

## **Title 15: Mississippi Department of Health**

### **Part 3: Bureau of Acute Care Systems**

#### **Subpart 1: Trauma System of Care**

#### **Chapter 1 Mississippi Trauma System of Care**

##### **Subchapter 1 General**

Rule 1.1.1. Legal Authority: The Mississippi State Department of Health (the Department) is assigned the responsibility for creating, implementing and managing the statewide trauma system. The Department shall be designated as the lead agency for trauma system development. The Department shall develop and administer trauma regulations that include, but are not limited to, the Mississippi Trauma System of Care Plan, trauma system standards, trauma center designations, field triage, inter-facility trauma transfer, pediatric trauma care, burn care, trauma data collection, trauma system evaluation and management of state trauma system funding. The Department shall promulgate regulations specifying the methods and procedures by which Mississippi-licensed acute care facilities shall participate in the statewide trauma system. Those regulations shall include mechanisms for determining the appropriate level of participation for each facility or class of facilities. The Department shall also adopt a schedule of fees to be assessed for facilities that choose not to participate in the statewide trauma system, or which participate at a level lower than the level at which they are capable of participating. The Department shall take the necessary steps to develop, adopt and implement the Mississippi Trauma System of Care Plan and all associated trauma system regulations necessary to implement the Mississippi Trauma System. The Department shall cause the implementation of professional and lay trauma education programs. These trauma educational programs shall include clinical trauma education and injury prevention. As it is recognized that rehabilitation services are essential for traumatized individuals to be returned to active, productive lives, the Department shall coordinate the development of an inclusive trauma system, which shall incorporate licensed acute care facilities designated based on resources and staffing, with the Mississippi Department of Rehabilitation Services and all appropriate rehabilitation systems.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.1.2. Mississippi Trauma Advisory Committee: The Mississippi Trauma Advisory Committee (MTAC) is created as a committee of the Emergency Medical Services Advisory Council. The membership of the MTAC is comprised of the members of the Emergency Medical Services Advisory Council (EMSAC); the members of which are appointed by the Governor. The Chairman of EMSAC shall appoint EMSAC members to the MTAC. This committee shall act as the advisory body for trauma system development, and provide technical support to the Department in all areas of trauma system design, trauma standards, data collection and evaluation, continuous quality improvement, trauma

system funding, and evaluation of the trauma system and trauma care programs.

*Source: Miss. Code Ann. § 41-59-7*

Rule 1.1.3. Mississippi Trauma Advisory Committee Meetings: The Mississippi Trauma Advisory Committee (MTAC) shall meet at least quarterly and report to the State Board of Health at its regularly scheduled meetings on the performance of Trauma System. For attendance at such meetings, the members of the MTAC shall be reimbursed for their actual and necessary expenses including food, lodging and mileage as authorized by law, and they shall be paid per diem compensation. Source: Miss. Code Ann. § 41-59-7; Miss. Code Ann. § 25-3-41; and Miss. Code Ann. § 25-3-69.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.1.4. **Definitions:** For the purposes of the Mississippi Trauma System, the following abbreviations, acronyms, and terms shall be defined as listed.

1. ACEP – American College of Emergency Physicians.
2. ACLS – Advanced Cardiac Life Support.
3. ACSCOT – American College of Surgeons Committee on Trauma.
4. AIS – Abbreviated Injury Scale.
5. ALS – Advanced life support, including techniques of resuscitation, such as, intravenous access, and cardiac monitoring.
6. APLS – Advanced Pediatric Life Support.
7. ATCN – Advanced Trauma Care for Nurses. A course designed for the registered nurse interested in increasing his/her knowledge in the management of multiple trauma patient.
8. ATLS – Advanced Trauma Life Support.
9. Alpha Patient – A trauma patient meeting the criteria for an Alpha (major trauma or seriously injured) Alert/Activation (refer to Trauma Activation Criteria document maintained on the Department’s website).
10. BACS – Bureau of Acute Care Systems, Mississippi State Department of Health.
11. BEMS – Bureau of Emergency Medical Services, Mississippi State Department of Health.

12. BLS – Basic life support techniques of resuscitation, including simple airway maneuvers, administration of oxygen, and intravenous access.
13. Board Certified – Physicians and oral/maxillofacial surgeons certified by appropriate specialty boards recognized by the American Board of Medical Specialties and the Advisory Board of Osteopathic Specialties and the American Dental Association.
14. Burn Fund – Mississippi Burn Care Fund established under Miss. Code Ann. § 7-9-70.
15. BTLS – Basic Trauma Life Support.
16. Bravo Patient – A trauma patient not meeting the criteria for an Alpha Alert/Activation, however, has received injuries requiring immediate attention (refer to Trauma Activation Criteria document maintained on the Department’s website).
17. CAP – Corrective Action Plan.
18. CCRN – Critical Care Registered Nurse.
19. CEN – Certified Emergency Nurse.
20. Catchment Area – Geographic area served by a designated trauma center for the purpose of trauma system planning, development and operations.
21. Department – also, “the Department” refers to the Mississippi State Department of Health
22. Designation – Formal recognition of hospitals by the Department as providers of specialized trauma services to meet the needs of the severely injured patient.
23. Diversion (trauma center) – Circumstances where a trauma center cannot accept the inter-facility transfer of injured trauma patients due to service or facility limitations. NOTE: This does not include pre-hospital/EMS.
24. E&D Chart – Essential and Desirables Chart for each trauma center designation level.
25. Emergency Department (or Emergency Room) – The area of an acute care hospital where the facility customarily receives patients in need of emergency medical evaluation and/or care.
26. EMS – Emergency Medical Services.
27. EMSAC – Emergency Medical Services Advisory Council.
28. ENA – Emergency Nurses Association.
29. Field Triage – Classification of patients according to medical need at the scene of an injury or onset of an illness.

30. GCS – Glasgow Coma Scale.
31. Immediately (or immediately available) – (a) unencumbered by conflicting duties or responsibilities; (b) responding without delay when notified; and (c) being within the specified resuscitation area of the trauma center when the patient is delivered or when notified by EMS that a patient is enroute, whichever is shorter. Specific times for each physician specialty are in the applicable trauma center level chapter.
32. Inclusive Trauma System – a trauma system incorporating every licensed acute care facility with an emergency department in order to provide a continuum of services for all injured persons who require care; in such a system, the injured patient's needs are matched to appropriate hospital resources.
33. Injury – (a) the result of an act that damages, harms, or hurts; (b) unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical or chemical energy or from the absence of essentials such as heat or oxygen.
34. Injury Prevention – efforts to forestall or prevent incidents that might result in injuries.
35. ISS – Injury Severity Score.
36. Level I Trauma Centers – Hospitals that have met the requirements for Level I as stated in Chapter 2 and are designated by the Department.
37. Level II Trauma Centers – Hospitals that have met the requirements for Level II as stated in Chapter 3 and are designated by the Department.
38. Level III Trauma Centers – Hospitals that have met the requirements for Level III as stated in Chapter 4 and are designated by the Department.
39. Level IV Trauma Centers – Hospitals that have met the requirements for Level IV as stated in Chapter 5 and are designated by the Department.
40. Medical Control – Physician direction over pre-hospital activities to ensure efficient trauma triage, transportation and care, as well as ongoing quality management.
41. Mid-level Providers/Practitioners – Physician Assistants (PA) and/or Nurse Practitioners (NP)
42. Mississippi Trauma System of Care Plan – The plan developed by the Department which sets out a comprehensive system of prevention, management and rehabilitation of major traumatic injuries. The plan is published on a three-year cycle.
43. Multidisciplinary Trauma Committee – Hospital committee composed of the trauma service Director, other physician members and other members appointed by the Trauma Medical Director that reviews trauma deaths in a hospital.

44. MTAC – Mississippi Trauma Advisory Committee.
45. Non-Designated Hospital – A licensed acute care hospital that has applied for designation as a trauma center but has not been designated by the Department.
46. Non-Participating Hospital – A licensed acute care hospital that has informed the Department that they do not desire to participate in the Trauma System, or a hospital that does not have a current designation or application for designation on file with the Department.
47. On-Call – Available to respond to the trauma center in order to provide a defined service.
48. PALS – Pediatric Advanced Life Support.
49. Pediatric Trauma Center – Hospitals that have met the requirements for Primary, Secondary, or Tertiary Pediatric Trauma Center designation as stated in Chapter 6 and has been designated by the Department.
50. PHTLS – Pre-Hospital Trauma Life Support.
51. Promptly (or promptly available) – Arrival of on-call physician specialists within the trauma receiving resuscitation area, emergency department, operating room, or other specified area of the trauma center within a maximum of 60 minutes from the time of notification to respond.
52. Performance Improvement (PI or Quality Improvement) – A method of evaluating and improving processes of patient care which emphasizes a multi-disciplinary approach to problem solving and focuses not on individuals but on systems of patient care which might cause variations in patient outcome.
53. Rehabilitation – Services that seek to return a trauma patient to the fullest physical, psychological, social, vocational, and educational level of functioning of which he or she is capable, consistent with physiological or anatomical impairments and environmental limitations.
54. Research – Clinical or laboratory studies designed to produce new knowledge applicable to the care of injured patients.
55. Residency Program – A residency program of the trauma center or a residency program formally affiliated with the trauma center where senior residents can participate in educational rotations.
56. RTTC – Rural Trauma Team Course.
57. RTS – Revised Trauma Score, a pre-hospital/Trauma Center scoring system in which numerical values are assigned to differing levels of Glasgow Coma Scale, systolic blood pressure, and respiratory rate.

58. Senior Resident (or "senior level resident") – A physician licensed in the State of Mississippi who has completed at least two years of the residency under consideration and has the capability of initiating treatment, when the clinical situation demands, and who is in training as a member of the residency program, as defined in regulation, at a designated trauma center. Residents in general surgery shall have completed three clinical years of general surgery residency in order to be considered a senior resident.
59. Service Area (or "catchment area") – Geographic area defined by the local EMS agency as the area served by a designated trauma center.
60. SHO – State Health Officer.
61. TCTF – Trauma Care Trust Fund.
62. TMD – Trauma Medical Director; a physician designated by the trauma center to coordinate trauma care.
63. TNCC – Trauma Nursing Core Course.
64. TPM – Trauma Program Manager; a designated RN with responsibility for coordination of all activities on the trauma service and works in collaboration with the TMD.
65. TSMD – state Trauma System Medical Director.
66. Trauma Registry – a database program managed by the Department that hospitals use to track treatment of trauma victims.
67. Trauma Team – A group of health care professionals organized to provide care to the trauma patient in a coordinated and timely fashion. The composition of a trauma team is delineated by hospital policy.
68. Triage – the process of sorting injured patients on the basis of the actual or perceived degree of injury and assigning them to the most effective and efficient trauma care resources, in order to ensure optimal care and the best chance of survival.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 2 Designation of Trauma/Burn Centers**

- Rule 1.2.1. Application for Initial Trauma/Burn Center designation.
- a. To receive designation as a trauma center, or as a burn center, or as a tertiary pediatric trauma center, an applicant hospital shall submit an application to the Department. Within 60 days of receipt of the application, the Department shall provide written notification to the applicant hospital that the application has been

received by the Department; whether the Department accepts or rejects the application; if accepted, the date scheduled for an education visit; if rejected, the reasons for rejection and a deadline for submission of the corrected application to the Department.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.2. Trauma Center Education Visit:

1. Designated Level I, II, III Trauma Centers; Burn Centers; or Tertiary Pediatric Trauma Centers may request an education visit. This visit is used to assist the applicant hospital in preparation for the trauma center survey. The results of the visit will be held in confidence by the Department. The Department will work with and provide assistance to the applicant hospital to correct any deficiencies noted during the education visit. Education visits may be conducted on-site or by telephone/video conference; the applicant hospital shall request the preferred type of visit. The composition of the education team shall be determined by the Department.
2. If an applicant hospital requests a trauma center survey without having first received an education visit and the hospital fails to meet designation criteria, the survey shall be deemed an education visit. Any subsequent survey for designation as a trauma center shall be at the applicant hospital's expense.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.3. Hospital Surveys

1. The Department shall provide for the survey of the applicant hospital, provided that its application has been formally approved by the Department, on the date scheduled and indicated in the Department's acceptance letter to the applicant hospital, unless the Department provides written notification with justification of change to the applicant hospital no later than 14 days prior to the survey date; or the applicant hospital provides written request with justification for a change in the survey date to the Department no later than 30 days prior to the survey date.
2. Results of trauma center surveys will be provided by the Department in writing to the applicant hospital. Details related to the hospital's survey will be considered confidential and will not be released.
3. Surveys of Mississippi licensed hospitals and those that currently participate in the Trauma System may be conducted by national accrediting organizations, i.e., American College of Surgeons or American Burn Association. The Department must be present and receive the complete report from the accrediting organization, including any/all Corrective Action Plans (CAP). The Department shall review the report for compliance with the Mississippi Trauma System Rules and Regulations and shall make a recommendation to the State Health Officer for designation.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.4. Level I, II, and III Trauma Center, Burn Center, and Tertiary Pediatric Trauma Center On-site Surveys

1. The Department shall provide multidisciplinary teams for all on-site surveys.
2. Trauma Center survey teams shall consist of disciplines as follows:
  - Level I and II Trauma Centers: Teams shall consist of the following representative disciplines: trauma/general surgeon, emergency medicine physician, and trauma nursing. The Department may add additional team members as necessary. All members of teams for Level I and II Trauma Center inspections shall reside and practice outside the State of Mississippi.
  - Level III Trauma Centers: As a minimum, teams shall consist of the following representative disciplines: trauma/general surgeon and trauma nursing. Team members may reside in Mississippi; however, they may not practice in any hospital or reside within 60 miles of the applicant hospital. The Department may add team members as necessary.
  - Burn Centers: Teams shall consist of the following representative disciplines: surgeon with experience/credentials in burn care and trauma/burn nursing. Team members may reside in or outside of Mississippi; however, they may not practice in any hospital or reside within 60 miles of the applicant hospital. The Department may add team members as necessary.
  - Tertiary Pediatric Trauma Centers: Teams shall consist of the following representative disciplines: trauma/general surgeon with pediatric experience/credentials, emergency medicine physician with pediatric experience, and trauma nursing with pediatric experience. The Department may add team members as necessary. All team members shall reside outside of the State of Mississippi.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.5. Categories of Trauma Center Designations

1. Complete Designation: The hospital has completed all requirements for designation at the application level.
2. Complete Designation with Conditions: The hospital has completed all requirements for Complete Designation at the application level with the exception of minor (no patient or operational impact) condition(s). This designation category may be used for initial designations or an interim change in status from Complete Designation due to a temporary loss of a capacity or capability.
  - The Department, upon receipt, shall either approve or disapprove the plan within thirty (30) days. The Department may require a "Focused Survey" with an inspection team to review the hospital's CAP for complete implementation. If the Focused Survey team deems the CAP fully implemented, the hospital will receive Complete Designation.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.6. Term of Trauma Center Designations:

1. The Department shall designate trauma centers for a period not to exceed three (3) years. Designations shall remain active for three years provided no substantive changes or variances have occurred. The Department may perform periodic trauma center audit/reviews at each designated trauma center. The State Health Officer (SHO) may extend trauma center designations for one (1) year.
2. After completion of a designation survey, the team conducting the survey will make a recommendation to the Department for designation. The Director of the Bureau of Acute Care Systems (BACS) will present the survey report and the team's recommendation to the state Trauma System Medical Director (TSMD). The TSMD may seek advice or further recommendation from the Mississippi Trauma Advisory Committee (MTAC) during its executive session, if the TSMD disagrees with the recommendations of the team; otherwise the TSMD may make direct recommendations to the State Health Officer.
3. The Director of BACS will prepare a memorandum detailing the recommendations of the team and signed by the TSMD for the State Health Officer and will forward the memorandum and the designation letter to the State Health Officer for signature. Once signed, the letter will be sent to the hospital receiving the survey.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.7. Trauma/Burn/Tertiary Pediatric Trauma Center Designation Renewal: Hospitals desiring renewal of designation must submit an application to the Department no later than 180 days prior to expiration of designation. The Department will acknowledge receipt of the application within 60 days to the applicant hospital and begin the designation process as provided by this regulation.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.8. Loss of Required Trauma Care Capability: Any designated trauma/burn center that loses, either permanently or temporarily, physician, nursing, or other patient care specialties required by this regulation, shall report that loss to the Department utilizing the state approved reporting system. If the loss will result in diminished capability for a period longer than 30 days, the facility must also submit a Corrective Action Plan (CAP) that addresses how the facility will become compliant.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.9. Suspension of Trauma Center Designation: The State Health Officer may suspend the trauma center designation of any hospital for:

1. Documented conditions of serious threat or jeopardy to patients' health or welfare;
2. Failure to comply with laws or regulations;
3. Failure to satisfactorily meet the minimum requirements as a trauma center as

defined by regulations for the designation level.

4. Failure to complete a Corrective Action Plan (CAP) within the timeframe specified by the Department.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.10. Hospitals having their designation suspended may reapply for designation after resolution of all issues related to the suspension, and completion of a new application and survey. When a hospital's designation is suspended or withheld, the hospital is responsible for paying the pro-rata fees as set forth in the "Play or Pay" section of these regulations from the date of suspension until the center is re-designated.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.11. Change of Trauma Center Designation

1. Trauma centers will be permitted to change designation if the following conditions are met in entirety:
  - a. The trauma center has been surveyed and designated by the Department, the designation is current, and the trauma center is in full compliance with the Mississippi Trauma System Rules and Regulations;
  - b. The Department's Trauma System Medical Director has reviewed the request and determines that there is no adverse impact to the Trauma System;
  - c. The Bureau of Acute Care Systems concurs with the request;
  - d. The State Health Officer (SHO) or designee issues the new designation.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.12. Appeal Process.

1. A hospital shall have 30 calendar days from the date of notification of suspension of trauma center designation to appeal the decision, in writing, to the Department and to request a due process hearing.
2. The Director of the Bureau of Acute Care Systems, upon receipt of a request for a hearing, shall set a date no more than 30 calendar days from the receipt of the request for a hearing.
3. The hearing officer appointed to conduct the hearing shall be a person appointed by the Director of the Office of Health Protection. A stenographic record of the hearing shall be made by a certified reporter/stenographer. The record shall consist of all sworn testimony taken, written, documentary or other relevant evidence taken at said hearing.
4. Within 30 calendar days of the receipt by the hearing officer of the certified record, he/she shall render findings of fact and conclusions of law contained in an order. The

order so produced by the hearing officer shall be the final order of the Mississippi State Department of Health and shall be appealable to a court of competent jurisdiction.

5. If the decision of the Department is unfavorable to the hospital, the hospital may apply for trauma center designation at another level but must pay all costs associated with the survey.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.2.13. Partial Capability: Any trauma center that chooses to offer patient care services that are above the level of their trauma center designation, must comply with the standards for the higher level of designation, including response times for physician specialties, protocols and procedures, performance improvement processes, and equipment, training, and personnel as listed on the Essentials and Desirables (“E&D”) chart of the appropriate trauma center level. Additionally, the higher patient care must be reviewed by the hospital performance improvement committee, the statewide Performance Improvement Committee and the Department.

