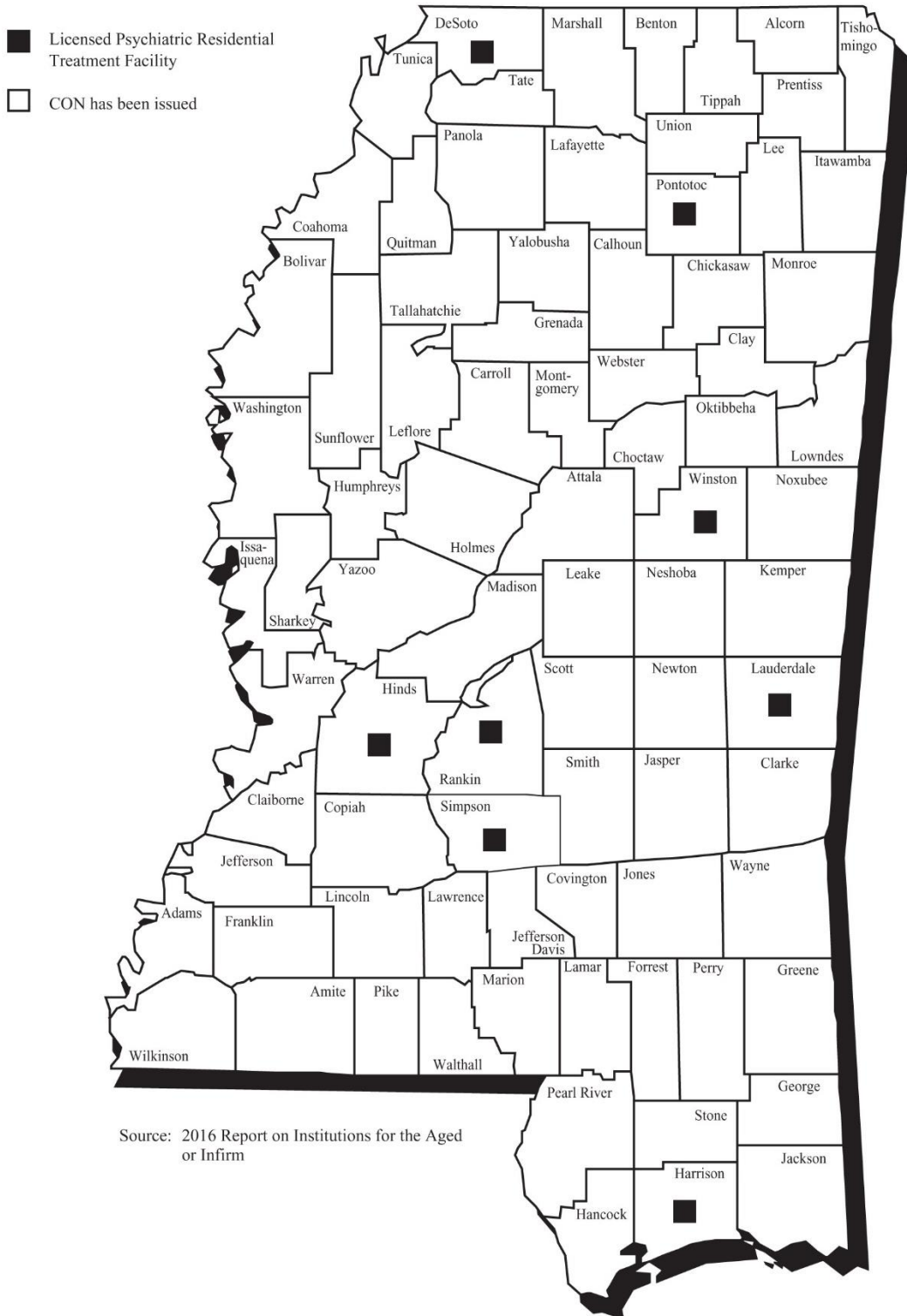
**Table 3-3
Private Psychiatric Residential Treatment Facility (PRTF)
Utilization
FY 2016**

Facility	County	Licensed Beds	CON Approved Beds	Occupancy Rate (%)	Average Daily Census
Parkwood BHS	DeSoto	40	0	94.74	37.90
Canopy Childrens Solution	Harrison	20	0	58.00	11.56
Canopy Childrens Solution - Jackson	Hinds	60	0	96.50	59.90
The Crossings	Lauderdale	60	0	100.00	60.00
Millcreek of Pontotoc	Pontotoc	51	0	100.00	51.00
Millcreek PRTF	Simpson	57	0	99.70	56.84
Diamond Grove Center	Winston	30	0	98.12	29.44
Total PRTF Beds		318			

Source: Mississippi State Department of Health, 2016 Report on Institutions for the Aged or Infirm, and Division of Health Planning and Resource Development

DMH operates a specialized thirty-two (32) bed treatment facility (ICF/IID) in Brookhaven for youth with an intellectual and/or developmental disability who are thirteen (13) years, but less than twenty-one (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 thirteen (13) years, but less than twenty-one (21) years of age, who present with a diagnosis of a severe emotional disturbance and need psychiatric residential care.

Map 3-3 Private Psychiatric Residential Treatment Facilities



Source: 2016 Report on Institutions for the Aged or Infirm

305 Alcohol and Substance Abuse Disorder Services

305.01 Alcohol and Substance Abuse Disorders

Alcohol and other drug problems cause pervasive effects: biological, psychological, and social consequences for the user; 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 substance use programs is shown on Maps 3-4 and 3-5. Each of the fourteen (14) regional community health centers provide a variety of alcohol and drug services, including residential and transitional treatment programs, along with recovery support services. Tables 3-4 and 3-5 show the utilization of these facilities for adult and adolescent chemical dependency services, respectively. A total of 615 residential treatment beds are available throughout the state. The community mental health centers (CMHCs) with whom DMH contracts are the foundation and primary service providers of the public substance use disorders services delivery system. Each CMHC serves a designated number of Mississippi counties. There are sixty-seven (67) community-based satellite centers throughout the state which allow greater access to services by the area's residents. The goal is for each CMHC to have a full range of treatment options available for citizens in its region. Other nonprofit service agencies/organizations, which make up a smaller part of the service system, also receive funding through the DMH to provide community-based services. Many of these free-standing nonprofit organizations receive additional funding from other sources such as grants from other state agencies, community service organizations, donations, etc.

Substance use disorder services usually include: (1) alcohol, tobacco, and other drug prevention services; (2) general outpatient treatment including individual, group, and family counseling; (3) recovery support (continuing care) planning and implementation services; (4) primary residential treatment services (including withdrawal management); (5) transitional residential treatment services; (6) vocational counseling and employment seeking assistance; (7) emergency services (including a 24-hour hotline); (8) educational programs targeting recovery from substance use disorders which include understanding the disease, the recovery process, relapse prevention, and anger management; (9) recreational and social activities presenting alternatives to continued substance use and emphasizing the positive aspects of recovery; (10) 10-15 week intensive outpatient treatment programs for individuals who are in need of treatment but are still able to maintain job or school responsibilities; (11) community-based residential substance use disorders treatment for adolescents; (12) specialized women's services; (13) priority treatment for pregnant/parenting women; (14) services for individuals with a co-occurring disorder of substance use disorder and serious mental illness; and, (15) employee assistance programs.

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 2016**

Facility	County	Licensed Beds	CON Approved Beds	Average Daily Census	Occupancy Rate (%)	ALOS
Alliance Health Center	Lauderdale	8		8.00	100	5
Baptist Memorial Hospital - Golden Triangle	Lowndes	8		0.00	0.00	0.00
Delta Regional Medical Center- West Campus	Washington	7		0.78	11.15	2.94
Forrest General Hospital	Forrest	8		1.85	23.08	3.58
Merit Health River Region	Warren	28		12.75	45.52	6.86
Mississippi Baptist Medical Center	Hinds	77		0.00	0.00	0.00
North Mississippi Medical Center	Lee	33		3.35	10.14	6.46
Panola Medical Center	Panola	10		4.28	42.77	4.68
Parkwood Behavioral Health System	DeSoto	14		4.85	34.66	5.97
South Central Regional Medical Center	Jones	10		5.50	54.99	4.66
St. Dominic Jackson-Memorial Hospital	Hinds	35		0.00	0.00	0.00
Total/Average Adult CDU Bed Rates		238	0	3.76	29.30	3.65

*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. MBMC has 13 beds that are not in use.

Sources: Applications for Renewal of Hospital License for FY 2016 Annual Hospital Report

**Table 3-5
Adolescent Chemical Dependency Unit
Bed Utilization
FY 2016**

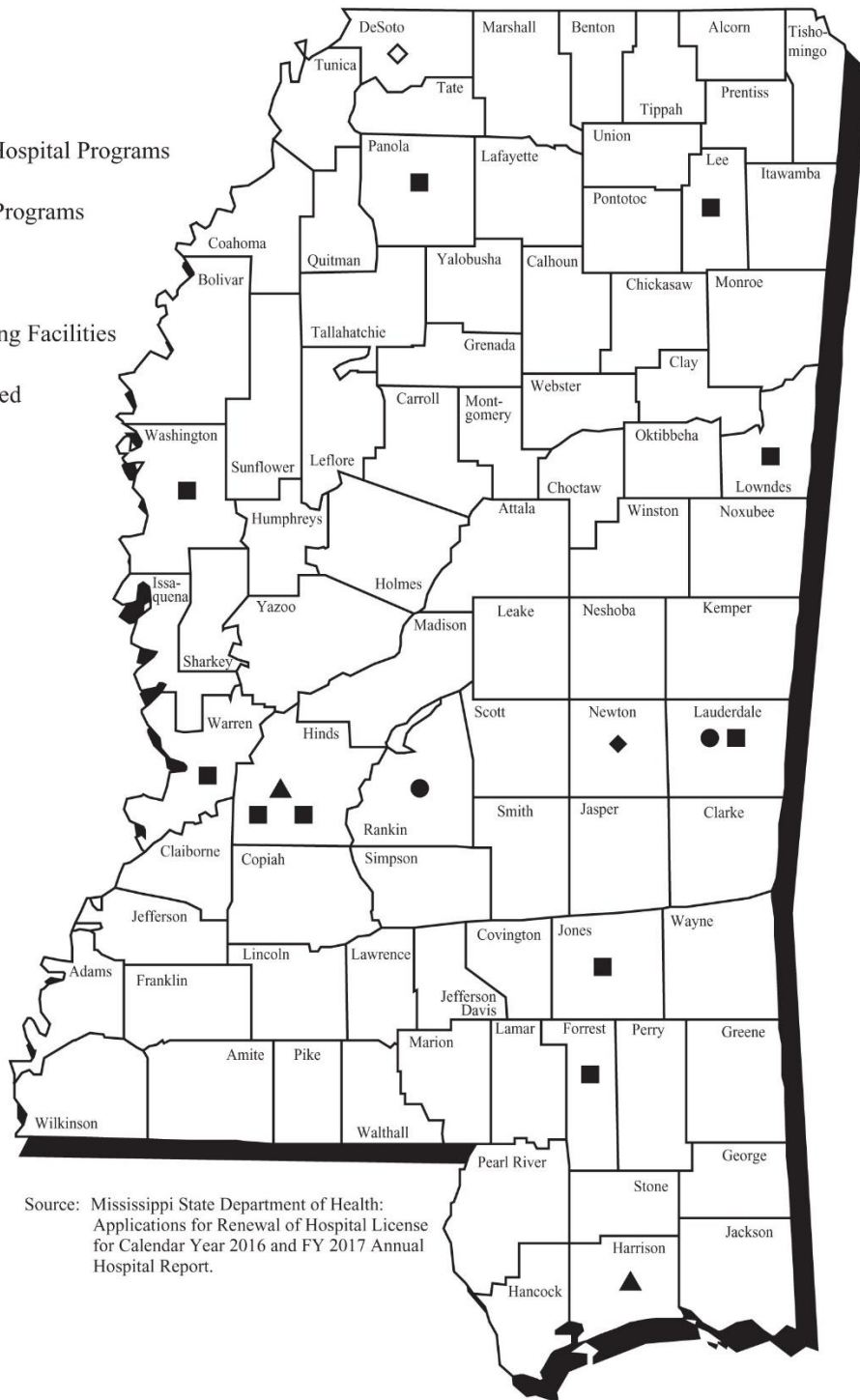
Facilities	County	Licensed Beds	CON Approved Beds	Average Daily Census	Occupancy Rate (%) *	ALOS
Memorial Hospital at Gulfport	Harrison	20		1.08	5.41	5.74
Merit Health River Region *	Warren	12		-	-	-
Mississippi Baptist Medical Center *	Hinds	20		-	-	-
Total/ Average Adolescent CDU Bed Rates		52		1.08	5.41	5.74

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

Sources: Applications for Renewal of Hospital License for FY 2016 Annual Hospital Report

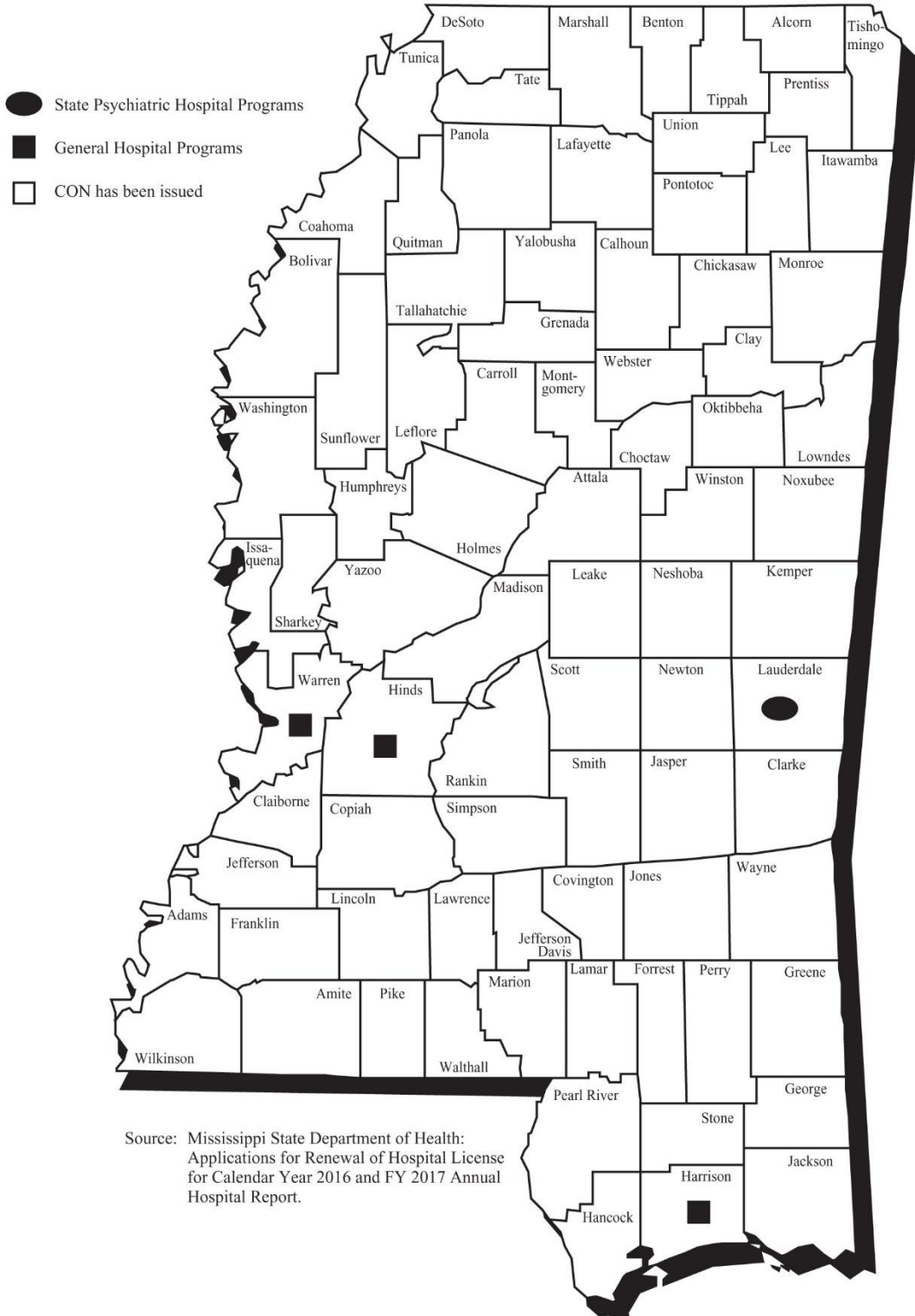
Map 3-4 Operational and Proposed Adult Chemical Dependency Programs and Facilities

- State Psychiatric Hospital Programs
- General Hospital Programs
- ▲ Veterans Hospital
- ◇ Private Freestanding Facilities
- CON has been issued



Source: Mississippi State Department of Health: Applications for Renewal of Hospital License for Calendar Year 2016 and FY 2017 Annual Hospital Report.

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



Source: Mississippi State Department of Health:
Applications for Renewal of Hospital License
for Calendar Year 2016 and FY 2017 Annual
Hospital Report.

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

Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

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

1. Indigent/Charity Care: An applicant must provide a "reasonable amount" of indigent/charity care as described in Chapter 1 of this *Plan*.
2. Mental Health Planning Areas: MSDH 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: Because DMH is a public entity and directly operates facilities providing acute psychiatric, chemical dependency, and psychiatric residential treatment facility beds, the number of licensed beds operated by DMH 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 DMH: MSDH shall solicit and take into consideration comments received from DMH 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 eighteen (18) years of age must receive treatment in units that are programmatically and physically distinct from adult (18 plus 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 thirteen (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, MSDH will allow deviations of up to twenty-five percent (25%) 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 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 fourteen (14) years of age. Therefore, of the beds determined to be needed for child/adolescent acute psychiatric services and psychiatric residential treatment facility services, twenty-five (25) beds under each category, for a total of fifty (50) beds statewide, shall be reserved exclusively for programs dedicated to children under the age of fourteen (14).
15. CON Authority: 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 CON under the authority of Section 41-7-191(1)(c).
16. Delicensed/Relicensed Beds: 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 CON. MSDH 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. Reopening a Facility: A health care facility has ceased to operate for a period of sixty (60) months or more shall require a CON prior to reopening.

306.02 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.

Need Criterion 1: Bed Need Requirements

- 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 that 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 that 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, MSDH may approve additional beds for facilities which have maintained an occupancy rate of at least eighty percent (80%) for the most recent twelve (12) month licensure reporting period or at least seventy percent (70%) 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, MSDH may approve a fifteen (15) bed acute child psychiatric unit at the University of Mississippi Medical Center for children aged four (4) to twelve (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, MSDH 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.

Need Criterion 2: Data Requirements

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 MSDH within fifteen (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 the medically indigent or charity patients that MSDH request.

Need Criterion 3: Referral/Admission of Charity/Indigent Patients

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.

Need Criterion 4: Letters of Commitment

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.

Need Criterion 5: Non-Discrimination Provision

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.

Need Criterion 6: Charity/Indigent Care

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.

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

306.03.01 Acute Psychiatric Beds for Adults

Need Criterion 1: Statistical Need for Adult Psychiatric Beds

MSDH shall base statistical need for adult acute psychiatric beds on a ratio of 0.21 beds per 1,000 population aged eighteen (18) and older for 2023 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.

Need Criterion 2: Proposed Size of Facility/Unit

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 sixty (60) beds. Hospital units should not be larger than thirty (30) beds. Patients treated in adult facilities and units should be eighteen (18) years of age or older.

Need Criterion 3: Staffing

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.

306.03.02 Acute Psychiatric Beds for Children and Adolescents**Need Criterion 1: Statistical Need for Child/Adolescent Beds**

MSDH shall base statistical need for child/adolescent acute psychiatric beds on a ratio of 0.55 beds per 1,000 population aged seven (7) to seventeen (17) for 2023 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, twenty-five (25) beds are hereby set aside exclusively for the treatment of children less than fourteen (14) years of age.

Need Criterion 2: Proposed Size of Facility/Unit

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 sixty (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 (8) to ten (10) 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 fourteen (14) years old but less than eighteen (18) years old, and a child is defined as a minor who is at least seven (7) years old but less than fourteen (14) years old.

Need Criterion 3: Staffing

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.

Need Criterion 4: Structural Design of Facility – Separation of Children and Adolescents

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.

306.03.03 Chemical Dependency Beds for Adults**Need Criterion 1: Statistical Need for Adult Chemical Dependency Beds**

MSDH shall base statistical need for adult chemical dependency beds on a ratio of 0.14 beds per 1,000 population aged eighteen (18) and older for 2023 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.

Need Criterion 2: Proposed Size of Facility/Unit

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 seventy-five (75) beds, and individual units should not be larger than thirty (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 that involves family and significant others.

Need Criterion 3: Aftercare/Follow-Up Services Provided

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.

Need Criterion 4: Type of Clients to be Treated at Facility

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.

306.03.04 Chemical Dependency Beds for Children and Adolescents

Need Criterion 1: Statistical Need for Child/Adolescent Chemical Dependency Beds

MSDH shall base statistical need for child/adolescent chemical dependency beds on a ratio of 0.44 beds per 1,000 population aged twelve (12) to seventeen (17) for 2023 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.

Need Criterion 2: Proposed Size of Facility/Unit

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 sixty (60) beds. Units shall not be larger than twenty (20) beds. The bed count of a facility or unit shall include detoxification beds.

Need Criterion 3: Provision of Home-Like Environment

Facilities or units, whether hospital-based or freestanding, should provide a home-like environment. Ideally, facilities should provide cottage-style living units housing eight (8) to ten (10) patients. Because of the special needs of children and adolescents, facilities or units which are not physically attached to a general hospital are preferred.

Need Criterion 4: Staffing

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.

Need Criterion 5: Structural Design of Facility – Separation of Children and Adolescents

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

Need Criterion 6: Aftercare/Follow-Up Services Provided

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.

306.03.05 Psychiatric Residential Treatment Facility Beds/Services

Need Criterion 1: Statistical Need for Psychiatric Residential Treatment Beds

MSDH shall base statistical need for psychiatric residential treatment beds on a ratio of 0.5 beds per 1,000 population aged five (5) to twenty-one (21) for 2023 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.

Need Criterion 2: Age Group to be Served

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).

Need Criterion 3: Structural Design of Facility

The applicant shall describe the structural design of the facility for the provision of services to children less than fourteen (14) years of age. Of the beds needed for psychiatric residential treatment facility services, twenty-five (25) beds are hereby set aside exclusively for the treatment of children less than fourteen (14) years of age. An applicant proposing to provide psychiatric residential treatment facility services to children less than fourteen (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 thirteen (13) years of age. A facility may house both categories of patients if both the physical design and staffing ratios provide for separation.

Need Criterion 4: Bed Count as Authorized by the Legislature

This criterion does not preclude more than twenty-five (25) psychiatric residential treatment facility beds being authorized for the treatment of patients less than fourteen (14) years of age. However, MSDH 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 318 licensed and CON approved beds indicated in Table 3-8 were the result of both CON approval and legislative actions).

Need Criterion 5: Proposed Size of Facility/Unit

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 fifteen (15) beds. A psychiatric residential treatment facility should not be larger than sixty (60) beds.

Need Criterion 6: Staffing

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
2025**

Bed Category and Ratio	2025 Projected Population	Projected Bed Need	Licensed Beds	Difference
Adult Psychiatric: 0.21 beds per 1,000 population aged 20+	2,282,191	479	636	-157
Child/Adolescent Psychiatric: 0.55 beds per 1,000 population aged 5 to 19	633,751	349	330	19

Source(s): Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report and State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018

**Table 3-7
Statewide Chemical Dependency Bed Need
2025**

Bed Category and Ratio	2025 Projected Population	Projected Bed Need	Licensed Beds	Difference
Adult Chemical Dependency: 0.14 beds per 1,000 population aged 20+	2,282,191	320	395	-75
Child/Adolescent Chemical Dependency: 0.44 beds per 1,000 population aged 5 to 19	633,751	279	77	202

Source(s): Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report and State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018

**Table 3-8
Statewide Psychiatric Residential
Treatment Facility Bed Need
2025**

Age Cohort	Bed Ratio per 1,000 Population	2023 Projected Population	Projected Bed Need	Licensed/CON Approved Beds	Difference
5 to 19	0.50	633,751	317	318	-1

Source(s): Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report and State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018

307 Private Distinct-Part Geriatric Psychiatric Services

During 2016, thirty-one (31) Mississippi hospitals operated certified distinct-part geriatric psychiatric units (Geropsych DPU) with a total of 393 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 64,587 inpatient days of psychiatric services to patients aged fifty-five (55) and older.

The industry standard formula for determining Geropsych DPU bed need is 0.5 beds per 1,000 population aged fifty-five (55) and over. The State Data Center of Mississippi under the University of Mississippi Center for Population Studies, projects Mississippi will have 943,320 persons aged fifty-five (55) and older by 2025. This population will need a total of 472 Geropsych DPU beds. The optimum unit size of a Geropsych unit is twelve (12) to twenty-four (24) beds. Table 3-9 shows the state's thirty-one (31) 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 2016**

Facility	County	Licensed Beds	Inpatient Days	Occupancy Rate (%)	Discharges	ALOS	Discharge Days
State Total/Average		393	62,246	43.00	5,041	13.15	58,900
General Hospital Service Area 1		34	3,442	29.76	303	11.78	3,480
North Oak Regional Medical Center	Tate	12	1,605	36.64	121	13.23	1,601
Panola Medical Center	Panola	22	1,837	22.88	182	10.32	1,879
General Hospital Service Area 2		25	4,505	48.08	324	13.38	4,428
Baptist Memorial Hospital - Booneville	Perry	15	2,987	54.56	197	14.74	2,903
Tippah County Hospital	Tippah	10	1,518	41.59	127	12.01	1,525
General Hospital Service Area 3		51	8,161	46.56	789	9.78	7,757
Bolivar Medical Center	Bolivar	12	2,572	58.72	208	10.30	2,143
Delta Regional Medical Center West Campus	Washington	14	1,291	25.26	174	7.40	1,288
Greenwood Leflore Hospital	Leflore	15	1,698	31.01	155	11.05	1,712
North Sunflower Medical Center	Sunflower	10	2,600	71.23	252	10.37	2,614
General Hospital Service Area 4		49	9,104	54.49	699	12.73	8,983
Monroe Regional Hospital	Monroe	10	2,046	56.05	150	13.68	2,052
Trace Regional Hospital	Chickasaw	18	3,428	52.18	256	13.40	3,431
University of MS Medical Center Grenada	Grenada	14	1,654	32.37	144	10.84	1,561
Winston Medical Center	Winston	7	1,976	77.34	149	13.01	1,939
General Hospital Service Area 5		104	17,554	46.50	1,148	31.17	14,834
Claiborne County Hospital	Claiborne	10	1,652	45.26	137	12.15	1,665
Merit Health Rankin	Rankin	20	4,591	62.89	378	-	-
Merit Health River Region	Warren	13	-	-	0	-	-
Mississippi Baptist Medical Center	Hinds	12	3,104	70.87	311	10.38	3,228
Mississippi State Hospital	Rankin	29	4,365	41.24	36	169.72	6,110
Sharkey - Issaquena Community Hospital	Sharkey	10	1,224	33.53	114	10.82	1,234
Simpson General Hospital	Simpson	10	2,618	71.73	172	15.10	2,597
General Hospital Service Area 6		38	6,209	45.77	546	11.34	6,235
Alliance Health Center	Lauderdale	12	1,591	36.32	164	9.89	1,622
Anderson Regional Medical Center South	Lauderdale	16	2,485	42.55	203	12.24	2,485
Neshoba County General Hospital	Neshoba	10	2,133	58.44	179	11.89	2,128
General Hospital Service Area 7		26	3,735	39.11	374	10.06	3,778
Beacham Memorial Hospital	Pike	14	2,167	42.41	217	10.35	2,246
Merit Health Natchez	Adams	12	1,568	35.80	157	9.76	1,532
General Hospital Service Area 8		32	2,778	23.40	233	7.56	2,647
Covington County Hospital	Covington	10	-	-	-	-	-
Jefferson Davis General Hospital	Jeff Davis	10	1,485	40.68	118	12.54	1,480
Merit Health Wesley	Lamar	12	1,293	29.52	115	10.15	1,167
General Hospital Service Area 9		34	6,758	53.31	625	10.51	6,758
Garden Park Medical Center	Harrison	12	3,051	69.66	266	11.48	3,054
Highland Community Hospital	Pearl River	10	1,235	33.84	152	8.05	1,223
Merit Health Biloxi	Harrison	12	2,472	56.44	207	11.99	2,481

Sources: Applications for Renewal of Hospital License for Calendar Year 2015 and FY 2016 Annual Hospital Report; Division of Health Planning and Resource Development calculations

Chapter 4 Perinatal Care

400 Natality Statistics

Mississippi experienced 37,928 live births in 2016. Of these live births, 51.2 percent (19,416) were white non-Hispanic, 41.8 percent (15,868) were black non-Hispanic, 2.6 percent (976) were other non-Hispanic and 4.4 percent (1,665) were Hispanic. A physician attended 97.8 percent of all in-hospital live births delivered in 2016 (37,928). Nurse midwife deliveries accounted for 735 live births.

More than 99 percent of the live births occurred to women 15 to 44 years of age. Births to unmarried women made up 53.2 percent (20,176) of all live births in 2016; of these, 65.6 percent (12,645) were to black women and 32.4 percent (6,250) were to white women and 4.4 percent (883) were to Hispanic women. Mothers under the age of 15 gave birth to 52 children; 67.3 percent (35) were black and 21.2 percent (11) were white and 5.8 (3) percent were Hispanic, and 5.8 (3) percent were other.

The birth rate in 2016 was 12.7 live births per 1,000 population; the fertility rate was 63.5 live births per 1,000 women aged 15-44 years.

Mississippi reported 401 fetal deaths in 2016. 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 16.7 per 1,000 live births compared to 6.0 for whites. Mothers aged 40 and older, had the highest fetal death ratio at 38.8 per 1,000 live births, followed by mothers aged, 24-29 with a ratio of 11.9. MSDH requires the reporting of fetal deaths with gestation of 20 or more weeks or fetal weight of 350 grams or more. MSDH does not report fetal death rates for an age group if there are less than 100 births.

There were 14 maternal deaths reported during 2016. Maternal mortality refers to deaths resulting from complications of pregnancies, childbirth, or the puerperium within 42 days of delivery.

401 Infant Mortality

Infant mortality remains a critical concern in Mississippi. There was a decline in the infant mortality rate to 8.6 in 2016 from 9.2 in 2015. 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: 2016 vital statistics data is the most recent available.)

Table 4-1
2016 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)	8.6	7.2	11.5	1.8
Neonatal Mortality (age under 28 days)	5.3	4.0	7.6	1.2
Postneonatal Mortality (age 28 days to one year)	3.3	3.2	3.9	0.6

Table 4-2 displays Mississippi’s infant mortality rates from 2003 to 2016, 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 2012 to 2016.

Table 4-2
Infant Mortality Rates
Mississippi, Region IV and USA – All Races
2003-2016

Year	Mississippi	Region IV	USA
2016	8.6	N/A	N/A
2015	9.2	N/A	5.9
2014	8.2	N/A	5.9
2013	9.7	N/A	5.9
2012	8.9	N/A	6
2011	9.4	N/A	N/A
2010	9.6	N/A	N/A
2009	10	N/A	N/A
2008	9.9	7.8	6.6
2007	10	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

N/A – Not Available

Source: Office of Health Informatics, Mississippi State Department of Health 2018

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

More than 97 percent of expectant mothers received some level of prenatal care in 2016. More than 70 percent (28,832) of mothers began prenatal care in the first trimester; 22.0 percent (6,592) began in the second trimester, and 6.7 percent (1,398) during the third trimester. Only 1.7 percent (495) of expectant mothers received no prenatal care prior to delivery. White mothers usually receive prenatal care much earlier in pregnancy than black mothers.

In 2016, 11.5 percent of births were low birthweight (less than 5.5 pounds – 2,500 grams) and 13.6 percent were premature (gestational age less than 37 weeks). These indicators differ markedly by maternal race: 8.3 percent of white births were low birthweight compared to 15.9 percent for blacks. The low birthweight rate for Hispanics was 7.6 percent. The premature birth rate was 10.4 percent for Hispanics, 11.6 percent for whites and 16.6 percent for blacks.

A total of 3,378 Mississippi teenagers gave birth in 2016 — 8.9 percent of the state's 37,928 live births. Teenage births increased each year from 2005 until 2008. The year 2016 saw a 1.9 percent increase from the 3,611 births recorded to teenagers in 2015. Teen pregnancy is cited as one of the major factors contributing to the school dropout rate. In addition, teenage mothers are more likely to be single parents, less likely to get prenatal care before the second trimester, are at a higher risk of having low birthweight babies, are more likely to receive public assistance, are at a greater risk to commit abuse or neglect, and are more likely to have children who will themselves become teen parents. Consequently, in 2016, 12.4 percent of teenage births were low birthweight and 12.6 percent were premature.

Of the 37,928 total births in 2016, 29,257 were associated with "at risk" mothers (77.1 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).

402 Physical Facilities for Perinatal Care

The 55 hospitals that experienced live births reported 36,930 deliveries. Three of these hospitals reported more than 2,000 obstetrical deliveries each in Fiscal Year 2016, accounting for 6,740 deliveries or 18.3 percent of the state's total hospital deliveries: Forest General Hospital with 2,320 deliveries, North Mississippi Medical Center with 2,236 deliveries, and the University of Mississippi Medical Center with 2,191 deliveries. These hospitals with a large number of deliveries are strategically located in north, central and south Mississippi. Map 4-2 shows the Perinatal Planning Areas.

Table 4-3
Utilization Data for Hospitals with Obstetrical Deliveries
FY 2015 and FY 2016

Facility	County	Number of Deliveries 2015	Number of Deliveries 2016
University of Mississippi Medical Center	Hinds	2,147	2,191
Forrest General Hospital	Forrest	2,332	2,320
North Mississippi Medical Center	Lee	2,131	2,236
Baptist Memorial Hospital-DeSoto	DeSoto	1,647	1,678
Merit Health River Oaks	Rankin	1,542	1,479
St. Dominic-Jackson Memorial Hospital	Hinds	1,472	1,560
Merit Health Wesley	Lamar	1,257	1,259
Merit Health Woman's Hospital	Rankin	1,126	1,108
Memorial Hospital at Gulfport	Harrison	1,450	1,450
Anderson Regional Medical Center	Lauderdale	1,263	1,215
Baptist Memorial Hospital - Union County	Union	940	1,020
Mississippi Baptist Medical Center	Hinds	1,756	1,706
Rush Foundation Hospital	Lauderdale	985	964
Baptist Memorial Hospital-Golden Triangle	Lowndes	932	935
OCH Regional Medical Center	Oktibbeha	888	930
Baptist Memorial Hospital - North Miss	Lafayette	945	875
South Central Regional Medical Center	Jones	904	923
Merit Health Northwest Mississippi	Coahoma	790	633
Ocean Springs Hospital	Jackson	838	800
Delta Regional Medical Center-Main Campus	Washington	726	715
Merit Health of Biloxi	Harrison	839	882
Southwest Mississippi Regional Medical Center	Pike	764	740
Merit Health River Region	Warren	709	628
Merit Health Central	Hinds	731	642
University of MS Medical Center Grenada	Grenada	410	435
King's Daughters Medical Center-Brookhaven	Lincoln	596	627
Merit Health Madison	Madison	300	309
Merit Health Natchez	Adams	181	857
Merit Health Natchez- Community Campus**	Adams	721	0
Magnolia Regional Health Center	Alcorn	702	676
Merit Health Gilmore Memorial	Monroe	610	634
Singing River Hospital	Jackson	624	631
Greenwood Leflore Hospital	Leflore	544	495

**Table 4-3
Utilization Data for Hospitals with Obstetrical Deliveries
FY 2015 and FY 2016 (continued)**

Facility	County	Number of Deliveries 2015	Number of Deliveries 2016
Garden Park Medical Center	Harrison	413	445
Bolivar Medical Center	Bolivar	389	369
North Miss Medical Center-West Point	Clay	360	319
Highland Community Hospital	Pearl River	315	291
Magee General Hospital	Simpson	277	36
South Sunflower County Hospital	Sunflower	194	199
Methodist Olive Branch Hospital	Desoto	296	371
Hancock Medical Center	Hancock	225	192
Wayne General Hospital	Wayne	215	198
George County Regional Hospital	George	258	282
North MS Medical Center- West Point	Clay	360	319
81 Medical Group	Harrison	391	371
Merit Health Rankin	Rankin	2	0
Merit Health Batesville	Panola	239	272
Baptist Medical Center-Leake	Leake	2	3
Marion General Hospital	Marion	1	1
Baptist Medical Center - Attala	Attala	0	2
Laird Hospital	Newton	0	2
Covington County Hospital	Covington	1	0
Scott Regional Hospital	Scott	1	1
Field Memorial Hospital	Wilkinson	0	2
Baptist Medical Center- Yazoo	Yazoo	2	3
H.C Watkins Memorial Hospital	Clarke	0	1
Jefferson County Hospital	Jefferson	1	0
Lawrence County Hospital	Lawrence	2	1
Choctaw Health Center	Choctaw	1	2
Pioneer Community Hospital of Choctaw	Choctaw	0	1
North Miss Medical Center- Iuka	Tishomingo	1	0
North Miss Medical Center - Eupora	Webster	1	0
North Oak Regional Medical Center	Tate	0	1
North Sunflower County Hospital	Sunflower	1	0
Tallahatchie General Hospital	Tallahatchie	1	0
Hardy Wilson Memorial Hospital	Copiah	1	0
Perry County General Hospital	Perry	1	0
University of MS Medical Center-Holmes	Holmes	1	2
Sharkey-Issaquena Community Hospital	Sharkey	1	0
S.E. Lackey Memorial Hospital	Scott	1	2
Neshoba County General Hospital	Neshoba	1	0
Noxubee General Hospital	Noxubee	0	1
Stone County Hospital	Marion	0	1
Total		37,757	37,248

Sources: Mississippi State Department of Health, Office of Health Informatics

* N/A – Denotes facility not reported on birth certificates sent to MSDH for the year.

** Facility closed in 2015.

403 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.

403.01 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): 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.
6. 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 405.03 of the State Health Plan.

7. 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.
8. 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.

403.02 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. 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 \$5,000,000 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.

Need Criterion 1: Minimum Procedures

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 403.01, Policy Statement 2, by hospital).

Need Criterion 2: Perinatal Services

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

Need Criterion 3: Staffing Requirements

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.

Need Criterion 4: Policies

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.

Need Criterion 5: Staff Required for Medical Emergency

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.

Need Criterion 6: Travel Time

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.

Need Criterion 7: Transfer of Patients in Medical Emergency

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.

Need Criterion 8: Data Requirements

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.

Need Criterion 9: Non-Discrimination Provision

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.

404 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.

404.01 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): 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: 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 405.03 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 other providers of the requested services.

404.02 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).

Need Criterion 1: Minimum Procedures

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. 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.

Applications submitted by existing providers of neonatal special care services, which seek to expand capacity by adding or converting neonatal special care beds must 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 seventy percent (70%) for the most recent two (2) years or maintained an eighty percent (80%) 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 additional or conversion of neonatal special care beds to meet projected demand balanced with optimum utilization rate for the Perinatal Planning Area.

Need Criterion 2: Minimum Bed Requirement for Single Neonatal Special Care Unit

A single neonatal special care unit (Subspecialty or Regional) that is Level 3 or greater should contain a 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.

Need Criterion 3: Travel Time

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.

Need Criterion 4: Referral Networks

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.

Need Criterion 5: Data Requirement

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.

Need Criterion 6: Non-Discrimination Provision

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.

404.03 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
2016

Perinatal Planning Areas	Number Live Births¹	Neonatal Intensive Care Bed Need	Neonatal Intermediate Care Bed Need
PPA I	2,340	5	14
PPA II	3,955	8	24
PPA III	2,415	5	14
PPA IV	4,161	8	25
PPA V	9,715	19	58
PPA VI	2,387	5	14
PPA VII	2,235	4	13
PPA VIII	4,519	9	27
PPA IX	5,411	11	32
State Total	37,138	74	223

¹ 2016 Occurrence Data. Number of beds based upon births rounded to the nearest 1,000.

Sources: Mississippi State Department of Health, Division of Health Planning and Resource Development Calculations, 2016

Source: Bureau of Public Health Statistics

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

405.01 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

405.02 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.

405.03 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 less than 35 weeks gestation until transfer to a facility that can provide the appropriate 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 at more than 32 weeks and weighing more than 1500g who have physiological 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 convalescent care after intensive care.
4. Provide mechanical ventilation for brief duration (less than 24 hours) and/or continuous positive airway pressure.
5. Stabilize infants born before 32 weeks gestation and weighing less than 1500 grams 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 (e.g., portable x-ray machine, blood gas analyzer) and personal (e.g., 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 less than 32 weeks gestation and weighing less than 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 less than 1500 grams 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 less than 32 weeks and weighing less than 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.

405.04 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

405.05 Hospital Evaluation and Level of Care Designation

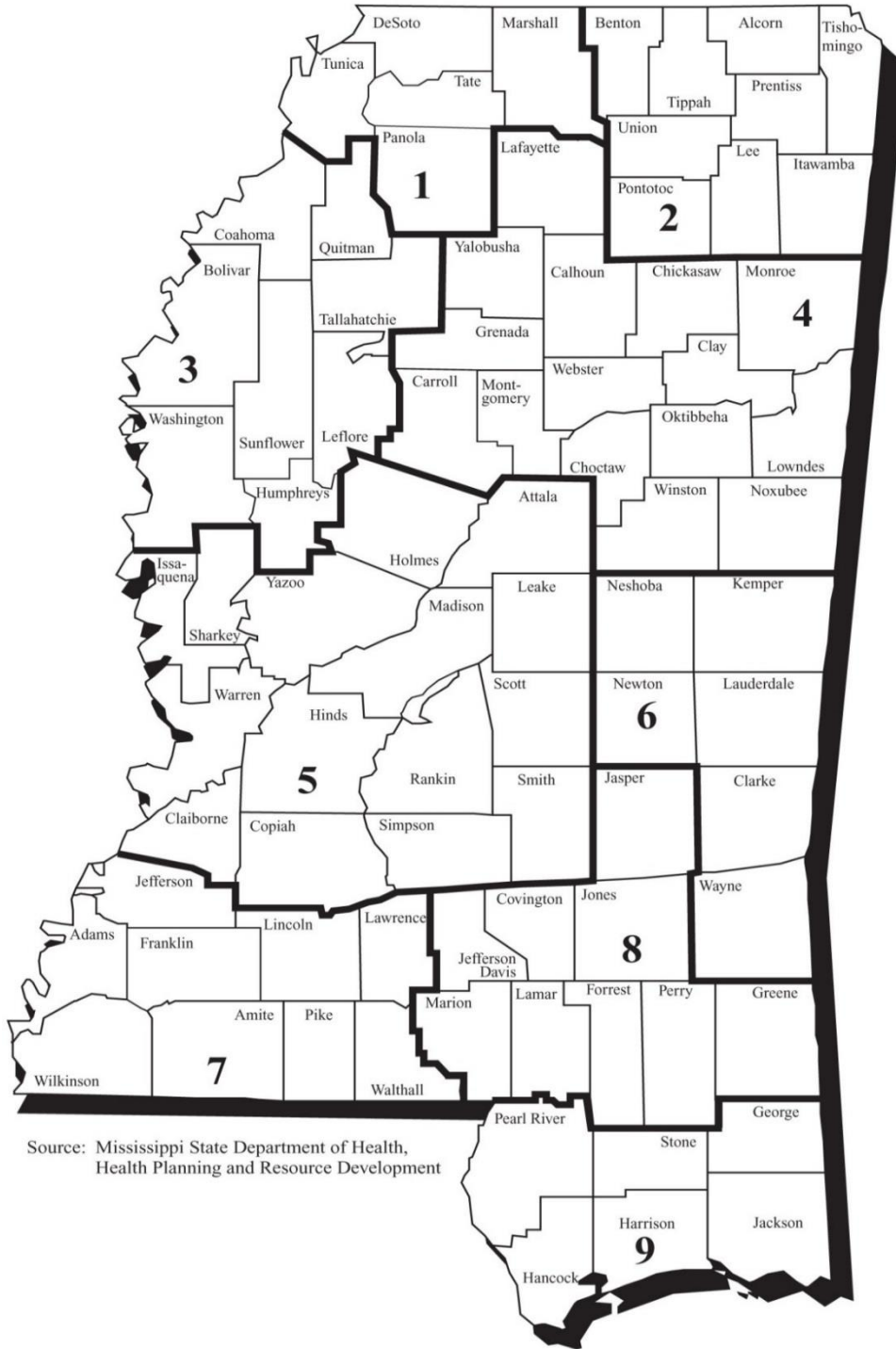
MSDH maintains the authority to evaluate hospitals offering obstetric and newborn services and designate a level of care based upon its clinical services and capacity.

References

American Academy of Pediatrics, Committee on Fetus and Newborn and American College of Obstetricians and Gynecologists Committee on Obstetric Practice, Edited by Kilpatrick, S, Papile, L., Macones, G. Guidelines for Perinatal Care, 8th Edition, Published 2017

American Academy of Pediatrics, Committee on fetus and Newborn; Levels of Neonatal Care. Pediatrics 2012; 130;587 DOI:10.1542/peds.2012-1999

Map 4-2 Perinatal Planning Area



Chapter 5 Acute Care Facilities and Services Overview

Mississippi had 112 non-federal medical/surgical hospitals in FY 2016, with a total of 13,155 licensed acute care beds (plus 573 beds held in abeyance by 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.

500 General Medical/Surgical Hospitals

When calculating the occupancy rate using total licensed bed capacity, the overall occupancy rate drops to 36.27 percent. Using these statistics and 2023 projected population totals, Mississippi had a licensed bed capacity to population ratio of 4.19 per 1,000 and an occupied bed to population ratio of 1.52 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 4768.36 leaving approximately 8377.64 unused licensed beds on any given day. Eighty (80) of the state's hospitals reported occupancy rates of less than 40 percent during FY 2016.