*Source: Miss. Code Ann. § 41-59-5*

### **Subchapter 3 Financial Support for the Trauma System**

Rule 1.3.1. Trauma Care Trust Fund: The Trauma Care Trust Fund (TCTF) shall serve as the financial support mechanism for development of the Mississippi Trauma System. The Department shall contract with a vendor, which shall provide specific services, including but not limited to TCTF distribution to designated trauma centers and EMS agencies, administrative support and trauma education activities, which shall be further delineated in the annual contract with MSDH.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.3.2. Trauma Care Trust Fund Eligibility

1. Trauma Care Trust Fund (TCTF) distribution shall be provided to designated Level I, II, and III Trauma Centers, designated Burn Centers, eligible physicians and eligible licensed ambulance services through the approved vendor. Designated Level IV Trauma Centers will receive an annual stipend for satisfactory participation in the Mississippi Trauma System. To be eligible for trauma funding as provided for in these rules, EMS providers must comply with the Mississippi Guidelines for Field Triage of Injured Patients and transport patients to the most appropriate trauma center (determined through Trauma Registry data reporting and statewide Performance Improvement Committee). Eligible expenditures for EMS providers are listed in the Trauma System Audit Manual posted on the MSDH Website.
2. Level I Trauma Centers and stand-alone Tertiary Pediatric Trauma Centers located in a state contiguous to the State of Mississippi that participate in the Mississippi Trauma System and have been designated by the Department shall be eligible to receive distributions from the TCTF.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.3.3. Trauma Care Trust Fund Distribution Formula

1. Funds for the administration and development of the Trauma System will be budgeted from available funds from the TCTF. Examples of administrative and development costs include but are not limited to salaries and benefit costs for personnel (full-time and part-time equivalents) who expend a portion of their time in trauma care administration and/or development, travel and training costs for such personnel, use of trauma care physicians and/or other trauma professionals used in the development and/or maintenance of the trauma system, development and/or maintenance of accounting and auditing of the use and distribution of the TCTF, costs of vendors involved in administrative and educational activities, , and the costs associated with the development and/or implementation of the Trauma System (i.e., telecommunication systems, data storage and/or retrieval systems, advertising, equipment, etc.).
2. Eighty-five percent (85%) of the remaining funds from the TCTF are allocated to participating Level I, II and III Trauma Centers and Burn Centers which shall further allocate at least thirty percent (30%) of the funds received to eligible physicians.
3. Fifteen percent (15%) of the remaining funds from the TCTF are allocated to eligible licensed ambulance services that provide pre-hospital care to trauma victims.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.3.4. Trauma Care Trust Fund Distribution Calculation: Amounts to be disbursed from the Trauma Care Trust Fund (TCTF) shall be calculated as follows:

1. On or about July 31 and January 31 each year, or at such other times as the State Health Officer may direct, the Bureau of Acute Care Systems shall obtain a financial report showing the fund balance in the TCTF.
2. To obtain the amount to be distributed, the following amounts will be subtracted from the fund balance:
  - One half of an amount to be determined by the Department for the administrative expenses of the Department (Bureau of Acute Care Systems, Trauma System of Care) as of the date of the calculation;
  - One half of an amount not to exceed Ten Thousand Dollars (\$10,000) for each Level IV Trauma Center which has completed at least one year of satisfactory participation in the Mississippi Trauma System as of the date of the calculation (annual stipend);
  - One half of an amount to be determined by the Department for MSTF administrative costs and costs of budgeted educational expenses as of the date of the calculation.
3. The amount remaining after the above administrative payments have been

calculated, reserved and/or expended, shall be distributed according to the TCTF formula.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.3.5. Trauma Card Trust Fund Ambulance Service Distribution

1. Fifteen percent (15%) of the amount remaining after the expenses noted in Rule 1.3.4 have been determined shall be distributed to the vendor used for fund distribution. The vendor shall further distribute said funds to eligible licensed ambulance services. Eligible licensed ambulance services shall be those basic or advanced life support ambulance services licensed by the Bureau of Emergency Medical Services to provide emergency pre-hospital trauma care. In the event there is more than one eligible licensed ambulance service active in one county, funding for the ambulance services in said county shall be distributed to both services based on call volume or other appropriate criteria as determined by the Department.
2. For purposes of determining amounts to be distributed to licensed ambulance services pursuant to this rule, the following definitions shall apply:
  - Census – the most recent decennial United States Census.
  - Small Counties – those counties with a population of less than 15,000 as identified in the most recent Census.
  - Large Counties – those counties with a population greater than or equal to 15,000 as identified in the most recent Census.
  - Total Fund Balance – that portion of the TCTF that is allocated to licensed ambulance services.
  - Small County Population Percentage – the sum of Small Counties population as a percent of the total state population as reflected by the Census.
  - Per Capita Portion – the portion of a Small County’s disbursement that is calculated by multiplying that county’s Small County Population Percentage by the Total Fund Balance.
  - Dedicated Portion – the portion of a Small County’s disbursement that is calculated by subtracting an amount from the Total Fund Balance and dividing among the Small Counties so that each Small County receives an equal disbursement that is equal to or less than the Large County with the lowest population.
  - Adjusted Population – determined by adding the population from the Small Counties and subtracting that sum from the state’s total population.
  - Adjusted Fund Balance – calculated by subtracting the amount dedicated for the smaller counties from the total fund balance.

**Per Capita Portion:**

Multiply the Small Counties Population Percentage by the Total Fund Balance.

Per Capita portion = (Small Counties Population Percentage X Total Fund Balance)

**Dedicated Portion:**

The Dedicated Portion is calculated by subtracting an amount from the Total Fund Balance and adding it to the Per Capita Portion so that the sum of the Per Capita Portion plus the Dedicated Portion is divided by the number of Small Counties, AND the result is less than or equal to the Disbursement received by the Large County with the population closest to or equal to 15,000.

Dedicated Portion = [(Per Capita Disbursement + Dedicated Portion) / (Number of Small Counties)]  
< / = Disbursement of the Large County with lowest population

The Disbursement for small counties is calculated by adding the Per Capita and Dedicated Portions.

Disbursement (for Small Counties) = (Per Capita Portion) + (Dedicated Portion)

**The amount to be disbursed for each Large County is calculated as follows:**

Disbursement = (census population) / (Adjusted population) X (Adjusted Fund Balance)

Source: Miss. Code Ann. § 41-59-75

Rule 1.3.6. Trauma Care Trust Fund Hospital Fixed Distribution

1. Eighty-five percent (85%) of the amount remaining after the expenses noted in Rule 1.3.4 have been determined shall be distributed to the vendor used for fund distribution. The vendor shall further distribute said funds to participating trauma centers as prescribed by the accounting firm.
2. Thirty percent (30%) of the amount reserved for distribution to hospitals shall be distributed according to a “Fixed Distribution,” based on the designated level of each eligible trauma center.
3. For purposes of determining amounts to be distributed to trauma centers pursuant to this rule, the following definitions shall apply:
  - Number of Facilities – the number of licensed acute care facilities designated as a Level I, Level II or Level III Trauma Centers
  - Relative Weights – Level I shall equal 100%; Level II shall equal 87.5%; Level III shall equal 62.5%
  - Calculated Weight – Equals the number of facilities designated at a particular level of trauma center multiplied by the relative weight.
  - Total Weight – equals the sum of calculated weights
  - Disbursement by Hospital Type – equals Total Hospital Fixed Fund/ Total Weight X Relative Weight

- Total Disbursement by Hospital Type – equals the sum of Disbursement by Hospital Type
4. To calculate the Hospital Fixed Distribution, the following formula is used:
- Multiply the number of facilities in each category (Level I, Level II and Level III) by the relative weights of each category. The product of this operation shall be the calculated weight of each type facility.
  - Sum the relative weights to obtain the “calculated weight.”
  - Divide the total Hospital Fixed Distribution amount by the product of the sum of the relative weights (“calculated weight”) and the relative weight assigned to that category.
  - The result is the amount to be distributed to each facility of that particular type (Level I, Level II or Level III).

*Source: Miss. Code Ann. § 41-59-75*

**Rule 1.3.7. Trauma Care Trust Fund Hospital Variable Distribution**

1. Fifty percent (50%) of the amount reserved for distribution to hospitals shall be distributed according to a “Variable Distribution” formula.
2. Using patient data collected in the Trauma Registry, assign all trauma cases of each Level I, Level II, and Level II Trauma Center an ISS severity index and category of A, B, C, or D according to the following table:

ISS	ISS Severity Index	ISS Severity Category
1-9	1.02	A
10-15	2.02	B
16-24	3.80	C
>24	6.57	D

3. Using patient data collected in the Trauma Registry, Calculate the number of cases treated by each trauma center which fall within each ISS Severity Category.
4. Multiply the total number of ISS Severity Category A cases by the relative value assignment of 1.02 to arrive at the total number of Category A points.
5. Multiply the total number of ISS Severity Category B cases by the relative value assignment of 2.02 to arrive at the total number of Category B points.
6. Multiply the total number of ISS Severity Category C cases by the relative value assignment of 3.80 to arrive at the total number of Category C points.

7. Multiply the total number of ISS Severity Category D cases by the relative value assignment of 6.57 to arrive at the total number of Category D points.
8. Add the points from Categories A, B, C, and D to arrive at a total number of points for each trauma center.
9. Sum the number of points from all categories and all hospitals to arrive at a total number of points for all trauma centers.
10. Take the number of points for each hospital and multiply that number by the total dollar amount for the 50 percent of the TCTF available for distribution to participating, eligible trauma centers. Take the product of that calculation and divide the resulting number by the total number of points for all trauma centers.
11. The resulting quotient is the dollar amount of the Hospital Variable Fund to be distributed to that trauma center.
12. Sum all the amounts to be distributed pursuant to the Hospital Variable Fund Calculation. The sum of all distributions should not exceed fifty percent (50%) of the eighty-five percent (85%) of the TCTF available for distribution to hospitals.

*Source: Miss. Code Ann. § 41-59-75*

Rule 1.3.8. Trauma Care Trust Fund Burn Center Distribution: Five percent (5%) of the amount reserved for distribution to hospitals shall be distributed to designated burn centers within the Trauma System. If more than one burn center is operating within the system, the 5% will be distributed based on a pro-rata share of patients as determined by Trauma Registry inputs. (Note: Trauma patients counted toward burn center distribution cannot be used to determine hospital variable distribution.) If no hospital has been designated as a burn center at the time of the distribution, the 5% shall be included in the Hospital Fixed Distribution.

*Source: Miss. Code Ann. § 41-59-75*

Rule 1.3.9. Play or Pay General Requirements:

1. Every Mississippi licensed acute care facility (hospital) having an organized emergency service or department shall participate in the Mississippi Statewide Trauma System. Every hospital having an organized emergency service or department shall submit data to the Trauma Registry.
2. Hospitals with the potential to serve as Level I, II, or III Trauma Centers must participate at the highest trauma designation level consistent with its capabilities as assessed by the Department.
3. Any hospital determined capable of participating as a Level IV Trauma Center may make application to be designated as a Level IV Trauma Center. A Level IV Trauma Center is required to submit data to the Trauma Registry and is eligible for \$10,000 for administrative costs as a participant in the Trauma System.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.3.10. Trauma Center Annual Capability Assessment:

1. Each year, all licensed acute care facilities shall complete the Trauma Center Annual Capability Assessment Survey, which is available via the Department's website. The facility will attest to the presence or absence of clinical services. Based on the facility's response, as well as other supporting evidence, the Department shall render an assessment of the facility's potential to participate in the Trauma System.
2. Each facility shall complete and return the Trauma Center Annual Capability Assessment Survey by July 31<sup>st</sup> each year.
3. On or about the first week of September an invoice and application (as applicable) will be sent by the Department to each facility in response to their respective survey.

*Source: Miss. Code Ann. § 41-59-5*

Rule 1.3.11. Annual Assessment Criteria: For the purposes of the annual capability assessment, if the trauma center has the resources to provide the following respective clinical services 24 hours per day, seven days per week, the trauma center will be assessed as follows:

1. Level I Trauma Center required services
  - Emergency Medicine
  - General Surgery
  - Orthopedic Surgery
  - Neurological Surgery
  - Anesthesia
  - Post Anesthesia Care Unit (PACU)
  - Intensive Care Unit (ICU)
  - Surgical Residency Program
2. Level II Trauma Center required services
  - Emergency Medicine
  - General Surgery

- Orthopedic Surgery
  - Neurological Surgery
  - Anesthesia
  - Post Anesthesia Care Unit (PACU)
  - Intensive Care Unit (ICU)
3. Level III Trauma Center required services
- Emergency Medicine
  - General Surgery
  - Orthopedic Surgery
  - Anesthesia
  - Post Anesthesia Care Unit (PACU)
  - Intensive Care Unit (ICU)

*Source: Miss. Code Ann. § 41-59-75*

Rule 1.3.12. Play or Pay Non-Participation Fee

1. Any hospital that chooses not to participate in the Trauma Care System as a Level I, II, or III Trauma Center, or participates at a level lower than the level at which it is capable of participating, as determined by the Department, or fails to maintain or becomes incapable of maintaining its designation as a Level I, II or III Trauma Center, or has its designation as a Level I, II, or III Trauma Center suspended by the Department, or becomes “non-designated” as a Level I, II, or III Trauma Center, shall be assessed and shall pay a non-participation fee as defined by this regulation.
  - All fees are due and payable annually before January 1 of each year. Any event above, occurring during the calendar year shall result in the hospital owing a pro- rata portion of the fee. The fee assessed shall be pro-rated on a monthly basis. The fee shall be paid in full upon written notification from the Department.
2. The fee schedule shall be reassessed and adjusted, as necessary, by the Mississippi Trauma Advisory Committee.
3. The fee schedule is as follows:

Current Level	Projected Level	Fee for Non-Participation
Non-Designated	Level II	\$1,492,000.00
Non-Designated	Level III	\$ 758,000.00
Level III to	Level II	\$ 423,500.00
Level IV to	Level II	\$1,492,000.00
Level IV to	Level III	\$ 758,000.00

Source: Miss. Code Ann. § 41-59-75

Rule 1.3.13. Play or Pay Appeal Process

1. Following the receipt of an invoice from the Department for a Non-Participation fee, the hospital assessed the fee may request a due process hearing on the assessment. Any such request for hearing must be filed by the assessed facility with the Director of the Bureau of Acute Care Systems, Mississippi State Department of Health, within thirty (30) days of the date of the assessment.
2. The date of the assessment is defined as the date which the assessment is placed in the United States Mail, postage pre-paid, addressed to the facility assessed, at the address furnished by the hospital to the Trauma Registry, or to the address published by the party as its usual and customary business address. The date of the postmark shall be prima facie evidence of the date of the assessment.
3. The Director of the Bureau of Acute Care Systems, upon receipt of a valid, timely request for a hearing, shall set a date no more than thirty (30) calendar days from the receipt of the request for hearing.
4. The hearing officer appointed to conduct the hearing shall be a person chosen or appointed by the Director of the Office of Health Protection. A stenographic record of the hearing shall be made by a certified reporter/stenographer. The record shall consist of all sworn testimony taken, written, documentary or other relevant evidence taken at said hearing.
5. The only issues for adjudication are:
  - The timeliness of notice of the assessment and delivery of the same;
  - The trauma classification of the party; and
  - The calculation of the amount of the assessment.
6. Within thirty (30) days of the receipt by the hearing officer of the certified record, he or she shall render findings of fact and conclusions of law contained in an order. The order so produced by the hearing officer shall be the final order of the Mississippi State Department of Health and shall be appealable to a court of competent jurisdiction.
7. If no appeal from the final order is taken within twenty (20) days of the date

of the order, the party assessed shall pay on or before the twentieth (20<sup>th</sup>) day following the date of the order the entire fee assessed.

*Source: Miss. Code Ann. § 41-59-75*

Rule 1.3.14. Delinquent Payments to the Trauma Care Trust Fund:

1. If a hospital fails to submit an application for designation as a trauma center and fails to pay the required fee for Non-Participation by January 1, a letter from the Department will be sent via certified mail to the administrator of the hospital informing that payment is due no later than 30 days from the delivery date of the letter, or that the a request for a due process hearing must be received at the Department no later than 30 days from the delivery date of the letter.
2. If the administrator fails to respond, or comply with the requirements of the certified letter, a letter will be sent by the Bureau of Acute Care Systems to the Bureau of Health Facilities Licensure and Certification documenting an alleged violation of the Minimum Standards for the Operation of Mississippi Hospitals, specifically that the governing body of the hospital, through its administrator, failed to take all reasonable steps to comply with all applicable federal, state and local laws and regulations. A copy of the letter will be sent to the hospital administrator via certified mail.
3. The Bureau of Health Facilities Licensure and Certification will conduct an investigation of the alleged violation(s). If a finding of Substantiated is returned, the Bureau of Acute Care Systems will recommend to Licensure and Certification that the hospital's license be revoked. A copy of this recommendation will be sent to the hospital administrator via certified mail. A copy of recommendation will also be sent to the Centers for Medicare and Medicaid Services (CMS).
4. Once the hospital has satisfied the requirements of this Sub-chapter, the Bureau of Acute Care Systems will send a letter to License and Certification recommending reinstatement of the hospital's license with/without restrictions, as appropriate. A copy of this recommendation will be sent to the hospital administrator via certified mail and to CMS.
5. If a hospital elects to participate at a level lower than the assessed capability and fails to pay the required fee for Non-participation by January 1, a letter from the Department will be sent via certified mail to the administrator of the hospital informing that payment is due no later than 30 days from the delivery date of the letter, or that the a request for a due process hearing must be received at the Department no later than 30 days from the delivery date of the letter.
6. If the administrator fails to respond, or comply with the requirements of the certified letter, a letter will be sent by the Bureau of Acute Care Systems to the Bureau of Health Facilities Licensure and Certification documenting an alleged violation of the Minimum Standards for the Operation of Mississippi Hospitals, specifically that the governing body of the hospital, through its administrator, failed to take all reasonable steps to comply with all applicable federal, state and local laws and regulations. A copy of the letter will be sent to the hospital

administrator via certified mail.

7. The Bureau of Health Facilities Licensure and Certification will conduct an investigation of the alleged violation(s) and if a finding of Substantiated is returned, the Bureau of Acute Care Systems will recommend to Licensure and Certification that the hospital's license be revoked. A copy of this recommendation will be sent to the hospital administrator via certified mail. A copy of recommendation will also be sent to CMS.
8. Once the hospital has satisfied the requirements of this Sub-chapter, the Bureau of Acute Care Systems will send a letter to License and Certification recommending reinstatement of the hospital's license with/without restrictions as appropriate. A copy of this recommendation will be sent to the hospital administrator via certified mail and to CMS.

#### **Subchapter 4 Mississippi State Trauma Registry**

##### **Rule 1.4.1. Applicability**

1. All Mississippi-licensed hospitals which have an emergency service or department shall participate in the Trauma Registry data collection process, whether or not they participate in the Trauma System. All out-of-state hospitals designated as Mississippi trauma centers shall participate in the Trauma Registry. Specialized treatment centers, either in-state or out-of-state, that have contracts with the Department to provide care to Mississippi trauma/burn patients, shall participate in the Trauma Registry.
2. All trauma data collection instruments shall include the collection of both pre-hospital and hospital patient care data and shall be integrated into the Department's data management systems. Trauma registry inclusion criteria and the data dictionary can be found on the Department's website.

*Source: Miss. Code Ann. § 41-59-75*

**Rule 1.4.2. Timeliness of Submissions:** Trauma Registry data shall be submitted by all hospitals to the Department no later than two (2) months plus six (6) days after the end of the current month. For example, Trauma Registry data for the month of January is due no later than April 6<sup>th</sup>.

*Source: Miss. Code Ann. § 41-59-75*

**Rule 1.4.3. Trauma Registrar staffing:** Each trauma center shall have a sufficient number of trauma registrars to ensure all registry entries are submitted on time and are accurate. Registrars must complete initial training of sixteen (16) hours within six (6) months of hire/assignment. All registrars must complete eight (8) hours of registry specific continuing education annually.

*Source: Miss. Code Ann §41-59-5*

## **Subchapter 5 Administrative and Educational Support**

### **Rule 1.5.1. Administrative and Educational Support Activities**

1. The Mississippi Trauma System of Care Plan provides for a mandatory trauma system that is inclusive, matching appropriate resources and responses to the needs of trauma patients. The Plan provides a mechanism for improving community health through an organized system of injury prevention, acute care and rehabilitation, which shall be fully integrated into the statewide public health system. The Plan calls for making use of a vendor or vendors for administrative and/or educational services as required for the efficacy of the program. Any vendor used for said purpose shall function under contract with MSDH.

*Source: Miss. Code Ann. § 41-59-75*

## **Subchapter 6 Inter-facility Transfers of Trauma Patients**

### **Rule 1.6.1. Inter-facility Transfers**

1. Patients may be transferred from trauma centers to other trauma centers and/or specialty referral centers provided that any such transfer is medically prudent, as determined by the transferring trauma center physician of record and is conducted by the appropriate level of emergency medical service provider.
2. Trauma centers shall develop written criteria for consultation and transfer of patients needing a higher/specialty level of care. Trauma center/specialty referral centers that repatriate trauma patients shall provide data required by the Trauma Registry to the receiving trauma center.
3. Trauma centers/specialty hospitals receiving transferred trauma patients shall provide written feedback to the transferring facility and shall participate in the state performance improvement process.

*Source: Miss. Code Ann. § 41-59-75*

## **Chapter 2 Performance Improvement and Patient Safety**

### **Subchapter 1 Authority and Scope**

- Rule 2.1.1. Each designated trauma center shall have a Performance Improvement and Patient Safety (PIPS) program. The PIPS program shall be multidisciplinary in nature with every member of the trauma team playing a role in PIPS program. The trauma center's trauma medical director (TMD) shall maintain overall accountability for the execution of the PIPS program. The trauma program shall have the authority to monitor all events that occur during a trauma-related episode of care within the organization.

*Source: Miss. Code Ann. § 41-59-5*

Rule 2.1.2. A reporting structure for the trauma program and service must be defined. The trauma service routinely functions under the organization's department of surgery and reports to the medical executive committee, or equivalent. In addition, the trauma program shall report to the administrative structure of the organization.

*Source: Miss. Code Ann. § 41-59-5*

Rule 2.1.3. The TMD and trauma program manager (TPM) shall maintain the trauma PIPS program with data support from the Trauma registry. Representatives from other clinical and hospital departments involved in the care of trauma patients, as well as the hospital's performance improvement/quality department, shall participate when appropriate to ensure multidisciplinary collaboration and compliance with the hospital's PIPS plan.

*Source: Miss. Code Ann. § 41-59-5*

Rule 2.1.4. The TMD is responsible for the review of all physician related issues, including all mortalities and screened complications. Although the TMD remains responsible for the overall function of the trauma program, the TPM shall be responsible for the operational and logistical aspects of the trauma PIPS program. The TPM is responsible for identification of issues and their initial validation, the maintenance of the trauma PIPS database/files and protection of their confidentiality, facilitating data trends and analysis, and coordinating surveillance of protocols/guidelines/clinical paths.