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 sixty (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 fifty percent (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. The fact that they arise frequently suggest the importance of reducing excess capacity where it is possible to do so and is not likely to result in problematic consequences. MSDH 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 2016**

Facility	Licensed Beds	Abeyance Beds	Average Daily Census	Occupancy Rate	Average Length of Stay
General Hospital Service Area 1	688	18	279.45	40.62	4.83
Alliance Healthcare System, Inc.	40		7.85	19.62	6.11
Baptist Memorial Hospital - DeSoto	309		145.51	47.09	4.13
Methodist Healthcare Olive Branch Hospital*	67		16.94	25.29	3.61
North Oak Regional Medical Center - Senatobia	76		11.59	15.25	5.04
Panola Medical Center	102	18	31.21	30.60	4.61
Parkwood Behavioral Health System	94		66.35	70.59	8.90
General Hospital Service Area 2	1,151	45	504.01	43.79	5.12
Baptist Memorial Hospital - Booneville	104		13.70	13.17	9.70
Baptist Memorial Hospital - Union County	145		23.52	16.22	2.89
Laird Hospital	25		1.85	7.41	3.22
Magnolia Regional Health Center	200		84.66	42.33	4.22
North Mississippi Medical Center	577		324.84	56.30	5.04
North Mississippi State Hospital	50		46.38	92.76	29.54
Pontotoc Health Services	25		1.46	5.83	2.99
Tippah County Hospital	25	45	7.60	30.40	5.54
Tishomingo Health Services, Inc.	48		5.72	11.92	3.13
General Hospital Service Area 3	983	41	292.73	29.78	4.92
Allegiance Speciality Hospital of Greenville	39		22.21	56.94	18.62
Bolivar Medical Center	164	1	29.76	18.15	3.76
Delta Regional Medical Center	195		63.61	32.62	4.71
Delta Regional Medical Center- West Campus	67	40	9.53	14.23	4.95
Greenwood - AMG Specialty Hospital	40		19.82	49.55	24.12
Greenwood Leflore Hospital	188		60.18	32.01	4.03
Medical/Dental Facility at Parchman	56		37.93	67.73	12.05
North Sunflower Medical Center	35		22.90	65.44	7.52
Northwest Mississippi Medical Center	171		33.13	19.38	3.88
South Sunflower County Hospital	49		15.13	30.88	4.05
Tallahatchie General Hospital	18		0.74	4.09	1.58
General Hospital Service Area 4	1,255	49	324.39	25.85	4.04
Baptist Memorial Hospital - North Mississippi	204		71.26	34.93	4.06
Baptist Memorial Hospital - Calhoun	25	4	2.17	8.69	3.34
Baptist Memorial Hospital-Golden Triangle	307		88.73	28.90	4.10
Choctaw Regional Medical Center	25	0	1.55	6.21	3.14
Clay County Medical Corporation	54		8.99	16.65	3.00
Diamond Grove Center	25		20.73	82.94	9.55
Gilmore Memorial Hospital	95		19.67	20.70	3.14
Monroe Regional Hospital	35		8.21	23.46	13.34
Noxubee General Critical Access Hospital	25		6.12	24.47	3.65
Oktibbeha County Hospital	90		20.98	23.32	3.33
Trace Regional Hospital	84	0	10.25	12.20	10.98
Tyler Holmes Memorial Hospital	25		3.06	12.24	3.41
University of Mississippi Medical Center- Grenada	156	4	27.79	17.81	4.17
Webster Health Services, Inc.	38		22.53	59.30	6.17
Winston Medical Center	41	41	10.41	25.39	4.42
Yalobusha General Hospital	26		4.67	17.96	3.39

Table 5-1 (continued)
Licensed Short-Term Acute Care Hospital Beds by Service Area
FY 2016

Facility	Licensed Beds	Abeyance Beds	Average Daily Census	Occupancy Rate	Average Length of Stay
General Hospital Service Area 5	4,693	229	1,690.37	36.02	5.21
Baptist Medical Center - Attala, Inc.	25	46	3.92	15.67	1.00
Baptist Medical Center - Leake, Inc.	25		5.50	22.01	3.80
Baptist Medical Center - Yazoo, Inc.	25		5.93	23.70	4.38
Brentwood Behavioral Healthcare of MS	105		71.03	67.65	9.35
Claiborne County Hospital	32		4.53	14.14	12.15
Copiah County Medical Center	25	10	13.29	53.16	6.57
Holmes County Hospital and Clinics	25	10	2.35	9.41	2.94
Magee General Hospital	64	20	10.35	16.16	3.99
Merit Health Central	304	143	80.92	26.62	4.86
Merit Health Madison	67		11.72	17.49	3.38
Merit Health Rankin	134		35.56	26.53	3.31
Merit Health River Oaks	130		37.75	29.04	5.00
Merit Health River Region	321		80.01	24.93	5.05
Merit Health Woman's Hospital	109		10.16	9.32	2.66
Mississippi Baptist Medical Center	541		246.46	45.56	4.38
Mississippi Methodist Rehabilitation Center	44		0.00	0.00	0.00
Mississippi State Hospital	1,347		171.95	12.77	57.69
Oak Circle Center	60		26.91	44.85	37.87
Patients' Choice Medical Center of Smith County	29		5.60	19.31	12.96
Promise Hospital of Vicksburg	35		27.82	79.48	25.84
Regency Hospital of Hattiesburg	33		27.61	83.68	27.55
S.E. Lackey Memorial Hospital	35		17.82	50.90	5.34
Select Specialty Hospital - Belhaven, LLC	25		18.59	74.36	32.67
Select Specialty Hospital - Jackson	53		40.27	75.97	25.29
Scott Regional Hospital	25		2.84	11.35	3.52
Sharkey - Issaquena Community Hospital	29		6.07	20.94	4.80
Simpson General Hospital	35		11.22	32.06	6.38
St. Dominic-Jackson Memorial Hospital	500		337.82	67.56	3.73
University of Mississippi Medical Center	479		372.26	77.72	4.69
Whitfield Medical Surgical Hospital	32	11	4.13	12.92	8.08
General Hospital Service Area 6	1,088	111	490.01	45.04	5.48
Alliance Health Center**	146		64.34	44.07	8.26
Anderson Regional Medical Center	260	71	134.60	51.77	4.06
Anderson Regional Medical Center South Campus	49		6.81	13.89	12.24
East Mississippi State Hospital	151	6	114.21	75.63	8.02
H.C. Watkins Memorial Hospital	25		2.76	11.02	3.90
John C. Stennis Memorial Hospital	25		0.96	3.85	2.78
Neshoba County General Hospital	48	34	17.13	35.68	4.14
Regency Hospital of Meridian	40		26.43	66.07	26.06
Rush Foundation Hospital	215		60.99	23.37	4.07
The Specialty Hospital of Meridian	49		43.66	89.10	27.35
Wayne General Hospital	80		18.13	22.66	4.01
General Hospital Service Area 7	579	16	140.39	24.25	3.39
Beacham Memorial Hospital	31	6	13.16	42.46	5.20
Field Health System	25		4.10	16.38	3.63
Franklin County Memorial Hospital	25	10	1.17	4.69	2.91
Jefferson County Hospital	30		3.32	11.06	10.41
King's Daughters Medical Center	99		28.20	28.48	2.57
Lawrence County Hospital	25		7.04	28.15	6.48
Merit Health Natchez	159		43.27	27.22	3.83
Southwest Mississippi Regional Medical Center	160		37.54	23.46	2.90
Walthall General Hospital	25		2.59	10.36	3.51

Table 5-1 (continued)
Licensed Short-Term Acute Care Hospital Beds by Service Area
FY 2016

Facility	Licensed Beds	Abeyance Beds	Average Daily Census	Occupancy Rate	Average Length of Stay
General Hospital Service Area 8	1,180	41	513.90	43.55	4.62
Covington County Hospital	35		2.68	7.67	3.72
Forrest General Hospital	480		283.22	59.00	4.20
Greene County Hospital	7	3	0.58	8.22	2.76
Jasper General Hospital	16		0.06	0.39	4.60
Jefferson Davis General Hospital	35		5.05	14.43	7.39
Marion General Hospital	49	30	9.21	18.79	5.00
Merit Health Wesley	211		83.31	39.48	4.90
Perry County General Hospital	22	8	0.75	3.40	3.22
South Central Regional Medical Center	275		82.93	30.15	4.01
South Mississippi State Hospital	50		46.11	92.22	23.83
General Hospital Service Area 9	1,529	45	533.11	34.87	4.59
Garden Park Medical Center	130		42.13	32.41	4.31
George Regional Hospital	48		9.27	19.30	3.36
Hancock Medical Center	102		13.24	12.98	3.39
Highland Community Hospital	60	45	15.50	25.84	3.54
Memorial Hospital at Gulfport	348		185.85	53.41	4.88
Merit Health Biloxi	180		83.87	46.60	5.34
Ocean Springs Hospital	136		73.22	53.84	3.78
Pearl River County Hospital	24		0.20	0.83	2.92
Select Specialty Hospital - Gulf Coast	61		27.17	44.55	24.39
Singing River Hospital	415		79.24	19.09	3.98
Stone County Hospital	25		3.41	13.62	3.66
TOTAL	13,146	595	4,768.36	36.27	4.89

Notes: 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 *2016 Mississippi Hospital Report*.

Source: Application for Renewal of Hospital License for Calendar Year 2015 and FY 2016 Annual Hospital Report; Division of Health Planning and Resource Development, Office of Health Policy and Planning.

501 Hospital Outpatient Services

The following table shows the number of visits to hospital emergency rooms and hospital outpatient clinics in FY 2016. These statistics represent an increase over 2013's total of 4,877,339 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 2016**

General Hospital Service Area	Number with Emergency Department	Number of Emergency Room Visits	Number of Hospitals with Outpatient Clinics	Number of Outpatient Clinic Visits	Total Outpatient Visits
Mississippi	84	1,931,303	76	3,698,269	5,629,572
1	5	132,004	5	74,383	206,387
2	8	203,360	7	357,607	560,967
3	7	147,798	4	248,158	395,956
4	13	219,362	12	511,299	730,661
5	19	481,425	20	1,029,974	1,511,399
6	6	114,467	7	285,068	399,535
7	8	113,616	7	208,541	322,157
8	8	190,306	6	186,975	377,281
9	10	328,965	8	796,264	1,125,229

Source: Applications for Renewals of Hospital License for Calendar Year 2015 and FY 2016 Annual Hospital Report, Mississippi State Department of Health.

502 Certificate of Need Criteria and Standards for General Acute Care Facilities

Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

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

1. Need in Counties Without a Hospital: Ten counties in Mississippi do not have a hospital: Amite, Benton, Carroll, Humphreys, Issaquena, Itawamba, Prentiss, Quitman, Smith 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.
2. Expedited Review: MSDH may consider an expedited review for CON applications that address only license code deficiencies, project cost overruns, and relocation of facilities or services.
3. Capital Expenditure: For the purposes of CON review, transactions which are separated in time but planned to be undertaken within twelve (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 twelve (12) months prior to the submission of the CON application.
4. Addition or Conversion of Beds: No health care facility shall be authorized to add any beds or convert any beds to another category of beds without a CON.
5. Beds in Abeyance: 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 CON. MSDH 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.
6. Break in Services: A health care facility that has ceased to operate for a period of sixty (60) months or more shall require a CON prior to reopening.

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

MSDH will review applications for a CON 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. MSDH will also review applications for a Certificate of Need according to the general criteria listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of MSDH; and the specific criteria and standards listed below.

Need Criterion 1: Acute Care Hospital Need Methodology

With the exception of psychiatric, chemical dependency, and rehabilitation hospitals, MSDH will use the following methodologies to project the need for general acute care hospitals:

a. Counties Without a Hospital

MSDH shall determine hospital need by multiplying the state's average annual occupied beds per 1,000 population (1.41 in FY 2013) by the estimated 2023 county population to determine the number of beds the population could utilize. A hospital with a maximum of 100 beds may be considered if the following three conditions are met: (i) the number of beds needed is 100 or more; (ii) there is strong community support for a hospital; and (iii) a hospital can be determined to be economically feasible.

b. Counties With Existing Hospitals

MSDH shall use the following formula to determine the need for an additional hospital in a county with an existing hospital:

$$ADC + \frac{K}{ADC}$$

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 GHSA's. A hospital with a maximum of 100 beds may be considered if the following three conditions are met: (i) the number of beds needed is 100 or more; (ii) there is strong community support for a hospital; and (iii) a hospital can be determined to be economically feasible.

c. Counties with Existing Hospitals Located in an Underdeveloped General Hospital Service Area and With a Rapidly Growing Population

If the need methodology in b above shows that a need does not exist in that county, an Applicant may further demonstrate need for an acute care hospital not to exceed one hundred (100) beds if the county has a population in excess of 140,000 people; the

county projects a population growth rate in excess of ten percent (10%) over the next ten (10) year period; and the county's GHSA does not presently exceed a factor of three beds per 1,000 population.

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

- i. 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;
- ii. 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
- iii. 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;
- iv. Fully participate in the Trauma Care System at a level to be determined by the MSDH 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
- v. 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.

Need Criterion 2: Indigent/Charity Care

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

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

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 \$5,000,000 (for clinical health services) or \$10,000,000 (for nonclinical health services). MSDH will further review applications under the applicable statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code of 1972, as amended. 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.

Need Criterion 1: Acute Care Bed Need

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 sixty percent (60%) for the most recent two (2) years or has maintained an occupancy rate of at least seventy percent (70%) for the most recent two (2) years according to the below formula:

$$\# \text{ Observation patient days}/365/ \text{ licensed beds} \quad + \quad \text{Inpatient Occupancy rate}$$

Note: *An observation patient day 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.

Need Criterion 2: 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.

Need Criterion 3: 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*.

Need Criterion 4: Cost of Project

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 fifteen percent (15%). 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 fifteen percent (15%), 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.

Need Criterion 5: Project Specifications

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.

Need Criterion 6: Renovation/Expansion Justification

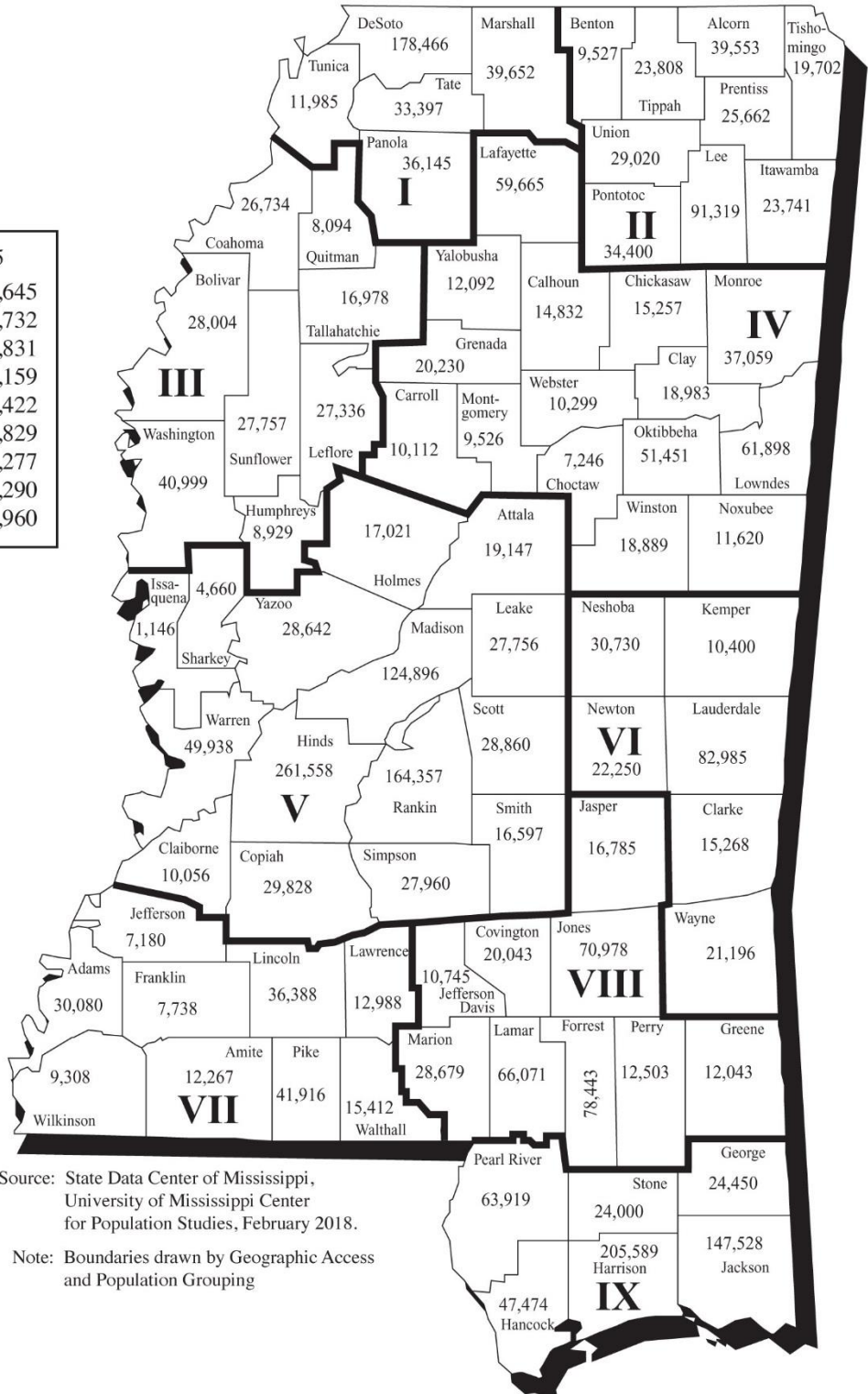
If the cost of the proposed renovation or expansion project exceeds eighty-five percent (85%) of the cost of a replacement facility, the applicant shall document their justification for rejecting the option of replacing said facility.

Need Criterion 7: Need for Service

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 2023 Population Projections

State Total - 3,138,145
 Planning Area 1 - 299,645
 Planning Area 2 - 296,732
 Planning Area 3 - 184,831
 Planning Area 4 - 359,159
 Planning Area 5 - 812,422
 Planning Area 6 - 182,829
 Planning Area 7 - 173,277
 Planning Area 8 - 316,290
 Planning Area 9 - 512,960



Source: State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 2018.
 Note: Boundaries drawn by Geographic Access and Population Grouping

503 Long-Term Acute Care Hospitals

A long-term acute care (LTAC) hospital is a freestanding, Medicare-certified acute care hospital with an average length of inpatient stay greater than twenty-five (25) calendar days, which is primarily engaged in providing chronic or long-term medical care to patients who do not require more than three (3) hours of rehabilitation or comprehensive rehabilitation per day, and has a transfer agreement with an acute care medical center and a comprehensive medical rehabilitation facility. As of FY 2016, sixteen (16) long-term acute care hospitals were in operation. The following table lists specific LTAC information.

**Table 5-3
Long-Term Acute Care Hospitals
2016**

Facility	Location	Licensed Beds	Occupancy Rate	Discharges	ALOS
General Hospital Service Area 1		0	0.00	0	0.00
NONE					
General Hospital Service Area 2		0	0.00	0	0.00
NONE					
General Hospital Service Area 3		79	53.20	737	20.91
Allegiance Specialty Hospital Greenville*	- Greenville	39	56.94	430	18.62
Greenwood AMG Specialty Hospital*	- Greenwood	40	49.55	307	24.12
General Hospital Service Area 4		0	0.00	0	0.00
NONE					
General Hospital Service Area 5		88	77.37	962	25.51
Mississippi Hospital for Restorative Care	- Jackson		0.00		0)
Promise Hospital of Vicksburg	- Vicksburg	35	79.48	377	25.84
Regency Hospital of Jackson	- Jackson		0.00		0.00
Select Specialty Hospital of Jackson	- Jackson	53	75.97	585	25.29
General Hospital Service Area 6		89	78.75	964	26.86
Regency Hospital of Meridian	- Meridian	40	66.07	370	26.06
Specialty Hospital of Meridian	- Meridian	49	89.10	594	27.35
General Hospital Service Area 7		0	0.00	0	0.00
NONE					
General Hospital Service Area 8		33	83.68	365	27.55
Regency Hospital of Southern Mississippi	- Hattiesburg	33	83.68	365	27.55
General Hospital Service Area 9		61	44.55	388	24.39
Select Specialty Hospital-Gulfport	- Gulfport	61	44.55	388	24.39
TOTAL		350	67.14	3,416	24.99

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

Source: Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report

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

Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

504.01 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 twenty-five (25) calendar days or more.
 4. Size of Facility: Establishment of a long-term care hospital shall not be for less than twenty (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. Addition or Conversion of Beds: 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 CON 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.

504.02 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

MSDH will review applications for a CON 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. 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 MSDH; and the specific criteria and standards listed below.

Need Criterion 1: Projected Need

The applicant shall document a minimum of 450 clinically appropriate restorative care admissions with an average length of stay of twenty-five (25) days.

Need Criterion 2: Financial Feasibility

A projection of financial feasibility by the end of the third year of operation.

Need Criterion 3: Bed Licensure

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.

Need Criterion 4: Licensure

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.

Need Criterion 5: Indigent/Charity 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*.

Need Criterion 6: Project Cost

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 twelve (12) month period by more than fifteen percent (15%). 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.

Need Criterion 7: Floor Area and Space Requirements

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

6. The gross square footage of the proposed project in comparison to state and national norms for similar projects.
7. The architectural design of the existing facility if it places restraints on the proposed project.
8. Special considerations due to local conditions.

Need Criterion 8: Transfer Agreement

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

505 Swing -Bed Programs and Extended Care Services

Federal law allows rural hospitals with fewer than 100 hospital beds to utilize its beds as “swing beds” to provide post-acute extended care services. 42 C.F.R. § 482.58. Hospitals must have a Medicare provider agreement and meet several eligibility and skilled nursing facility service requirements to be granted CMS approval to provide post-hospital extended care services and to be reimbursed as a swing-bed hospital.

Swing-bed hospitals have the same Medicare coverage requirements and coinsurance provisions as nursing facilities. In addition to meeting acute care standards, swing-bed hospitals must also substantially comply with the eight skilled nursing facility services standards listed in 42 C.F.R. §482.58(b). These standards include resident rights, admission, transfer, and discharge rights, freedom from abuse, neglect, and exploitation, dental services, specialized rehabilitative services, social services, patient activities, and discharge planning. Because 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 for the elderly and others with long-term needs. If it is not possible for the patient to return home, the swing-bed hospital assists the patient and their family with nursing home placement. Ideally, the swing-bed concept should help alleviate low utilization problems in small rural hospitals and provide a new revenue source with few additional expenses while also more efficiently utilizing hospital staff during periods of low acute care occupancy.

505.01 Swing -Bed Utilization

Forty-seven (47) Mississippi hospitals and one specialty hospital participated in the swing bed program during Fiscal Year 2016. They reported 6,980 discharges from their swing beds and an average length of stay of 16.25 days.

**Table 5-4
Swing-Bed Utilization
FY 2016**

Facility	Licensed Beds	Discharges	ALOS	Average Daily Census
General Hospital Service Area 1	3	33	6.79	0.57
Alliance Health Care System	3	33	6.79	0.57
General Hospital Service Area 2	35	1047	13.97	43.84
Baptist Memorial Hospital-Union County	0	95	7.73	1.98
Laird Hospital	25	247	11.35	7.71
Pontotoc Health Services	0	343	20.22	19.29
Tippah County Hospital	10	166	16.18	7.16
Tishomingo Health Services, Inc.	10	196	14.35	7.70
General Hospital Service Area 3	66	615	28.90	23.51
Bolivar Medical Center	12	127	10.21	3.65
North Sunflower Medical Center	15	322	14.07	12.96
South Sunflower County Hospital	30	107	15.69	4.63
Tallahatchie General Hospital	9	59	75.61	2.27
General Hospital Service Area 4	151	1,782	14.65	71.71
Baptist Memorial Hospital- Calhoun	25	100	23.82	6.27
Choctaw Regional Medical Center	15	149	13.62	5.37
Clay County Medical Corporation	10	196	11.56	6.20
Gilmore Memorial Hospital	0	59	6.63	1.07
Monroe Regional Hospital	0	245	15.76	10.37
Noxubee General Critical Access Hospital	25	173	16.11	7.74
Oktibbeha County Hospital	10	124	8.79	3.06
Trace Regional Hospital	10	4	22.25	0.28
Tyler Holmes Memorial Hospital	10	140	17.15	6.87
Webster Health Services	20	349	13.50	12.81
Winston Medical Center	0	13	8.46	0.30
Yalobusha General Hospital	26	230	18.15	11.37
General Hospital Service Area 5	54	1,063	15.00	54.08
Baptist Medical Center- Attala, Inc.	0	0	0.00	7.82
Baptist Medical Center - Yazoo, Inc.	10	185	14.17	5.06
Baptist Medical Center- Leake, Inc.	25	281	17.07	12.69
Holmes County Hospital & Clinics	0	69	18.86	4.09
Magee General Hospital	12	158	17.52	7.72
Claiborne County Hospital	7	126	14.41	5.02
Scott Regional Hospital	0	83	23.43	5.14
Simpson General Hospital	0	161	14.56	6.54

Source: Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report

Table 5-4 (Continued)
Swing-Bed Utilization
FY 2016

Facility	Licensed Beds	Discharges	ALOS	Average Daily Census
General Hospital Service Area 6	115	1,018	11.51	40.86
Anderson Regional Medical Center South	25	362	16.45	16.31
H.C. Watkins Memorial Hospital	25	207	16.11	8.98
John C Stennis Memorial Hospital	25	217	11.83	7.13
Neshoba County General Hospital	10	25	11.44	0.79
Speciality Hospital of Meridan	20	0	0	0.01
Wayne General Hospital	10	207	13.20	7.64
General Hospital Service Area 7	51	518	18.82	28.50
Field Health System	16	125	16.53	5.55
Franklin County Memorial Hospital	25	194	28.21	14.79
Lawrence County Hospital	10	95	16.08	4.22
Walthall County General Hospital	0	104	14.45	3.94
General Hospital Service Area 8	57	720	17.80	34.75
Covington County Hospital	25	248	15.66	10.44
Greene County Hospital	0	75	19.80	4.07
Jasper General Hospital	12	127	20.57	6.99
Jefferson Davis Community Hospital	0	66	13.61	2.50
Marion General Hospital	20	204	19.34	10.75
General Hospital Service Area 9	0	184	18.77	13.72
George Regional Hospital	0	7	10.43	0.20
Stone County Hospital	0	177	27.11	13.52
State Total	532	6,980	16.25	311.54

Source: Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report

Note(s): According to the Applications for Renewal of Hospital License for Calendar Year 2016 and FY 2017 Annual Hospital Report: Baptist Memorial Hospital-Union County, Pontotoc Health Services, Gilmore Memorial Hospital, Monroe Regional Hospital, Winston Medical Center, Baptist Medical Center- Attala, Inc., Holmes County Hospital & Clinics, Scott Regional Hospital, Simpson General Hospital and George Regional Hospital reported zero (0) licensed Swing Beds.

505.02 Certificate of Need Criteria and Standards for Swing-Bed Services

MSDH will review applications for a 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. 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.

Need Criterion 1: Federal Requirements

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.

Need Criterion 2: Resolution Adopted for Proposed Participation

The applicant shall provide a copy of the Resolution adopted by its governing board approving the proposed participation.

Need Criterion 3: Hospitals Proposing Beds over the Maximum allowed by Federal Law

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 once the federal threshold is met.

Need Criterion 4: Medicare Recipients

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.

Need Criterion 5: Limitation on Medicare/Medicaid Patients

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 thirty (30) days per admission unless the hospital receives prior approval for such patient from the Division of Medicaid.

Need Criterion 6: Hospitals with More Licensed Beds or a Higher Average Daily Census

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 fifty (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 fifty (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.

Need Criterion 7: Transfer Agreements

The applicant shall provide copies of transfer agreements entered into with each nursing facility within the applicant's geographic area.

Need Criterion 8: Failure to Comply

An applicant subject to the conditions stated in Need 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 MSDH, after a hearing complying with due process, MSDH, determines that the hospital has failed to comply with any of those requirements.

506 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 photons (x-ray or gamma rays) or charged particles (electrons, protons or heavy nuclei) 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). Radiation therapy services does not include low energy, superficial, external beam x-ray treatment of superficial skin lesions.

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.

507 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 (5) treatments versus thirty (30) to forty (40) for radiotherapy.

Three (3) 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.

508 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 2015 and FY 2016

Facility	County	Number of Treatments (Visits)	
		2015	2016
General Hospital Service Area 1		10,302	9,875
Baptist Memorial Hospital - DeSoto	DeSoto	10,302	9,875
General Hospital Service Area 2		17,196	14,438
Magnolia Regional Health Center	Alcorn	4,003	3,873
North Miss Medical Center	Lee	13,193	10,565
General Hospital Service Area 3		9,043	10,550
Alliance Cancer Center-Clarksdale	Coahoma	2,237	2,130
Alliance Cancer Center- Greenville	Washington	3,589	4,058
Greenwood Leflore Hospital	Leflore	3,217	4,362
General Hospital Service Area 4		24,033	22,540
Baptist Memorial Hospital - Golden Triangle	Lowndes	18,152	15,625
Baptist Memorial Hospital - North Miss	Lafayette	5,881	6,915
Cancer Care at Premier Health Complex ¹	Oktibbeha	DNS	DNS
General Hospital Service Area 5		47,484	44,916
Vicksburg Oncology Associates ¹	Warren	4,492	4,653
Merit Health Central	Hinds	7,542	6,002
Miss Baptist Medical Center	Hinds	11,561	11,472
Promise Hospital of Vicksburg	Warren	-	-
St. Dominic Jackson- Memorial Hospital	Hinds	12,937	12,015
University of Mississippi Medical Center	Hinds	10,952	10,774
General Hospital Service Area 6		1	1
Anderson Regional Cancer Center	Lauderdale	1	1
General Hospital Service Area 7		7,480	7,597
Caring River Cancer Center ¹	Adams	2,814	3,130
Southwest Miss Regional Medical Center	Pike	4,666	4,467
General Hospital Service Area 8		19,577	21,312
Forrest General Hospital	Forrest	15,580	17,281
Laurel Cancer Care ¹	Jones	3,997	3,942
Regency Hospital of Hattiesburg [*]	Forrest	-	-
South Central Regional Medical Center ^{****}	Jones	-	89
General Hospital Service Area 9		18,968	52,349
Cedar Lake Oncology Center ¹	Harrison	2,439	3,915
Memorial Hospital at Gulfport	Harrison	9,586	10,611
Merit Health Biloxi	Harrison	2,436	33,316
Ocean Springs Hospital ^{**}	Jackson	-	-
Select Specialty Hospital - Gulf Coast ^{***}	Harrison	-	-
Singing River Hospital ^{**}	Jackson	4,507	4,507
State Total		154,084	183,578

¹ Indicates freestanding clinics.

*Regency Hospital of Hattiesburg uses Forrest General Hospital's Linear Accelerator Machine.

**Singing River Hospital and Ocean Springs Hospital share one Linear Accelerator Machine.

***Select Specialty Hospital – Gulf Coast uses Memorial Hospital at Gulfport's Linear Accelerator Machine.

****South Central Regional Medical Center uses Laurel Cancer Care's Linear Accelerator Machine.

DNS- Did Not Submit

Sources: Applications for Renewal of Hospital License for Calendar Years 2015 and 2016

509 Certificate of Need Criteria and Standards for Therapeutic Radiation Services

Note: Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

509.01 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: MSDH shall determine the need for therapeutic radiation services equipment using the General Hospital Service Areas as presented in this chapter of the *Plan*. MSDH shall determine the need for therapeutic radiation services and 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 Section 509.02.02 of the *Plan*). MSDH will consider out-of-state population in determining need only when the applicant submits adequate documentation acceptable to MSDH, 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 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: 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. "Backup" equipment should only be utilized when the primary equipment is deemed out of service.

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 MSDH through a determination of non-reviewability.

509.02 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)

MSDH will review CON 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. 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 MSDH; 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, regardless of the capital expenditure.

Need Criterion 1: Project Need

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 serviced, i.e., 320 patients per year/unit, or 8,000 treatments per year/unit for the most recent 24-month period.

Need Criterion 2: Presence of Readily Available Services

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

Need Criterion 3: Staffing Requirements

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.

Need Criterion 4: Access to Additional Staff

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

Need Criterion 5: Physician Location

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 sixty (60) minutes normal driving time of the facility.

Need Criterion 6: Access to a Modern Simulator

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 regarding the use of the simulator:

9. 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.
10. 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.

Need Criterion 7: Access to Computerized Treatment Planning System

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.

Need Criterion 8: Supervision of Treatment

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

Need Criterion 9: MSDH Division of Radiological Health Approval

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

Need Criterion 10: Quality Assurance Program

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.

Need Criterion 11: Failure to Comply

The applicant shall affirm understanding and agreement that failure to comply with Need 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.

509.02.01 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 8,130 new cancer cases in 2018. Based on a population of 3,138,145 (year 2023) as estimated by the State Data Center of Mississippi (University of Mississippi Center for Population Studies) is 2.59 cases per 1,000 population.
3. Patients to Receive Treatment: The number of cancer patients expected to receive therapeutic radiation treatment is set at forty-five percent (45%).
4. Population to Equipment Ratio: Using the above stated data, a population of 100,000 will generate 259 new cancer cases each year. Assuming that forty-five percent (45%) will receive radiation therapy, a population of 274,560 will generate approximately 320 patients

4. Expansion of Existing Services: 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. Addition of Services: 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. Discharge Planning Policy: 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. Referral Policy: All stereotactic radiosurgery services should have established protocols for referring physicians to assure adequate post-operative diagnostic evaluation for radiosurgery patients.
8. Service Cost Comparison: 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. Patient Cost Comparison: The usual and customary charge to the patient for stereotactic radiosurgery should be commensurate with cost.

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

MSDH will review CON 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. 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 MSDH; 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, regardless of the capital expenditure.

Need Criterion 1: Minimum Procedures

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.

Need Criterion 2: Staffing Requirements

- 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.

Need Criterion 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.

510 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.

510.01 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.

Sixty-four (64) facilities (hospitals and free-standing) in Mississippi operated fixed or mobile based MRI units in FY 2016. These facilities performed a total of data to be inserted] MRI procedures during the year. Table 5-6 presents the location, type (fixed or mobile and number of units per facility), and utilization of MRI equipment throughout the state in fiscal years 2015 and 2016.

**Table 5-6
Location and Number of MRI Procedures by General Hospital Service Area
FY 2015 and FY 2016**

	Type of Providers	County	Type of Equipment	Number of MRI Procedures		Days/Hours of Operation
				2015	2016	2016
General Hospital Service Area 1				13,436	13,416	
Baptist Memorial Hospital - DeSoto	H	DeSoto	F(3)	8,022	7,502	M-Sun.72 Hrs.
Desoto Imaging Specialists	FS	DeSoto	F	3,366	3,060	M-F, 60 Hrs.
Methodist Healthcare Olive Branch Hospital	H	DeSoto	F	1,394	2,106	M-F, 40 Hrs.
Panola Medcial Center	H	Panola	M	654	748	M, Th, F 25 Hrs.
Superior MRI Services	MP	Panola	M	-	-	N/A
General Hospital Service Area 2				29,868	31,182	
Baptist Memorial Hospital - Booneville	H	Prentiss	F	817	725	M-F, 40 Hrs
Baptist Memorial Hospital - Union	H	Union	F M(4)	2,353	2,831	Mon-Sat., 168 Hrs.
Imaging Center of Gloster Creek Village ****	FS	Lee	F			M-F,40 Hrs.
Magnolia Regional Health Center	H	Alcorn	F(2)	6,727	6,311	M-F- 40 Hrs.
Medical Imaging at Barnes Crossing	FS	Lee	F	3,664	3,595	M-F, 40 Hrs.
Medical Imaging at Crossover Road	FS	Lee	F	2,249	2,614	M-F, 40 Hrs.
North Miss. Medical Center	H	Lee	F(4)	13,217	14,327	M-F, 240 Hrs.
Tishomingo Health Services, Inc.	H	Tishomingo	M	841	779	M-F, 40 Hrs.
General Hospital Service Area 3				10,398	10,738	
Allegiance Specialty House of Greenville	H	Washington	F	61	62	M-F. 40 Hrs.
Bolivar Medical Center	H	Bolivar	M	1,038	1,208	M-F, 40 Hrs.
Delta Regional Med. Center-Main Campus	H	Washington	F	2,548	2,497	M-F, 40 Hrs.
Greenwood Leflore Hospital	H	Leflore	F	3,366	3,479	M-F, 50+ Hrs.
North Sunflower Medical Center	H	Sunflower	F	706	645	Tu, Th. 8 Hrs.
Northwest Miss. Regional Medical Center	H	Coahoma	F	1,509	1,601	M-F, 40 Hrs.
South Sunflower County Hospital	H	Sunflower	M	441	369	W., 4 Hrs.
Superior- North Sunflower Medical Center ¹	MP	Sunflower	M	517	664	Tu, Th., 8 Hrs.
Tallahatchie General Hospital	H	Tallahatchie	M	212	213	M, 4 Hrs.
General Hospital Service Area 4				21,758	22,586	
Baptist Memorial Hospital - Golden Triangle	H	Lowndes	F(2)	2,845	2,942	M-Sun, 168 Hrs.
Baptist Memorial Hospital - North MS	H	Lafayette	FM	2,698	2,759	Mon.- Sun., 168 Hrs.
Baptist Memorial Hospital - Calhoun	H	Calhoun	M	192	255	M. & Thr., 10 Hrs.
Clay County Medical Corporation	H	Clay	M	DNS	548	DNS
Gilmore Memorial Hospital, Inc.	H	Monroe	M	996	974	M-F, 40 Hrs.
Imaging Center of Columbus	FS	Lowndes	F(2)	6,156	6,496	M-F, 50 Hrs.
Imaging Ctr. of Excellence Institute - MSU	FS	Oktibbeha	F	1,396	1,600	M-F, 45 Hrs.
Monroe Regional Hospital *	H	Monroe	M	303	268	M,T, F 12 Hrs.
North Miss. Medical Center - Eupora ***	H	Webster	M	637	574	M, Tu, & W 24 Hrs.
North Miss. Medical Center - West Point	H	Clay	M	560	548	M-F, 40 Hrs.
Oktibbeha County Hospital	H	Oktibbeha	F	2,616	2,620	M-F, 40 Hrs.
Trace Regional Hospital	H	Chickasaw	M	309	316	Tu., Th. 16 Hrs.
SMI- Tyler Holmes Memorial Hospital	H	Montgomery	M	237	235	W, 4 Hrs.
University of MS Medical Center - Grenada**	H	Grenada	F	2,586	2,406	M-F, 40 Hrs.
SMI- Yalobusha Hospital	H	Yalobusha	M	227	45	W, 4 Hrs.

F- Fixed unit

M-Mobile Unit

Type of Providers: H-Hospital, FS-Freestanding, and MP- Mobile Provider

Note: ¹Indicates Superior is the approved service provider.

² Indicates Scott Medical Imaging is the approved service provider.

*Pioneer Community Hospital changed its name to Monroe Regional Hospital.

**Grenada Lake Medical Center changed its name to University of MS Medical Center-Grenada.

***Webster Health Services changed its name to North MS Medical Center- Eupora.

**** Imaging Center of Gloster Creek Village did not start data collection until February 2017.

Table 5-6 (continued)
Location and Number of MRI Procedures by General Hospital Service Area
FY 2015 and FY 2016

Facility	Type of Providers	County	Type of Equipment	Number of MRI Procedures		Days/Hours of Operation
				2015	2016	2016
General Hospital Service Area 5				81,775	91,524	
Baptist Medical Center - Attala, Inc. *	H	Attala	F	-	-	M, F 30 Hrs.
Baptist Medical Center - Leake, Inc.	H	Leake	M	325	435	Tu., 4 Hrs.
Baptist Medical Center- Yazoo, Inc.	H	Yazoo	M	572	614	Tu., Th., 8 Hrs.
Central MS Diagnostics, LLC	FS	Rankin	F	1,044	1,042	M-F, 40 Hrs.
Copiah County Medical Center	H	Copiah	M	499	391	M,W,F 12 Hrs.
King's Daughters Medical Center	H	Yazoo	F	2,650	2,831	Tues. & Th., 8 Hrs
Kosciusko Medical Clinic	FS	Attala	F	2,447	2,359	M-F, 45 Hrs.
Madison Radiological Group, LLC	FS	Madison	F	2,038	2,328	M-F, 40 Hrs.
Magee General Hospital	H	Simpson	F	706	656	M-F, 40 Hrs.
Merit Health Central	H	Hinds	F(2)	3,609	2,182	M-Sun, 90+ Hrs.
SMI- Merit Health Madison ²	H	Madison	F	220	304	M, W 8 Hrs.
Merit Health Rankin	H	Rankin	F	610	762	M-F 40 Hrs.
Merit Health River Oaks	H	Rankin	F	2,912	3,610	M-F, 50 Hrs.
Merit Health River Region	H	Warren	F	2,466	2,526	M-F, 40 Hrs.
Miss. Baptist Medical Center	H	Hinds	F(2)	7,402	8,289	M-Sat., M-F, 104 Hrs.
Miss. Diagnostic Imaging Center	FS	Rankin	F	2,233	2,237	M-F, 40 Hrs.
Mission Primary Care Clinic	FS	Warren	M	665	521	M- Th. 40 Hrs.
Miss. Sports Medicine & Orthopedic	FS	Hinds	F(2)	6,218	6,218	M-F, 90 Hrs.
Open MRI of Jackson	FS	Rankin	F	DNS	DNS	DNS
SELackey Memorial Hospital	H	Scott	M	526	526	M, W, & Th, 24 Hrs.
Sharkey/Issaquena Community Hospital	H	Sharkey	M	170	159	W., 4 hrs.
Southern Diagnostic Imaging	FS	Rankin	F	4,863	5,781	M-F, 80 Hrs.
SMI-Hardy Wilson Memorial Hospital ²	H	Copiah	M	469	361	M, Th., & Fri. 12 Hrs.
SMI- Holmes County Hospital & Clinics	H	Holmes	M	0	345	Thurs., 4 Hrs.
SMI- Leake Memorial Hospital	H	Leake	M	327	429	Tu. 4 Hrs.
SMI- Madison River Oaks Medical Center	H	Madison	M	208	289	Tu. Th., 8 Hrs
SMI-Ridgeland Diagnostic Center ²	FS	Madison	M	739	627	M, W, & Th. 12 Hrs.
SMI- Scott County Hospital ²	MP	Scott	M	18	145	F, 4 Hrs.
SMI-Simpson General Hospital ²	MP	Simpson	M	28	114	Th., 4 Hrs.
St. Dominic's Jackson- Memorial Hospital	H	Hinds	F(3)/M(1)	16,421	22,807	M-Sun., 328 Hrs.
St. Dominic's Madison Medical Imaging	FS	Madison	F	2,143	2,430	M-F, 40 Hrs.
University of MS Medical Center	H	Hinds	F(6)	19,247	20,206	M-F 504 Hrs.
General Hospital Service Area 6				13,614	14,183	
Anderson Regional Medical Center **	H	Lauderdale	F(3)	4,705	4,393	M-F, 40 Hrs.
Anderson Regional Medical Center-South Campus	FS	Lauderdale	F(2)	33	26	
H. C. Watkins Memorial Hospital	H	Clarke	M	0	141	Thr., 8 Hrs.
Imaging Center of Meridian, LLC	FS	Lauderdale	M	2,698	2,825	M-F, 45 Hrs.
John C Stennis Memorial Hospital	H	Kemper	M	79	63	M-F, 45 Hrs.
Laird Hospital	H	Newton	M	449	431	M,W, & F, 20 Hrs.
Neshoba County General Hospital	H	Neshoba	F(4) M	1,342	1,507	M-F., 40Hrs.
Rush Foundation Hospital	FS	Lauderdale	F(2)	3,812	4,452	M-F, 130 Hrs.
SMI-- Newton Regional Hospital ²	MP	Newton	M	176	29	M, 4 Hrs.
SMI-Wayne General Hospital ²	MP	Wayne	M	320	316	M, 4 hrs.

F- Fixed unit

M-Mobile Unit

Type of Providers: H-Hospital, FS-Freestanding, and MP- Mobile Provider

Note: ¹Indicates Superior is the approved service provider.

² Indicates Superior Medical Imaging is the approved service provider.

*Baptist Medical Center- Attala shares an MRI with Kosciusko Medical Clinic

**Anderson Regional Medical Center South Campus uses Anderson Regional Medical Center's MRI

Table 5-6 (continued)
Location and Number of MRI Procedures by General Hospital Service Area
FY 2015 and FY 2016

Facility	Type of Providers	County	Type of Equipment	Number of MRI Procedures		Days/Hours of Operation
				2015	2016	2016
General Hospital Service Area 7				7,265	8,521	
King's Daughters Medical Center	H	Lincoln	F	2,650	2,831	M-F, 48 Hrs.
Merit Health Natchez	MP	Adams	F(2)	1,930	2,509	M-F, 50 Hrs.
SMI-Lawrence County Hospital ²	MP	Lawrence	M	5	114	W, 4 Hrs.
SMI - Walthall County Hospital ²	MP	Walthall	M	158	162	W, 4 Hrs.
Southwest MS Regional Medical Center	H	Pike	F	2,522	2,905	M-F, 40 Hrs.
General Hospital Service Area 8				31,516	32,759	
Forrest General Hospital	H	Forrest	F(2)	5,514	6,061	M-Sun., 168 Hrs.
Hattiesburg Clinic, P.A.	FS	Forrest	F(4)	11,123	11,888	M-F 40 Hrs. & Sat. 38 Hrs.
Jefferson Davis Comm. Hospital	MP	Jeff Davis	M	121	105	Th., 4 Hrs.
Merit Health Wesley	H	Lamar	F	2,426	2,325	M-F, 50 Hrs.
Open Air MRI of Laurel	FS	Jones	F	3,818	3,507	M-F, 40+ Hrs.
SMI- Marion General Hospital ²	MP	Marion	M	275	280	Tu., 4 Hrs.
South Central Regional Medical Center	H	Jones	F	2,229	2,229	M-F, 50 Hrs.
Southern Bone & Joint Specialist, PA	FS	Forrest	F(2)	6,010	6,364	M-Sat., 140 Hrs.
General Hospital Service Area 9				29,142	31,290	
Cedar Lake MRI-Open MRI LLC	FS	Harrison	F	4,565	5,170	M-Sat, 78 Hrs.
Compass Imaging, LLC	FS	Harrison	M	534	633	M. & F, 16 Hrs.
Garden Park Medical Center	H	Harrison	F	1,225	1,815	M-F, 40 Hrs.
George County Hospital	H	George	F	773	749	M-F, 40 Hrs.
Hancock Medical Center	H	Hancock	F	913	1,075	M-F, 40 Hrs.
Highland Community Hospital*	H	Pearl River	M	1,513	1,657	M-Fri, 45 Hrs.
Memorial Hospital at Gulfport	H	Harrison	F(2)	7,994	8,908	M-Sun, 154 Hrs.
Merit Health Biloxi	H	Harrison	FM	1,937	1,876	M-F, 40 Hrs.
Ocean Springs Hospital	H	Jackson	F (2)	4,296	4,135	M-F, 115+ Hrs.
OMRI, Inc. dba Open MRI	MP	Jackson	M(3)	N/A	N/A	M, Thr. 120 & F 160 Hrs.
Singing River Hospital	H	Jackson	F(2) M	5,136	5,016	M-F, 155+ Hrs.
SMI- Stone County Hospital	H	Stone	M	256	256	Tues., 4 Hrs.
State Total				238,772	256,199	

F- Fixed unit

M-Mobile Unit

Type of Providers: H-Hospital, FS-Freestanding, and MP- Mobile Provider

Note: ² Indicates Scott Medical Imaging is the approved service provider.

Sources: Applications for Renewal of Hospital License for Calendar Years 2015; Fiscal Year 2016; FY 2017 MRI Utilization Survey

511 Invasive Digital Angiography (DA)

Invasive Digital Angiography (DA) is a diagnostic and catheter based therapeutic intravascular intervention imaging procedure that combines a digital processing unit with equipment similar to that used for standard fluoroscopic procedures.

Most invasive DA studies are appropriate as an outpatient procedure in a freestanding facility, where proper protocols have been met.

512 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 5-7 presents the location, type (fixed or mobile), and utilization of PET equipment throughout the state in 2016.

**Table 5-7
Location and Number of PET Procedures by Service Area
FY 2016**

Facility	County	Type of Equipment	Number of PET Procedures
General Hospital Service Area 1			416
Baptist Memorial Hospital - DeSoto	DeSoto	M	416
General Hospital Service Area 2			1,241
Magnolia Regional Health Center	Alcorn	M	344
North Mississippi Medical Center	Lee	F	897
General Hospital Service Area 3			605
Alliance Cancer Center- Clarksdale	Coahoma	M	DNS
Delta Regional Medical Center (Main Campus)	Washington	M	428
Greenwood Leflore Hospital	Leflore	M	177
General Hospital Service Area 4			1,374
Baptist Memorial Hospital - Golden Triangle	Lowndes	F	654
Baptist Memorial Hospital - North Miss	Lafayette	F	576
University of MS Medical Center- Grenada	Grenada	M	144
General Hospital Service Area 5			5,552
Merit Health Central	Hinds	F	166
Mississippi Baptist Medical Center	Hinds	F (2)	1,264
St. Dominic Jackson- Memorial Hospital	Hinds	F	1,731
University of MS Medical Center	Hinds	F	2,391
Baptist Medical Center-- Attala *	Attala	M	-
General Hospital Service Area 6			306
Anderson Regional Medical Center	Lauderdale	M	306
General Hospital Service Area 7			645
Merit Health Natchez	Adams	M	271
Southwest MS Regional Medical Center	Pike	M	374
General Hospital Service Area 8			3,965
Forrest General Hospital	Forrest	M	8
Hattiesburg Clinic, P.A. ¹	Forrest	F (2)	3,257
South Central Regional Medical Center	Jones	M	606
Merit Health Wesley	Lamar	M	94
General Hospital Service Area 9			1,927
Merit Health Biloxi	Harrison	M	130
Garden Park Medical Center	Harrison	M	75
Memorial Hospital at Gulfport	Harrison	F	1,001
Ocean Springs Hospital	Jackson	M	345
Singing River Hospital	Jackson	M	376
State Total			16,031

Note: ¹ Indicates freestanding clinics.

*Baptist Medical Center- Attala is CON approved for a mobile PET but did not utilize the service in 2016.

Sources: Applications for Renewal of Hospital License for Calendar Years 2015; Fiscal Year 2016 Annual Hospital Report; FY 2017 PET Utilization Survey

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

Note: Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

512.01.01 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 CON 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 has not provided the service on a regular basis within the last twelve (12) months must obtain a CON before providing such services, regardless of the capital expenditure.
2. CON Approval Preference: MSDH 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 twelve (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: 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 State Data Center (University of Mississippi Center for Population Studies). 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 MSDH through the filing of a Determination of Non Reviewability 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.

512.01.02 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

MSDH will review applications for a CON 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. 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 MSDH; 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, regardless of the capital expenditure.

512.01.03 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of MRI Equipment

Need Criterion 1: Minimum Procedures/Population

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 twelve (12) month period and/or documented projections of physician referrals may be used.

Need Criterion 2: Equipment Requirements

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.

Need Criterion 3: Data Requirements

Applicants shall provide written assurance that they will record and maintain, at a minimum, the following information and make it available to MSDH:

- 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 fifteen (15) business days of request. The required information may also be requested for entities outside of Mississippi that use the MRI equipment in question.

Need Criterion 4: Business Registration

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

Need Criterion 5: CON Approval/Exemption for MRI Equipment

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 MSDH through a determination of reviewability. Each specified piece of equipment must be exempt from or have CON approval.

512.01.04 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.

Need Criterion 1: Minimum Procedures/Population

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.

Need Criterion 2: Availability of Diagnostic Imaging Modalities

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.