*Source: Miss. Code Ann. § 41-59-5*

Rule 2.1.5. There must be a process to address trauma program operational issues. Typically, this function is accomplished by a multidisciplinary trauma committee that examines trauma-related hospital operations and includes representatives from all phases of trauma care. PIPS activities may also be accomplished within this committee. The committee must be chaired by the TMD and shall be comprised of department directors and physicians representing all phases and disciplines of care provided to the injured patient. The committee shall meet routinely with a defined attendance requirement.

*Source: Miss. Code Ann. § 41-59-5*

Rule 2.1.6. Mortalities, significant complications, and process variances associated with unanticipated outcomes shall undergo a systematic multidisciplinary trauma peer review to determine opportunities for improvement. This effort may be accomplished in a variety of formats but shall involve the participation and leadership of the TMD, general surgeons on the trauma call panel, and liaisons from emergency medicine, orthopedics, neurosurgery, anesthesia, critical care, and radiology. Ideally, other surgeons and other non-liaison members of other specialties involved in trauma call shall attend when a case in which they participated is being discussed. This meeting shall be held routinely with the frequency determined by the TMD based on case volume and the needs of the PIPS program. Meeting minutes and other documentation of this peer review activity shall be confidential.

*Source: Miss. Code Ann. § 41-59-5*

Rule 2.1.7. Each trauma center shall define criteria for case selection for formal trauma mortality and morbidity review. Documentation of case review shall be completed by the TMD and the TPM. Corrective action plans shall be developed, and issues trended, as appropriate.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 2 Performance Improvement and Patient Safety Plan**

Rule 2.2.1. Each trauma center shall prepare a written Performance Improvement and Patient Safety (PIPS) Plan. There is no precise prescription for the PIPS plan; however, the trauma program must demonstrate a continuous process of monitoring, assessment, and management directed at improving care. A trauma PIPS plan shall practice a multi-disciplinary and multi-departmental approach to reviewing the quality of patient care across departments and divisions. The trauma PIPS program shall integrate with the hospital quality and patient safety effort and have a clearly defined reporting structure and method for provision of feedback.

*Source: Miss. Code Ann. § 41-59-5*

Rule 2.2.2. Each trauma center shall define a trauma population to perform data collection and analysis. Some programs may choose to define their trauma population as per Mississippi State Department of Health Trauma Registry Inclusion Criteria, while other programs may opt to monitor all injured patients treated at the facility regardless of registry inclusion.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 3 Case Review Process**

Rule 2.3.1. Identified cases shall be reviewed by the TPM and TMD, as appropriate, for determination of need for further action. The TMD provides oversight for the review process for all aspects of the multidisciplinary trauma care from the time of the injury through discharge. PIPS data shall be routinely presented to a committee within the hospital charged with trauma PIPS. The trauma program shall also interact with the organization's performance improvement/quality program referring appropriate issues for review.

*Source: Miss. Code Ann. § 41-59-5*

Rule 2.3.2. Levels of review can be accomplished in a variety of formats, depending on the volume of trauma patients at a given center and the structure of the trauma PIPS program in the context of the hospital's quality program. The levels of review are:

- a. First Level Review: TPM or designee performs the initial case review to verify and validate the issue. If the first level of review is completed, affirming that clinical care is appropriate and no issues are identified, the case does not require second level or formal committee review. However, if an issue is identified, the issue shall be addressed by the TMD and/or the committee charged with trauma PIPS review. In

some instances, immediate feedback and resolution may be possible at this level. Even if issue resolution occurs during this level, the issue and activities shall be documented for ongoing monitoring and trend analysis.

- b. Second Level Review: This level encompasses cases consisting of clinical care, provider care, or systems issues which require medical director expertise and judgment. The TPM and TMD may initiate further investigation, implement action without formal referral to a peer review or system committee, or decide to send it to the appropriate performance improvement/quality committee or to a hospital department for further investigation/peer review and request follow-up. If immediate feedback and resolution are obtained, the issue may be resolved. If not, the issue shall be referred for multidisciplinary committee review, including peer review or some other appropriate PIPS committee capable of further analysis and event resolution.
- c. Third Level Review: The TPM and TMD will perform an initial case review, consisting of identification of all background information, pertinent protocols (or deficiency of), and specify all individual issues to be discussed, in preparation for multidisciplinary review. Cases may be referred to the appropriate hospital department via appointed liaisons, committee, or department chair. The TMD and/or trauma committee will then review the response of the referral for follow-up planning.
- d. Fourth Level Review: The TPM, TMD, and multidisciplinary review committee perform the initial review. Cases are then referred to the appropriate body for external review with review response to the TMD and/or trauma committee for follow-up planning.

*Source: Miss. Code Ann. § 41-59-5*

Rule 2.3.3. Reviewed issues shall have a determination classified in a manner consistent with the trauma center's institution-wide performance improvement program. Mutually agreed upon nomenclature shall be utilized. Based on this review process, the appropriateness and timeliness of care shall be reviewed, and opportunities for improvement (i.e. errors in judgment, technique, treatment, or communication, along with delays in assessment, diagnosis, technique, or treatment) shall be determined and documented. When an error can be attributed to a single credentialed provider, use of the departmental or institutional formal medical peer review process shall be considered.

*Source: Miss. Code Ann. § 41-59-5*

Rule 2.3.4. The TMD must oversee corrective action planning at their institution. Structured plans may be created by any of the PIPS team members or trauma committees in an effort to improve sub-optimal performance identified through the PIPS process. The goal is to create forward momentum to effect demonstrable outcome change leading to subsequent loop closure. An evaluation and re-evaluation process will be part of the plan according to the institution's action plan methodology. Examples of corrective action categories are:

- a. Counseling
- b. Credentialing/privilege change

- c. Education
- d. External review
- e. Guideline, protocol, or pathway development or revision
- f. PEER review
- g. Resource addition or enhancement
- h. Trending

*Source: Miss. Code Ann. § 41-59-5*

#### **Subchapter 4 Trauma Core Indicators**

Rule 2.4.1. Process and outcomes measures, referred to as audit filters or indicators, require defined criteria and metrics. Trauma Core Indicators (TCI) are mandatory indicators within the Mississippi Trauma System.

*Source: Miss. Code Ann. § 41-59-5*

### **Chapter 3 Level I Trauma Centers**

#### **Subchapter 1 Hospital Organization**

Rule 3.1.1. General

1. Level I Trauma Centers shall act as tertiary care facilities at the hub of the trauma care system. The facility must have the ability to provide leadership and total care for every aspect of injury from prevention to rehabilitation. As a tertiary facility, the Level I Trauma Center must have adequate depth of resources and personnel.
2. Level I Trauma Centers shall provide leadership in education, trauma prevention, research, system planning and performance improvement.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.1.2. Hospital Departments/Divisions/Sections

1. The Level I Trauma Centers must have the following departments, divisions, or sections:
  - a. Emergency Medicine
  - b. General Surgery

- c. Orthopedic Surgery
- d. Neurological Surgery
- e. Anesthesia

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.1.3. Trauma Program

1. There shall be a written commitment on behalf of the entire facility to the organization of trauma care. The written commitment shall be in the form of a resolution at the time of application passed by an appropriate quorum of the members of the governing authority. Should the business organization be other than a corporation, a letter explaining such, together with a written commitment of the hospital's chief executive officer, to the establishment of a trauma care program may be sufficient. The trauma program must be established and recognized by the medical staff and hospital administration. The trauma program must come under the direction of a board-certified general surgeon with special interest in trauma care. An identified hospital administrative leader must work closely with the trauma medical director to establish and maintain the components of the trauma program including appropriate financial support. The trauma program location in the organizational structure of the hospital must be such that it may interact effectively with at least equal authority with other departments providing patient care. The administrative structure must minimally include an administrator, medical director (TMD), trauma program manager (TPM), trauma registrar and appropriate support staff. Administrative support includes human resources, education activities, community outreach activities, and research. The trauma program must be multidisciplinary in nature and the performance improvement evaluation of this care must be extended to all the involved departments.
2. Compliance with the above will be evidenced by but not limited to:
  - a. Governing authority and medical staff letter of commitment in the form of a resolution;
  - b. Written policies and procedures and guidelines for the care of the trauma patient;
  - c. Defined trauma team and written roles and responsibilities;
  - d. Appointed Trauma Medical Director with a written job description;
  - e. Appointed Trauma Program Manager with a written job description;
  - f. A written Trauma Performance Improvement plan; and
  - g. Documentation of representative attendance at statewide PI meetings.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.1.4. Trauma Service: The trauma service shall be established and recognized by the medical staff and be responsible for the overall coordination and management of the system of care rendered to the injured patient. The trauma service will vary in each organization depending on the needs of the patient and the resources available. The trauma service shall come under the organization and direction of a surgeon who is board certified with special interest in trauma care. All patients with multiple system trauma or serious injury shall be evaluated and or admitted by the trauma surgical service. The surgeon responsible for the overall care of the patient must be identified.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.1.5. Trauma Medical Director (TMD): Level I Trauma Centers shall have a physician director Board Certified in General Surgery of the trauma program. The medical director plays an important administrative role and may not direct more than one adult trauma center. The medical director will be responsible for developing a performance improvement process and will have overall accountability and administrative authority for the trauma program. The medical director must be given administrative support to implement the requirements specified by the state trauma plan. The director is responsible for working with the credentialing process of the hospital, and in consultation with the appropriate service chiefs, for recommending appointment and removal of physicians from the trauma team. He must cooperate with nursing administration to support the nursing needs of the trauma patient and develop treatment protocols for the trauma patients. The director in collaboration with the Trauma Program Manager (TPM) must coordinate the budgetary process for the trauma program. The director must be currently certified in Advanced Trauma Life Support (ATLS), maintain personal involvement in care of the injured, maintain education in trauma care, and maintain involvement in professional organizations. The trauma director must be actively involved with the trauma system development. The TMD must perform an annual assessment of the general surgeons and mid-level providers assigned to the trauma service using a formal documented process.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.1.6. Trauma Program Manager (TPM)

1. Level I Trauma Centers must have a registered nurse working full-time in the role of Trauma Program Manager (TPM). Working in conjunction with the TMD, the TPM is responsible for organization of the program and all systems necessary for the multidisciplinary approach throughout the continuum of trauma care. The TPM is responsible for working with the trauma team to assure optimal patient care. There are many requirements for data coordination and performance improvement, education and prevention activities incumbent upon this position. The TPM must obtain 16 hours of trauma related education per year.
2. The TPM or his/her designee must offer or coordinate services for trauma

education. The TPM should liaison with local EMS personnel, the Department, and other trauma centers.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.1.7. Trauma Team: There shall be identified members of the trauma team. Policies must be in place describing the respective role of all personnel on the trauma team. The composition of the trauma team in any hospital will depend on the characteristics of the hospital and its staff. All physicians and mid-level providers (physician assistant/nurse practitioner) on the trauma team responsible for directing the initial resuscitation of the trauma patients must be currently certified in Advanced Trauma Life Support (ATLS). ATLS requirements are waived for Board Certified Emergency Medicine and Board-Certified General Surgery Physicians. Composition of the trauma team for a severely injured patient includes:

1. Emergency Physician and/or mid-level providers (physician assistant/nurse practitioner)
2. General/Trauma Surgeon
3. Nurses: ED
4. Laboratory Technicians
5. Respiratory Therapist

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.1.8. Multidisciplinary Trauma Committee

1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. Each trauma center may choose to have one or more committees as needed to accomplish the task. One committee must be multidisciplinary and focus on program oversight and leadership. The major focus will be on PI activities, policy development, communication among all team members, and establishment of standards of care, and education and outreach programs for injury prevention. The committee has administrative and systematic control and oversees implementation of all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Membership for the committee includes representatives from:
  - a. Trauma Medical Director (Chairman; must be present at greater than 50% of the meetings).
  - b. Emergency Medicine
  - c. General Surgery

- d. Orthopedics
  - e. Neurosurgery
  - f. Anesthesia
  - g. Operating Room
  - h. Intensive Care
  - i. Respiratory Therapy
  - j. Radiology
  - k. Laboratory
  - l. Rehabilitation
  - m. Pre-hospital Care Providers
  - n. Administration
  - o. Pediatrics
  - p. Nursing
  - q. Trauma Program Manager
2. The clinical managers (or designees) of the departments involved with trauma care must play an active role with the committee.
  3. The trauma center may wish to accomplish performance improvement activities in this committee or develop a separate peer review committee. This committee must handle peer review independent from department based review. The committee must meet regularly and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 2 Clinical Components**

- Rule 3.2.1. Required Components: Level I Trauma Centers must maintain published call schedules and have the following physician coverage immediately available 24 hours/day:
1. Emergency Medicine (In-house 24 hours/day). Emergency Physician and/or mid-level provider (physician assistant/nurse practitioner) must be in the specified trauma resuscitation area upon patient arrival.
  2. Trauma/General Surgery (In-house 24/hours). The trauma surgeon on-call must

be unencumbered and immediately available to respond to the trauma patient. The 24-hour-in-house availability of the attending surgeon is the most direct method for providing this involvement. A PGY 4 or 5 resident may be approved to begin the resuscitation while awaiting the arrival of the attending surgeon but cannot be considered a replacement for the attending surgeon in the ED. The general surgeon is expected to be in the emergency department upon arrival of the seriously injured patient. The trauma surgeon's participation in major therapeutic decisions, presence in the emergency department for major resuscitation and presence at operative procedures is mandatory. There must be a back-up surgeon schedule published. A system must be developed to assure notification of the on-call surgeon and compliance with these criteria and their appropriateness must be documented and monitored by the PI process. Response time for Alpha Activations is 15 minutes and starts at patient arrival or EMS notification, whichever is shorter. Response time for Bravo Activations is 20 minutes from the time notified to respond.

3. Orthopedic Surgery. It is required to have the orthopedists dedicated to the trauma center solely while on-call. The maximum response time for all trauma patients is 60 minutes from the time notified to respond.
4. Neurologic Surgery. It is required to have the neurosurgeon dedicated to the trauma center solely while on-call or a backup schedule must be available. The maximum response time for all trauma patients is 30 minutes from the time notified to respond.
5. It is desirable the following specialists are promptly available 24 hours/day:
  - a. Cardiac Surgery\*
  - b. Cardiology
  - c. Critical Care Medicine
  - d. Hand Surgery
  - e. Infectious Disease
  - f. Micro-vascular Surgery
  - g. Nephrology
  - h. Nutritional Support
  - i. Obstetrics/Gynecologic Surgery
  - j. Ophthalmic Surgery
  - k. Oral/Maxillofacial
  - l. Pediatrics

- m. Plastic Surgery
- n. Pulmonary Medicine
- o. Radiology
- p. Thoracic Surgery\*

\*A trauma surgeon is presumed to be qualified and have privileges to provide emergency thoracic surgical care to patients with thoracic injuries. If this is not the case, the facility must have a board certified cardiac/thoracic surgeon immediately available (within 30 minutes of the time notified to respond).

- 6. Policies and procedures must exist to notify the transferring hospital of the patient's condition.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.2.2. Qualifications of Surgeons on the Trauma Team

- 1. Basic to qualification for trauma care for any surgeon is board certification in a surgical specialty recognized by the American Board of Medical Specialties, the Advisory Board for Osteopathic Specialties, the Royal College of Physicians, the American Dental Association and Surgeons of Canada, or other appropriate foreign board. Many boards require a practice period. Such an individual may be included when recognition by major professional organizations has been received in their specialty. The board certification criteria apply to the general surgeons, orthopedic surgeons, and neurosurgeons.
- 2. Alternate criteria in lieu of board certification are as follows:
  - a. A non-board-certified general surgeon must have completed a surgical residency program.
  - b. He/she must be licensed to practice medicine.
  - c. He/she must be approved by the hospital's credentialing committee for surgical privileges.
  - d. The surgeon must meet all criteria established by the trauma director to serve on the trauma team.
  - e. The surgeons' experience in caring for the trauma patient must be tracked by the PI program.
  - f. The TMD must attest to the surgeons' experience and quality as part of the recurring granting of trauma team privileges.
  - g. The TMD, using the trauma PI program, is responsible for determining

each general surgeon's ability to participate on the trauma team.

3. The surgeon is expected to serve as the captain of the resuscitating team and is expected to be in the emergency department upon arrival of the seriously injured patient to make key decisions about the management of the trauma patient's care. The surgeon will coordinate all aspects of treatment, including resuscitation, operation, critical care, recuperation and rehabilitation (as appropriate in a Level I facility) and determine if the patient needs transport to a higher level of care. If transport is required, he/she is accountable for coordination of the process with the receiving physician at the receiving facility. If the patient is to be admitted to the Level I Trauma Center, the surgeon is the admitting physician and will coordinate the patient care while hospitalized. Guidelines must be written at the local level to determine which types of patients should be admitted to the Level I Trauma Centers or which patients should be considered for transfer to a higher level of care. General surgeons taking trauma call must have eight (8) hours of trauma specific continuing medical education over three years. This can be met within the 40-hour requirement by licensure.
4. The general surgery liaison, orthopedic liaison, and neurosurgery liaison must participate in a multi-disciplinary trauma committee and the PI process. Committee attendance at least fifty percent (50%) over a year's period of time.

*Source: Miss. Code Ann. § 41-59-5*

#### Rule 3.2.3. Qualification of Emergency Physicians

1. For those physicians providing emergency medicine coverage, board certification in Emergency Medicine or General Surgery is required (or current certification in ATLS).
2. Alternative criteria for the non-boarded physician working in the Emergency Department are as follows:
  - a. He/she must be licensed to practice medicine
  - b. He/she must be approved by the hospital's credentialing committee for emergency medicine privileges.
  - c. The physician must meet all criteria established by the trauma and emergency medical director to serve on the trauma team.
  - d. The physician's experience in caring for the trauma patient must be tracked by the PI program.
  - e. The trauma and emergency medical director must attest to the physician's experience and quality as part of the recurring granting of trauma team privileges.
  - f. ATLS must be obtained within 18 months of hire.
3. The emergency medicine liaison must participate in a multi-disciplinary trauma

committee and the PI process. Committee attendance must be at least fifty percent (50%) over a year's period of time. Emergency physicians must be currently certified in ATLS (ATLS requirements are waived for Board Certified Emergency Medicine and Board-Certified General Surgery Physicians), and it is required they be involved in at least eight (8) hours of trauma related continuing medical education (CME) every 3 years.

*Source: Miss. Code Ann. § 41-59-5*

### **Subchapter 3 Facility Standards**

#### **Rule 3.3.1. Emergency Department**

1. The facility must have an emergency department, division, service, or section staffed so trauma patients are assured immediate and appropriate initial care. The emergency physician and/or mid-level provider (physician assistant/nurse practitioner) must be in-house 24 hours/day and immediately available at all times. The emergency department medical director must meet the recommended requirements related to commitment, experience, continuing education, ongoing credentialing, and board certification in emergency medicine.
2. The emergency department medical director, along with the Trauma Medical Director, will establish trauma-specific credentials that must exceed those that are required for general hospital privileges. Examples of credentialing requirements would include skill proficiency, training requirements, conference attendance, education requirements, ATLS verification and specialty board certification.
3. The emergency medicine physician will be responsible for activating the trauma team based on predetermined response protocols. He will provide team leadership and care for the trauma patient until the arrival of the surgeon in the resuscitation area. The emergency department must have established standards and procedures to ensure immediate and appropriate care for the adult and pediatric trauma patient. The emergency department medical director, or his/her designee, must act as a liaison and participate with the multidisciplinary trauma committee and the trauma PI process.
4. There shall be an adequate number of RN's staffing the trauma resuscitation area in-house 24 hours/day. Emergency nurses staffing the trauma resuscitation area must be a current provider of Trauma Nurse Core Curriculum (TNCC) or Advance Trauma Care for Nurses (ATCN) and participate in the ongoing PI process of the trauma program. Nurses must obtain TNCC or ATCN within 18 months of assignment to the ER.
5. The list of required equipment necessary for the ED can be found on-line at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

#### **Rule 3.3.2. Surgical Suites/Anesthesia**

1. The operating room (OR) must be staffed and available in-house 24 hours/day.
2. An operating room must be adequately staffed and available within 30 minutes of time of notification. Availability of the operating room personnel and timeliness of starting operations must be continuously evaluated by the trauma performance improvement process, and measures must be implemented to ensure optimal care.
3. The OR nurses should participate in the care of the trauma patient and be competent in the surgical stabilization of the major trauma patient.
4. The surgical nurses are an integral member of the trauma team and must participate in the ongoing PI process of the trauma program and be represented on the multidisciplinary trauma committee.
5. The OR supervisor must be able to demonstrate a prioritization scheme to assure the availability of an operating room for the emergent trauma during a busy operative schedule. There must be an on-call system for additional personnel for multiple patient admissions.
6. The anesthesia department in a Level I trauma center must be ideally organized and run by an anesthesiologist who is highly experienced and devoted to the care of the injured patient. Anesthesiologists on the trauma team must have successfully completed an anesthesia residency program approved by the Accreditation Council for Graduate Medical Education, the American Board of Osteopathic Specialties and have board certification in anesthesia. One anesthesiologist must maintain commitment to education in trauma related anesthesia.
7. Anesthesia must be in-house and available 24 hours/day. Anesthesia chief residents or Certified Registered Nurse Anesthetist (CRNAs) may fill this requirement. When residents or CRNAs are utilized, the staff anesthesiologist on-call will be available within 30 minutes, and present for all operations.
8. Hospital policy must be established to determine when the anesthesiologist must be immediately available for airway control and assisting with resuscitation. The availability of the anesthesiologist and the absence of delays in airway control or operative anesthesia must be documented and monitored by the PI process. The maximum response time for all trauma patients is 30 minutes from the time notified to respond.
9. The list of required equipment necessary for Surgery and Anesthesia can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.3.3. Post Anesthesia Care Unit (PACU)

1. Level I Trauma Centers must have a PACU staffed 24 hours/day and available

to the postoperative trauma patient. Frequently it is advantageous to bypass the PACU and directly admit to the ICU. In this instance, the ICU may meet these requirements.