Need Criterion 3: Non-Discrimination

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 nor procedures which would exclude patients because of race, color, age, sex, ethnicity, or ability to pay.

Need Criterion 4: Staffing Requirements

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.

Need Criterion 5: Experimental Procedures

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.

Need Criterion 6: Data Requirements

The applicant shall provide assurances that the following data regarding its use of the MRI equipment will be kept and made available to MSDH 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.

Need Criterion 7: CON Approval/Exemption for MRI Equipment

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 through a determination of non-reviewability. Each specified piece of equipment must be exempt from or have CON approval.

512.01.05 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

513 Certificate of Need Criteria and Standards for Diagnostic and Therapeutic Imaging Services

Note: Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

513.01 Digital Angiography Equipment and Services

513.01.01 Policy Statement Regarding Certificate of Need Applications for the Acquisition or Control of Digital Angiography Equipment and/or the Offering of Invasive Digital Angiography Services

1. Digital Angiography Equipment and Services in Ambulatory Surgery Centers: Applicants proposing the acquisition or otherwise control of Digital Angiography equipment and/or the offering of invasive digital angiography services in a single specialty ambulatory surgery center must apply for a certificate of need before providing such services.

513.01.02 Certificate of Need Criteria and Standards for Invasive Digital Angiography in a Hospital

MSDH will review applications for a CON for the acquisition or otherwise control of Digital Angiography (DA) 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. 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 MSDH; and the specific criteria and standards listed below.

CON review is required when the capital expenditure for the purchase of Digital 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 and therapeutic intravascular intervention 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 regardless of the capital expenditure.

Need Criterion 1: Staffing Requirements

The applicant for invasive DA services shall demonstrate that proper protocols for screening 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 backup.

The protocols shall include, but are not limited to, having prior arrangements for 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, cardiologist, radiologist or nephrologist credentialed and accredited for interventional peripheral vascular procedures.

Need Criterion 2: CON Exemption

Before utilizing or providing the equipment or service, the applicant desiring to provide the digital angiography equipment or invasive DA services shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by MSDH through a determination of reviewability.

513.01.03 Certificate of Need Criteria and Standards for Invasive Digital Angiography (DA) in a Freestanding Facility

Need Criterion 1: Staffing Requirements

- a. The applicant for invasive DA services shall demonstrate that proper protocols for screening and medical specialty backup are in place before services are rendered by personnel other than those with specialized training. The protocols shall include, but are not limited to, having prior arrangements for consultation/backup from a vascular surgeon, cardiologist, radiologist or nephrologist credentialed and accredited for interventional peripheral vascular procedures.
- b. Identify physicians in the group and state which physicians(s) will perform intravascular interventions using DA. Certify that:
 - i. Each physician will maintain medical staff privileges at a full service hospital; or
 - ii. At least one member of the physician group has staff privileges at a full service hospital and will be available at the facility or on call within a 30-minute travel time of the full service hospital during the hours of operation of the facility.

Need Criterion 2: Types of Procedures

- a. Procedures in a freestanding facility are generally non-emergent nor life threatening in nature and require a patient stay of less than 24 consecutive hours. The procedures shall not be of a type that:
 - i. Generally result in blood loss of more than ten percent of estimated blood volume in a patient with a normal hemoglobin;
 - ii. Require major or prolonged intracranial, intrathoracic, abdominal, or major joint replacement procedures, except for laparoscopic procedures; or
 - iii. Involve major blood vessels.
 - 1. Major blood vessels are defined as the group of critical arteries and veins including the aorta, coronary arteries, pulmonary arteries, superior and

inferior vena cava, pulmonary veins, carotid arteries, and any intracerebral artery or vein.

2. Percutaneous endovascular interventions of the peripheral vessels not excluded in a.iii.1. above are permitted to be performed in a freestanding facility. These procedures are defined as procedures performed without open direct visualization of the target vessel, requiring only needle puncture of an artery or vein followed by insertion of catheters, wires, or similar devices which are then advanced through the blood vessels using imaging guidance. Once the catheter reaches the intended location, various maneuvers to address the diseased area may be performed which include, but are not limited to, injection of contrast for imaging, ultrasound of the vessel, treatment of vessels with angioplasty, artherectomy, covered or uncovered stenting, intentional occlusion of vessels or organs (embolization), and delivering of medications, radiation, or other energy such as laser, radiofrequency, or cryo.

Need Criterion 3: Transfer Agreement

The applicant must certify that the proposed facility will have a formal transfer agreement with a full service hospital to provide services which are required beyond the scope of the freestanding facility's programs.

Need Criterion 4: CON Exemption

Before utilizing or providing the equipment or service, the applicant desiring to provide the digital angiography equipment or invasive DA services shall have CON approval or written evidence that the equipment or service is exempt from CON approval as determined by MSDH through a determination of reviewability.

513.02 Positron Emission Tomography (PET) Equipment and Services

513.02.01 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 1 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. MSDH will consider out-of-state population in determining need only when the applicant submits adequate documentation acceptable to

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 units 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 operations 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: MSDH may approve applicants proposing to enter 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 and complies with the teaching exception as outlined in section 102.02 of this Plan. 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. 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 MSDH by submitting a determination of reviewability for any proposed changes from those presented in the CON 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.

513.02.02 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

MSDH 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. 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 MSDH; 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, regardless of the capital expenditure.

Need Criterion 1: Minimum Procedures/Population

- 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.

Need Criterion 2: Business Registration

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

Need Criterion 3: Approval of Additional PET Equipment

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.

Need Criterion 4: Division of Radiological Health Approval

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.

Need Criterion 5: Data Requirements

The applicant shall provide assurances that the following data regarding the PET equipment will be kept and made available to MSDH 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.

Need Criterion 6: Fixed/Minimum Value Contracts

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.

Need Criterion 7: CON Approval/Exemption for PET Equipment

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 MSDH. Each specified piece of equipment must be exempt from or have CON approval.

513.02.03 Certificate of Need Criteria and Standards for 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.

Need Criterion 1: Minimum Procedures

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.

Need Criterion 2: PET Equipment Utilized by Multiple Providers

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.

Need Criterion 3: Quality Control and Environmental Requirements

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.

Need Criterion 4: Division of Radiological Health Approval

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.

Need Criterion 5: Provision of On-Site Medical Cyclotron

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.

Need Criterion 6: Staffing Requirements

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 CON 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.

Need Criterion 7: Management of Medical Emergencies

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

Need Criterion 8: Accommodating Referred Patients

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.

Need Criterion 9: Medical Necessity

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.

Need Criterion 10: Notification of Procedures Offered

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

Need Criterion 11: Data Requirements

The applicant shall provide assurances that the following data regarding the PET service will be kept and made available to MSDH 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.

Need Criterion 12: CON Approval/Exemption for PET Equipment

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 MSDH through a determination of reviewability. Each specified piece of equipment must be exempt from or have CON approval.

514 Cardiac Catheterization

Cardiac catheterization is an integral part of cardiac evaluation and 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 patients are not catheterized in the facility. Additionally, a facility without open-heart surgery capability must document that more complex procedures, except for percutaneous coronary interventions (PCI) as provided herein, are not performed in the facility. Such procedures include, but are not limited to: transseptal puncture, transthoracic left ventricular puncture, myocardial biopsy, trans catheter aortic valve replacement (TAVR), and left atrial occlusion devices.

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 5-8 presents the utilization of cardiac catheterization services in Fiscal Years 2015 and 2016.

Table 5-8
Cardiac Catheterizations by Facility and Type
by Cardiac Catheterization/Open Heart Planning Area (CC/OHSPA)
FY 2015 and FY 2016

Facility	County	Total Adult Procedures		Total Pediatric Procedures		Total PTCA Procedures	
		2015	2016	2015	2016	2015	2016
CC/OHSPA 1		2,092	2,497	0	0	872	1,154
Baptist Memorial Hospital-DeSoto	DeSoto	2,060	2,226	0	0	870	767
Methodist Healthcare Olive Branch Hospital	DeSoto	32	271	0	0	2	387
CC/OHSPA 2		6,545	6,464	0	0	464	386
Magnolia Regional Health Center	Alcorn	3,285	2,949	0	0	99	73
North Mississippi Medical Center	Lee	3,260	3,515	0	0	365	313
North Mississippi State Hospital*	Lee	0	0	0	0	0	0
CC/OHSPA 3		1,242	1,138	0	0	143	152
Allegiance Specialty Hospital of Greenville	Washington	0	0	0	0	0	0
Delta Regional Medical Center	Washington	752	780	0	0	143	152
Greenwood Leflore Hospital*	LeFlore	95	75	0	0	0	0
Northwest Mississippi Medical Center*	Coahoma	395	283	0	0	0	0
CC/OHSPA 4		2,394	2,634	0	0	749	748
Baptist Memorial Hospital-Golden Triangle	Lowndes	1,118	1,225	0	0	311	359
Baptist Memorial Hospital-N. Mississippi	Lafayette	1,167	1,266	0	0	438	389
UMMC Grenada*	Grenada	109	143	0	0	0	0
CC/OHSPA 5		24,302	20,046	1,573	1,895	2,937	3,446
Merit Health Central	Hinds	668	668	0	0	149	149
Merit Health River Oaks*	Rankin	0	0	0	0	125	125
Mississippi Baptist Medical Center	Hinds	4,275	4,449	0	0	1,259	1,367
Merit Health River Region	Warren	2,023	808	0	0	273	0
Promise Hospital of Vicksburg	Warren	0	0	0	0	0	0
Select Specialty Hospital- Belhaven, LLC	Hinds	0	0	0	0	0	0
Select Specialty Hospital - Jackson	Hinds	0	0	0	0	0	0
St. Dominic-Jackson Memorial Hospital	Hinds	10,052	11,596	0	0	911	782
University of MS Medical Center	Hinds	7,284	2,525	1,573	1,895	220	1,023
CC/OHSPA 6		932	845	0	0	10	8
Anderson Regional Medical Center	Lauderdale	0	0	0	0	0	0
Anderson Regional Medical Center -South*	Lauderdale	0	0	0	0	0	0
Rush Foundation Hospital	Lauderdale	932	845	0	0	10	8
CC/OHSPA 7		949	811	0	0	34	22
Merit Health Natchez*	Adams	0	0	0	0	0	0
SW Miss Regional Medical Center	Pike	949	811	0	0	34	22
CC/OHSPA 8		3,968	5,177	0	0	1,363	1,689
Forrest General Hospital	Forrest	2,716	3,413	0	0	1,058	1,226
Regency Hospital of Hattiesburg*	Forrest	0	0	0	0	0	0
South Central Regional Medical Center*	Jones	0	564	0	0	0	0
Merit Health Wesley	Lamar	1,252	1,200	0	0	305	463
CC/OHSPA 9		5,092	4,878	0	0	2,621	2,382
Merit Health Biloxi*	Harrison	50	15	0	0	0	0
Memorial Hospital at Gulfport	Harrison	2,679	2,744	0	0	1,112	1,074
Ocean Springs Hospital	Jackson	1,382	1,250	0	0	940	816
Select Specialty Hospital-Gulf Coast	Harrison	0	0	0	0	0	0
Singing River Hospital	Jackson	981	869	0	0	569	492
State Total		47,581	44,490	1,573	1,895	9,193	9,987

* Diagnostic Catheterization Only

Source: Applications for Renewal of Hospital License for Calendar Year 2015/2016; FY 2016/2017 Annual Hospital Report

515 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 Manual* and all adopted rules, procedures, and plans of the Mississippi State Department of Health.

515.01 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/or 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. However, it should be noted that the State has seen a decrease in mortality rates in the last few years. From 2004 to 2013, the mortality rate for African American women decreased by 25% per 100,000 and the total mortality rate decreased by 19.6% per 100,000. 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.

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. 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.

MSDH shall interpret and implement all standards in this Plan in recognition of the stated findings and so as to achieve the stated goal.

515.02 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 three levels of cardiac catheterization services an applicant may provide: diagnostic cardiac catheterization services, percutaneous coronary intervention (PCI) in a hospital without on-site cardiac surgery, or 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. Percutaneous coronary intervention (PCI) services in a hospital without on-site cardiac surgery are defined as, and refer to, those therapeutic cardiac catheterization services involving primary and elective PCIs but not involving transseptal puncture, transthoracic left ventricular puncture, myocardial biopsy, and any other procedure that is currently defined as a structural heart disease procedure.
 - c. 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, myocardial biopsy, and any procedure that is currently defined as a structural heart disease procedure.
2. Open-Heart Surgery Capability: 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. This policy also does not preclude approval of a Certificate of Need application to perform percutaneous coronary intervention (PCI) services in a hospital without on-site cardiac surgery or in a Cardiac Ambulatory Surgical Facility as defined in 515.06.
3. Service Areas: The State has 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. 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.

5. Present Utilization of Cardiac Catheterization Equipment/Services: 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. 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. MSDH may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.
6. Minimum Caseload: Applicants for a diagnostic cardiac catheterization Certificate of Need must be able to project a caseload of at least 300 diagnostic catheterizations per year per year by the end of the third year of operation. Applicants for a therapeutic cardiac catheterization Certificate of Need must be able to project a caseload of at least 450 catheterizations, diagnostic and therapeutic, per year by the end of the third year of operation. Applicant for a Certificate of Need to provide PCI services in a hospital without on-site cardiac surgery must be able to project a caseload of at least 300 catheterizations, diagnostic and PCI, with at least 100 being PCIs, per year by the end of the third year of operation.
7. 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.
8. Hospital-Based: All cardiac catheterizations and open-heart surgery services shall be located in acute care hospitals or in a Cardiac Ambulatory Surgical Facility, subject to the policy statements and need criteria and standards set forth in Sections 515.06 and 515.07 of this State Health Plan. ~~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.~~
9. Conversion of Existing Therapeutic Cardiac Catheterization Services to PCI Services in a Hospital without On-Site Cardiac Surgery Capabilities: A hospital currently providing therapeutic cardiac catheterization services may convert their cardiac catheterization program to provide PCI services in the hospital without on-site cardiac surgery capability without certificate of need review; provided, however, that the facility shall submit an application for determination of non-reviewability prior to eliminating on-site cardiac surgery. The hospital must attest in the application for determination of non-reviewability that it will meet the CON criteria and standards as set out in Rule 515.04 of this *Plan*. If, at any time, the hospital goes 12 consecutive months of providing PCI services without on-site cardiac surgery, the hospital wants to convert back to a therapeutic cardiac catheterization program, the hospital must submit a certificate of need application for review.

515.03 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. 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, regardless of the capital expenditure.

Need Criterion 1: 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.

Need Criterion 2: 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.

Need Criterion 3: 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.

Need Criterion 4: 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.

Need Criterion 5: 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 patients are not catheterized in the facility, and (b) certify that therapeutic cardiac catheterization services and/or PCI

services in a hospital without on-site cardiac surgery will not be performed in the facility unless and until the applicant has received CON approval to provide said services.

Need Criterion 6: 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.

515.04 Certificate of Need Criteria and Standards for the Acquisition or Otherwise Control of Therapeutic Cardiac Catheterization Equipment for the Performance of PCI Services in a Hospital Without On-Site Cardiac Surgery and/or the Offering Of PCI Services in a Hospital Without On-Site Cardiac Surgery

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 for the performance or offering of PCI services in a hospital without on-site cardiac surgery under the applicable statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code of 1972, as amended. 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 for the performance of PCI services in a hospital without on-site cardiac surgery is reviewable if the equipment costs exceed \$1,500,000. The offering of PCI services in a hospital without on-site cardiac surgery 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, regardless of the capital expenditure.

Need Criterion 1: Minimum Procedures

An applicant proposing the establishment of PCI services in a hospital without on-site cardiac surgery shall demonstrate that the proposed equipment/service utilization will be a minimum of 300 cardiac catheterizations, both diagnostic and PCI, with at least 100 being total PCIs, per year by its third year of operation. Applicants must certify they will submit volume data to demonstrate and verify the utilization of the service at a minimum of every three (3) years.

Need Criterion 2: Staffing Requirements

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.

Need Criterion 3: Staff Residency

The applicant shall certify that medical staff performing PCI procedures shall be onsite within thirty (30) minutes.

Need Criterion 4: Recording and Maintenance of Data

In addition to the certification in Need Criterion 1, applicants shall provide, as required under licensure standards, written assurance that they will record and maintain separate utilization data for diagnostic and PCI catheterization procedures (e.g., morbidity data, number of diagnostic cardiac catheterization and PCI 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.

Need Criterion 5: Open-Heart Surgery

An applicant proposing the establishment of PCI services without on-site cardiac surgery shall:

- a. Document that open-heart surgery services will be available through a formal emergency transfer agreement to a hospital providing open heart surgery. Such transfer must be done at a minimum of less than 120 minutes to accomplish transfer from the onset of PCI complications to cardiopulmonary bypass. Transporting of the patient to the receiving hospital must include the capability to provide an intra-aortic balloon pump (IABP).
- b. Programs must project and annually perform a minimum of 100 total PCIs per year to include at a minimum 12 primary PCIs per year by the end of the third year of operation. New programs should have three years to reach the absolute minimum volume, but after that, programs failing to reach this volume for two consecutive years should not remain open. MSDH has the discretion under a finding of rare or unique circumstances to grant an exception to the above based on a finding of need of access and quality of care by the program.
- c. Certify that the proposed primary operators for the service have a life-time experience of greater than 150 total PCIs with acceptable outcomes as primary operator after completing a cardiology fellowship. Successful completion of an Interventional Cardiology fellowship is considered adequate certification.
- d. New and Existing Programs must actively participate in the STEMI (“ST”-Segment Elevation Myocardial Infarction) Network, including, but not limited to, the submission of data to the STEMI databank.
- e. At the present time, 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.
- f. Certify that the Applicant will provide educational programs to underserved patient populations (low income, racial and ethnic minorities, women, Medicaid eligible, and handicapped persons) with the goal of decreasing cardiac mortality rates in such populations.
- g. Certify that the applicant will provide a reasonable amount of charity care.
- h. Certify that the applicant will hold monthly multi-disciplinary meetings to evaluate patient outcomes, review quality improvement data, and to identify and implement solutions for any operational issues.

- i. Certify that the following guideline from the Society of Cardiovascular Angiography and Interventions (SCAI)-ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention or such sections' update(s), if applicable, at the time of filing the certificate of need application will be met:
 - (i) Certify the applicant will have available in the catheterization lab the equipment in Section 4.1.1 entitled "Equipment" and that such will be routinely tested;
 - (ii) Certify the availability of adequate staff in the catheterization lab as set forth in Section 4.1.2 entitled "Staffing" and that such staff will be certified on both basic life support and advanced cardiovascular life support;
 - (iii) Certify that "time-out" procedures will be implemented as discussed in Section 4.1.3 entitled "'Time-Out' Procedures"; and
 - (iv) Certify that the applicant will operate a quality improvement program and participate in a national PCI registry as discussed in Section 7.1 entitled "Quality Performance: Recommendations"

Need Criterion 6: Applicants for PCI Services in a Hospital without On-Site Cardiac Surgery Capabilities Currently Providing Diagnostic Catheterization Services

In addition to Need Criteria 1-5, an applicant proposing the establishment of PCI services in a hospital without open heart surgery capabilities, 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 or that its primary operators for the service have a life-time experience of greater than 250 total procedures (including both diagnostic catheterizations and PCIs) with acceptable outcomes after completing a cardiology fellowship. Successful completion of an Interventional Cardiology fellowship is considered adequate certification.

Need Criterion 7: 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.

515.05 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. 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.

Need Criterion 1: Minimum Procedures:

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, of which at least 100 should be PCIs, per year by its third year of operation.

Need Criterion 2: 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.

Need Criterion 3: Staff Residency

The applicant shall certify that medical staff performing therapeutic cardiac catheterization procedures shall be onsite within thirty (30) minutes.

Need Criterion 4: Recording and Maintenance of Data

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.

Need Criterion 5: Open-Heart Surgery

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.

Need Criterion 6: 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.

Need Criterion 7: Applicants for Therapeutic Cardiac Catheterization Currently Providing Diagnostic Catheterization Services or PCI Services in a Hospital without On-Site Cardiac Surgery

In addition to Need Criteria 1-6, an applicant proposing the establishment of therapeutic cardiac catheterization services, who is already an existing provider of diagnostic catheterization services and/or PCI services in a hospital without on-site cardiac surgery, shall demonstrate that it has provided a minimum of 300 procedures (including both diagnostic catheterizations and PCIs) 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.

515.06 Policy Statement Regarding Certificate of Need Applications for the Establishment of Cardiac Ambulatory Surgical Facilities

1. Definitions. For purposes of this Policy Statement and the Certificate of Need Criteria and Standards for the Establishment of Cardiac Ambulatory Surgical Facilities, the following definitions shall apply.
 - a. “Cardiac Ambulatory Surgical Facility (CASF)” means an ambulatory surgical facility which is established and operated for the purpose of providing cardiac catheterization procedures. A JV-CASF (as defined below) is a type of CASF.
 - b. “Joint Venture Cardiac Ambulatory Surgical Facility (JV-CASF)” means a CASF which is jointly owned by (i) an acute care hospital which offers cardiac catheterization services and PCI services, and (ii) one or more cardiologists who are licensed to practice medicine by the Mississippi State Board of Medical Licensure, or a group practice comprised of such cardiologists.
2. Offering of Cardiac Catheterization Services. Cardiac catheterization services may be performed only in (a) an acute care hospital, (b) a hospital-owned CASF, or (c) a JV-CASF. Exception: The MSDH may consider an application for a CASF which does not have hospital ownership if the applicant obtains and provides to MSDH a written letter of support for the proposed project from all acute care hospitals which offer cardiac catheterization services and/or PCI services and are located within a 25-mile radius of the proposed facility. A CASF must maintain appropriate third-party accreditation. A CASF must be located within twenty-five (25) miles of an acute care hospital that provides cardiac catheterization services and PCI services. In order to encourage local ownership and operation of joint ventures and CASFs, a CASF with hospital ownership must be located within a 25-mile radius of the main campus of the acute care hospital that has an ownership interest in the JV-CASF and/or the hospital-owned CASF.
3. Types of Procedures. A CASF or JV-CASF may perform only those cardiac catheterization procedures which have been approved by the federal Centers for Medicare and Medicaid Services (“CMS”) in an ambulatory surgical center. Primary (i.e., acute infarct) PCIs shall not be performed in a CASF.
4. Multispecialty and Single-Specialty Ambulatory Surgical Facilities. Cardiac catheterization procedures may be performed in a multispecialty ambulatory surgical facility, or in a single-specialty ambulatory surgical facility if they meet the need criteria and standards for the establishment of a CASF (as set forth in Policy Statement 2). The multispecialty ambulatory surgical facility or single-specialty ambulatory surgical facility which proposes to offer cardiac catheterization services and which does not have hospital ownership must be located within twenty-five (25) miles of an acute care hospital that provides cardiac catheterization services and PCI services. The MSDH may consider an application to offer cardiac catheterization services by a multispecialty ambulatory surgical facility or a single-specialty ambulatory surgical facility which does not have hospital ownership if the applicant obtains and provides to the MSDH a written letter of support for the proposed project from all hospitals which offer cardiac catheterization services and PCI services and are located within a 25-mile radius of the proposed project.
5. CON-Exempt Single-Specialty CASFs Prohibited. The MSDH shall not grant any determination of reviewability that exempts a single-specialty cardiac ambulatory surgical facility from certificate of need review. All single-specialty CASFs must obtain a certificate of need from the MSDH prior to the commencement of operations or services.

6. Application of Policy Statement. In reviewing CON applications for the establishment of a CASF, the MSDH shall apply the policies set forth in Section 515.02 of this State Health Plan (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).

515.07 Certificate of Need Criteria and Standards for the Establishment of Cardiac Ambulatory Surgical Facilities

The Mississippi State Department of Health will review applications for a Certificate of Need for the establishment of Cardiac Ambulatory Surgical Facilities (CASFs and JV-CASFs) under the applicable statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code of 1972, as amended. 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.

Need Criterion 1: Minimum Procedures

An applicant proposing the establishment of a CASF shall demonstrate that the proposed service utilization will be a minimum of 300 cardiac catheterization procedures, diagnostic and therapeutic, per year, by the third year of operation. Applicants must certify they will submit volume data to demonstrate and verify the utilization of the service at a minimum of every three (3) years.

Need Criterion 2: Minimum Population

The applicant must document that the proposed Cardiac Catheterization/Open-Heart Surgery Planning Area (Map 5-2) has a population base of at least 60,000 within thirty (30) minutes travel time of the facility.

Need Criterion 3: Minimum Number of Procedure Rooms

All CASFs shall establish and have available for service no fewer than two (2) procedure rooms used exclusively for cardiac catheterization and PCI services.

Need Criterion 4: Financial Feasibility

The applicant must provide documentation that the CASF will be economically viable within two (2) years of commencement of services.

Need Criterion 5: Letters of Support

The applicant must show support from the cardiologists who will be expected to utilize the CASF.

Need Criterion 6: 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. The applicant shall also certify that all cardiologists and providers who perform cardiac catheterization and/or PCI procedures in the CASF will maintain active medical staff and clinical privileges at an acute care hospital with which the facility has a formal emergency transfer agreement (as required by Need Criterion 8).

Need Criterion 7: Recording and Maintenance of Data

In addition to the certification in Need Criterion 1, applicants shall provide, as required under licensure standards, written assurance that they will record and maintain separate utilization

data for diagnostic cardiac catheterization and PCI procedures (e.g., morbidity data, number of diagnostic cardiac catheterization and PCI 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.

Need Criterion 8: Service Specific

An applicant proposing the establishment of a CASF shall:

- a. Document that open-heart surgery services will be available through a formal emergency transfer agreement to a hospital providing open heart surgery. Such transfer must be done at a minimum of less than 120 minutes to accomplish transfer from the onset of PCI complications to cardiopulmonary bypass. Transporting of the patient to the receiving hospital must include the capability to provide a ventricular support device, such as an intra-aortic balloon pump (IABP), or an Impella.
- b. Certify that the proposed primary operators performing PCI's have a life time experience of greater than 150 total PCIs with acceptable outcomes as primary operator after completing a cardiology fellowship. Successful completion of an Interventional Cardiology fellowship is considered adequate certification.
- c. The CASF shall participate in and submit quality data to the appropriate cardiac catheterization registries.
- d. Certify that the applicant will hold quarterly multi-disciplinary meetings to evaluate patient outcomes, review quality improvement data, and to identify and implement solutions for any operational issues.
- e. Certify that the following guideline from the Society of Cardiovascular Angiography and Interventions (SCAI)-ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention or such sections' update(s), if applicable, at the time of filing the certificate of need application will be met:
 - i. Certify the applicant will have available in the catheterization lab the equipment in Section 4.1.1 entitled "Equipment" and that such will be routinely tested;
 - ii. Certify the availability of adequate staff in the catheterization lab as set forth in Section 4.1.2 entitled "Staffing" and that such staff will be certified on both basic life support and advanced cardiovascular life support;
 - iii. Certify that "time-out" procedures will be implemented as discussed in Section 4.1.3 entitled "'Time-Out' Procedures"; and
 - iv. Certify that the applicant will operate a quality improvement program and participate in a national PCI registry as discussed in Section 7.1 entitled "Quality Performance: Recommendations"

Need Criterion 9: Medicaid Participation

All CASFs shall participate in the Mississippi Medicaid program.

Need Criterion 10: Indigent/Charity Care

The applicant shall certify that the CASF will provide Medicaid and indigent/charity care, including care to underinsured patients, of no less than five percent (5%) of the total volume of procedures performed at the CASF. Each approved facility shall report the total volume of indigent/charity care to the MSDH Office of Health Policy and Planning annually and shall publish their indigent/charity care policy to their facility website.

Need Criterion 11: Regulatory Approval

Before utilizing the equipment or providing the service, the applicant desiring to establish a CASF 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.

516 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 twelve (12) months prior to the time the services would be offered.

Table 5-9 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 5-9
Number of Open-Heart Surgeries by Facility and Type
By Cardiac Catheterization/Open Heart Surgery Planning Area (CC/OHSPA)
FY 2015 and FY 2016**

Facility	County	Number of Adult Open-Heart Procedures		Number of Pediatric Open-Heart Procedures	
		2015	2016	2015	2016
CC/OHSPA 1		247	262	1	1
Baptist Memorial Hospital - DeSoto	DeSoto	246	261	0	0
Methodist Healthcare Olive Branch Hospital	DeSoto	1	1	1	1
CC/OHSPA 2		789	848	0	4
Magnolia Regional Medical Center	Alcorn	162	141	0	0
North MS Medical Center	Lee	627	707	0	4
CC/OHSPA 3		4	4	4	4
Delta Regional Medical Center-Main Campus	Washington	4	4	4	4
CC/OHSPA 4		51	43	4	4
Baptist Memorial Hospital-Golden Triangle	Lowndes	50	42	0	0
Baptist Memorial Hospital-North Mississippi	Lafayette	1	1	4	4
CC/OHSPA 5		670	653	237	371
Merit Health Central	Hinds	65	46	0	0
MS Baptist Medical Center	Hinds	1	1	4	4
Merit Health River Region	Warren	65	50	4	4
Promise Hospital of Vicksburg	Warren	3	3	4	4
Select Specialty Hospital- Belhaven, LLC	Hinds	2	0	4	0
Select Specialty Hospital- Jackson	Hinds	0	0	0	0
St. Dominic Hospital	Hinds	311	338	0	0
University of MS Medical Center	Hinds	223	215	221	359
CC/OHSPA 6		145	195	4	4
Anderson Regional Medical Center	Lauderdale	102	142	4	4
Rush Foundation Hospital	Lauderdale	43	53	0	0
The Specialty Hospital of Meridian	Lauderdale	0	0	0	0
CC/OHSPA 7		1	1	4	4
Southwest MS Regional Med. Center	Pike	1	1	4	4
CC/OHSPA 8		530	467	0	0
Forrest General Hospital	Forrest	530	467	0	0
Merit Health Wesley	Lamar	0	0	0	0
CC/OHSPA 9		375	358	0	4
Memorial Hospital at Gulfport	Harrison	186	169	0	4
Ocean Springs Hospital	Jackson	151	151	0	0
Select Specialty Hospital - Gulf Coast	Harrison	0	0	0	0
Singing River Hospital	Jackson	38	38	0	0
State Total		2,812	2,831	254	392

Source: Applications for Renewal of Hospital License for Calendar Year 2015/2016; FY 2016/2017 Annual Hospital Report

516.01 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: MSDH 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. 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. MSDH 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, MSDH 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 MSDH, 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.

516.02 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

MSDH will review applications for a CON 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. 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 MSDH; 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, regardless of the capital expenditure.

Need Criterion 1: Minimum Population

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.

Need Criterion 2: Minimum Procedures

The applicant shall demonstrate that it will perform a minimum of 150 open-heart surgeries per year by its third year of operation.

Need Criterion 3: Impact on Existing Providers:

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 forty-five (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 MSDH. 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. MSDH may collect and consider any additional information it deems essential, including information regarding access to care, to render a decision regarding any application.

Need Criterion 4: Staffing Requirements

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. MSDH 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.

Need Criterion 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.

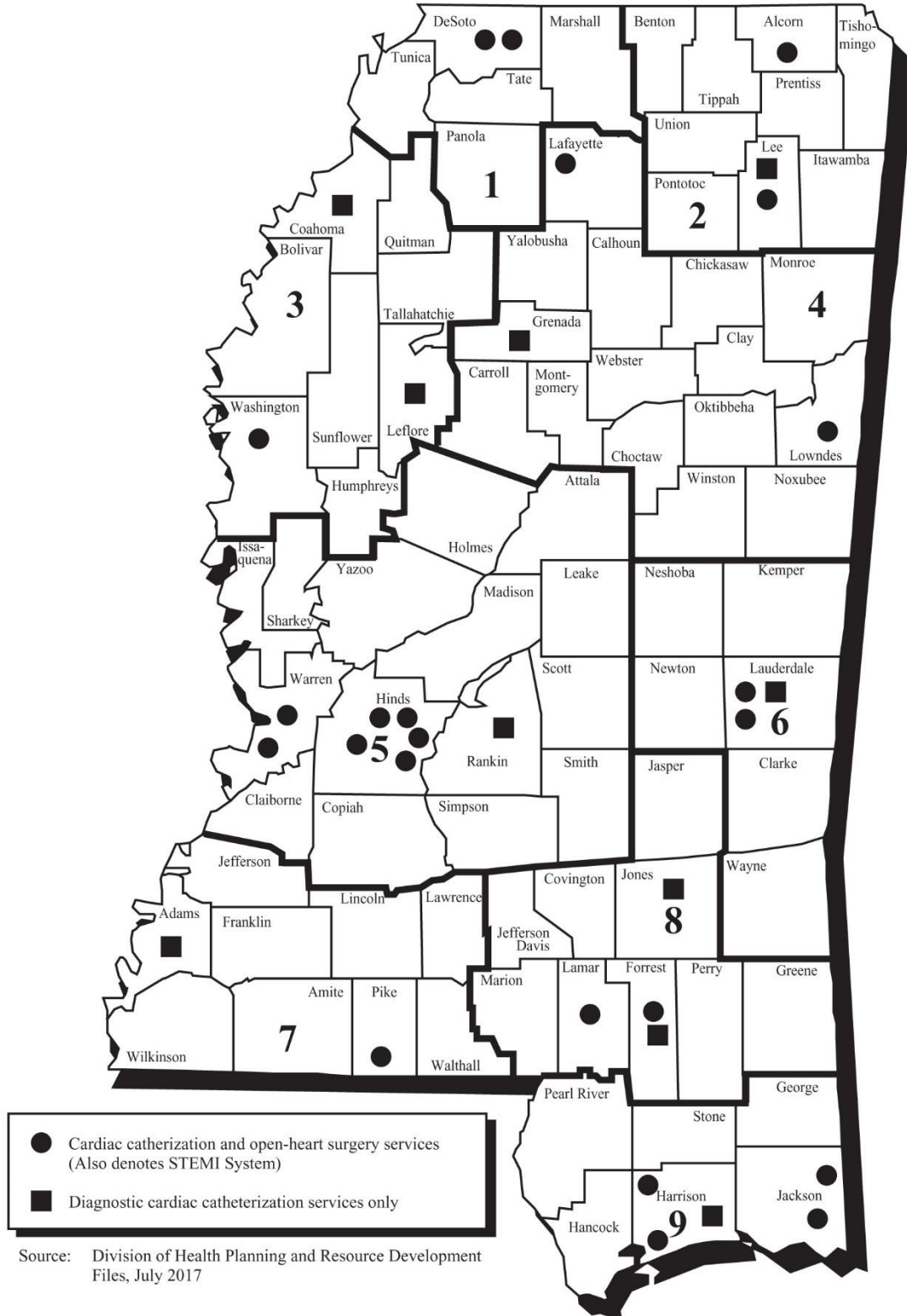
Need Criterion 6: Data Requirements

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 MSDH annually.

Need Criterion 7: CON Approval/Exemption for Open-Heart Surgery Equipment/Service

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 MSDH through a determination of reviewability. Each specified piece of equipment must be exempt from or have CON approval.

Map 5-2
Cardiac Catheterization/Open-Heart Surgery
Planning Areas (CC/OHSPA)
and Location of Existing/CON-Approved Services



517 Systems of Care

There are three systems of care: the Trauma Care System, the ST-Elevation Myocardial Infarction (STEMI) System, and the Stroke System. Mississippi is one of only six states that has multiple acute systems of care, and is the only state that has statewide systems for trauma, STEMI, and stroke.

Each system of care has five key components: an organizational structure, protocols for the transport and transfer of patients, an advisory group process, a performance/quality improvement process, and a data collection system. These components work together to accomplish the ultimate goal of the systems – to deliver the right patient to the right hospital the first time, an approach shown to improve outcomes.

518 Emergency Medical Services

In Mississippi, the Emergency Medical Services (EMS) system is extraordinary in that ninety-nine percent (99%) of the state's population is covered by paramedic level agencies. EMS provides services not only to certified prehospital personnel but also provides the highest standards of prehospital healthcare to the citizens and visitors of Mississippi ensuring, patients are delivered to the right hospital the first time.

518.01 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 MSDH, 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 in response to disasters. This includes 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.

518.02 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 Off Line Medical Control. The physician oversees the care of patients in EMS systems and is knowledgeable about out-of-hospital patient care interventions and delivery systems. Typically the physicians work in conjunction with local EMS managers to assure quality patient care. EMS may be provided by a fire department, a private ambulance service, a county or government-based service, a hospital-based

service, or a combination of the above. EMS professionals may be paid or serve as volunteers in the community.

518.03 Advisory Group

In accordance with Miss. Code Ann. § 41-59-7, the Emergency Medical Services Advisory Council (EMSAC) was created, with membership appointed by the Governor.

518.04 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, and EMS practitioners.

518.05 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, 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. 153155

The system provides for:

- Data collection based upon the NHTSA V2.2.1 data set. Data will be migrated to the NHTSA V3.4 data set in FY2018.
- The aggregation of information from various units and services with the possibility of sharing secured data with other systems and agencies.
- Electronic transport of information to improve communications.
- Standard and ad hoc reporting for using data to support evidence based practices.
- 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.

519 Mississippi Trauma Care System

Trauma is the leading cause of death for all age groups in Mississippi from birth to age forty-four (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.

519.01 Organization

Miss. Code Ann. §41-59-5 (5), establishes MSDH as the lead agency to develop a uniform, non-fragmented, inclusive statewide Trauma Care System, that provides excellent patient care. Through the State Trauma Plan, MSDH has designated seven trauma care regions; each incorporated as a 501c-3 organization which contracts with MSDH to administer the plan within their respective region. The

State Trauma Plan includes the seven regional plans, 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 (House Bill 1405) in 2008, which required MSDH to develop regulations mandating all licensed acute-care facilities 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 to the Trauma Care Trust Fund. Each hospital’s capability to participate in the Trauma Care System is reviewed annually by their respective Trauma Care Region and MSDH, which determines the appropriate level of participation and any associated 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 surgical residency program, ongoing trauma research, and provide 24-hour trauma service. These hospitals provide a variety of other services to comprehensively care for trauma 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 I 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/trauma surgery and orthopedic surgery 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.

519.02 Protocols

The Trauma Care System has developed uniform trauma activation criteria for all hospitals participating in the system to ensure that patients receive appropriate care, regardless of locale. EMS Field Destination Guidelines, based on the Center for Disease Control (CDC) Field Triage Decision Scheme, provide for the transport of trauma patients to the most appropriate facility. The approved Trauma Activation Criteria, based on the publication *Resources for Optimal Care of the Injured Patient*, provide the criteria used by trauma center staff for trauma team activation.

519.03 Advisory Committee

In accordance with Miss. Code Ann. § 41-59-7, the Mississippi Trauma Advisory Committee (MTAC) was created as a committee of the Emergency Medical Services Advisory Council (EMSAC). This committee is comprised of members of EMSAC, appointed by the Governor. The committee acts as the advisory body for trauma care system development, and provides technical support to MSDH in all areas of trauma care system design, trauma standards, data collection and evaluation, continuous quality improvement, trauma care system funding, and evaluation of the trauma care system and trauma care programs.

519.04 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 MSDH Director of Health Protection. The committee is independent from MTAC and EMSAC. The PI Committee is chaired by the state Trauma System of Care Medical Director. Membership shall include, but may not be limited to, representatives from the following areas:

- Emergency Medicine
- 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
- Trauma Medical Directors from each Level I Trauma Center

The PI Committee establishes specific statewide performance measures. Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. MSDH Division of Trauma provides administrative support to the PI Committee and all meetings of the Committee, PI Committee meetings are by invitation only and are not open to the public.

519.05 Data System

There are four objectives of the trauma registry: performance improvement, enhanced hospital operations, injury prevention, and medical research. In July 2006, MSDH 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 and the registry for Traumatic Brain and Spinal Cord Injuries (TBI/SCI).

520 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.

520.01 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, Paramedics, on-line and off-line medical control physicians need to have a basic knowledge and awareness of the STEMI System Plan elements and system function. Specifically, this knowledge refers to the alert criteria (identification of a STEMI), and communication procedures.
- Hospital Component – Hospitals may participate in the STEMI System on a voluntary basis but must meet the criteria prescribed in the STEMI Standards to be designated as a STEMI Receiving or STEMI Referral Center.
- Program oversight is provided by MSDH's Bureau of Acute Care Systems.

Map 5-2 identifies those hospitals participating in the STEMI System.

520.02 Protocols

Standard treatment protocols for both STEMI Receiving Centers and STEMI Referral 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/>.

520.03 Advisory Group

The STEMI Advisory Committee meets quarterly. Membership is comprised of the following membership categories as prescribed by the STEMI System of Care Plan:

- Cardiology Co-Chairman
- Emergency Medicine Co-Chairman
- Emergency Medicine Representative – Northern Region
- Emergency Medicine Representative – Central Region
- Emergency Medicine Representative – Southern Region
- Emergency Nursing Representative – Northern Region
- Emergency Nursing Representative – Central Region
- Emergency Nursing Representative – Southern Region
- Hospital Administration Representative – Northern Region
- Hospital Administration Representative – Central Region
- Hospital Administration Representative – Southern Region
- Cardiology Representative – Northern Region
- Cardiology Representative – Central Region
- Cardiology Representative – Southern Region
- STEMI Nursing Representative – Northern Region
- STEMI Nursing Representative – Central Region
- STEMI Nursing Representative – Southern Region
- Southern Regional STEMI Coordinator
- Registry Representative – Northern Region
- Registry Representative – Central Region
- Registry Representative – Southern Region
- EMS Provider Representative – Northern Region
- EMS Provider Representative – Central Region
- EMS Provider Representative – Southern Region
- EMS Administration Representative – Northern Region
- EMS Administration Representative – Central Region
- EMS Administration Representative – Southern Region
- Northern Regional STEMI Coordinator
- Central Regional STEMI Coordinator
- Southern Regional STEMI Coordinator
- American Heart Association Representative

520.04 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 meets quarterly. Membership is comprised of the following:

- Cardiology Chair
- Emergency Medicine Vice Chair
- Cardiologist(one from each region)
- Emergency Department Physician (one from each region)
- Representative from each PCI hospital (minimum of one per region)
- Non-PCI hospital representative (minimum of one per region)
- EMS Representatives (minimum of three)

The PI Committee establishes specific system-wide performance measures. Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. The MSDH Bureau of Acute Care Systems provides administrative support to the PI Committee and all meetings of the Committee. PI committee meetings, are by invitation only, and are not open to the public.

520.05 Data System

The data system for the STEMI System of Care is the ACTION Registry-GWTG (Get With The Guidelines) system. 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.

521 Acute Ischemic Stroke System of Care

Mississippi ranks fourth in the nation in occurrence of death from the immediate and long-term effects of stroke. Moreover, stroke continues to be the fifth leading cause of death and a leading cause of disability in Mississippi. However, eighty-three percent (83%) of stroke occurrences in Calendar Year 2015 were potentially treatable ischemic strokes. The primary goal of the Mississippi Stroke System of Care is to get the patient suffering from a stroke to an appropriate hospital so that patients who are candidates for thrombolytic and interventional therapies may receive appropriate care in a timely manner. This approach is supported by research that shows early thrombolytics for ischemic stroke and interventional therapy for large vessel occlusion improve outcomes in patients suffering from these types of stroke. Therefore, the Stroke System of Care has focused on early recognition of strokes by educating individuals to call 911 when a stroke occurs, minimizing door to CT times and ensuring early administration of thrombolytics.

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 a rural facility in conjunction with input from a nurse 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 and Ship”) if needed for neurological, neurosurgical, or neuro-interventional support.

521.01 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) 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 MSDH’s Bureau of Acute Care Systems.

521.02 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 and 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 their delivery to a Stroke Ready hospital for diagnosis.

521.03 Advisory Group

The Stroke Advisory Committee meets quarterly. Membership is comprised of the following as prescribed in the Stroke System of Care Plan:

- Chairperson
- Emergency Medicine Representative – Northern Region
- Emergency Medicine Representative – Central Region
- Emergency Medicine Representative – Southern Region
- Emergency Nursing Representative – Northern Region
- Emergency Nursing Representative – Central Region
- Emergency Nursing Representative – Southern Region
- Hospital Administration Representative – Northern Region
- Hospital Administration Representative – Central Region
- Hospital Administration Representative – Southern Region
- Neurology Representative – Northern Region
- Neurology Representative – Central Region
- Neurology Representative – Southern Region
- Stroke Nursing Representative – Northern Region
- Stroke Nursing Representative – Central Region

- Stroke Nursing Representative – Southern Region
- Registry Representative – Northern Region
- Registry Representative – Central Region
- Registry Representative – Southern Region
- EMS Provider Representative – Northern Region
- EMS Provider Representative – Central Region
- EMS Provider Representative – Southern Region
- EMS Administration Representative – Northern Region
- EMS Administration Representative – Central Region
- EMS Administration Representative – Southern Region
- Northern Regional STROKE Coordinator
- Central Regional STROKE Coordinator
- Southern Regional STROKE Coordinator
- American Heart Association Representative

521.04 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 meets quarterly and is appointed by the State Health Officer. Membership is comprised of the following:

- Neurology Chair
- Emergency Medicine Vice Chair
- Neurologist (one from each region)
- One Emergency Department Physician (one from each region)
- Representative from each stroke participating hospital (minimum of one per region)
- EMS representative (minimum of three)

Subject Matter Experts (SME) participate in committee activities appropriate to their expertise. The MSDH Bureau of Acute Care Systems provides administrative support to the PI Committee and all meetings of the Committee. PI Committee meetings are by invitation only and are not open to the public.

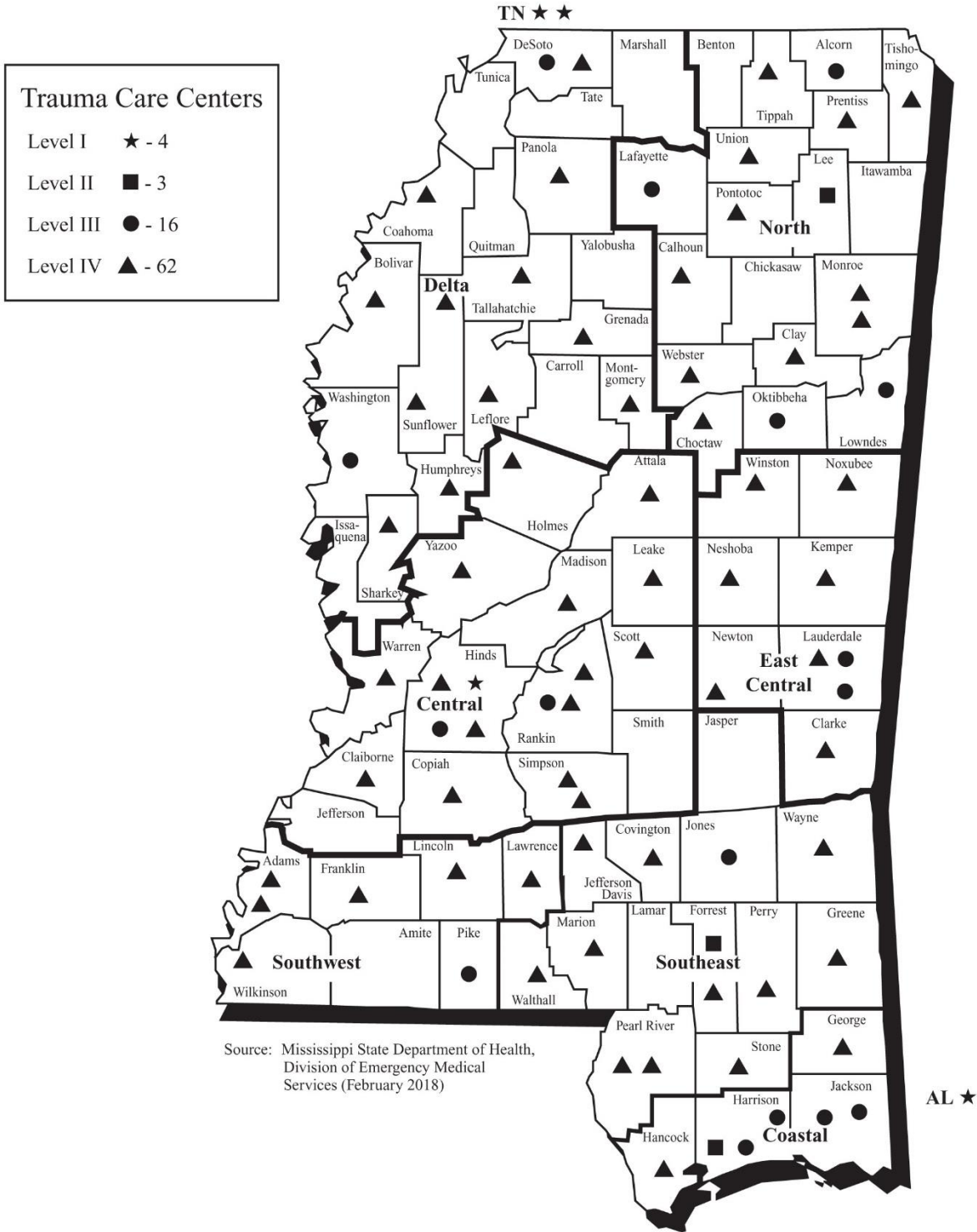
521.05 Data System

The American Heart Association/American Stroke Association GWTG (Get With The Guidelines) – Stroke Program 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 on 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 a regional stroke system

**Map 5-3
Mississippi Trauma Care Regions**



Chapter 6 Comprehensive Medical Rehabilitation Services

600 Comprehensive Medical Rehabilitation Services

Comprehensive medical rehabilitation (CMR) services are an intensive care service that treats patients with severe physical disabilities by providing a coordinated multidisciplinary approach that requires 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 2017**

Facilities	Licensed Bed Capacity	Average Daily Census	Average Length of Stay	Occupancy Rate (%)
Baptist Memorial Hospital - DeSoto	30	17.06	12.49	56.86
Delta Regional Medical Center -West Campus	24	8.16	12.26	34.00
Forrest General Hospital	24	16.37	14.46	68.23
Memorial Hospital at Gulfport	33	22.91	12.19	69.41
Mississippi Methodist Rehab Center	80	55.75	16.21	69.69
North Miss Medical Center	30	23.95	13.58	79.85
University Hospital and Health System*	0	0.00	0.00	0.00
State Total	221	20.60	11.60	54.01

Source: Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report

Note(s): According to the Applications for Renewal of Hospital License for Calendar Year 2016 and FY 2017 Annual Hospital Report, University Hospital and Health System* reported zero (0) Level 1 CMR Bed Units.