2. PACU staffing must be in sufficient numbers to meet the critical needs of the trauma patient.
3. The list of required equipment necessary for PACU can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.3.4. Intensive Care Unit (ICU)

1. Level I Trauma Centers must have an Intensive Care Unit (ICU) that meets the needs of the adult trauma patient.
2. The surgical director or co-director must be the TMD, or general surgeon taking trauma call. The director is responsible for the quality of care and administration of the ICU and will set policy and establish standards of care to meet the unique needs of the trauma patient.
3. The surgeon assumes and maintains responsibility for the care of the serious or multiple injured patients. A surgically directed ICU physician team is essential. The team will provide in-house physician coverage for all ICU trauma patients at all times. This service can be staffed by appropriately trained physicians from different specialties but must be led by a qualified surgeon as determined by critical care credentials consistent with the medical staff privileging process of the institution. The trauma surgeon must maintain control over all the aspects of care, including but not limited to respiratory care, management of mechanical ventilation, and placement and use of pulmonary catheters, as well as the management of fluids, electrolytes and antimicrobials, and enteral and parenteral nutrition.
4. There must be in-house physician coverage for the ICU at all times. A physician credentialed by the facility must be available to the trauma patient in the ICU 24 hours/day. This coverage is for emergencies only and is not intended to replace the primary surgeon but rather is intended to ensure that the patient's immediate needs are met while the surgeon is contacted.
5. Level I Trauma Centers must provide staffing in sufficient numbers to meet the critical needs of the trauma patient. Critical care nurses must be available 24 hours per day. ICU nurses are integral part of the trauma team and as such, shall be represented on the multidisciplinary trauma committee and participate in the PI process of the trauma program at least 50% of the time.
6. The list of required equipment necessary for the ICU can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 4 Clinical Support Services**

Rule 3.4.1. Respiratory Therapy Service: The service must be staffed with qualified personnel in-house 24 hours/day to provide the necessary treatment for the injured patient.

*Source: Miss. Code Ann. § 41-59-5*

### **Rule 3.4.2. Radiological Service**

1. A radiological service must have a certified radiological technician in-house 24 hours/day and immediately available at all times for general radiological procedures. A technician must be in-house and immediately available for computerized tomography (CT) for both head and body.
2. Sonography, angiography, and MRI must be available to the trauma team and may be covered with a technician on call.
3. The radiology liaison must attend at least 50 percent of committee meetings and should educate and guide the entire trauma team in the appropriate use of radiologic services.
4. A staff radiologist must be promptly available, when requested, for the interpretation of radiographs, performance of complex imaging studies or interventional procedures. The radiologist must ensure the preliminary interpretations are promptly reported to the trauma team and the PI program must monitor all changes in interpretation.
5. Written policy must exist delineating the prioritization/availability of the CT scanner for trauma patients.
6. The trauma center must have policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriate trauma providers during transportation to, and while in, the radiology department.

*Source: Miss. Code Ann. § 41-59-5*

### **Rule 3.4.3. Clinical Laboratory Service**

1. Clinical laboratory service must have the following services available in-house 24 hours/day:
  - a. Access to a blood bank and adequate storage facilities. Sufficient quantities of blood and blood products must be maintained at all times. Blood typing and crossmatch capabilities must be readily available.
  - b. Standard analysis of blood, urine and other body fluids including micro-sampling when appropriate.
  - c. Blood gas and PH determinations (this function may be performed by

services other than the clinical laboratory service, when applicable.)

- d. Alcohol and drug screening.
- e. Coagulation studies.
- f. Microbiology

- 2. Trauma centers of all levels must have a massive blood transfusion protocol developed collaboratively between the trauma service and the blood bank.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.4.4. Acute Hemodialysis: Level I Trauma Centers must have Acute Hemodialysis services.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.4.5. Burn Care: There must be a written protocol to transfer the patient to a Burn Center, if appropriate burn care is not available at the Level I Trauma Center. Policies and procedures shall be in place to assure the appropriate care is rendered during the initial resuscitation and transfer of the patient.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.4.6. Rehabilitation/Social Services

- 1. Recognizing that early rehabilitation is imperative for the trauma patient, a physical medicine and rehabilitation specialist must be available for the trauma program.
- 2. The rehabilitation of the trauma patient and the continued support of the family members are an important part of the trauma system. Each facility will be required to address a plan for integration of rehabilitation into the acute and primary care of the trauma patient, at the earliest stage possible after admission to the trauma center. Hospitals will be required to identify a mechanism to initiate rehabilitation services and/or consultation in a timely manner as well as policies regarding coordination of the Multidisciplinary Rehabilitation Team. The rehabilitation services must minimally include;
  - a. Occupational Therapy
  - b. Physical Therapy
  - c. Speech Pathology
  - d. Social Work
  - e. Psychological
  - f. Nutritional support

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.4.7. Prevention/Public Outreach

1. Level I Trauma Centers will be responsible for taking a lead role in coordination of appropriate agencies, professional groups and hospitals to develop a strategic plan for public awareness. This plan must take into consideration public awareness of the trauma system, access to the system, public support for the system, as well as specific prevention strategies. Prevention programs must be specific to the needs of the hospital and/or geographic area. A trauma center's prevention program must include and track partnerships with other community organizations. At a minimum, Trauma Registry data must be utilized to identify injury trends and focus prevention needs.
2. Outreach is the act of providing resources to individuals and institutions that do not have the opportunities to maintain current knowledge and skills. Staff members at a Level I Trauma Centers must provide consultation to staff members of other level facilities. For example: Advanced Trauma Life Support (ATLS), Pre-Hospital Trauma Life Support (PHTLS), Trauma Nurse Curriculum Course (TNCC), and Transport Nurse Advanced Trauma Course (TNATC) courses can be coordinated by the trauma center.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.4.8. Transfer Guidelines: Level I Trauma Centers shall work in collaboration with the referral trauma facilities in the system and develop inter-facility transfer guidelines. These guidelines must address criteria to identify high-risk trauma patients that could benefit from a higher level of trauma care. All designated facilities will agree to provide services to the trauma victim regardless of his/her ability to pay.

*Source: Miss. Code Ann. § 41-59-5*

Rule 3.4.9. Education

1. Level I Trauma Centers must have an internal trauma education program including training in trauma for physicians, nurses and pre-hospital providers. Level I Trauma Centers must take a leadership role in providing educational activities. Education can be accomplished via many mechanisms (i.e. classic CME, preceptorships, fellowships, clinical rotations, telecommunications or providing locum tenens etc.).
2. Level I Trauma Centers must have a written trauma education plan.
3. The Level I Trauma Center is expected to support a surgical residency program. Additionally, there should be a senior resident rotation in at least one of the following disciplines: emergency medicine, general surgery, orthopedic surgery, neurosurgery or support a trauma fellowship. The Level I should provide ATLS courses for the system.

*Source: Miss. Code Ann. § 41-59-5*

#### Rule 3.4.10. Research

1. A trauma research program must be designed to produce new knowledge applicable to the care of the injured patient. The research may be conducted in a number of ways including traditional laboratory and clinical research, reviews of clinical series, and epidemiological or other studies. Publication of articles in peer-review journals as well as presentations of results at local, statewide and national meetings and ongoing studies approved by human and animal research review boards are expected from productive programs. The program should have an organized structure that fosters and monitors ongoing productivity.
2. The research program must be balanced to reflect a number of different interests. There must be a research committee, and identifiable Institutional Review Board process, active research protocols, surgeons involved in extramural educational presentations and adequate number of peer reviewed scientific publications. Publications should appear in peer-reviewed journals. In a three-year cycle, the minimum activity is ten publications from the physicians representing any of the four following specialties: emergency medicine, general surgery, orthopedic surgery, and neurosurgery.

### **Chapter 4 Level II Trauma Centers**

#### **Subchapter 1 Hospital Organization**

Rule 4.1.1. General: A Level II Trauma Center is an acute care facility with the commitment, resources, and specialty training necessary to provide sophisticated trauma care, and provide leadership in performance improvement activities.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.1.2. Hospital Departments/Divisions/Sections: The Level II Trauma Center must have the following departments, divisions, or sections:

1. Emergency Medicine
2. Trauma/General Surgery
3. Orthopedic Surgery
4. Neurological Surgery
5. Anesthesia

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.1.3. Trauma Program

1. There must be a written commitment on behalf of the entire facility to the organization of trauma care. The written commitment shall be in the form of a

resolution at the time of application passed by an appropriate quorum of the members of the governing authority. Should the business organization be other than a corporation, a letter explaining such together with a written commitment of the hospital's chief executive officer to the establishment of a trauma care program may be sufficient. The trauma program must be established and recognized by the medical staff and hospital administration. The trauma program must come under the direction of a surgeon with current or previous board certification in General Surgery. An identified hospital administrative leader must work closely with the trauma medical director to establish and maintain the components of the trauma program including appropriate financial support. The trauma program location in the organizational structure of the hospital must be placed so that it may interact effectively with at least equal authority with other departments providing patient care. An administrative structure must minimally include an administrator, medical director (TMD), trauma program manager (TPM), trauma registrar and the appropriate support staff. Administrative support includes human resources, educational activities and community outreach activities. The trauma program must be multidisciplinary in nature and the performance improvement evaluation of this care must extend to all the involved departments.

2. Compliance with the above will be evidenced by, but not limited to:
  - a. Governing authority and medical staff letter of commitment in the form of a resolution;
  - b. Written policies and procedures and guidelines for care of the trauma patient;
  - c. Defined trauma team and written roles and responsibilities;
  - d. Appointed Trauma Medical Director with a written job description;
  - e. Appointed Trauma Program Manager with a written job description;
  - f. A written Trauma Performance Improvement plan;

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.1.4. Trauma Service: The trauma service must be established and recognized by the medical staff and be responsible for the overall coordination and management of the system of care rendered to the injured patient. The trauma service will vary in each organization depending on the needs of the patient and the resources available. The trauma service must come under the organization and direction of a surgeon with current or previous board certification in General Surgery. All patients with multiple system trauma or serious injury must be evaluated and admitted by the trauma service. The surgeon responsible for the overall care of the patient must be identified.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.1.5. Trauma Medical Director (TMD): Level II Trauma Centers must have a physician director current or previous Board Certified in General Surgery of the trauma program. The trauma program medical director plays an important administrative role and may not direct more than one Trauma Center. The medical director will be responsible for developing a performance improvement process and will have overall accountability and administrative authority for the trauma program. The medical director must be given administrative support to implement the requirements specified by the State trauma plan. The director is responsible for working with the credentialing process of the hospital, and, in consultation with the appropriate service chiefs, recommending appointment and removal of physicians from the trauma team. He should cooperate with nursing administration to support the nursing needs of the trauma patient and develop treatment protocols for the trauma patients. The director in collaboration with the trauma program manager (TPM) should coordinate the budgetary process for the trauma program. The director must be currently certified in Advanced Trauma Life Support (ATLS), maintain personal involvement in care of the injured, maintain education in trauma care, and maintain involvement in professional organizations. The trauma director must be actively involved with trauma system development. The TMD must perform an annual assessment of the general surgeons and mid-level providers assigned to the trauma service using a formal documented process.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.1.6. Trauma Program Manager (TPM)

1. Level II Trauma Centers must have a registered nurse working full-time in the role of Trauma Program Manager (TPM). Working in conjunction with the TMD, the TPM is responsible for organization of the program and all systems necessary for the multidisciplinary approach throughout the continuum of trauma care. The TPM is responsible for working with the trauma team to assure optimal patient care. There are many requirements for data coordination and performance improvement, education and prevention activities incumbent upon this position. The TPM must obtain 16 hours of trauma related education per year.
2. The TPM or his/her designee should offer or coordinate services for trauma education. The TPM should liaison with local EMS personnel, the Department, and other Trauma Centers.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.1.7. Trauma Team – the team approach is optimal in the care of the multiple injured patients. There must be identified members of the trauma team. Policies should be in place describing the respective role of all personnel on the trauma team. The composition of the trauma team in any hospital will depend on the characteristics of that hospital and its staff. The team leader must be a qualified

general surgeon. All physicians and mid-level providers (physician assistant/nurse practitioner) on the trauma team responsible for directing the initial resuscitation of the trauma patients must be currently certified in Advanced Trauma Life Support (ATLS). ATLS requirements are waived for Board Certified Emergency Medicine and Board-Certified General Surgery Physicians. Minimum composition of the trauma team for a severely injured patient shall include:

1. Emergency Physicians and/or mid-level providers (physician assistant/nurse practitioner)
2. General/Trauma Surgeon
3. Nurses
4. Laboratory Technicians
5. Respiratory Therapists

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.1.8. Multidisciplinary Trauma Committee

1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. Each trauma center may choose to have one or more committees to accomplish the tasks necessary. One committee should be multidisciplinary and focus on program oversight and leadership. The major focus will be on PI activities, policy development, communication among all team members, establishment of standards of care, education and outreach programs, and injury prevention. The committee has administrative and systematic control and oversees implementation of all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Membership for the committee includes representatives from:
  - a. Trauma Medical Director (Chairman; must be present at greater than 50% of the meetings)
  - b. Emergency Medicine
  - c. General Surgery
  - d. Orthopedics
  - e. Neurosurgery
  - f. Anesthesia
  - g. Operating Room
  - h. Intensive Care

- i. Respiratory Therapy
  - j. Radiology
  - k. Laboratory
  - l. Rehabilitation
  - m. Pre-hospital Care Providers
  - n. Administration
  - o. Pediatrics
  - p. Nursing
  - q. Trauma Program Manager
2. The clinical managers (or designees) of the departments involved with trauma care should play an active role with the committee.
  3. The trauma center may wish to accomplish performance improvement activities at this same committee or develop a separate peer review committee. This committee should handle peer review independent from department based review. This committee must be multidisciplinary, meet regularly, and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 2 Clinical Components**

- Rule 4.2.1. Required Components: Level II Trauma Centers must maintain published call schedules and have the following physician coverage immediately available 24 hours/day:
1. Emergency Medicine (In-house 24 hours/day). Emergency Physician and/or mid-level provider (Physician Assistant/Nurse Practitioner) must be in the specified trauma resuscitation area upon patient arrival.
  2. Trauma/General Surgery. The trauma surgeon on-call must be unencumbered and immediately available to respond to the trauma patient. The general surgeon is expected to be in the emergency department upon arrival of the seriously injured

patient. Hospital policy must be established to define conditions requiring the trauma surgeon's presence with the clear requirement on the part of the hospital and surgeon that the surgeon will participate in the early care of the patient. The trauma surgeon's participation in major therapeutic decisions, presence in the emergency department for major resuscitation and presence at operative procedures is mandatory. The on-call surgeon must be dedicated to the trauma center and not on-call at any other hospital. There must be a back-up surgeon schedule published. A system must be developed to assure notification of the on-call surgeon and compliance with these criteria and their appropriateness must be documented and monitored by the PI process. Response time for Alpha Activations is 30 minutes and starts at patient arrival or EMS notification, whichever is shorter. Response time for Bravo Activations is 45 minutes from the time notified to respond.

3. Orthopedic Surgery. It is desirable to have the orthopedists dedicated to the trauma center solely while on-call or a backup schedule should be available. The maximum response time for all trauma patients is 60 minutes from the time notified to respond.
4. Neurologic Surgery. It is desirable to have the neurosurgeon dedicated to the trauma center solely while on-call or a backup schedule should be available. The maximum response time for all trauma patients is 30 minutes from the time notified to respond.
5. It is desirable the following specialists be on-call and available 24 hours/day:
  - a. Critical Care Medicine
  - b. Obstetrics/Gynecologic Surgery
  - c. Plastic Surgery
  - d. Radiology
  - e. Thoracic Surgery\*

\*A trauma surgeon is presumed to be qualified and have privileges to provide emergency thoracic surgical care to patients with thoracic injuries. If this is not the case, the facility should have a board-certified thoracic surgeon immediately available (within 30 minutes of the time notified to respond).

6. Recognizing that early rehabilitation is imperative for the trauma patient, a physical medicine and rehabilitation specialist must be available for the trauma program.
7. Policies and procedures should exist to notify the transferring hospital of the patient's condition.

Rule 4.2.2. Qualifications of Surgeons on the Trauma Team

1. Basic to qualification for trauma care for any surgeon is current or previous Board Certification in a surgical specialty recognized by the American Board of Medical Specialties, the Advisory Board for Osteopathic Specialties, the American Dental Association, the Royal College of Physicians and Surgeons of Canada or other appropriate foreign board. Many boards require a practice period. Such an individual may be included when recognition by major professional organizations has been received in their specialty. The board certification criteria apply to the general surgeons, orthopedic surgeons, and neurosurgeons.
2. Alternate criteria in lieu of board certification are as follows:
  - a. A non-board-certified general surgeon must have completed a surgical residency program.
  - b. He/she must be licensed to practice medicine.
  - c. He/she must be approved by the hospital's credentialing committee for surgical privileges.
  - d. The surgeon must meet all criteria established by the TMD to serve on the trauma team.
  - e. The surgeon's experience in caring for the trauma patient must be tracked by the PI program.
  - f. The TMD must attest to the surgeon's experience and quality as part of the recurring granting of trauma team privileges.
  - g. The TMD, using the trauma PI program, is responsible for determining each general surgeon's ability to participate on the trauma team.
3. The surgeon is expected to serve as the captain of the resuscitating team and is expected to be in the emergency department upon arrival of the seriously injured patient to make key decisions about the management of the trauma patient's care. The surgeon will coordinate all aspects of treatment, including resuscitation, operation, critical care, recuperation and rehabilitation (as appropriate in a Level II facility) and determine if the patient needs transport to a higher level of care. If transport is required, he/she is accountable for coordination of the process with the receiving physician at the receiving facility. If the patient is to be admitted to the Level II Trauma Center, the surgeon is the admitting physician and will coordinate the patient care while hospitalized. Guidelines should be written at the local level to determine which types of patients should be admitted to the Level II Trauma Center or which patients should be considered for transfer to a higher level of care.

General Surgeons taking trauma call must have eight (8) hours of trauma specific continuing education over three years. This can be met within the 40-hour requirement by licensure.

4. The orthopedic liaison and neurosurgery liaison must participate in a multi-disciplinary trauma committee and the PI process. Committee attendance must be at least fifty percent (50%) over a year's period of time.

*Source: Miss. Code Ann. § 41-59-5*

#### Rule 4.2.3. Qualifications of Emergency Physicians

1. For those physicians providing emergency medicine coverage, current or previous board certification in Emergency Medicine or General Surgery is required or current certification in ATLS.
2. Alternative criteria for the non-boarded physician working in the Emergency Department are as follows:
  - a. He/she must be licensed to practice medicine.
  - b. He/she must be approved by the hospital's credentialing committee for emergency medicine privileges.
  - c. The physician must meet all criteria established by the trauma and emergency medical director to serve on the trauma team.
  - d. The physician's experience in caring for the trauma patient must be tracked by the PI program.
  - e. The emergency medical director must attest to the physician's experience and quality as part of the recurring granting of trauma team privileges.
  - f. ATLS must be obtained within 18 months of hire.
3. The emergency medicine liaison must participate in a multi-disciplinary trauma committee and the PI process. Committee attendance must be at least fifty percent (50%) over a year's period of time. Emergency physicians must be currently certified in ATLS (ATLS requirements are waived for Board Certified Emergency Medicine and Board-Certified General Surgery Physicians), and it is required they be involved in at least eight (8) hours of trauma related continuing education (CME) every 3 years.

*Source: Miss. Code Ann. § 41-59-5*

## Subchapter 3 Facility Standards

### Rule 4.3.1. Emergency Department

1. The facility must have an emergency department, division, service, or section staffed so trauma patients are assured immediate and appropriate initial care. The emergency physician must be in-house 24 hours/day and immediately available at all times. The emergency department medical director must meet the recommended requirements related to commitment, experience, continuing education, ongoing credentialing, and current or previous board certification in emergency medicine.
2. The director of the emergency department, along with the Trauma Medical Director (TMD), will establish trauma-specific credentials that should exceed those that are required for general hospital privileges. Examples of credentialing requirements would include skill proficiency, training requirements, conference attendance, education requirements, ATLS verification, and specialty board certification.
3. The emergency medicine physician or designee will be responsible for activating the trauma team based on predetermined response protocols. He will provide team leadership and care for the trauma patient until the arrival of the surgeon in the resuscitation area. The emergency department must have established standards and procedures to ensure immediate and appropriate care for the adult and pediatric trauma patient. The emergency department medical director, or his/her designee, must act as a liaison and participate with the multidisciplinary trauma committee and the trauma PI process.
4. There should be an adequate number of RN's staffed for the trauma resuscitation area in-house 24 hours/day. Emergency nurses staffing the trauma resuscitation area must be a current provider of Trauma Nurse Core Curriculum (TNCC), or Advanced Trauma Care for Nurses (ATCN), and participate in the ongoing PI process of the trauma program. Nurses must obtain TNCC or ATCN within 18 months of assignment to the ER.
5. The list of required equipment necessary for the ED can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

### Rule 4.3.2. Surgical Suites/Anesthesia

1. An operating room must be adequately staffed and available within 30 minutes of time of notification. Availability of the operating room personnel and timeliness of starting operations must be continuously evaluated by the trauma performance improvement process, and measures must be implemented to ensure optimal care.