**Table 6-2
Hospital-Based Level II CMR Units
FY 2017**

Facility	Licensed Bed Capacity	Average Daily Census	Average Length of Stay	Occupancy Rate (%)
Baptist Memorial Hospital - North Miss	13	4.99	10.80	38.36
Greenwood Leflore Hospital	20	12.08	12.63	60.40
Merit Health Natchez f/k/a Natchez Regional Medical Center	20	7.41	12.63	37.03
Northwest MS Regional Medical Center*	0	0	0.00	0.00
Anderson Regional Medical Center South	20	13.29	11.34	66.47
Singing River Hospital*	20	15.54	12.73	77.71
TOTALS	93	8.89	10.02	46.66

Source: Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report

Note(s): Singing River Hospital was CON approved February 2013 to add 8 Level II CMR Beds. Singing River Hospital currently has a Six Month Extension for the completion of the proposed project. Northwest MS Regional Medical Center place 14 Beds in abeyance September 2013.

601 The Need for Comprehensive Medical Rehabilitation Services

A total of 221 Level I and 93 Level II rehabilitation beds were operational in Mississippi during FY 2017. 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 30 Level I beds and needs 103 additional Level II CMR beds

602 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.

603 Certificate of Need Criteria and Standards for Comprehensive Medical Rehabilitation Beds/Services

603.01 Policy Statement Regarding Certificate of Need Applications for Comprehensive Medical Rehabilitation Beds/Services

1. Definition: Comprehensive Medical Rehabilitation (CMR) Services provided in a freestanding CMR hospital or a CMR distinct part unit are defined as an intensive care service 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 of 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 CMR beds/services.
3. CMR Services:

Level I - Level I CMR providers may provide treatment services for all rehabilitation diagnostic categories.

Level II - Level II CMR 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: MSDH shall determine the need for Level I CMR beds/services based upon a formula of 0.08 beds per 1,000 population for the state as a whole.

MSDH shall determine need for Level II CMR 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 CMR beds.
5. Present Utilization of Rehabilitation Services: When reviewing CON applications, MSDH shall consider the utilization of existing services and the presence of valid CONs for services.
6. Minimum Sized Facilities/Units: Freestanding CMR facilities shall contain not less than 60 beds. Hospital-based Level I CMR units shall contain not less than 20 beds. If the established formula reveals a need for more than ten beds, MSDH may consider a twenty (20) bed (minimum sized) unit for approval. Hospital-based Level II CMR facilities are limited to a maximum of thirty (30) beds. New Level II rehabilitation units shall not be located within a forty-five (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 eighty percent (80%) for the most recent twelve (12) month licensure reporting period or at least seventy percent (70%) for the most recent two (2) years.

8. Priority Consideration: When reviewing two or more competing CON applications, 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 CMR services; proposed comprehensive range of services; and the patient base needed to sustain a viable CMR 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 CMR units are limited to a maximum size of thirty (30) beds and must be more than a forty-five (45) mile radius from any other Level I or Level II rehabilitation facility.
11. Enforcement: In any case in which 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 MSDH in law or equity.
12. Addition/Conversion of Beds: 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 CON 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. Delicensed Beds: 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 CON. MSDH 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.

603.02 Certificate of Need Criteria and Standards for Comprehensive Medical Rehabilitation Beds/Services

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. 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 MSDH, 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 were 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.

Need Criterion 1: Projected Need

- a. New/Existing CMR Beds/Services: The need for Level I CMR 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 CMR 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 CMR Beds: The applicant shall document the need for the proposed project.

Exception: Notwithstanding the service specific need requirements as stated in "a" above, MSDH may approve additional beds for facilities which have maintained an occupancy rate of at least eighty percent (80%) for the most recent twelve (12) month licensure reporting period or at least seventy percent (70%) 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, MSDH may approve the establishment of a twenty (20) bed Level II CMR unit for any hospital without CMR beds which held a Level II Trauma care designation on July 1, 2003, as well as on the date the Certificate of Need CON application is filed.

- e. Conversion of Level II CMR Beds to Level I CMR Beds: Notwithstanding any other policy statement, standard or criterion, including, but not limited to, Need Criterion

1(a) above, an existing Level II CMR unit may convert no more than eight (8) beds to Level I CMR status if the Level II facility meets the following requirements:

- (i) The Level II CMR unit demonstrates high utilization by documenting that it has maintained an occupancy rate of at least eighty percent (80%) for the most recent twelve (12) month licensure reporting period or at least seventy percent (70%) for the most recent two (2) years, as reported in the Mississippi State Health Plan.
- (ii) The Level II CMR unit establishes the need for Level I CMR status for no more than eight (8) beds by documenting that the facility expects to have a minimum of sixty (60) patient admissions annually with one or more of the following rehabilitation diagnostic categories: spinal cord injuries, congenital deformity, and/or brain injury. This documentation may include, without limitation, the Level II CMR unit's patient data or any other data or documentation acceptable to MSDH.
- (iii) The Level II CMR unit shall document compliance with the standards for Level I CMR units set forth below in 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.

Need Criterion 2: Level 1 CMR Services

Applicants proposing to establish Level I CMR 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 neurological disorders, including multiple sclerosis, motor neuron disease, polyneuropathy, muscular dystrophy, and Parkinson's Disease.

Applicants proposing to establish Level II CMR 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 CMR services shall include on their *Annual Report of Hospitals* submitted to MSDH the following: total admissions, average length of stay by diagnosis, patient age, sex, race, zip code, payor source, and length of stay by diagnosis.

Need Criterion 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 (1) year hospital internship, at least two (2) 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 a 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 (1) year hospital internship, at least two (2) 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 twenty (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 a consultant or on a contractual basis.

603.03 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 CMR 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.

603.04 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 2023. 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 2023. Table 6-3 presents Level II CMR bed need.

**Table 6-3
Comprehensive Medical Rehabilitation Bed Need
2017**

Level	Estimated Population 2023	Approved CMR Beds	CMR Beds Need	Difference
Level I	3,138,145	494 221	251	6030
Level II	3,138,145	93	196	103

Source(s): Applications for Renewal of Hospital License for Calendar Year 2016; FY 2017 Annual Hospital Report. State Data Center of Mississippi, University of Mississippi Center for Population Studies, February 13, 2018.

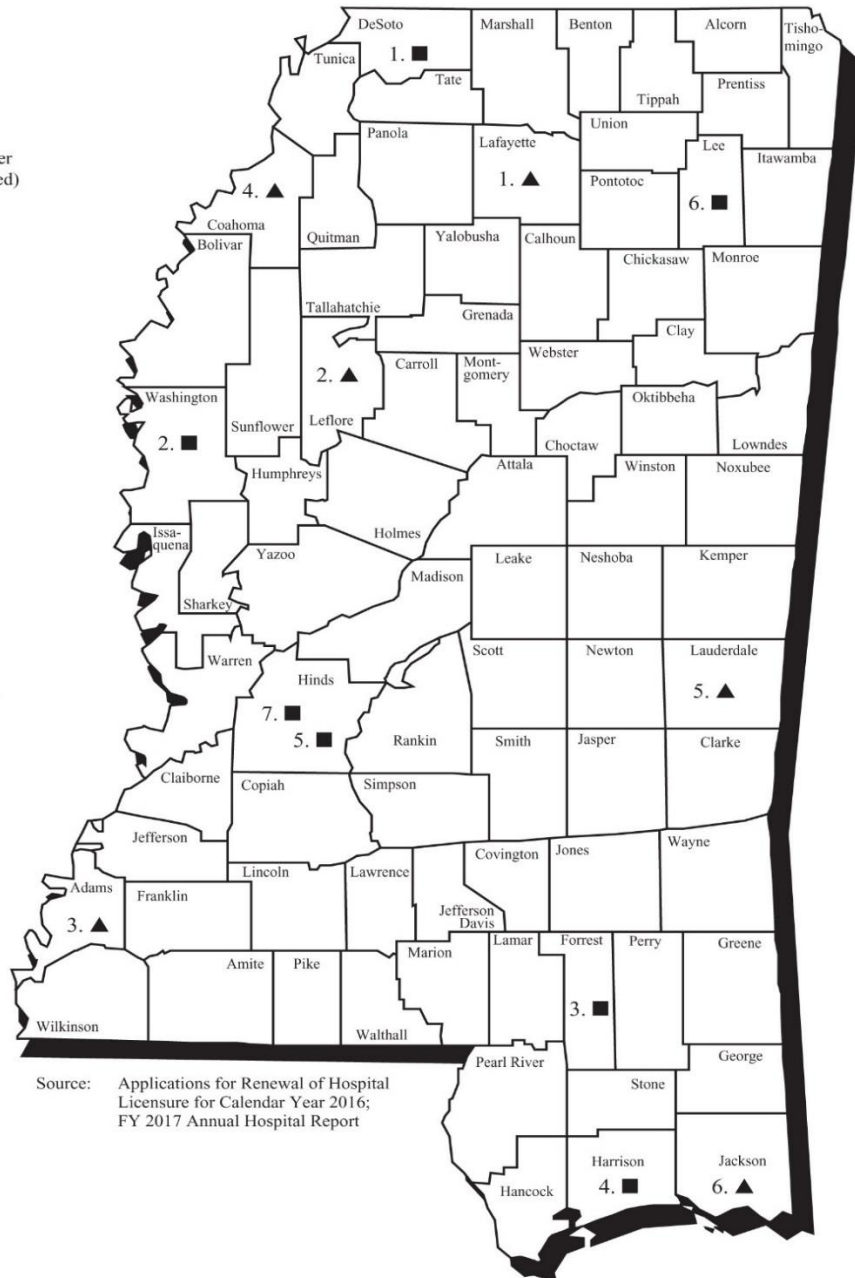
Map 6-1 Location of Comprehensive Medical Rehabilitation Facilities Level I and Level II

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
7. ■ University Hospital
and Health System

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: Applications for Renewal of Hospital Licensure for Calendar Year 2016; FY 2017 Annual Hospital Report

604 Certificate of Need Criteria and Standards for Comprehensive Medical Residential Medical Rehabilitation Beds/Services for Patients with Traumatic Brain Injury (CRMR-TBI)

604.01 Policy Statement Regarding Certificate of Need Applications for Comprehensive Residential Medical Rehabilitation Beds/Services for Patients with Traumatic Brain Injury

1. Definitions:
 - (a) Comprehensive Residential Medical Rehabilitation Services (CRMR) for Patients with a Traumatic Brain Injury (TBI) are defined as a place which is devoted to the provision of residential treatment and rehabilitative care in a transitional living program or a lifelong living program for periods of twenty-four (24) hours or longer for persons who have traumatic brain injury.
 - (b) A transitional living program is treatment and rehabilitative care delivered to traumatic brain 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) Lifelong living program is treatment and rehabilitative care to traumatic brain injury patients who have been discharged from advanced treatment and rehabilitation facilities, but who cannot live at home independently, and who require on-going lifetime support and rehabilitation.
 - (d) A TBI is a traumatic harm 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.
2. Planning Areas: The state as a whole shall serve as a single planning area for determining the need of CRMR beds/services for patients with a TBI.
3. Any application for a CRMR-TBI shall document the need for such a program in the state. Any application for an expansion through the addition of beds at a CRMR-TBI shall document an occupancy rate in excess of seventy percent (70%) for the most recent two (2) years.
4. Present Utilization of Rehabilitation Services: When reviewing CON applications for CRMR-TBI, MSDH shall consider the utilization of existing services and the presence of valid CONs for services.
5. Minimum Sized Facilities/Units: CRMR-TBI facilities shall contain not less than six (6) beds and no more than thirty (30) beds. MSDH shall give a preference for CRMR-TBI facilities that are not located within a forty-five (45) mile radius of any other CRMR-TBI 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 CRMR-TBI 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.
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 CON 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 CON. MSDH 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.

604.02 Certificate of Need Criteria and Standards for Comprehensive Residential Medical Rehabilitation Beds/Services for Patients with Traumatic Brain Injury (CRMR-TBI)

MSDH will review applications for a CON for the establishment, offering, or expansion of CRMR beds and/or services for patients with TBI under the statutory requirements of Sections 41-7-173, 41-7-191, and 41-7-193, Mississippi Code 1972, Annotated, as amended. 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 MSDH; 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.

Need Criterion 1: Projected Need

- a. New/Existing CRMR Beds/Services for Patients with TBI: shall be determined considering the current and projected population of the state as whole and the current and projected incidence of TBIs. The state as a whole shall be considered a planning area.
- b. Projects which do Not Involve the Addition of any CRMR-TBI 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 seventy percent (70%) for the most recent two (2) years.

Need Criterion 2: Federal/State Requirements

Applicants proposing to establish CRMR services for patients with TBI shall demonstrate the ability to meet all CMS and state licensure requirements.

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.

700 Ambulatory Surgery Services

During FY 2016, the state's medical/surgical hospitals reported a total of 277,138 general surgical procedures. This number included 186,324 ambulatory surgeries, almost a 6.96 percent increase of the 174,198 ambulatory surgeries performed in hospitals during 2013. The percentage of surgeries performed on an outpatient basis in hospitals has risen from 63.4 percent in 2013 to 67.2 percent in 2016. Table 7-1 displays hospital affiliated surgery data by general hospital service area.

Mississippi licenses 19 freestanding ambulatory surgery facilities. Table 7-2 shows the distribution of facilities and related ambulatory surgery data. The 19 facilities reported 85,842 procedures during fiscal year 2016. Total outpatient surgeries (hospitals and freestanding facilities combined) comprised 99.05 percent of all surgeries performed in the state. The number of procedures performed in freestanding facilities was 30.97 percent of total surgeries in 2016.

Table 7-110
Selected Hospital Affiliated Ambulatory Surgery Data by General Hospital Service Area
FY 2016

General Hospital Service Area	Total Number of Surgeries	Number of Ambulatory Surgeries	Ambulatory Surgeries / Total Surgeries (Percentage)	Number of Operating Rooms / Suites	Average Number of Surgical Procedures per Day / Suite
Mississippi	277,138	186,324	67.2	467	2.37
1	7,810	4,751	60.8	19	1.64
2	32,386	20,805	64.2	46	2.82
3	18,887	14,483	76.7	31	2.44
4	24,964	17,536	70.2	44	2.27
5	88,863	57,891	65.1	153	2.32
6	22,442	16,367	72.9	40	2.24
7	17,680	16,317	92.3	35	2.02
8	23,617	14,472	61.3	43	2.20
9	40,489	23,702	58.5	56	2.89

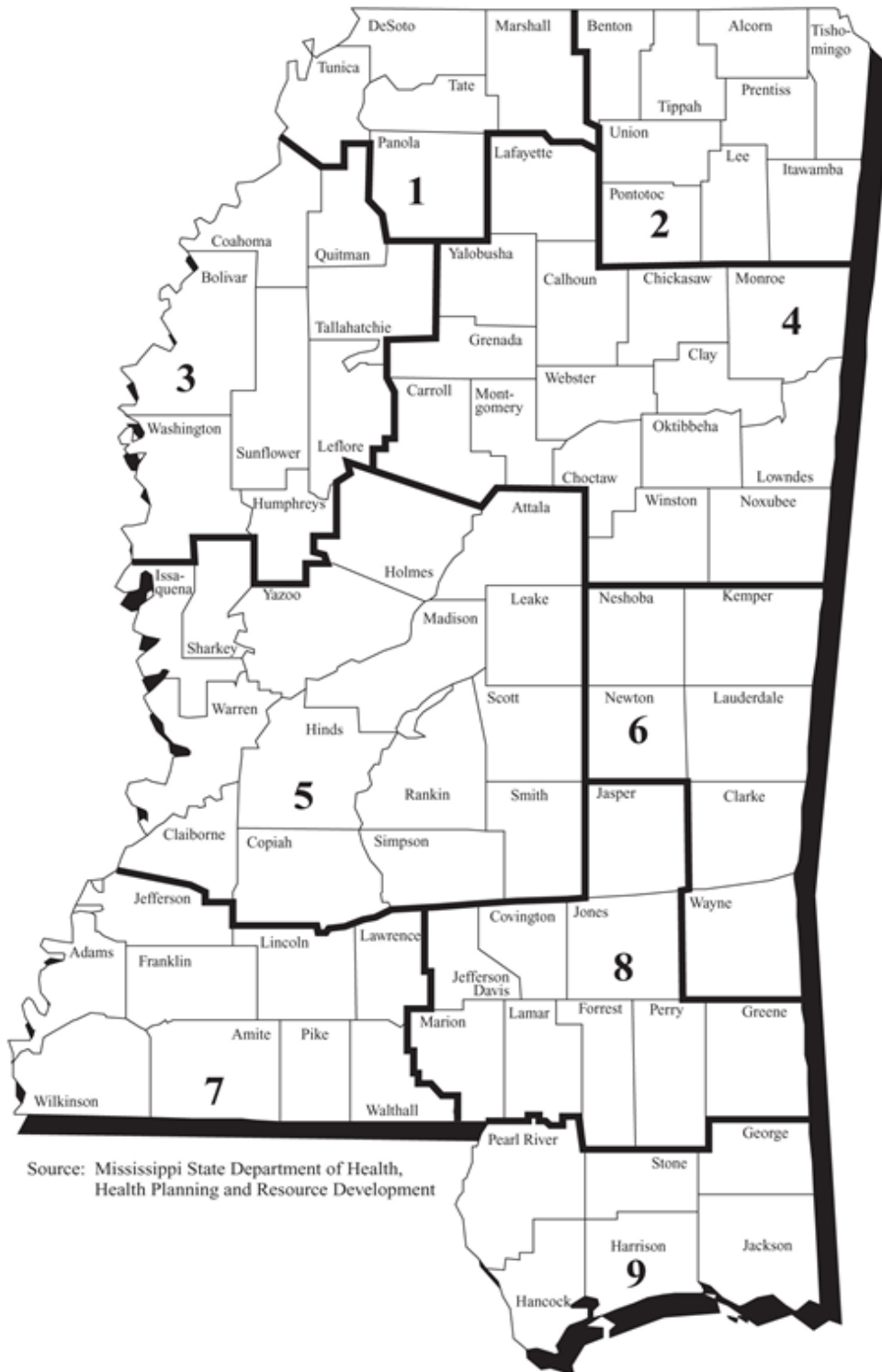
Table 7-2
Selected Freestanding Ambulatory Surgery Data by County
FY 2016

Ambulatory Surgery Planning Area	County	Number of Freestanding Ambulatory Surgery Centers	Number of Ambulatory Surgeries Performed	Number of Operating Rooms/Suites	Number of Surgical Procedures Per Day/O.R. Suite
(ASPAs)	Mississippi	19	85,842	77	4.46
1	DeSoto	1	2,165	3	2.89
2	Lee	1	7,883	8	3.94
4	Lafayette	1	3,609	4	3.61
5	Hinds	3	23,415	13	7.20
5	Rankin	2	11,973	10	4.79
6	Lauderdale	1	4,345	3	5.79
8	Forrest	4	19,907	16	4.98
8	Jones	1	1,603	4	1.60
9	Harrison	2	5,299	7	3.03
9	Jackson	3	5,643	9	2.51

Based on 250 working days per year

Source: Survey of individual ambulatory surgery centers conducted April 2018; 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

701 Certificate of Need Criteria and Standards for Ambulatory Surgery Services

Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

701.01 Policy Statement Regarding Certificate of Need Applications for Ambulatory Surgery Services

1. Ambulatory Surgery Planning Areas (ASPAs): MSDH shall use the Ambulatory Surgery Planning Areas as outlined on Map 7-1 of this Plan for planning and 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 thirty (30) minutes normal driving time or twenty-five (25) miles, whichever is greater, of the proposed/established facility. Note: Licensure standards require a freestanding facility to be within fifteen (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: 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 five (5) days per week x fifty (50) weeks per year x eighty percent (80%) utilization rate.
6. Present Utilization of Ambulatory Surgery Services: 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. 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 twelve (12) month reporting period, as reflected in data supplied to and/or verified by MSDH. 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 five (5) days per week x fifty (50) weeks per year x eighty-percent (80%) 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 (2) 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.

701.02 Certificate of Need Criteria and Standards for Ambulatory Surgery Services

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. MSDH will also review applications submitted for CON_in accordance with the rules and regulations in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of MSDH; and the specific criteria and standards listed below.

Ambulatory surgery services require CON review when the establishment or expansion of the services involves a capital expenditure in excess of \$5,000,000. In addition, 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, regardless of the capital expenditure.

Need Criteria 1: Minimum Surgeries

The applicant shall demonstrate that the proposed ambulatory surgery facility shall perform a minimum average of 1,000 surgeries per operating room per year.

Need Criteria 2: Minimum Population

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.

Need Criteria 3: Present Utilization of Ambulatory Surgery Services

The 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 twelve (12) month reporting period as reflected in data supplied to and/or verified by MSDH. MSDH may collect additional information it deems essential to render a decision regarding any application.

Need Criteria 4: Affirmation of Provision of Surgical Services

The applicant must affirm that the proposed program shall provide a full range of surgical services in general surgery.

Need Criteria 5: Financial Feasibility

The applicant must provide documentation that the facility will be economically viable within two (2) years of initiation.

Need Criteria 6: Letters of Support

The proposed facility must show support from the local physicians who will be expected to utilize the facility.

Need Criteria 7: Staffing Requirements

Medical staff of the facility must live within a twenty-five (25) mile radius of the facility.

Need Criteria 8: Transfer Agreements/Follow-Up Services

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.

Need Criteria 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.

702 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; or
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.