2. If the staff is not in-house, hospital policy must be written to assure notification and prompt response.
3. The OR nurses should participate in the care of the trauma patient and be competent in the surgical stabilization of the major trauma patient.
4. The surgical nurses are an integral member of the trauma team and must participate in the ongoing PI process of the trauma program and must be represented on the multidisciplinary trauma committee.
5. The OR supervisor must be able to demonstrate a prioritization scheme to assure the availability of an operating room for the emergent trauma patient during a busy operative schedule. There must be an on-call system for additional personnel for multiple patient admissions.
6. The anesthesia department in a Level II Trauma Center must be organized and run by an anesthesiologist who is experienced and devoted to the care of the injured patient.
7. A licensed anesthesia provider must be immediately available with a mechanism established to ensure early notification of the on-call provider. Anesthesiologists or Certified Registered Nurse Anesthetist (CRNAs) may fill this requirement. Hospital policy must be established to determine when the licensed anesthesia provider must be immediately available for airway control and assisting with resuscitation. The availability of the licensed anesthesia provider and the absence of delays in airway control or operative anesthesia must be documented and monitored by the PI process. The maximum response time for all trauma patients is 30 minutes from the time notified to respond.
8. The list of required equipment for Surgery and Anesthesia can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.3.3. Post Anesthesia Care Unit (PACU)

1. It is essential to have a PACU staffed 24 hours/day and available to the postoperative trauma patient. If the staff is not in-house, hospital policy must be written to assure early notification and prompt response. If this availability requirement is met with a team on call from outside the hospital, the availability of the PACU nurses and compliance with this requirement must be documented.
2. PACU staffing should be in sufficient numbers to meet the critical needs of the trauma patient.

3. The list of required equipment necessary for the PACU can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

**Rule 4.3.4. Intensive Care Unit (ICU)**

1. Level II Trauma Centers must have an Intensive Care Unit (ICU) that meets the needs of the adult trauma patient.
2. The surgical director or co-director must be the TMD, or general surgeon taking trauma call. The director is responsible for the quality of care and administration of the ICU and will set policy and establish standards of care to meet the unique needs of the trauma patient.
3. The trauma surgeon assumes and maintains responsibility for the care of the serious or multiple injured patients. A surgically directed ICU physician team is desirable. The team will provide in-house physician coverage for all ICU trauma patients at all times. This service can be staffed by appropriately trained physicians from different specialties but must be led by a qualified surgeon consistent with the medical staff privileging process of the institution. The trauma surgeon must maintain control over all aspects of care, including but not limited to respiratory care, management of mechanical ventilation and placement and use of pulmonary catheters, as well as management of fluids, electrolytes, antimicrobials, and enteral and parenteral nutrition.
4. There must be physician coverage for the ICU at all times. A physician credentialed by the facility must be promptly available to the trauma patient in the ICU 24 hours/day. This coverage is for emergencies only and is not intended to replace the primary surgeon but rather is intended to ensure that the patient's immediate needs are met while the surgeon is contacted.
5. Level II Trauma Centers must provide staffing in sufficient numbers to meet the critical needs of the trauma patient. Critical care nurses must be available 24 hours per day. ICU nurses are an integral part of the trauma team and as such, shall be represented on the multidisciplinary trauma committee and participate in the PI process of the trauma program at least 50% of the time.
6. The list of required equipment necessary for the ICU can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

**Subchapter 4 Clinical Support Services**

- Rule 4.4.1. Respiratory Therapy Service** – the service must be staffed with qualified personnel in-house 24 hours/day to provide the necessary treatments for the injured patient.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.4.2. Radiological Service

1. A radiological service must have a certified radiological technician in-house 24 hours/day and immediately available at all times for general radiological procedures. A technician must be in-house and immediately available for computerized tomography (CT) for both head and body.
2. Specialty procedures such as Sonography and Angiography must be available to the trauma team. It is desirable that MRI services be available to the trauma team.
3. The radiologist liaison must attend at least 50 percent of committee meetings and should educate and guide the entire trauma team in the appropriate use of radiologic services. A staff radiologist must be promptly available, when requested, for the interpretation of radiographs, performance of complex imaging studies or interventional procedures. The radiologist must ensure the preliminary interpretations are promptly reported to the trauma team and radiology services must monitor the interpretation.
4. Written policy must exist delineating the prioritization/availability of the CT scanner for trauma patients. The Trauma Center must have policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to, and while in, the radiology department.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.4.3. Clinical Laboratory Service:

1. A clinical laboratory service must have the following services available in-house 24 hours/day:
  - a. Access to a blood bank and adequate storage facilities. Sufficient quantities of blood and blood products must be maintained at all times. Blood typing and crossmatch capabilities must be readily available.
  - b. Standard analysis of blood, urine, and other body fluids including micro sampling when appropriate.
  - c. Blood gas and pH determinations (this function may be performed by services other than the clinical laboratory service, when applicable).
  - d. Alcohol and drug screening.
  - e. Coagulation studies
  - f. Microbiology

2. Trauma Centers of all levels must have a massive blood transfusion protocol developed collaboratively between the trauma service and the blood bank.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.4.4. Acute Hemodialysis: There must be a written protocol to transfer the patient to a facility that provides this service if this service is not available at the Level II Trauma Center.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.4.5. Burn Care: There must be a written protocol to transfer the patient to a Burn Center, if appropriate burn care is not available at the Level II Trauma Center. Policies and procedures shall be in place to assure that the appropriate care is rendered during the initial resuscitation and transfer of the patient.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.4.6. Rehabilitation/Social Services

1. The rehabilitation of the trauma patient and the continued support of the family members are an important part of the Trauma System. Each facility will be required to address a plan for integration of rehabilitation into the acute and primary care of the trauma patient, at the earliest stage possible after admission to the trauma center. Hospitals will be required to identify a mechanism to initiate rehabilitation services and/or consultation in a timely manner as well as policies regarding coordination of the multidisciplinary rehabilitation team. The rehabilitation services must minimally include;
  - a. Occupational Therapy
  - b. Physical Therapy
  - c. Speech Pathology
  - d. Social Work
  - e. Psychological Therapy
  - f. Nutritional support

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.4.7. Prevention/Public Outreach

1. Level II Trauma Centers will be responsible for participating with appropriate agencies, professional groups and hospitals in their geographic area to develop a strategic plan for public awareness. This plan must take into consideration public awareness of the trauma system, access to the system, public support for the system, as well as specific prevention strategies. Prevention programs must be specific to the needs of the geographic area. A trauma center's prevention program must include and track partnerships with other community organizations. Trauma Registry data must be utilized to identify injury trends and focus prevention needs.

2. Outreach is the act of providing resources to individuals and institutions that do not have the opportunities to maintain current knowledge and skills. Staff members at the Level II Trauma Center should provide consultation to staff members at other facilities in the geographic area. Advanced Trauma Life Support (ATLS), Pre-Hospital Trauma Life Support (PHTLS), Trauma Nurse Curriculum Course (TNCC), and Transport Nurse Advanced Trauma Course (TNATC) courses for example can be coordinated by the Trauma Center. Trauma physicians should provide a formal follow up to referring physicians/designee about specific patients to educate the practitioner for the benefit of further injured patients.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.4.8. Transfer Guidelines: Level II Trauma Centers shall work in collaboration with the referral trauma facilities in the system and develop interfacility transfer guidelines. These guidelines must address criteria to identify high-risk trauma patients that could benefit from a higher level of trauma care. All designated facilities will agree to provide services to the trauma victim regardless of his/her ability to pay.

*Source: Miss. Code Ann. § 41-59-5*

Rule 4.4.9. Education.

1. Level II Trauma Centers must have internal trauma education programs including training in trauma for physicians, nurses, ancillary staff, and prehospital providers.
2. Level II Trauma Centers must have a written trauma education plan.

## **Chapter 5 Level III Trauma Centers**

### **Subchapter 1 Hospital Organization**

Rule 5.1.1. General: A Level III Trauma Center is an acute care facility with the commitment, medical staff, personnel and specialty training necessary to provide initial resuscitation of the trauma patient. Generally, a Level III Trauma Center is expected to provide initial resuscitation of the trauma patient and immediate operative intervention to control hemorrhage and to assure maximal stabilization prior to referral to a higher level of care. In many instances, patients will remain in the Level III Trauma Center unless the medical needs of the patient require secondary transfer. The decision to transfer a patient is the responsibility of the

physician attending the trauma patient. All Level III Trauma Centers will work collaboratively with other trauma facilities to develop transfer protocols and a well-defined transfer sequence. The trauma center shall participate in hospital and statewide performance improvement activities.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.1.2. Hospital Departments/Divisions/Sections: The Level III Trauma Center must have the following departments, divisions, or sections:

1. Emergency Medicine
2. Trauma/General Surgery
3. Orthopedic Surgery
4. Anesthesia

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.1.3. Trauma Program

1. There must be a written commitment on behalf of the entire facility to the organization of trauma care. The written commitment shall be in the form of a resolution at the time of application passed by an appropriate quorum of the members of the governing authority. Should the business organization be other than a corporation, a letter explaining such together with a written commitment of the hospital's chief executive officer to the establishment of a trauma care program may be sufficient. The trauma program must be established and recognized by the medical staff and hospital administration. The trauma program must come under the direction of a surgeon with current or previous board certification in General Surgery. An identified hospital administrative leader must work closely with the trauma medical director to establish and maintain the components of the trauma program including appropriate financial support. The trauma program location in the organizational structure of the hospital must be placed so that it may interact effectively with at least equal authority with other departments providing patient care. An administrative structure must minimally include an administrator, trauma medical director (TMD), trauma program manager (TPM), trauma registrar and other appropriate support staff. Administrative support includes human resources, educational activities and community outreach activities. The trauma program must be multidisciplinary in nature and the performance improvement evaluation of this care must extend to all the involved departments.
2. Compliance with the above will be evidenced by but not limited to:

- a. Governing authority and medical staff letter of commitment in the form of a resolution;
- b. Written policies and procedures and guidelines for care of the trauma patient;
- c. Defined trauma team and written roles and responsibilities;
- d. Appointed Trauma Medical Director with a written job description;
- e. Appointed Trauma Program Manager with a written job description;
- f. A written Trauma Performance Improvement plan;

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.1.4. Trauma Service: The trauma service must be established and recognized by the medical staff and be responsible for the overall coordination and management of the system of care rendered to the injured patient. The trauma service will vary in each organization depending on the needs of the patient and the resources available. The trauma service must come under the organization and direction of the TMD. All patients with multiple system trauma or serious injury must be evaluated and/or admitted by the trauma surgeon. The surgeon responsible for the overall care of the patient must be identified.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.1.5. Trauma Medical Director (TMD)

1. Level III Trauma Centers must have a physician director of the trauma program with current or previous Board Certification in General Surgery and may not direct more than one trauma center. The TMD plays an important administrative role. The TMD will be responsible for developing a performance improvement process and will have overall accountability and administrative authority for the trauma program. The TMD must be given administrative support to implement the requirements specified by the State trauma plan. The TMD is responsible for working with the credentialing process of the hospital and, in consultation with the appropriate service chiefs, recommending appointment and removal of physicians from the trauma team. She/he must cooperate with nursing administration to support the nursing needs of the trauma patient and develop treatment protocols for the trauma patients. The TMD in collaboration with the Trauma Program Manager (TPM) must coordinate the budgetary process for the trauma program
2. The TMD must be currently certified in Advanced Trauma Life Support (ATLS), maintain personal involvement in care of the injured, maintain education in trauma care, and maintain involvement in professional organizations. The TMD, or his designee, must be actively involved with the trauma system development at the community and state level. The TMD must perform an annual assessment

of general surgeons and mid-level providers assigned to the trauma service using a formal documented process.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.1.6. Trauma Program Manager (TPM)

1. Level III Trauma Centers must have a registered nurse working in the role of Trauma Program Manager (TPM). Working in conjunction with the TMD, the TPM is responsible for organization of the program and all systems necessary for the multidisciplinary approach throughout the continuum of trauma care. The TPM is responsible for working with the trauma team to assure optimal patient care. There are many requirements for data coordination and performance improvement, education and prevention activities incumbent upon this position. The TPM must obtain/maintain 4 hours of trauma related education per year. TNCC may be used to meet this requirement.
2. The TPM or his/her designee must offer or coordinate services for trauma education. The TPM must liaison with local EMS personnel, the Department and other trauma centers.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.1.7. Trauma Team – the team approach is optimal in the care of the severely or multiple injured patient. There must be identified members of the trauma team. Policies must be in place describing the roles of all personnel on the trauma team. The composition of the trauma team in any hospital will depend on the characteristics of that hospital and its staff. All physicians and mid-level providers (physician assistant/nurse practitioner) on the trauma team responsible for directing the initial resuscitation of the trauma patient must be currently certified in Advanced Trauma Life Support (ATLS). ATLS requirements are waived for Board Certified Emergency Medicine and Board-Certified General Surgery Physicians. Minimum composition of the trauma team for severely injured patients includes:

1. General/Trauma Surgeons
2. Emergency Physicians and/or mid-level providers (physician assistant/nurse practitioner)
3. Nursing: ED
4. Laboratory Technicians
5. Respiratory Therapists
6. Radiology Technician

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.1.8. Multidisciplinary Trauma Committee

1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. The exact format will be hospital specific and may be accomplished by collaboration with another designated Trauma Center in the region. Each trauma center may choose to have one or more committees to accomplish the tasks necessary. One committee must be multidisciplinary and focus on program oversight and leadership. The major focus will be on PI activities, policy development, communication among all team members, development of standards of care, education and outreach programs, and injury prevention. The committee has administrative and systematic control and oversees the implementation of all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Membership for the committee includes representatives from:
  - a. Trauma Medical Director (Chairman; must be present at greater than 50% of the meetings)
  - b. Emergency Medicine
  - c. General Surgery
  - d. Orthopedics
  - e. Anesthesia
  - f. Operating Room
  - g. Intensive Care
  - h. Respiratory Therapy
  - i. Radiology
  - j. Laboratory
  - k. Rehabilitation
  - l. Pre-hospital Care Providers
  - m. Administration
  - n. Pediatrics
  - o. Nursing
  - p. Trauma Program Manager
2. The clinical managers (or designees) of the departments involved with trauma

care must play an active role with the committee.

3. The trauma center may wish to accomplish performance improvement activities in this committee or develop a separate peer review committee. This committee must handle peer review independent from department based review. The committee must be multidisciplinary, meet regularly and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 2 Clinical Components**

Rule 5.2.1. Required Components – Level III Trauma Centers must maintain published call schedules and have the following physician coverage immediately available 24 hours/day:

1. Emergency Medicine (In-house 24 hours/day). Emergency Physician and/or mid-level provider (physician assistant/nurse practitioner) must be in the specified trauma resuscitation area upon patient arrival.
2. Trauma/General Surgery. It is desirable that a backup surgeon schedule is published. It is desirable that the surgeon on-call is dedicated to the trauma center and not on-call to any other hospital while on trauma call. Hospital policy must be established to define conditions requiring the trauma surgeon's presence with the clear requirement on the part of the hospital and surgeon that the surgeon will participate in the early care of the patient. The trauma surgeon's participation in major therapeutic decisions, presence in the emergency department for major resuscitation and presence at operative procedures is mandatory. A system must be developed to assure notification of the on-call surgeon and compliance with these criteria and their appropriateness must be documented and monitored by the PI process. Response time for Alpha Activations is 30 minutes and starts at patient arrival or EMS notification, whichever is sooner. Response time for Bravo Activations is 45 minutes from the time notified to respond.
3. Orthopedic Surgery. It is desirable to have the orthopedists dedicated to the trauma center solely while on-call. The maximum response time for all trauma patients is 60 minutes from the time notified to respond.
4. It is desirable the following specialist be on-call and available 24 hours/day:
  - a. Critical Care Medicine
  - b. Obstetrics/Gynecology Surgery
  - c. Critical Care Medicine
  - d. Thoracic Surgery\*

\*A trauma surgeon is presumed to be qualified and have privileges to

provide emergency thoracic surgical care to patients with thoracic injuries. If this is not the case, the facility must have a board-certified thoracic surgeon immediately available (within 30 minutes of the time notified to respond).

5. Policies and procedures must exist to notify the transferring hospital of the patient's condition.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.2.2. Qualifications of Surgeons on the Trauma Team

1. Basic to qualification for trauma care for any surgeon is current or previous Board Certification in a surgical specialty recognized by the American Board of Medical Specialties, the Advisory Board for Osteopathic Specialties, the American Dental Association, the Royal College of Physicians and Surgeons of Canada, or other appropriate foreign board. Many boards require a practice period. Such an individual may be included when recognition by major professional organizations has been received in their specialty. The board certification criteria apply to the general surgeons and orthopedic surgeons.
2. The surgeon is expected to serve as the captain of the resuscitating team and is expected to be in the emergency department upon arrival of the seriously injured patient to make key decisions about the management of the trauma patient's care. The surgeon will coordinate all aspects of treatment, including resuscitation, operation, critical care, recuperation and rehabilitation (as appropriate in a Level III facility) and determine if the patient needs transport to a higher level of care. If transport is required, he/she is accountable for coordination of the process with the receiving physician at the receiving facility. If the patient is to be admitted to the Level III Trauma Center, the surgeon is the admitting physician and will coordinate the patient care while hospitalized. Guidelines must be written at the local level to determine which types of patients should be admitted to the Level III Trauma Center or which patients should be considered for transfer to a higher level of care. General Surgeons taking trauma call must have eight (8) hours of trauma specific continuing medical education (CME) over three years. This can be met within the 40-hour requirement by licensure.
3. The general surgery and orthopedic liaisons must participate in a multi-disciplinary trauma committee and the PI process. Committee attendance must be at least fifty percent (50%) over a year's period of time.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.2.3. Qualifications of Emergency Physicians

1. For those physicians providing emergency medicine coverage, board certification in Emergency Medicine and/or General Surgery is required or current certification in ATLS. ATLS must be obtained within 18 months of hire.
2. The emergency medicine liaison must participate in a multi-disciplinary trauma committee and the PI process. Committee attendance must be at least fifty

percent (50%) over a year's period of time. Emergency physicians must be currently certified in ATLS (ATLS requirements are waived for Board Certified Emergency Medicine and Board-Certified General Surgery Physicians), and it is required they be involved in at least eight (8) hours of trauma related continuing education (CME) every 3 years.

*Source: Miss. Code Ann. § 41-59-5*

### **Subchapter 3 Facility Standards**

#### **Rule 5.3.1. Emergency Department**

1. The facility must have an emergency department, division, service or section staffed so trauma patients are assured immediate and appropriate initial care. The emergency physician and/or mid-level providers must be in-house 24 hours/day, immediately available at all times, and capable of evaluating trauma patients and providing initial resuscitation. The emergency medicine physician will provide team leadership and care for the trauma patient until the arrival of the surgeon in the resuscitation area. The emergency department must have established standards and procedures to ensure immediate and appropriate care for the adult and pediatric trauma patient. The medical director for the department must participate with the multidisciplinary trauma committee and the trauma PI process. The emergency department medical director must meet the recommended requirements related to commitment, experience, continuing education, ongoing credentialing, and initial or current board certified in emergency medicine.
2. The medical director of the emergency department, along with the TMD, will establish trauma-specific credentials that must exceed those that are required for general hospital privileges. Examples of credentialing requirements would include skill proficiency, training requirements, conference attendance, education requirements, ATLS verification, and specialty board certification.
3. The emergency medicine physician or designee will be responsible for activating the trauma team based on predetermined response protocols. He/she will provide team leadership and care for the trauma patient until the arrival of the surgeon in the resuscitation area. The emergency department must have established standards and procedures to ensure immediate and appropriate care for the adult and pediatric trauma patient. The emergency department medical director, or his/her designee, must act as a liaison and participate with the multidisciplinary trauma committee and the trauma PI process.
4. There must be an adequate number of RN's staffed for the trauma resuscitation area in-house 24 hours/day. Emergency nurses staffing the trauma resuscitation area must be a current provider of Trauma Nurse Core Curriculum (TNCC), or Advanced Trauma Care for Nurses (ATCN), and participate in the ongoing PI process of the trauma program. Nurses must obtain TNCC or ATCN within 18 months of assignment to the ER.

5. The list of required equipment necessary for the ED can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

#### Rule 5.3.2. Surgical Suites/Anesthesia

1. An operating room must be adequately staffed and available within 30 minutes of time of notification, Availability of the operating room personnel and timeliness of starting operations must be continuously evaluated by the trauma performance improvement process, and measures must be implemented to ensure optimal care.
2. If the staff is not in-house, hospital policy must be written to assure notification and prompt response.
3. The OR nurses should participate in the care of the trauma patient and be competent in the surgical stabilization of the major trauma patient.
4. The OR nurses are integral members of the trauma team and must participate in the ongoing PI process of the trauma program and must be represented on the multidisciplinary trauma committee.
5. The OR supervisor must be able to demonstrate a prioritization scheme to assure the availability of an operating room for the emergent trauma patient during a busy operative schedule. There must be an on-call system for additional personnel for multiple patient admissions.
6. The anesthesia department in a Level III Trauma Center must be organized and run by an anesthesiologist or physician liaison who is experienced and devoted to the care of the injured patient.
7. A licensed anesthesia provider must be immediately available with a mechanism established to ensure early notification of the on-call provider. Anesthesiologists or Certified Registered Nurse Anesthetist (CRNAs) may fill this requirement. Hospital policy must be established to determine when the licensed anesthesia providers must be immediately available for airway control and assisting with resuscitation. The availability of the licensed anesthesia providers and the absence of delays in airway control or operative anesthesia must be documented and monitored by the PI process. The maximum response time for all trauma patients is 30 minutes from the time notified to respond.
8. The list of required equipment necessary for Surgery and Anesthesia can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

#### Rule 5.3.3. Post Anesthesia Care Unit (PACU)

1. A Level III Trauma Center must have a PACU staffed and available 24

hours/day to the postoperative trauma patient. Hospital policy must be written to assure early notification and prompt response. If this availability requirement is met with a team on call from outside the hospital, the availability of the PACU nurses and compliance with this requirement must be documented.

2. PACU staffing must be in sufficient numbers to meet the critical need of the trauma patient.
3. The list of required equipment necessary for the PACU can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.3.4. Intensive Care Unit (ICU)

1. Level III Trauma Centers must have an Intensive Care Unit (ICU) that meets the needs of the adult trauma patient.
2. There must be physician coverage for the ICU at all times. A physician credentialed by the facility must be promptly available to the trauma patient in the ICU 24 hours/day. This coverage is for emergencies only and is not intended to replace the primary surgeon but rather is intended to ensure that the patient's immediate needs are met while the surgeon is contacted.
3. The surgical director or co-director must be the TMD, or general surgeon taking trauma call. The director is responsible for the quality of care and administration of the ICU and will set policy and establish standards of care to meet the unique needs of the trauma patient.
4. The trauma surgeon assumes and maintains responsibility for the care of the serious or multiple injured patient. A surgically directed ICU physician team is desirable. The team will provide in-house physician coverage for all ICU trauma patients at all times. This service can be staffed by appropriately trained physicians from different specialties but must be led by a qualified surgeon as determined by critical care credentials consistent with the medical staff privileging process of the institution. The trauma surgeon, in collaboration with other specialty providers, must maintain control over all aspects of care, including, but not limited to respiratory care, management of mechanical ventilation and placement and use of pulmonary catheters, as well as management of fluids, electrolytes, antimicrobials, and enteral and parenteral nutrition.
5. Level III Trauma Center must provide staffing in sufficient numbers to meet the needs of the trauma patient. Critical care nurses must be available 24 hours per day. ICU nurses are an integral part of the trauma team and as such, must be represented on the multidisciplinary trauma committee and participate in the PI process of the trauma program at least 50% of the time.
6. The list of required equipment necessary for the ICU can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

#### **Subchapter 4 Clinical Support Services**

Rule 5.4.1. Respiratory Therapy Service – the service must be staffed with qualified personnel on-call 24 hours/day to provide the necessary treatments for the injured patient.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.4.2. Radiological Service

1. The radiologist is a key member of the trauma team and should be represented on the Multidisciplinary Trauma Committee. A radiological service must have a certified radiological technician who must be available in-house 24 hours/day to meet the immediate needs of the trauma patient for general radiological procedures. A technician must be immediately available for computerized tomography (CT) for both head and body. If the specialty technician is on-call from home, a mechanism must be in place to assure early notification and timely response.
2. Specialty procedures such as Sonography must be available to the trauma team and may be covered with a technician on call. If the technician is not in-house 24 hours/day for special procedures, the performance improvement process must document and monitor the procedure is promptly available. It is desirable that MRI services be available to the trauma team.
3. The radiologist liaison must attend at least 50 percent of committee meetings and should educate and guide the entire trauma team in the appropriate use of radiologic services. A staff radiologist must be promptly available, when requested, for the interpretation of radiographs, performance of complex imaging studies or interventional procedures. The radiologist must ensure the preliminary interpretations are promptly reported to the trauma team and radiology services must monitor the interpretation.
4. Written policy must exist delineating the prioritization/availability of the CT scanner for trauma patients. The Trauma Center must have policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to, and while in, the radiology department.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.4.3. Clinical Laboratory Service

1. A clinical laboratory service must have the following services available in-house

24 hours/day:

- a. Access to a blood bank and adequate storage facilities. Sufficient quantities of blood and blood products must be maintained at all times. Blood typing and crossmatch capabilities must be readily available.
  - b. Standard analysis of blood, urine, and other body fluids includes micro sampling when appropriate.
  - c. Blood gas and Ph determinations (this function may be performed by services other than the clinical laboratory service, when applicable).
  - d. Alcohol and drug screening
  - e. Coagulation studies.
  - f. Microbiology
2. Trauma centers of all levels must have a massive blood transfusion protocol developed collaboratively between the trauma service and the blood bank.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.4.4. Acute Hemodialysis: There must be a written protocol to transfer the patient to a facility that provides this service if this service if it is not available at the Level III Trauma Center.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.4.5. Burn Care: There must be a written protocol to transfer the patient to a Burn Center, if appropriate burn care is not available at the Level III Trauma Center. Policies and procedures shall be in place to assure the appropriate care is rendered during the initial resuscitation and transfer of the patient.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.4.6. Rehabilitation/Social Services:

1. Recognizing that early rehabilitation is imperative for the trauma patient, a physical medicine and rehabilitation specialist must be available for the trauma program.
2. The rehabilitation of the trauma patient and the continued support of the family members are an important part of the trauma system. Each facility will be required to address a plan for integration of rehabilitation into the acute and primary care of the trauma patient, at the earliest stage possible after admission to the trauma center. Hospitals will be required to identify a mechanism to initiate rehabilitation services and/or consultation in a timely manner as well as policies regarding coordination of the multidisciplinary rehabilitation team. The rehabilitation services must minimally include:

- a. Occupational Therapy
- b. Physical Therapy
- c. Speech Pathology
- d. Social Work
- e. Psychological Therapy
- f. Nutritional Support

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.4.7. Prevention/Public Outreach

1. Level III Trauma Centers will be responsible for participating with appropriate agencies, professional groups and hospitals in their region to develop a strategic plan for public awareness. This plan must take into consideration public awareness of the trauma system, access to the system, public support for the system, as well as specific prevention strategies. A trauma center's prevention program must include and track partnerships with other community organizations. Trauma Registry data must be utilized to identify injury trends and focus prevention needs.
2. Outreach is the act of providing resources to individuals and institutions that do not have the opportunities to maintain current knowledge and skills. Staff members at the Level III Trauma Center must provide consultation to staff members at other facilities in the region. Advanced Trauma Life Support (ATLS), Pre-Hospital Trauma Life Support (PHTLS), Trauma Nurse Curriculum Course (TNCC), and Transport Nurse Advanced Trauma Course (TNATC) courses for example can be coordinated by the Trauma Center. Trauma physicians must provide a formal follow up to referring physicians/designee about specific patients to educate the practitioner for the benefit of further injured patients.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.4.8. Transfer Guidelines:

1. Level III Trauma Centers shall work in collaboration with the referral trauma facilities in their region and develop inter-facility transfer guidelines. These guidelines must address criteria to identify high-risk trauma patients that could benefit from a higher level of trauma care. All designated facilities will agree to provide services to the trauma victim regardless of his/her ability to pay.

*Source: Miss. Code Ann. § 41-59-5*

Rule 5.4.9 Education

1. Level III Trauma Centers must have internal trauma education programs including training in trauma for physicians, mid-level providers, nurses, ancillary staff and pre-hospital providers.
2. Level III Trauma Centers must have a written trauma education plan.

*Source: Miss. Code Ann. § 41-59-5*

## **Chapter 6 Level IV Trauma Centers**

### **Subchapter 1 Hospital Organization**

#### **Rule 6.1.1. General**

1. Level IV Trauma Centers are generally licensed, small, rural facilities with a commitment to the resuscitation of the trauma patient and written transfer protocols in place to assure those patients who require a higher level of care are appropriately transferred. These facilities may be staffed by a physician, or a licensed mid-level practitioner (i.e., physician assistant or nurse practitioner) or Registered Nurse. The major trauma patient will be resuscitated and transferred.
2. This designation does not contemplate that Level IV Trauma Centers will have resources available for emergency surgery for the trauma patient. Specialty coverage may or may not be available, but a well-organized resuscitation team is required.
3. Level IV Trauma Centers may meet the following standards in their own facility or through a formal affiliation with another trauma center.

*Source: Miss. Code Ann. § 41-59-5*

**Rule 6.1.2. Hospital Departments/Divisions/Sections – the Level IV Trauma Center must have the following departments, divisions, or sections: Emergency Medicine**

*Source: Miss. Code Ann. § 41-59-5*

#### **Rule 6.1.3. Trauma Program/Service**

1. There must be a written commitment letter from the Board of Directors and the medical staff on behalf of the entire facility which states the facility's commitment to compliance with the Mississippi Trauma System Rules and Regulations. The written commitment shall be in the form of a resolution passed by an appropriate quorum of the members of the governing authority. Should the business organization be other than a corporation, a letter explaining such together with a written commitment of the hospital's chief executive officer to the establishment of a trauma care program may be sufficient. A trauma program must be established and recognized by the organization.

Compliance with the above will be evidenced by:

- a. Board of Director's and medical staff letter of commitment;
- b. Written policies, procedures and guidelines for care of the trauma patient;

- c. A defined Trauma Team with written roles and responsibilities;
- d. Appointed Trauma Medical Director with a written job description;
- e. A written Trauma Performance Improvement Plan;
- f. Appointed Trauma Program Manager with a written job description;
- g. Documentation of Trauma Center representative's attendance at the Trauma Care Region meetings.

*Source: Miss. Code Ann. § 41-59-5*

#### Rule 6.1.4. Trauma Medical Director (TMD)

1. The Level IV Trauma Center must have a physician director of the trauma program. In this instance, the physician is responsible for working with all members of the trauma team and overseeing the implementation of a trauma specific performance improvement process for the facility. Through this process, he/she should have overall responsibility for the quality of trauma care rendered at the facility. The director must be given administrative support to implement the requirements specified by the Mississippi Trauma System of Care Plan. The director should assist in the development of standards of care and assure appropriate policies and procedures are in place for the safe resuscitation and transfer of trauma patients. The physician director must have current verification in ATLS. ATLS requirements are waived for Board Certified Emergency Medicine and Board-Certified General Surgery Physicians.

The TMD must have the authority to manage all aspects of trauma care. The TMD authorizes trauma service privileges of the on-call panel, works in cooperation with the nursing administration to support the nursing needs of trauma patients, and develops treatment protocols along with the trauma team in collaboration with the peer review processes. The TMD must perform an annual assessment of the trauma panel providers.

2. Compliance with the above will be evidenced by:
  - a. Chairing and participating in the multidisciplinary trauma committee where trauma performance improvement is presented and attend a minimum of 50 percent of the committee meetings.
  - b. Administrative support can be documented in the organizational chart which depicts the reporting relationship between the trauma program medical director and administration;
  - c. Trauma specific policies, procedures and guidelines approved by the TMD

*Source: Miss. Code Ann. § 41-59-5*

Rule 6.1.5. Trauma Program Manager (TPM)

1. The Trauma Center must have a person to act as a liaison to the regional evaluation process to conduct many of the administrative functions required by the trauma program. It is not anticipated that this would be a full-time role. Specifically, this person is responsible, with the TMD, for coordinating optimal patient care for all injured victims. This position will ideally serve as liaison with local EMS personnel, the Trauma Care Region, and other Trauma Centers. The TPM must obtain/maintain TNCC and/or 4 hours of trauma related education per year.
2. Compliance with the above will be evidenced by:
  - a. Attendance at and participation in the committee where trauma performance improvement is presented;
  - b. A written job description of roles and responsibilities to the trauma program which include: management of the trauma program, monitoring of clinical activities on trauma patients, providing staff with trauma related education, implementation of trauma specific performance improvement and supervision of the trauma registry;
  - c. Documentation of collaboration with TMD in the development and implementation of trauma specific policies, procedures and guidelines.

*Source: Miss. Code Ann. § 41-59-5*

Rule 6.1.6. Trauma Team

1. The team approach is optimal in the care of the multiple injured patients. The Trauma Center must have a written policy for notification and mobilization of an organized trauma team to the extent that one is available. The Trauma Team may vary in size and composition when responding to the trauma activation. The physician leader or mid-level provider on the trauma team is responsible for directing all phases of the resuscitation in compliance with ATLS protocol.

Suggested composition of the trauma team includes, if available:

- a. Physicians and/or mid-level providers
  - b. Laboratory Technicians
  - c. Nursing
  - d. Ancillary Support Staff
2. Compliance with the above will be evidenced by:

- a. A written resuscitation protocol which adheres to the principles of ATLS;
- b. A written trauma team activation criteria policy which includes physiologic, anatomic and mechanism of injury criteria.

*Source: Miss. Code Ann. § 41-59-5*

Rule 6.1.7. Multidisciplinary Trauma Committee

- 1. The purpose of the committee is to provide oversight and leadership to the entire trauma program. The exact format will be hospital specific and may be accomplished by collaboration with another designated trauma center in the system. The major focus will be on PI activities, policy development, communication among all team members, development of standards of care, education and outreach programs, and injury prevention. The committee oversees the implementation of the process which includes all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care.

Membership for the committee includes representatives (if available in the community) from:

- a. Emergency Medicine
  - b. Respiratory Therapy
  - c. Radiology
  - d. Laboratory
  - e. Rehabilitation
  - f. Pre-hospital Care Providers
  - g. Administration
  - h. Nursing
  - i. Trauma Program Manager
  - j. Trauma Medical Director (Chairman; must be present  $\geq 50\%$ )
- 2. The clinical managers (or designees) of the departments involved with trauma care should play an active role with the committee.
  - 3. The trauma center may wish to accomplish performance improvement activities in this committee or develop a separate peer review committee. This committee should handle peer review independent from department based review. The committee must meet regularly and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 2 Clinical Components**

### **Rule 6.2.1. Required Components**

1. The Trauma Center must maintain published on-call schedules for physicians and/or mid-level providers on-call to the facility.
2. Emergency Medicine (In-house 24 hours/day). Emergency Physician and/or mid-level provider (Physician Assistant/Nurse Practitioner) must be in the specified trauma resuscitation area upon patient arrival.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 3 Facility Standards**

### **Rule 6.3.1. Emergency Department**

1. The facility must have an emergency department staffed so trauma patients are assured immediate and appropriate initial care. There must be a designated physician director. It is not anticipated that a physician will be available on-call to an emergency department in a Level IV Trauma Center; however, it is a desirable characteristic of a Level IV. The on-call practitioner must respond to the emergency department based on local written criteria. A system must be developed to assure early notification of the on-call practitioner. Compliance with this criterion must be documented and monitored by the Trauma Performance Improvement process.
2. All physicians and mid-level providers (Physician Assistant/Nurse Practitioner) on the trauma team responsible for directing the initial resuscitation of the trauma patients must be currently certified in The American College of Surgeons Advanced Trauma Life Support (ATLS). ATLS requirements are waived for Board Certified Emergency Medicine and Board-Certified General Surgery Physicians. Rural Trauma Team Development Course (RTTDC) may be substituted for ATLS at Level IV Trauma Centers.
3. Emergency nurses staffing the trauma resuscitation area must be a current provider in TNCC, ATCN, or RTTDC within the last four years. Nurses must obtain trauma training within 18 months of assignment to the ER. Adequate numbers of nurses must be available in-house 24 hours/day, to meet the need of the trauma patient. The nurse may perform other patient care activities within the hospital when not needed in the emergency department.
4. Compliance with the above will be evidenced by:
  - a. Published on-call list of practitioners to the Emergency Department;
  - b. Documentation of nursing staffing patterns to assure 24-hour coverage.

- c. The list of required equipment necessary for the ED can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

#### **Subchapter 4 Clinical Support Services**

##### **Rule 6.4.1. General**

1. It is not anticipated that Level IV Trauma Centers have any of the following services available 24/7:
  - a. Respiratory Therapy Services
  - b. Radiology Services
  - c. Clinical Laboratory Services
  - d. Hemodialysis: There must be a written protocol to transfer the patient to a facility that provides this service if this service is not available at the Level IV Trauma Center.
2. Should any of these services be available, the facility should make them available to the trauma patient as necessary and within the capabilities of the facility.

*Source: Miss. Code Ann. § 41-59-5*

**Rule 6.4.2. Burn Care:** There must be a written protocol to transfer the patient to a Burn Center, if appropriate burn care is not available at the Level IV Trauma Center. Policies and procedures shall be in place to assure the appropriate care is rendered during the initial resuscitation and transfer of the patient.

*Source: Miss. Code Ann. § 41-59-5*

##### **Rule 6.4.3. Prevention/Public Outreach**

1. The Level IV Trauma Center is responsible for working with other trauma centers and the Department to develop education and prevention programs for the public and professional staff.
2. Level IV Trauma Centers shall collaborate with Level I, II and III Trauma Centers, Burn Centers and Tertiary/Secondary Pediatric Centers for the purpose of systemwide performance improvement.

*Source: Miss. Code Ann. § 41-59-5*

##### **Rule 6.4.4. Transfer Guidelines**

1. All facilities will work together to develop transfer guidelines indicating which

patients should be considered for transfer and procedures to ensure the most expedient, safe transfer of the patient. All designated facilities will agree to provide service to the trauma patient regardless of their ability to pay.

2. The following trauma patient treatment guidelines must be in place, at a minimum:
  - a. Pediatrics
  - b. Burns
  - c. Surgical
  - d. Orthopedics
  - e. Neurological
  
3. Once the decision for transfer has been made, it is the responsibility of the referring physician to initiate resuscitation measures within the capabilities of the local hospital. The referring provider shall select a mode of transport according to the patient's needs so that the level of care is appropriate during transport.

*Source: Miss. Code Ann. § 41-59-5*

Rule 6.4.5. Level IV Trauma Centers must have an internal trauma education program.

*Source: Miss. Code Ann. § 41-59-5*

## **Chapter 7 Pediatric Trauma Centers**

The hospital resources for adult trauma centers are described in Chapters 3, 4, 5 and 6. The traumatized pediatric patient has special requirements that go beyond the resources required for an adult Trauma Center.

All adult trauma centers in Mississippi are required to function at one of the three levels of pediatric trauma care. An adult Trauma Center does not have to function at the same or similar levels but must function at some level of pediatric trauma care. The three levels of pediatric trauma care include: tertiary, secondary, and primary.

### **Subchapter 1 Tertiary Pediatric Trauma Centers**

Rule 7.1.1. General

1. Tertiary Pediatric Trauma Centers shall act as regional tertiary care facilities at the hub of the trauma care system for injured pediatric patients. The facility shall have the ability to provide leadership and total care for every aspect of injury from prevention to rehabilitation. The Tertiary Pediatric Trauma Center must

have adequate depth of resources and personnel.

2. A standalone pediatric trauma center provides tertiary pediatric trauma care without sharing resources with another facility (i.e., CT scanner, radiology, surgeons, etc.). Only Level I Trauma Centers and standalone pediatric hospitals may qualify as a Tertiary Pediatric Trauma Center.
3. Tertiary Pediatric Trauma Centers have the responsibility of providing leadership in pediatric trauma education, trauma prevention, pediatric trauma research, system planning and performance improvement.
4. The list of required equipment for Tertiary Pediatric Trauma Centers can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.2. Hospital Departments/Divisions/Sections

1. The Tertiary Pediatric Trauma Center must have the following department, divisions, or sections:
  - a. Emergency medicine
  - b. General surgery (not required for stand-alone Pediatric Trauma Center)
  - c. Pediatric surgery
  - d. Orthopedic surgery
  - e. Neurological surgery
  - f. Anesthesia

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.3. Pediatric Trauma Program

1. There must be a written commitment on behalf of the entire facility to the organization of pediatric trauma care. The written commitment shall be in the form of a resolution passed by an appropriate quorum of the members of the governing authority. Should the business organization be other than a corporation, a letter explaining such together with a written commitment of the hospital's chief executive officer to the establishment of a pediatric trauma care program is sufficient. The pediatric trauma program must be established and recognized by the medical staff and hospital administration. The pediatric trauma program must come under the direction of a board-certified in General Surgery or Pediatric Surgery in Tertiary Center, current or previous board-certification in General or Pediatric Surgery in Primary and Secondary Centers with special interest in pediatric trauma care. An identified hospital administrative leader must work closely with the pediatric trauma medical director to establish and maintain the components of the pediatric trauma program including appropriate financial

support. The pediatric trauma program location in the organizational structure of the hospital must be under the overall adult trauma program and must be such that it may interact effectively with at least equal authority with other departments providing pediatric patient care. The administrative structure must minimally include an administrator, pediatric medical director, trauma program manager, trauma registrar, and the appropriate support staff. These resources must be captured under the organization of the adult trauma program. The pediatric trauma program must be multidisciplinary in nature and the performance improvement evaluation of this care must be extended to all the involved departments.