702.01 Home Health Status

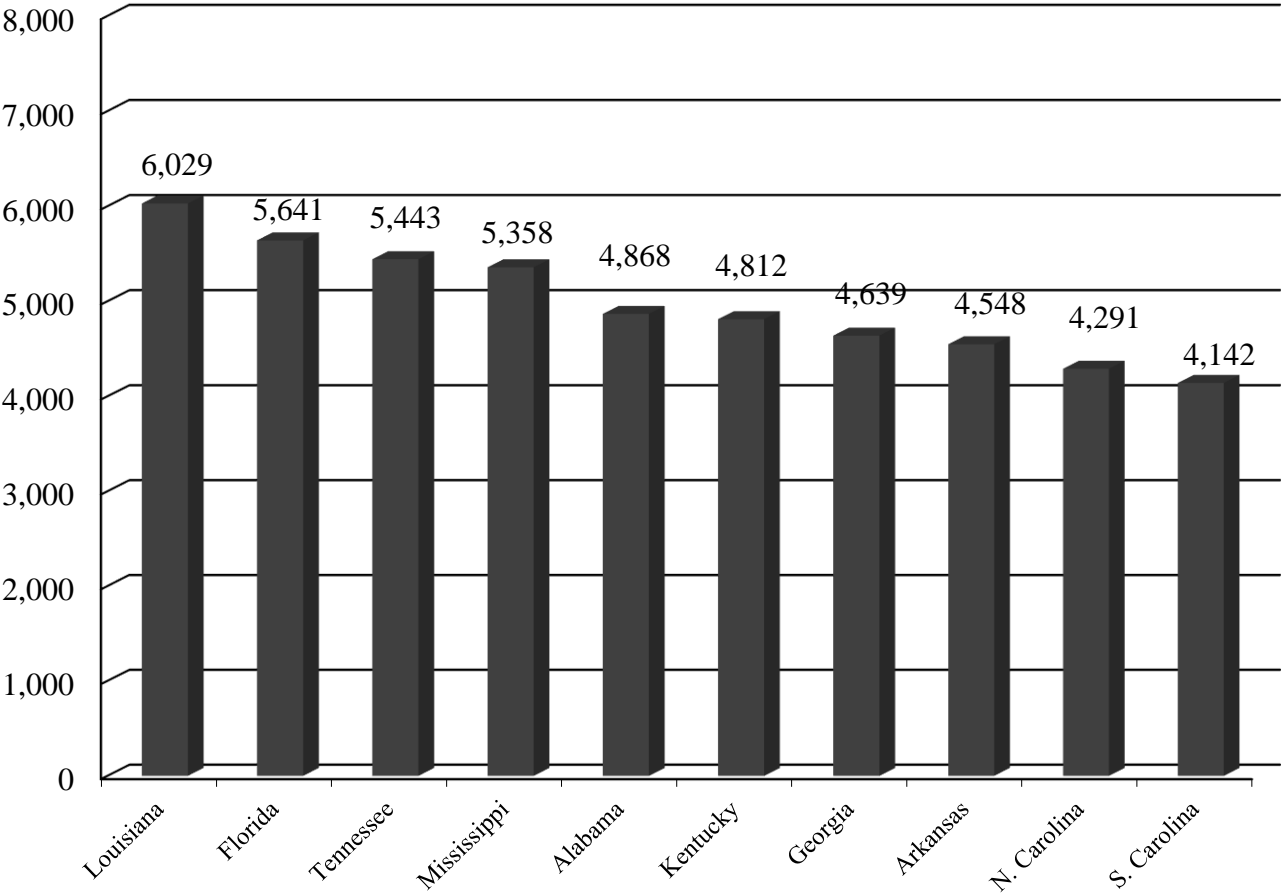
The 2016 *Report on Home Health Agencies* (the latest available) indicated that 56,051 Mississippians received home health services during the year. The report noted there were 2,024,397 home health care visits made in 2016 in Mississippi. Each patient (all payor sources) received an average of thirty-four (34) visits.

Table 7-3
Medicare Home Health Statistics
in the Ten-State Region
January 1, 2016 – December 31, 2016

	2016 Total Home Health Visits	Total Home Health Claims	Total Home Health Payments	Total Home Health Patients	Average Home Health Payment per Patient	Average Visits per Patient
Region Total	31,749,241	1,837,640	\$4,867,820,107	945,751	\$5,147	34
Alabama	2,593,834	152,665	361,674,479	74,299	\$4,868	35
Arkansas	1,225,853	71,340	168,094,540	36,963	\$4,548	33
Florida	12,150,926	611,951	1,855,186,730	328,895	\$5,641	37
Georgia	2,383,617	147,280	392,174,285	84,532	\$4,639	28
Kentucky	1,798,752	112,715	278,384,370	57,858	\$4,812	31
Louisiana	2,925,397	185,354	406,847,630	67,485	\$6,029	43
Mississippi	2,024,397	133,948	300,330,665	56,051	\$5,358	36
North Carolina	2,654,532	174,679	457,761,772	106,679	\$4,291	25
South Carolina	1,418,020	93,116	243,526,027	58,798	\$4,142	24
Tennessee	2,573,913	154,592	403,839,609	74,191	\$5,443	35

Source: Palmetto GBA – Medicare Statistical Analysis Department, HCIS (Health Care Information System), December 2017

Figure 7-2
Medicare - Average Home Health Payments



Source: Palmetto GBA – Medicare Statistical Analysis Department, HCIS (Health Care Information System), December 2017

703 Certificate of Need Criteria and Standards for Home Health Agencies/Services

Should MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

703.01 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 31,794,241 as shown in Table 7-3 (2016 is the 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 fifty (50) patients in each county proposed to be served. Based on 2016-data 31,749,241 visits approximates a Region Total of thirty four (34) visits per patient.
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.

703.02 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, 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. 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 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.

Need Criteria 1: Establishment of Need

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*.

Need Criteria 2: Home Health Service Area Boundaries

The applicant shall state the boundaries of the proposed home health service area in the application.

Need Criteria 3: Unmet Need

The applicant shall document that each county proposed to be served has an unmet need equal to fifty (50) patients, using a ratio of 31,749,241 patient total home health visits equals approximately 34 average visits per patient.

Need Criteria 4: Home Office of New Home Health Agency

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.

Need Criteria 5: Application Requirements

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 twelve (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.

Need Criteria 6: Difference in Existing Services Already Provided

Information concerning whether proposed agencies would provide services different from those available from existing agencies.

703.03 Statistical Need Methodology for Home Health Services

The methodology used to calculate the average number of visits per 1,000 elderly (65+) in the ten state region consist of the following:

1. The ten-state region consists of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee.
2. The 2023 projected population aged 65 and older estimates from each state.
3. Table 7-3 showing the average number of Medicare paid home health visits for the ten-state region, according to 2016 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 payments in the ten-state region.
4. In 2016, the region average of home health visits was 31,749,241. An average patient in the region received thirty-four (34) home health visits. Therefore 31,749,241, visits equal 34 patients. Note: The Mississippi average for 2016 was 2,024,397 visits (Medicare reimbursed) and an averaged patient received thirty-six (36) visits.

704 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.

ESRD treatment generally consists of either a kidney transplant or dialysis. Dialysis treatment consists of either peritoneal dialysis or hemodialysis. Peritoneal dialysis, uses a dialyzing fluid which is placed in the abdominal cavity through a plastic tube (catheter), 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.

Both hemodialysis and peritoneal dialysis mimic the function normally performed by the kidney. Dialysis can be done by the patient and an assistant in the home, in a facility, or by professional staff in a hospital or limited care facility. Mississippi has 74 ESRD facilities and 10 Satellite ESRD facilities providing maintenance dialysis services as of FY 2018 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 – thirty (30) years for a living donor versus fifteen (15) years for a cadaver kidney.

The University of Mississippi Medical Center, the only kidney transplant program in the state, performed 103 cadaver and zero 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	31
RCG of Natchez	31
Alcorn	22
RCG of Corinth	22
Attala	20
FMC Kosciusko	20
Bolivar	32
Fresenius Kidney Care	32
Claiborne	10
Fresenius Kidney Care - Port Gibson	10
Clarke	13
Pachuta Dialysis Unit	13
Clay	14
FMC- West Point	14
Coahoma	40
RCG of Clarksdale	40
Copiah	30
BMA Hazlehurst	13
Hazlehurst Dialysis	17
Covington	23
Collins Dialysis Unit	23
DeSoto	49
Fresenius Kidney Care *	49
Forrest	60
Hattiesburg Dialysis Unit	60
George	16
Lucedale Dialysis	16
Grenada	28
RCG of Grenada	28
Hancock	20
FMC- South Miss Kidney Center - Diamondhead (Bay St. Louis)	20

FY 2018 Annual ESRD Dialysis Utilization Survey Conducted May 2018

*Satellite ESRD Facility

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	101
FMC-South Miss Kidney Center - Biloxi	19
FMC-South Miss Kidney Center - Gulfport	20
FMC-South Miss Kidney Center - Orange Grove	30
FMC-South Miss Kidney Center - D'Iberville	12
FMC-South Miss Kidney Center - North Gulfport	20
Hinds	252
FMC- Jackson *	38
FMC- Mid Mississippi*	12
FMC Southwest Jackson	33
FMC - West Hinds County *	14
Davita Jackson North	46
Davita Jackson South	28
Davita Jackson Southwest	18
University MS Medical Center Outpatient Hemodialysis	40
University MS Medical Center Pediatric Nephrology Facility	23
Holmes	22
Davita Renal Care of Lexington	22
Humphreys	9
RCG of Belzoni	9
Itawamba	13
Davita Itawamba County Dialysis	13
Jackson	45
Davita Ocean Springs Dialysis	17
Davita Singing River Dialysis	28
Jasper	21
Bay Springs Dialysis Unit - Bay Springs	21
Jones	38
Laurel Dialysis Unit	38
Kemper	10
FMC-Kemper County	10
Lafayette	28
RCG Oxford	28
Lamar	14
West Hattiesburg Clinic Dialysis *	14
Lauderdale	75
Fresenius Kidney Care- Meridian	65
FMC- Lauderdale County*	10
Lawrence	18
Silver Creek Dialysis Unit	18
Leake	15
RCG- Carthage	15

FY 2018 Annual ESRD Dialysis Utilization Survey Conducted May 2018

*Satellite ESRD Facility

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	60
RCG of Tupelo	50
Lee County Dialysis *	10
Leflore	34
RCG of Greenwood	34
Lincoln	32
RCG of Brookhaven	32
Lowndes	49
RCG of Columbus	35
FMC - Lowndes *	14
Madison	40
FMC Canton	18
Canton Renal Center	22
Marion	30
Columbia Dialysis Unit	30
Marshall	20
RCG of Holly Springs	20
Monroe	32
RCG of Aberdeen	32
Montgomery	15
RCG of Winona	15
Neshoba	53
Fresenius Kidney Care - Pearl River	39
Fresenius Kidney Care- Neshoba County	14
Newton	16
FMC- Newton	16
Noxubee	21
RCG of Macon	21
Oktibbeha	25
RCG of Starkville	25
Panola	30
RCG of Sardis	30
Pearl River	20
Picayune Dialysis Unit	20

FY 2018 Annual ESRD Dialysis Utilization Survey Conducted May 2018

*Satellite ESRD Facility

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
RCG of McComb	32
Rankin	59
Fresenius Kidney Care-Rankin County	35
Davita Brandon	24
Scott	18
FMC - Forest	18
Sharkey	13
FMC-Rolling Fork	13
Simpson	18
FMC - Magee	18
Stone	12
Wiggins Dialysis Unit	12
Sunflower	21
RCG of Indianola	21
Tate	10
RCG- Senatobia	10
Tunica	24
RCG- Tunica *	24
Union	25
Fresenius Kidney Care- Central New Albany*	25
Walthall	21
Tylertown Dialysis Unit	21
Warren	21
Fresenius Kidney Care	21
Washington	52
Mid-Delta Kidney Center	9
Fresenius Kidney Care- Greenville	43
Wayne	19
Waynesboro Renal Dialysis Unit	19
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	1,980

FY 2018 Annual ESRD Dialysis Utilization Survey Conducted May 2018

*Satellite ESRD Facility

704 Certificate of Need Criteria and Standards for End Stage Renal Disease Facilities

MSDH receive a CON 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 MSDH has developed and adopted CON criteria and standards. If MSDH 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 MSDH.

704.01 Policy Statement Regarding Certificate of Need Application 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. Type of Review: CON applications for ESRD services shall be considered substantive as defined under the appropriate *Mississippi State Health Plan*.
3. 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.
4. Utilization Definitions: 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.
 - 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.
5. 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.
6. 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.

7. Minimum Expected Utilization: It is anticipated that a new ESRD facility may not be able to reach optimum utilization (65 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.
8. Minimum Size Facility: No CON application for the establishment of a new ESRD facility shall be approved for less than ten (10) stations.
9. Expansion of Existing ESRD Facilities: Existing ESRD facilities may add ESRD stations as follows:
 - a. An existing ESRD facility with a CMS star rating of 1 or 2, may add ESRD stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than four (4) stations.
 - b. An existing ESRD facility with a CMS star rating of 3, may add ESRD stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than six (6) stations.
 - c. An existing ESRD facility with a CMS star rating of 4 or 5, may add ESRD stations without certificate of need review, as long as the facility does not add, over the period of one (1) year, more than eight (8) stations.

Note: An ESRD facility that has not yet been given a CMS star rating may add ESRD stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than four (4) stations.

10. Home Dialysis Programs: Each existing ESRD facility may establish or relocate a home dialysis program to any location within a 10-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 dialysis program. If such established or relocated 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 two home dialysis program, the project shall be subject to CON review as the establishment of a new ESRD facility. Existing freestanding home dialysis programs may add home training stations as follows:
 - a. An existing freestanding home dialysis facility with a CMS star rating of 1 or 2, may add home training stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than four (4) stations.
 - b. An existing freestanding home dialysis facility with a CMS star rating of 3, may add home training stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than six (6) stations.

- c. An existing ESRD facility with a CMS star rating of 4 or 5, may add home training stations without certificate of need review, as long as the facility does not add, over the period of one (1) year, more than eight (8) stations.

Note: An existing freestanding home dialysis facility that has not yet been given a CMS star rating may add home training stations without certificate of need review as long as the facility does not add, over the period of one (1) year, more than eight (8) stations.

- 11. Establishment of Satellite ESRD Facilities: Any existing ESRD facility which reaches a total of 30 ESRD stations, may establish a ten (10) station satellite facility. If a proposed satellite ESRD facility is to be located more than one (1) mile from the existing facility, a certificate of need must be obtained by the facility prior to the establishment of the satellite facility.
- 12. 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.
- 13. 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*.
- 14. 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.
- 15. Federal Definitions: The definitions contained in 42 CFR § 494.10 shall be used as necessary in conducting health planning and CON activities.
- 16. Affiliation with a Renal Transplant Center: ESRD facilities shall be required to enter into a written affiliation agreement with a renal transplant center.

704.02 Certificate of Need Criteria and Standards for End Stage Renal Disease (ESRD) Facilities

MSDH will review applications for a CON 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. MSDH will also review applications for CON according to the general criteria as listed in the *Mississippi Certificate of Need Review Manual*; all adopted rules, procedures, and plans of MSDH; 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 CON 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 CON 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).

704.02.01 Establishment of an End Stage Renal Disease (ESRD) Facility

Need Criterion 1: 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.

Need Criterion 2: For Expansion of Existing ESRD Facilities

- a. Expansion of Existing ESRD Facilities – Non-Satellite: In the event that an existing ESRD facility (that is not a satellite facility less than two (2) years in existence) proposes to add more stations than what is outlined in ESRD Policy Statement 9, then the facility must apply for a certificate of need, and shall document that it has maintained, or can project a minimum annual utilization rate of sixty-five percent (65%) for the 12 months prior to the month of the submission of the CON application. NOTE: ESRD Policy Statements 3 and Need Criteria 1, do not apply to applications for the expansion of existing ESRD facilities.

- b. Expansion of Existing ESRD Facilities – Satellite: In the event that an existing ESRD facility (that is a satellite facility in operation two years or less), proposes to add more stations than what is outlined in ESRD Policy Statement 9, then the facility must apply for a certificate of need, and shall document that it has maintained or can project through, for example, but not necessarily limited to, patient support letters, the distance between the patient's residence or transportation source and the facility, and/or transportation or patient support concerns, a minimum annual utilization rate of sixty-five percent (65%). NOTE: ESRD Policy Statement 3 and Need Criteria 1 do not apply to applications for the expansion of existing ESRD facilities.

Need Criterion 3: For Establishment of ESRD Satellite Facilities

In order for a thirty (30) station ESRD facility to be approved for the establishment of a ten (10) 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 fifty-five percent (55%) for the twelve (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 thirty (30) mile radius of the existing facility, the facility must (a) document that it has maintained a minimum annual utilization rate of fifty-five percent (55%) for the twelve (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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 8: 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

Need Criterion 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.

704.02.02 Establishment of a Renal Transplant Center

Need Criterion 1:

The applicant shall document that the proposed renal transplant center will serve a minimum population of 3.5 million people.

Need Criterion 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.

Need Criterion 3:

The applicant shall document that the facility will perform a minimum of 25 transplants annually.

Glossary

Accessibility — a measure of the degree to which the health care delivery system inhibits or facilitates an individual's ability to receive 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 that is primarily organized, constructed, renovated, or otherwise established for the purpose of providing elective surgical treatment to outpatients whose recovery, under normal and routine circumstances, will not require inpatient care. Such facilities as herein defined do 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 in 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 State 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 contractor's personal resources does not affect the contribution of the CCRC sponsor.

Conversion — 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 — maintaining control of expenses within the health care delivery system to prevent and reduce unnecessary spending.

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 are a “distinct part” (i.e. distinguishable from the larger institution and fiscally separate for cost reporting purposes) of an institution that is certified to provide Skilled Nursing Facility services as by the Centers for Medicare and Medicaid Services (CMS).

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 \leq (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 outpatient.

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 documented in the patient's medical record, which coincides with the time that observation services are initiated in accordance with a physician's order 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 outpatient until 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

**Table 2-2A
2023 Projected Nursing Home Bed Need**

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 Abeance	Licensed	Difference
District I	444,312	222	54,720	547	25,844	930	8,076	1,090	2,790	263	3,225	-698
District II	530,592	265	66,816	668	34,641	1,247	11,534	1,557	3,738	48	4,027	-337
District III	729,593	365	90,826	908	41,638	1,499	14,261	1,925	4,697	227	4,928	-458
District IV	898,269	449	114,375	1,144	55,403	1,995	17,245	2,328	5,915	328	6,124	-537
State Total	2,602,766	1,301	326,737	3,267	157,526	5,671	51,116	6,901	17,140	866	18,304	-2,030

**Table 2-2A (continued)
2023 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 Abeysance	Licensed	Difference
Attala	15,122	8	2,351	24	1,216	44	458	62	137	0	120	17
Bolivar	22,632	11	3,463	35	1,462	53	447	60	159	60	350	-251
Carroll	7,541	4	1,532	15	826	30	213	29	78	0	60	18
Coahoma	22,673	11	2,452	25	1,181	43	428	58	136	30	178	-72
DeSoto	153,028	77	15,307	153	7,853	283	2,278	308	820	0	320	500
Grenada	16,051	8	2,597	26	1,201	43	381	51	129	10	247	-128
Holmes	14,131	7	1,848	18	769	28	273	37	90	8	148	-66
Humphreys	7,472	4	902	9	413	15	142	19	47	0	60	-13
Leflore	22,839	11	2,844	28	1,177	42	476	64	146	62	370	-286
Montgomery	7,293	4	1,381	14	630	23	222	30	70	0	120	-50
Panola	30,020	15	3,656	37	1,868	67	601	81	200	0	190	10
Quitman	6,616	3	879	9	448	16	151	20	49	0	60	-11
Sunflower	23,378	12	2,796	28	1,185	43	398	54	136	0	246	-110
Tallahatchie	14,799	7	1,365	14	624	22	190	26	69	21	98	-50
Tate	27,604	14	3,659	37	1,697	61	437	59	170	14	120	36
Tunica	10,363	5	1,065	11	440	16	117	16	47	0	60	-13
Washington	33,368	17	4,952	50	2,040	73	639	86	226	58	356	-188
Yalobusha	9,382	5	1,671	17	814	29	225	30	81	0	122	-41
District Total	444,312	222	54,720	547	25,844	930	8,076	1,090	2,790	263	3,225	-698

Table 2-2A (continued)

2023 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 Abeysance	Licensed	Difference
Alcorn	31,857	16	4,452	45	2,515	91	729	98	249	0	264	-15
Benton	7,708	4	1,112	11	534	19	173	23	58	0	60	-2
Calhoun	11,776	6	1,813	18	943	34	300	41	98	0	155	-57
Chickasaw	12,264	6	1,813	18	901	32	279	38	94	0	139	-45
Choctaw	5,420	3	1,094	11	553	20	179	24	58	13	60	-15
Clay	14,895	7	2,531	25	1,144	41	413	56	130	20	160	-50
Itawamba	19,221	10	2,571	26	1,479	53	470	63	152	0	196	-44
Lafayette	51,625	26	4,821	48	2,391	86	828	112	272	0	180	92
Lee	75,871	38	8,964	90	4,818	173	1,666	225	526	0	487	39
Lowndes	51,375	26	6,253	63	3,171	114	1,099	148	351	0	380	-29
Marshall	32,484	16	4,554	46	1,976	71	638	86	219	0	180	39
Monroe	29,733	15	4,118	41	2,392	86	816	110	252	0	332	-80
Noxubee	9,628	5	1,210	12	568	20	214	29	66	0	60	6
Oktibbeha	45,075	23	3,824	38	1,885	68	667	90	219	0	179	40
Pontotoc	28,884	14	3,383	34	1,587	57	546	74	179	0	164	15
Prentiss	20,806	10	2,680	27	1,617	58	559	75	171	0	144	27
Tippah	19,481	10	2,605	26	1,368	49	354	48	133	0	240	-107
Tishomingo	15,374	8	2,496	25	1,396	50	436	59	142	15	178	-51
Union	23,759	12	3,130	31	1,585	57	546	74	174	0	180	-6
Webster	8,293	4	1,217	12	621	22	168	23	61	0	155	-94
Winston	15,063	8	2,175	22	1,197	43	454	61	134	0	134	0
District Total	530,592	265	66,816	668	34,641	1,247	11,534	1,557	3,738	48	4,027	-337

**Table 2-2A (continued)
2023 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	Difference
Adams	23,788	12	3,945	39	1,694	61	653	88	200	20	254	-74
Amite	9,114	5	1,899	19	959	35	295	40	98	0	80	18
Claiborne	8,385	4	1,047	10	460	17	164	22	53	4	73	-24
Copiah	24,013	12	3,644	36	1,628	59	543	73	180	30	150	0
Franklin	6,007	3	1,073	11	488	18	170	23	54	0	60	-6
Hinds	223,835	112	23,598	236	10,511	378	3,614	488	1,214	59	1,518	-363
Issaquena	919	0	133	1	70	3	24	3	8	0	0	8
Jefferson	5,878	3	810	8	358	13	134	18	42	0	60	-18
Lawrence	10,458	5	1,490	15	780	28	260	35	83	0	60	23
Lincoln	29,575	15	4,167	42	1,944	70	702	95	221	0	320	-99
Madison	104,295	52	13,312	133	5,295	191	1,994	269	645	0	455	190
Pike	34,073	17	4,885	49	2,208	79	750	101	247	0	315	-68
Rankin	138,052	69	15,884	159	7,945	286	2,476	334	848	91	502	255
Sharkey	3,724	2	577	6	253	9	106	14	31	0	54	-23
Simpson	22,741	11	3,089	31	1,593	57	537	72	172	0	180	-8
Walthall	12,086	6	1,953	20	1,026	37	347	47	109	8	137	-36
Warren	40,732	20	5,660	57	2,699	97	847	114	288	0	380	-92
Wilkinson	7,570	4	1,082	11	485	17	171	23	55	15	90	-50
Yazoo	24,348	12	2,578	26	1,242	45	474	64	147	0	240	-93
District Total	729,593	365	90,826	908	41,638	1,499	14,261	1,925	4,697	227	4,928	-458

**Table 2-2A (continued)
2023 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	Difference
Clarke	11,779	6	2,148	21	1,049	38	292	39	105	0	120	-15
Covington	16,375	8	2,070	21	1,174	42	424	57	128	0	120	8
Forrest	66,720	33	7,129	71	3,434	124	1,160	157	385	80	536	-231
George	20,312	10	2,373	24	1,390	50	375	51	135	0	101	34
Greene	9,736	5	1,299	13	767	28	241	33	78	0	120	-42
Hancock	38,237	19	5,791	58	2,732	98	714	96	272	29	202	41
Harrison	173,385	87	20,587	206	8,908	321	2,709	366	979	80	932	-33
Jackson	122,360	61	15,394	154	7,597	273	2,177	294	783	0	528	255
Jasper	13,279	7	2,027	20	1,106	40	373	50	117	0	110	7
Jeff Davis	8,037	4	1,647	16	818	29	243	33	83	0	60	23
Jones	58,233	29	7,813	78	3,736	134	1,196	161	403	10	428	-35
Kemper	8,243	4	1,263	13	655	24	239	32	73		60	13
Lamar	56,866	28	5,477	55	2,829	102	899	121	306	3	180	123
Lauderdale	67,871	34	9,200	92	4,391	158	1,523	206	490	77	825	-412
Leake	23,604	12	2,567	26	1,183	43	402	54	134	0	143	-9
Marion	23,076	12	3,419	34	1,585	57	599	81	184	0	297	-113
Neshoba	25,603	13	3,161	32	1,446	52	520	70	167	3	340	-176
Newton	18,337	9	2,221	22	1,241	45	451	61	137	0	180	-43
Pearl River	51,207	26	7,855	79	3,790	136	1,067	144	385	6	306	73
Perry	10,059	5	1,420	14	786	28	238	32	80	0	60	20
Scott	24,295	12	2,726	27	1,373	49	466	63	152	0	162	-10
Smith	13,186	7	2,082	21	1,057	38	272	37	102	0	121	-19
Stone	20,095	10	2,488	25	1,143	41	274	37	113	40	103	-30
Wayne	17,374	9	2,218	22	1,213	44	391	53	127	0	90	37
District Total	898,269	449	114,375	1,144	55,403	1,995	17,245	2,328	5,915	328	6,124	-537