2. Compliance with the above will be evidenced by but not confined to:
  - a. Governing authority and medical staff letter of commitment in the form of a resolution;
  - b. Written policies and procedures and guidelines for care of the pediatric trauma patient;
  - c. Defined pediatric trauma team and written roles and responsibilities;
  - d. Appointed pediatric trauma medical director with a written job description;
  - e. Appointed pediatric trauma program manager with a written job description;
  - f. A written pediatric trauma performance improvement plan;
  - g. Documentation of representative attendance at statewide performance improvement meetings.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.4. Pediatric Trauma Service: The pediatric trauma service must be established and recognized by the medical staff and be responsible for the overall coordination and management of the system of care rendered to the injured pediatric patient. The pediatric trauma service will vary in each institution depending on the needs of the pediatric patient and the resources available. The pediatric trauma service must come under the organization of the adult trauma program (not required for a standalone facility) and direction of a surgeon who is board certified (Tertiary Pediatric Trauma Center, current or previous board certified). All pediatric patients with multiple system trauma or serious injury must be evaluated and/or admitted by the pediatric trauma service. The surgeon responsible for the overall care of the pediatric patient must be identified.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.5. Pediatric Trauma Medical Director (TMD): Tertiary pediatric Trauma Centers

must have a physician director Board Certified in General Surgery or Pediatric Surgery of the pediatric trauma program. This role can be filled by the TMD of the adult Trauma Center. The pediatric TMD plays an important administrative role and may not direct more than one pediatric Trauma Center. The pediatric TMD will be responsible for developing a performance improvement process and will have overall accountability and administrative authority for the pediatric trauma program. The pediatric TMD must be given administrative support to implement the requirements specified by the State trauma plan. The pediatric TMD is responsible for working with the credentialing process of the hospital, and in consultation with the appropriate service chiefs, for recommending appointment and removal of physicians from the pediatric trauma team. He/she must cooperate with nursing administration to support the nursing needs of the pediatric trauma patient and develop treatment protocols for the pediatric trauma patient. The pediatric trauma medical director, in collaboration with the trauma program manager, must coordinate the budgetary process for the trauma program. The director must be currently certified in ATLS, maintain personal involvement in care of the injured pediatric patient, maintain education in pediatric trauma care, and maintain involvement in professional organizations. The pediatric TMD must be actively involved with the trauma system development at the community, regional, and state levels. The TMD must perform an annual assessment of the general surgeons, pediatric surgeons, and mid-level providers assigned to the pediatric trauma service using a formal documented process.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.6. Pediatric Trauma Program Manager

1. Tertiary pediatric Trauma Centers must have a registered nurse working in the role of the TPM. The TPM of the adult Trauma Center may assume this additional role; however, if a pediatric TPM is utilized, the pediatric TPM is to report and be held accountable by the adult TPM. Working in conjunction with the pediatric trauma medical director, the pediatric TPM is responsible for organization of the pediatric trauma program and all systems necessary for the multidisciplinary approach throughout the continuum of trauma care. The pediatric TPM is responsible for working with the pediatric trauma team to assure optimal patient care. There are many requirements for data coordination, PI, education, and prevention activities incumbent upon this position. The TPM must obtain 16 hours of trauma related education per year.
2. The pediatric TPM/designee must offer or coordinate services for pediatric trauma education. The pediatric TPM must liaison with local EMS personnel, the Department and other trauma centers.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.7. Pediatric Trauma Team: The team approach is optimal in the care of the multiple injured pediatric patient. There must be identified members of the pediatric trauma team. Policies must be in place describing the respective role of all personnel on the pediatric trauma team. The composition of the pediatric trauma

team will depend on the characteristics of the hospital and its staff. All physicians and/or mid-level providers (physician assistant/nurse practitioner) on the pediatric trauma team responsible for directing the initial resuscitation of the pediatric trauma patient must be certified in Advanced Trauma Life Support (ATLS). ATLS requirement is waived for Board Certified Emergency Medicine, Board Certified General Surgery and Board-Certified Pediatric Surgery physicians.

Composition of the trauma team for a severely injured patient includes:

1. ED physician and/or mid-level providers (Physician Assistant/Nurse Practitioner)
2. General/Pediatric surgeon
3. Nurses: ED
4. Laboratory Technicians
5. Radiology Services
6. Respiratory Therapist

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.8. Multidisciplinary Trauma Committee

1. The purpose of the committee is to provide oversight and leadership to the entire trauma program including the pediatric trauma program. The exact format will be hospital specific and may be accomplished by collaboration with another designated Trauma Center in the region. Each Trauma Center may choose to have one or more committees as needed to accomplish this task. One committee must be multidisciplinary and focus on pediatric trauma program oversight and leadership. The major focus will be on performance improvement (PI) activities, pediatric trauma policy development, communication among all pediatric trauma team members, and establishment of pediatric trauma standards of care, education, and outreach programs for pediatric injury prevention. The committee has administrative and systematic control and oversees implementation of all pediatric trauma program services, meets regularly, takes attendance, maintains minutes, and works to correct overall pediatric trauma program deficiencies to optimize pediatric patient care. Membership for the committee includes representatives from:
  - a. TMD (Chairman, must be present greater than 50% of the meetings)
  - b. Pediatric Emergency Medicine
  - c. Pediatric Surgery

- d. Pediatric Orthopedics
  - e. Pediatric Neurosurgery
  - f. Anesthesia
  - g. Operating room
  - h. Intensive care
  - i. Respiratory Therapy
  - j. Radiology
  - k. Laboratory
  - l. Pediatric Rehabilitation
  - m. Pre-hospital care providers
  - n. Administration
  - o. Pediatrics
  - p. Nursing
  - q. Trauma Program Manager
2. Clinical managers (or designees) of the departments involved with pediatric trauma care must play an active role with the committee.
  3. The pediatric trauma center may wish to accomplish PI activities in this committee or develop a separate peer review committee. This committee must handle peer review independent from departmental based review. This committee must meet regularly, maintain attendance, and maintain minutes. This committee must report findings to the overall multidisciplinary trauma committee and hospital performance improvement program.

*Source: Miss. Code Ann. § 41-59-5*

**Rule 7.1.9. Required Clinical Components**

1. Tertiary pediatric Trauma Centers must maintain published call schedules and have the following physician coverage immediately available 24 hours/day:
2. Pediatric Emergency Medicine (in-house 24 hours/day). Emergency Physician and/or mid-level provider (physician assistant/nurse practitioner) must be in the specified trauma resuscitation area upon patient arrival.

3. Trauma/General/Pediatric Surgery (in-house 24 hours/day). The surgeon covering pediatric trauma call must be unencumbered and immediately available to respond to the pediatric trauma patient. The 24-hour-in-house availability of the attending surgeon is the most direct method for providing this involvement. A PGY 4 or 5 resident may be approved to begin the resuscitation while awaiting the arrival of the attending surgeon but cannot be considered a replacement for the attending surgeon in the ED. The surgeon is expected to be in the ED upon arrival of the seriously injured pediatric patient. The surgeon's participation in major therapeutic decisions, presence in the ED for major resuscitation, and presence at operative procedures is mandatory. There must be a back-up surgeon schedule published. A system must be developed to assure early notification of the on-call surgeon and compliance with these criteria and their appropriateness must be documented and monitored by the PI process. Response time for Alpha Activations is 15 minutes and starts at patient arrival or EMS notification, whichever is shorter. Response time for Bravo Activations is 20 minutes from patient arrival.
4. Orthopedic Surgery. It is required to have the orthopedic surgeon dedicated to the pediatric Trauma Center solely while on-call, but if not dedicated, a published back-up call schedule must be available. Response time for all trauma activations is 60 minutes from the time notified to respond.
5. Neurological Surgery. The neurosurgeons on the pediatric trauma team must be board certified. The pediatric neurosurgeon liaison to the pediatric trauma team must attend a minimum of 50% of the peer review committees annually and participate in the multidisciplinary trauma committee. It is required to have the neurosurgeon dedicated to the pediatric trauma center solely while on-call, but if not dedicated, a published back-up call schedule must be available. Response time for all trauma activations is 30 minutes from the time notified to respond.
6. It is desirable the following specialists are promptly available 24 hours/day:
  - a. Cardiac Surgery
  - b. Cardiology
  - c. Critical Care Medicine
  - d. Hand Surgery
  - e. Infectious Disease
  - f. Microvascular Surgery
  - g. Nephrology
  - h. Nutritional support

- i. Obstetrics/Gynecologic Surgery
- j. Ophthalmic Surgery
- k. Oral/Maxillofacial
- l. Pediatrics
- m. Pediatric Critical Care Medicine
- n. Pediatric Rehabilitation
- o. Plastic Surgery
- p. Pulmonary Medicine
- q. Radiology
- r. Thoracic Surgery\*
- s. Child Life or Family Support Programs

\* The trauma surgeon is presumed to be qualified and have privileges to provide emergency thoracic surgical care to pediatric patients with thoracic injuries. If this is not the case, the facility must have a board-certified thoracic surgeon available for the injured pediatric patient (within 30 minutes of the time notified to respond).

- 7. Policies and procedures must exist to notify the transferring hospital of the patient's condition.

*Source: Miss. Code Ann. § 41-59-5*

#### Rule 7.1.10. Qualifications of Surgeons on the Trauma Team

- 1. Basic qualifications for pediatric trauma care for any surgeon is Board Certification in a surgical specialty recognized by the American Board of Medical Specialties, the Advisory Board of Osteopathic Specialties, the Royal College of Physicians, the American Dental Association and Surgeons of Canada, or other appropriate foreign board. Many boards require a practice period. Such an individual may be included when recognition by major professional organizations has been received in their specialty. The board certification criteria apply to the general surgeons, orthopedic surgeons, and neurosurgeons.
- 2. Alternate criteria in lieu of board certification are as follows:
  - a. A non-board-certified general surgeon must have completed a surgical residency program.
  - b. He/she must be licensed to practice medicine.

- c. He/she must be approved by the hospital's credentialing committee for surgical privileges.
  - d. The surgeon must meet all criteria established by the pediatric trauma medical director to serve on the pediatric trauma team.
  - e. The surgeon's experience in caring for the pediatric trauma patient must be tracked by the trauma PI program.
  - f. The pediatric trauma medical director must attest to the surgeon's experience and quality as part of the recurring granting of pediatric trauma team privileges.
  - g. The pediatric trauma medical director using the trauma PI program is responsible for determining each general surgeon's ability to participate on the pediatric trauma team.
3. The surgeon is expected to serve as the captain of the resuscitating team and is expected to be in the emergency department upon arrival of the seriously injured pediatric patient to make key decisions about the management of the pediatric trauma patient's care. The surgeon will coordinate all aspects of treatment, including resuscitation, operation, critical care, recuperation, and rehabilitation (as appropriate in a tertiary pediatric trauma center), and determine if the patient needs transport to a higher level of care. If transport is required, he/she is accountable for coordination of the process with the receiving physician at the receiving facility. If the patient is to be admitted to the tertiary pediatric Trauma Center, the surgeon is the admitting physician and will coordinate the patient care while hospitalized. Guidelines must be written at the local level to determine which types of patient should be admitted to the tertiary pediatric Trauma Center or which patients should be considered for transfer to a higher level of care. General surgeons/pediatric surgeons taking trauma call must have eight (8) hours of trauma specific continuing medical education (CME) over three years. This can be met within the 40-hour requirements by licensure.
4. The pediatric surgeon liaison and general surgeon liaison (not required for stand-alone pediatric Trauma Center) must participate in a multidisciplinary trauma committee, the PI process; maintain committee attendance at least fifty percent (50%) over a year's period of time.

*Source: Miss. Code Ann. § 41-59-5*

#### Rule 7.1.11. Qualifications of Emergency Physicians

- 1. For those physicians providing emergency medicine coverage, board certification in Emergency Medicine or General/Pediatric Surgery is required or current certification in ATLS.
- 2. Alternate criteria for the non-boarded physician working in the Emergency Department are as follows:

- a. He/she must be licensed to practice medicine.
  - b. He/she must be approved by the hospital's credentialing committee for emergency medicine privileges.
  - c. The physicians meet all criteria established by the pediatric trauma and emergency medicine directors to serve on the pediatric trauma team.
  - d. The physician's experience in caring for the pediatric trauma patient must be tracked by the trauma PI program.
  - e. The pediatric trauma and emergency medicine directors must attend to the physician's experience and quality as part of the recurring granting of pediatric trauma team privileges.
  - f. ATLS must be obtained within 18 months of hire.
3. The emergency medicine liaison must participate in a multidisciplinary trauma committee, the PI process; maintain committee attendance at least fifty percent (50%) over a year's period of time. General/Pediatric Surgery and Emergency physicians must be currently certified in ATLS (ATLS requirements are waived for Board Certified Emergency Medicine and Board Certified General / Pediatric Surgery physicians), and it is required they be involved in at least eight (8) hours of trauma related CME every 3 years.

*Source: Miss. Code Ann. § 41-59-5*

#### Rule 7.1.12. Facility Standards: Emergency Medicine

1. The facility must have a dedicated pediatric emergency department so pediatric patients are assured immediate and appropriate initial care. The emergency physician must be in-house 24 hours/day and immediately available at all times. The emergency department medical director must meet the recommended requirements related to commitment, experience, continuing education, ongoing credentialing, and board certification in emergency medicine.
2. The director of the emergency department, along with the pediatric trauma medical director, will establish trauma-specific credentials that must exceed those that are required for general hospital privileges. Examples of credentialing requirements would include skill proficiency, training requirements, conference attendance, education requirements, ATLS verification, and specialty board certification.
3. The emergency medicine physician will be responsible for activating the pediatric trauma team based on predetermined response protocols. He will provide trauma leadership and care for the pediatric trauma patient until the arrival of the surgeon in the resuscitation area. The emergency department must have established

standards and procedures to ensure immediate and appropriate care for the pediatric trauma patient. The emergency department medical director, or his/her designee, must act as a liaison and participate with the multidisciplinary trauma committee and the trauma PI process.

4. There shall be an adequate number of RN's staffing the trauma resuscitation area in-house 24 hours/day. Emergency nurses staffing the trauma resuscitation area must be a current provider of Trauma Nurse Core Curriculum (TNCC) or Advanced Trauma Care for Nurses (ATCN) and participate in the ongoing PI process of the trauma program. Nurses must obtain TNCC or ATCN within 18 months of assignment to the ER.
5. The list of required equipment necessary for the ED can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.13. Facility Standards: Surgical Suites/Anesthesia

1. The operating room (OR) must be staffed and available in-house 24 hours/day.
2. An operating room must be adequately staffed and available within 30 minutes of time of notification. Availability of the operating room personnel and timeliness of starting operations must be continuously evaluated by the trauma performance improvement process, and measures must be implemented to ensure optimal care.
3. The OR nurses must participate in the care of the pediatric trauma patient and be competent in the surgical stabilization of the major pediatric trauma patient. The Surgical nurses are an integral member of the trauma team and must participate in the ongoing PI process of the pediatric trauma program and be represented on the Multidisciplinary Trauma Committee.
4. The OR supervisor must be able to demonstrate a prioritization scheme to assure the availability of an operating room for the emergency pediatric patient during a busy operative schedule. There must be an on-call system for additional personnel for multiple patient admissions.
5. The anesthesia department in a tertiary pediatric Trauma Center must be organized and run by an anesthesiologist who has a special interest in the care of the injured pediatric patient. Anesthesiologist on the pediatric trauma team must have successfully completed an anesthesia residency program approved by the Accreditation Council of Graduate Medical Education or the American Board of Osteopathic Specialists and have board certification in anesthesia. One anesthesiologist must maintain commitment to education in trauma related anesthesia.
6. Anesthesia must be available in-house 24hours/day. Anesthesia Chief Residents or Certified Registered Nurse Anesthetist (CRNAs) who are capable of assessing

emergency situations in pediatric trauma patient and of providing indicated treatment, including initiation of surgical anesthesia may fill this requirement. When the CRNA or chief resident is used to meet this requirement, the staff Anesthesiologist on-call will be available within 30 minutes, and present for all operations.

7. Hospital policy must be established to determine when the anesthesiologist must be immediately available for airway control and assisting with resuscitation. The availability of the anesthesiologist and the absence of delays in airway control or operative anesthesia must be documented and monitored by the PI process. The maximum response time for all trauma patients is 30 minutes from the time notified to respond.
8. The list of required equipment necessary for Surgery and Anesthesia can be found online at the department's website.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.14. Facility Standards: PACU

1. Tertiary pediatric Trauma Centers must have a PACU staffed 24 hours/day and available to the postoperative pediatric trauma patient. Frequently it is advantageous to bypass the PACU and directly admit to the PICU. In this instance, the Pediatric ICU may meet these requirements.
2. PACU staffing must be in sufficient number to meet the critical needs of the pediatric trauma patient.
3. The list of required equipment necessary for PACU can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.15. Facility Standards: Pediatric ICU (PICU)

1. Tertiary pediatric Trauma Centers must have a PICU that meets the needs of the pediatric trauma patient.
2. The surgical director or co-director must be the TMD or general/pediatric surgeon taking trauma call. The director is responsible for the quality of care and administration of the PICU and will set policy and establish standards of care to meet the unique needs of the pediatric trauma patient.
3. The pediatric trauma surgeon assumes and maintains responsibility for the care of the serious or multiple injured pediatric patient. A surgically directed PICU physician team is essential. The team will provide in-house physician coverage for all PICU pediatric trauma patients at all times. This service can be staffed by appropriately trained physicians from different specialists, but must be led by a

qualified surgeon consistent with the medical staff privileging process of the institution. The pediatric trauma surgeon must maintain control over all aspects of care, including but not limited to respiratory care and management of the mechanical ventilation; placement and use of pulmonary catheters; management of fluid and electrolytes, antimicrobials, and enteral and parenteral nutrition.

4. There must be in-house physician coverage for the PICU at all times. A physician credentialed by the facility must be available to the pediatric trauma patient in the PICU 24 hours/day. This coverage is for emergencies only and is not intended to replace the primary surgeon but rather is intended to ensure that the patient's immediate needs are met while the surgeon is contacted.
5. Tertiary Pediatric Trauma Centers must provide staffing in sufficient numbers to meet the critical needs of the pediatric trauma patient. Critical care nurses must be available 24 hours per day. PICU nurses are an integral part of the pediatric trauma team and as such, shall be represented on the multidisciplinary trauma committee and participate in the PI process of the trauma program at least 50% of the time.
6. The list of required equipment necessary for the PICU can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.16. Clinical Support Services: Respiratory Therapy

1. The service must be staffed with qualified personnel in-house 24 hours/day to provide the necessary treatment for the injured pediatric patient.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.17. Clinical Support Services: Radiological Services

1. A radiological service must have a certified radiological technician in-house 24 hours/day and immediately available at all times for general radiological procedures. A technician must be in-house and immediately available for computerized tomography (CT) for both head and body.
2. Sonography, angiography and MRI must be available to the trauma team and may be covered with a technician on call.
3. The radiology liaison must attend at least 50% of the committee meetings and should educate and guide the entire trauma team in the appropriate use of radiologic services.
4. A staff radiologist must be promptly available, when requested, for the interpretation of radiographs, performance of complex imaging studies or interventional procedures. The radiologist must ensure the preliminary

interpretations are promptly reported to the pediatric trauma team and the trauma PI program must monitor all changes in interpretations.

5. Written policy must exist delineating the prioritization/availability of the CT scanner for pediatric trauma patients.
6. The Trauma Center must have policies designated to ensure the trauma patients who may require resuscitation and monitoring are accompanied by appropriate trauma providers during transportation to, and while in the radiology department.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.18. Clinical Support Services: Laboratory Services

1. Clinical laboratory service must have the following services available in-house 24 hours/day:
  - a. Access to blood bank and adequate storage facilities. Sufficient quantities of blood and blood products must be maintained at all times. Blood typing and crossmatch capabilities must be readily available.
  - b. Standard analysis of blood, urine and other body fluids including micro-sampling when appropriate.
  - c. Blood gas and pH determinations (this function may be performed by services other than the clinical laboratory service, when applicable).
  - d. Alcohol and drug screening
  - e. Coagulation studies
  - f. Microbiology
2. Trauma Centers of all levels must have a massive blood transfusion protocol developed collaboratively between the trauma service and blood bank.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.19. Clinical Support Services: Acute Hemodialysis

1. Tertiary pediatric Trauma Centers must have Acute Hemodialysis services.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.20. Clinical Support Services: Burn Care

1. There must be a written protocol to transfer the patient to a Burn Center, if appropriate burn care is not available at the tertiary pediatric Trauma Center.

Policies and procedures shall be in place to assure the appropriate care is rendered during the initial resuscitation and transfer of the patient.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.21. Clinical Support Services: Rehabilitation/Social Services

1. Recognizing that early rehabilitation is imperative for the trauma patient, a physical medicine and rehabilitation specialist must be available for the trauma program.
2. The rehabilitation of the pediatric trauma patient and the continued support of the family members are an important part of the trauma system. Each facility will be required to address a plan for integration of rehabilitation into the acute and primary care of the pediatric trauma patient, at the earliest stage possible after admission to the Tertiary Pediatric Trauma Center. Hospitals will be required to identify a mechanism to initiate rehabilitation services and/or consultation in a timely manner as well as policies regarding coordination of the multidisciplinary rehabilitation team. The rehabilitation services must minimally include:
  - a. Occupational Therapy
  - b. Physical Therapy
  - c. Speech Pathology
  - d. Social Work,
  - e. Psychological
  - f. Nutritional support

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.22. Clinical Support Services: Prevention/Public Outreach

1. Tertiary pediatric Trauma Centers will be responsible for taking a lead role in coordination of appropriate agencies, professional groups, and hospitals in their region to develop a strategic plan for public awareness. This plan must take into consideration public awareness of the trauma system, access to the system, public support for the system, as well as specific prevention strategies. Prevention program must be specific to the needs of the region. A Tertiary Pediatric Trauma Center's prevention program must include and track partnerships with other community organizations. At a minimum, trauma registry data must be utilized to identify injury trends and focus prevention needs.
2. Outreach is the act of providing resources to individuals and institutions that do not have the opportunities to maintain current knowledge and skills. Staff members at the Tertiary Pediatric Trauma Center must provide consultation to staff members of other level facilities. For example, ATLS, Pre-Hospital Trauma Life Support (PHTLS), TNCC, and Transport Nurse Advance Trauma Course (TNATC) courses can be coordinated by the tertiary pediatric Trauma Center.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.23. Clinical Support Services: Transfer Guidelines

1. Tertiary pediatric Trauma Centers shall work in collaboration with the referral facilities in the system and develop inter-facility transfer guidelines. These guidelines must address criteria to identify high-risk pediatric trauma patients that could benefit from a higher level of trauma care. All designated facilities will agree to provide services to the pediatric trauma patient regardless of his/her ability to pay.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.24. Clinical Support Services: Education

1. Tertiary Pediatric Trauma Centers must have a written trauma education plan.
2. Tertiary Pediatric Trauma Centers must have internal trauma education programs including educational training in pediatric trauma for physicians, nurses, and pre-hospital providers. The Tertiary Pediatric Trauma Center must take a leadership role in providing educational activities. Education can be accomplished via many mechanisms (i.e., classic CME, preceptorships, fellowships, clinical rotations, telecommunications or providing locum tenens, etc.).
3. The Tertiary Pediatric Trauma Center is expected to support a pediatric surgical residency program. Additionally, there should be a senior resident rotation in at least one of the following disciplines: emergency medicine, general surgery, orthopedic surgery, neurosurgery or support a trauma fellowship.

*Source: Miss. Code Ann. § 41-59-5*

Rule 7.1.25. Clinical Support Services: Research

1. The trauma research program must be designated to produce new knowledge applicable to the care of the injured patients. The research may be conducted in a number of ways including traditional laboratory and clinical research, reviews of clinical series, and epidemiological or other studies. Publications of articles in peer-review journals as well as presentations of results in local, regional, and national meetings and ongoing studies approved by human and animal research review boards are expected from productive programs. The program should have an organized structure that fosters and monitors ongoing productivity.
2. The research program must be balanced to reflect the number of different interests. There must be a research committee, and identifiable Institutional Review Board process, active research protocols, surgeons involved in extramural educational presentations and adequate number of peer reviewed scientific

publications. Publications should appear in peer-reviewed journals. In a three-year cycle, the suggested minimum activity is ten publications (per review cycle) from the physicians representing the membership of the trauma team.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 2 Secondary Pediatric Trauma Center**

### **Rule 7.2.1. General**

1. A Secondary Pediatric Trauma Center is an acute care facility with the commitment, medical staff, personnel and specialty training necessary to provide care of the pediatric trauma patient. The decision to transfer a pediatric patient rest with the physician attending the pediatric trauma patient. All Secondary Pediatric Trauma Centers will work collaboratively with other trauma facilities to develop transfer protocols and a well-defined transfer sequence.
2. As a minimum, only Level III or higher adult trauma centers may qualify as a Secondary Pediatric Trauma Center.
3. Surgeons and ED physicians must be credentialed by the hospital for pediatric trauma care.
4. The list of required equipment for Secondary Pediatric Trauma Centers can be found on-line at the Department's website.

## **Subchapter 3 Primary Pediatric Trauma Center**

### **Rule 7.3.1. General**

1. Primary Pediatric Trauma Centers are facilities with a commitment to the initial resuscitation of the pediatric trauma patient and have written transfer protocols in place to assure those patients who require a higher level of care are appropriately transferred.
2. All designated trauma centers shall, as a minimum, be designated as a Primary Pediatric Trauma Center as a condition of designation in the Mississippi Trauma System.
3. The list of required equipment for Primary Pediatric Trauma Centers can be found online at the department's website.

*Source: Miss. Code Ann. § 41-59-5*

## Chapter 8 Burn Centers

### Subchapter 1 Hospital Organization

#### Rule 8.1.1. General

1. The burn center must be an acute care facility licensed in Mississippi or associated with a designated Level I Trauma Center in the MS Trauma System. The burn center must have a medical and an administrative commitment to the care of patients with burns. There must be a written commitment on behalf of the entire facility to the organization of burn care. The written commitment shall be in the form of a resolution passed by an appropriate quorum of the members of the governing authority. The burn center must have written guidelines for the triage, treatment, and transfer of burned patients from other facilities. The burn center must maintain an organizational chart relating personnel within the burn center and the hospital. The burn center must maintain current accreditation by the Joint Commission (TJC) or other recognized accrediting organization(s). The list of required equipment for burn centers can be found online at the Department's website.

*Source: Miss. Code Ann. § 41-59-5*

#### Rule 8.1.2. Burn Program

1. The burn center hospital must formally establish and maintain an organized burn program that is responsible for coordinating the care of burned patients. Compliance will be evidenced by, but not limited to:
  - a. Governing authority and medical staff letter of commitment in the form of a resolution;
  - b. Written policies and procedures and guidelines for care of the burn patient;
  - c. Defined burn team and written roles and responsibilities;
  - d. Appointed Burn Center Medical Director with a written job description;
  - e. Appointed Burn Center Program Manager with a written job description;
  - f. A written Burn Center Performance Improvement plan;
  - g. Documentation of representative attendance at statewide performance improvement meetings.

*Source: Miss. Code Ann. § 41-59-5*

#### Rule 8.1.3. Burn Center Director

1. The burn center director must be a surgeon with board certification by the American Board of Surgery or American Board of Plastic Surgery; certification of special qualifications in surgical critical care is desirable. The burn center director must have completed a one-year fellowship in burn treatment or must have experience in the care of patients with acute burn injuries for two or more years during the previous five years. The burn center director must participate in continuing medical education in burn treatment (48 hours of burn/trauma related CME in a 3-year period) and must demonstrate ongoing involvement in burn-related research and community education in burn care and/or prevention.
2. Responsibilities of the burn center director must include, but not be limited to, the following:
  - a. Creation of policies and procedures within the burn center that specify the care of burned patients;
  - b. Creation of policies and protocols for use throughout the burn care system for referral care, triage, and transport of burn patients;
  - c. Communications on a regular basis with physicians and other authorities about patients who have been refused;
  - d. Direction of the burn center administrative functions, including approval of medical staff credentialing;
  - e. Direction and active participation in the burn center performance improvement program;
  - f. Liaison with adjacent and regional burn centers; and
  - g. Development and participation in internal and external continuing medical education programs in the care and prevention of burn injuries.

*Source: Miss. Code Ann. § 41-59-5*

**Rule 8.1.4. Burn Program Manager (BPM)**

1. Burn Centers must have a registered nurse, with two (2) or more years of experience as a nurse in a burn center, working full time in the role of Burn Program Manager (BPM), who is administratively responsible for the burn center. The BPM must have at least two (2) years or more of experience in acute burn care and six (6) months or more managerial experience. Working in conjunction with the Burn Center Director, the BPM is responsible for organization of the program and all systems necessary for the multidisciplinary approach throughout the continuum of

burn care. The BPM is responsible for working with the burn team to assure optimal patient care. There are many requirements for data coordination and performance improvement, education and prevention activities incumbent upon this position.

2. The BPM or his/her designee should offer or coordinate services for burn education. The BPM should liaison with local EMS personnel, the Department, trauma centers and other burn centers.
3. The BPM must participate in 16 or more hours of burn-related education (can be met by attendance at the annual meetings of the American Association for the Surgery of Trauma, ABA, or any ABA-endorsed meetings or continuing education programs, such as ABLIS or ABLIS Now) each year or 48 hours in a three-year period.
4. There must be an organizational chart relating the nurse manager to the burn service and other members of the burn team.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.1.5. Burn Team – the team approach is optimal in the care of the multiple injured patient. There must be identified members of the burn team. Policies should be in place describing the respective role of all personnel on the team. The composition of the team in any hospital will depend on the characteristics of the hospital and its staff. In some instances, a tiered response may be appropriate. If a tiered response is employed, written policy must be in place and the system monitored by the PI process. Composition of the burn team for an injured patient shall include:

1. Emergency Physicians and/or mid-level providers (physician assistant/nurse practitioner)
2. General/Trauma Surgeon
3. Physician Specialists
4. Anesthesiologist
5. Laboratory Technicians as dictated by clinical needs
6. Nursing: ED, OR, ICU, etc.
7. Auxiliary Support Staff
8. Respiratory Therapist
9. Security Officers

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.1.6. Multidisciplinary Burn Care Committee

1. The purpose of the committee is to provide oversight and leadership to the entire burn program. The exact format will be hospital specific and may be accomplished by collaboration with another designated burn center. Each burn center may choose to have one or more committees as needed to accomplish the task. One committee should be multidisciplinary and focus on program oversight and leadership. The major focus will be on PI activities, policy development, communication among all team members, and establishment of standards of care, and education and outreach programs for injury prevention. The committee has administrative and systematic control and oversees implementation of all program related services, meets regularly, takes attendance, maintains minutes and works to correct overall program deficiencies to optimize patient care. Attendance from the list below must be at least 50% or greater and reported at least quarterly. Membership for the committee should include representatives from:
  - a. Administration
  - b. Operating Room
  - c. Anesthesia
  - d. Burn and/or Plastic Surgery
  - e. Burn Emergency/Emergency Medicine
  - f. Pre-hospital providers
  - g. Intensive Care
  - h. Radiology
  - i. Laboratory
  - j. Rehabilitation
  - k. Respiratory Therapy
  - l. Nursing
  - m. Burn Program Manager/BPM
2. The clinical managers (or designees) of the departments involved with burn care should play an active role with the committee.
3. The burn center may wish to accomplish performance improvement activities in this committee or develop a separate peer review committee. This committee

should handle peer review independent from department based review. The committee must meet regularly and maintain attendance and minutes. This committee must report findings to the overall hospital performance improvement program.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.1.7. Policies and Procedures – the burn center must maintain an appropriate policy and procedure manual that is reviewed annually by the burn center director and the Burn Program Manager. The policy and procedure manual must contain, at a minimum, the following policies addressing the following:

1. Administration of the burn center.
2. Staffing of the burn center.
3. Criteria for admission to the burn center by the burn service.
4. Use of burn center beds by other medical or surgical services.
5. Criteria for discharge and follow-up care.
6. Availability of beds and the transfer of burn patients to other medical or surgical units within the hospital.
7. Care of patients with burns in areas of the burn center hospital other than the burn center.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.1.8. Personnel

1. The burn center must be granted the necessary authority to direct and coordinate all services for patients admitted to the burn service. The burn center director must make sure that medical care conforms to the burn center protocols. Privileges for physicians participating in the burn service must be determined by the medical staff credentialing process and approved by the burn center director. Qualifications for surgeons who are responsible for the care of burned patients must conform to criteria documenting appropriate training, patient care experience, continuing medical education, and commitment to teaching and research in the care of burned patients.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 2 Clinical Components**

Rule 8.2.1. Trauma Evaluation

1. Patients with burns and trauma must be evaluated and/or stabilized at a trauma

center before transfer to a burn center. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.2.2. Burn Service Coverage

1. The burn service must maintain an on-call schedule for attending staff surgeons who are assigned to the burn service. The staff surgeons must be promptly available on a 24-hour basis. Patients with >20%TBSA 2<sup>nd</sup> or 3<sup>rd</sup> degree burns and any patient with signs of airway injury must be seen by the attending on call for burn surgery or by the Burn ICU Physician within 2 hours of admission. All other inpatient admissions for burn injuries must be seen by the attending on call for burn surgery within 24 hours.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.2.3. Qualifications of Attending Staff Surgeons

1. The Burn Center Director must appoint qualified attending staff surgeons to participate in the care of patients on the burn service. Attending staff surgeons must be board-certified or board eligible with current Advanced Burn Life Support (ABLS). Certification of special qualifications in critical care is desirable. The attending staff surgeon must have demonstrated expertise in burn treatment. Attending staff surgeons must participate in continuing medical education in burn treatment. Other attending surgeons must demonstrate participation in an internal education plan.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.2.4. Nursing Staff

1. There must be a patient care system in effect that is used to determine nurse staffing for each patient in the burn center. This system must be used to determine daily staffing needs. There must be a burn center orientation program that documents nursing competencies specific to the care and treatment of burn patients, including critical care, wound care, and rehabilitation. Burn center nursing staff must be provided with a minimum of two (2) burn-related continuing education opportunities annually.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.2.5. Mid-Level Providers

1. Appropriate credentialed mid-level providers may be used as members of the burn team. These individuals may include, but are not limited to, physician assistants, surgical assistants, or nurse practitioners. They may augment but do

not replace the physician member of the team.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.2.6. Burn Center Referral Criteria

1. Burn injuries that should be referred to a burn center include, but are not limited to the following:
  - a. Partial-thickness burns of greater than 10% of the total body surface area;
  - b. Burns that involve the face, hands, feet, genitalia, perineum, or major joints;
  - c. Third-degree burns;
  - d. Electrical burns, including lightning injury;
  - e. Chemical burns;
  - f. Inhalation injury;
  - g. Burn injury in patients with pre-existing medical disorders that could complicate management, prolonged recovery, or affect mortality;
  - h. Burn injury in patients who will require special social, emotional, or rehabilitative intervention;
  - i. Burns and concomitant trauma (such as fractures) when the burn injury poses the greatest risk of morbidity or mortality. If the trauma poses the greater immediate risk, the patient's condition may be stabilized initially in a Trauma Center before transfer to a burn center;
  - j. Burns in children; children with burns should be transferred to a burn center designated to treat children. In the absence of a regional designated pediatric burn center, an adult burn center may serve as a second option for the management of pediatric burns.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.2.7. Specialty Services – the following specialists must be available for consultation:

1. General surgery
2. Cardiothoracic surgery
3. Neurological surgery
4. Obstetrics/gynecology
5. Ophthalmology

6. Anesthesiology
7. Pediatrics (if applicable)
8. Orthopedic surgery
9. Plastic surgery
10. Urology
11. Pulmonary
12. Radiology
13. Nephrology
14. Psychiatry
15. Cardiology
16. Gastroenterology
17. Hematology and/or Pathology
18. Neurology
19. Pathology
20. Infectious disease

*Source: Miss. Code Ann. § 41-59-5*

### **Subchapter 3 Facility Standards**

Rule 8.3.1. Emergency Department – the emergency department must have written protocols mutually developed with the burn service for the care of acutely burned patients.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.3.2. Surgical Suites – the burn center hospital must have operating rooms available 24 hours a day.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.3.3. Allograft Use – the burn center hospital’s policies and procedures for the use of allograft tissues must be in compliance with all federal, state, and the Joint Commission/other recognized accrediting organizations’ requirements, and with standards of the American Association of Tissue Banks.

*Source: Miss. Code Ann. § 41-59-5*

## **Subchapter 4 Clinical Support Services**

### **Rule 8.4.1. Respiratory Therapy Service**

1. Respiratory therapists must be available for the assessment and management of patients on the burn service on a 24-hour basis. Members must participate in an internal education plan.

*Source: Miss. Code Ann. § 41-59-5*

### **Rule 8.4.2. Renal Dialysis, Radiological Services, and Clinical Laboratory**

1. Renal dialysis, radiological services (including computed tomography scanning), and clinical laboratory services must be available 24 hours per day.

*Source: Miss. Code Ann. § 41-59-5*

### **Rule 8.4.3. Rehabilitation/Social Services**

1. There must be a rehabilitation program designed for burned patients that identifies specific goals.
2. The primary burn care therapist must have annual participation in 16 hours or more of burn-related education (can be met by attendance at the annual meetings of the American Association for the Surgery of Trauma, American Burn Association (ABA), or any ABA-endorsed meetings or continuing education programs, such as ABLA or ABLIS Now) each year or 48 hours over a three (3) year period.
3. Social service consultation must be available to the burn service. Members must participate in an internal education plan.

*Source: Miss. Code Ann. § 41-59-5*

### **Rule 8.4.4. Nutritional Support**

1. A dietician must be available on a daily basis for consultation.
2. Members must participate in an internal education plan.

*Source: Miss. Code Ann. § 41-59-5*

### **Rule 8.4.5. Pharmacy**

1. A pharmacist who has at least six (6) months of experience in critical care and the pharmacokinetics implications for patients with acute burn injuries must be available on a 24-hour basis.
2. Members must participate in an internal education plan.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.4.6. Clinical Psychiatry

1. A psychiatrist or clinical psychologist should be available for consultation by the burn service on a 24-hour basis.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.4.7. Continuity of Care Program

1. The burn center must provide the following services:
  - a. Patient and family education in rehabilitation programs;
  - b. Support for family members or other significant persons;
  - c. Coordinated discharge planning;
  - d. Follow-up after hospital discharge;
  - e. Access to community resources;
  - f. Evaluation of the patient's physical, psychological, developmental, and vocational status;
  - g. Planning for future rehabilitative and reconstructive needs.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.4.8. Weekly Patient Care Conferences

1. Patient care conferences must be held at least weekly to review and evaluate the status of each patient admitted to the burn center. Each clinical discipline should be represented to appropriately contribute to the treatment plan for each patient. Patient care conferences must be documented in the progress notes of each patient and/or in minutes of the conference.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.4.9. Infection Control Program

1. The burn center must have effective means of isolation that are consistent with principles of universal precautions and barrier techniques to decrease the risk of cross-infection and cross-contamination. The burn center hospital must provide

ongoing review and analysis of nosocomial infection data and risk factors that relate to infection prevention and control for burn patients. This data must be available to the burn team to assess infection risk factors that relate to infection prevention and control for burn patients.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.4.10. Mass Casualty Plan

1. The burn center must have a written multiple-casualty plan for the triage and treatment of patients burned in a multiple casualty incident occurring within its service area. The multiple casualty plan must be reviewed and updated as needed, and on an annual basis by EMS representatives and the burn center director.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.4.11. Burn Prevention

1. The burn center will be responsible for taking a lead role in coordination of appropriate agencies, professional groups and hospitals in their region to develop a strategic plan for public awareness. This plan must take into consideration public awareness of the burn system, access to the system, public support for the system, as well as specific prevention strategies. Prevention programs must be specific to the needs of the region. Trauma Registry data must be utilized to identify injury trends and focus prevention needs.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.4.12. Trauma Registry

1. All facilities designated as burn centers in Mississippi must participate in the statewide Trauma Registry for the purpose of supporting peer review and performance improvement activities at the local, regional, and state levels. Since this data relates to specific trauma patients and are used to evaluate and improve the quality of health care services, this data is confidential and will be governed by the Miss. Code Ann. §41-59-77.
2. This database must include all patients who are admitted to the burn center hospital for acute burn care treatment. Compliance with the above will be evidenced by:
  - a. Documentation of utilization of the Trauma Registry data in the trauma/burn performance improvement process.
  - b. Timely submission of Trauma Registry Data to the Department and the appropriate Trauma Region.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.4.13. Transfer Guidelines

1. All facilities will work together to develop transfer guidelines indicating which patients should be considered for transfer and procedures to ensure the most expedient, safe transfer of the patient. The transfer guidelines shall make certain that feedback is provided to the facilities and assure that this information becomes part of the trauma registry. All designated facilities will agree to accept and provide service to the trauma/burn patient regardless of their ability to pay.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.4.14. Education

1. The burn center must be actively engaged in promoting Advanced Burn Life Support (ABLS) courses in its region. It is desirable for the director to be an ABLS instructor and essential that the director is current in ABLS. The unit should have one or more employees who are ABLS instructors.
2. The burn center must offer education on the current concepts in emergency and inpatient burn care treatment to pre-hospital and hospital care providers within its service area.
3. The burn center must have an internal burn education plan for the staff.

*Source: Miss. Code Ann. § 41-59-5*

Rule 8.4.15. Research

1. The burn center must participate in basic, clinical, and health sciences research. The medical director must demonstrate ongoing involvement in burn-related research.

*Source: Miss. Code Ann. § 41-59-5*