

**North Carolina's
Trauma Center Designation Criteria
Adopted as Permanent Rules in
April 2003
(Edition: December 15, 2003)**

**Title 10A – Department of Health and Human Services
Chapter 13 – Facility Services
Subchapter 13P – Office of Emergency Medical Services Regulations
Section .0900 – Trauma Center Standards and Approval**

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Introduction & General Information on Trauma Center Designation

The information contained within this document is derived from the State of North Carolina's temporary trauma rules adopted on January 1, 2002, and made permanent on April 1, 2003. It is an attempt to present the rules (which, being rules, can be somewhat cumbersome to wade through) in a format that is easier to read and understand. In short, the North Carolina Office of Emergency Medical Services (OEMS) provides this as a "User's Manual" on the state's trauma center criteria and designation process.

The document comes with a few precautionary notes, as follow:

The Rules Take Precedence: Although every effort has been taken to make sure this document is absolutely accurate, if there is any discrepancy between this document and the rules, the rules take precedence and serve as the actual requirements for determining a level of designation, and for dictating the trauma designation process, enforcement procedures, etc. The North Carolina trauma rules are contained in 10A NCAC 13P .0801 through .1103.

Throughout this document, the Title and Subchapter of the North Carolina Administrative Code for these temporary rules are understood whenever a specific rule is cited. [Example: 10A NCAC 13P .0901(3)(a) will be cited as .0901(3)(a).]

The Importance of Definitions: At the back of the criteria, you will find a glossary of terms to assist in interpreting the criteria. These are taken directly from the trauma definition section (Rule .0801) of North Carolina's temporary trauma rules. Perhaps out of a simple misunderstanding, people often fail to acknowledge that the definitions have the same weight as any other part of the rules and should be reviewed as such to ensure compliance.

For example, the criteria themselves often require surgeons or other health care professionals to be "promptly" or "immediately" available. What constitutes "promptly" or "immediately" available is specifically addressed in the definitions and is used as the yardstick for compliance. Looking at the term "immediately available," the definitions state that this term means the "physical" presence" of a health care professional when needed by the trauma patient. A hospital's stance that it presumed this term could be interpreted to include immediate availability by phone would not be acceptable. The hospital would not meet the essential criteria for designation.

The Importance of the Performance Improvement Guidelines: The rules and this document often refer the reader to the "Performance Improvement Guidelines for North Carolina Trauma Centers." The Performance Improvement (PI) guidelines were developed as a joint undertaking by the state's many trauma medical directors, trauma program managers and trauma registrars, as well as OEMS, so that hospitals contemplating designation, trauma centers and site team surveyors would have a better understanding as to the PI expectations for each trauma program in North Carolina. While the rules list many of the specific requirements contained in the PI document, clarifications and details for a quality trauma performance improvement program in North Carolina are more specifically laid out in the PI guidelines. A trauma center must comply with the PI guidelines in order to be compliant with the essential criteria for designation.

The PI guidelines are owned, and shall be amended from time to time, by the North Carolina Committee on Trauma (NCCOT) of the American College of Surgeons.

Trauma Documents on Web Site: OEMS routinely updates its web site (www.ncems.org), including the trauma section. Once on OEMS' home page, click news page, then trauma. This section includes a variety of information not only on trauma center designation, but on related topics such as the EMS and trauma rules, Regional Advisory Committees (RAC), the North Carolina Chapter of the American Trauma Society, the North Carolina trauma registry and the State Trauma Advisory Committee (STAC). Within the trauma center designation section itself is a variety of information including the Performance Improvement Guidelines, a map showing the location of North Carolina's trauma centers, contact information for each trauma center, etc.

Questions on this Document or the Rules: Any questions regarding the information contained in this document can be addressed to Sharon Rhyne, Hospitals Specialist, North Carolina Office of Emergency Medical Services, 2707 Mail Service Center, Raleigh, NC 27699-2707. She can also be reached by telephone at (919) 855-3951 or email address <sharon.rhyne@ncmail.net>.

NORTH CAROLINA'S TRAUMA CENTER DESIGNATION CRITERIA

APRIL 2003*

The items listed below as “E” are essential (required) in order to obtain and maintain the respective level (I, II or III) of trauma center designation.	Levels		
	I	II	III
REQUIRED OF INITIAL TRAUMA CENTER APPLICANTS			
<ul style="list-style-type: none"> • Trauma program and trauma service that must be operational at least 6 months prior to application for designation • Membership in and inclusion of all trauma patient records in the North Carolina Trauma Registry for at least six months prior to submitting a Request for Proposal (RFP) • Consult visit by OEMS within one year prior to submission of the RFP • Submission of a letter of intent to OEMS 180 days prior to the submission of an RFP to OEMS that defines the hospital's primary catchment area • Demonstration of need for trauma center designation by submitting one original and three copies of a document that addresses, at a minimum: <ul style="list-style-type: none"> □ Population to be served and extent to which population is underserved for trauma care, including methodology used to reach this conclusion; □ Geographic considerations to include trauma primary and secondary catchment area and distance from other trauma centers; and □ Trauma patient volume and severity of injury for the facility for the 24-month period of time preceding the application. The hospital shall show that its trauma service will be taking care of at least 200 trauma patients with an Injury Severity Score ≥ 15 during the first two-year period of its designation. This criteria shall be met w/out compromising quality of care or cost effectiveness of any other designated Level I or II trauma center sharing all or part of its catchment area or by jeopardizing the existing center's ability to meet this same 200-patient minimum 	E	E	E
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<ul style="list-style-type: none"> • Submission of a letter of intent to OEMS 180 days prior to the submission of an RFP to OEMS that defines the hospital's primary catchment area • Demonstration of need for trauma center designation by submitting one original and three copies of a document that addresses, at a minimum: <ul style="list-style-type: none"> □ Population to be served and extent to which population is underserved for trauma care, including methodology used to reach this conclusion; □ Geographic considerations to include trauma primary and secondary catchment area and distance from other trauma centers; and □ Trauma patient volume and severity of injury for the facility for the 24-month period of time preceding the application. The hospital shall show that its trauma service will be taking care of at least 200 trauma patients with an Injury Severity Score ≥ 15 during the first two-year period of its designation. This criteria shall be met w/out compromising quality of care or cost effectiveness of any other designated Level I or II trauma center sharing all or part of its catchment area or by jeopardizing the existing center's ability to meet this same 200-patient minimum 	E	E	E
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CRITERIA FOR INITIAL & RENEWAL TRAUMA CENTER APPLICANTS			
INSTITUTIONAL ORGANIZATION			
Trauma program (which includes notification to OEMS in writing within 30 days if there are changes to the trauma program administrative structure, as referenced in .0904(t) of the trauma rules)	E	E	E
Trauma service	E	E	E
Response of a trauma team to provide evaluation and treatment of a trauma patient 24-hours-per-day that includes: For a Level I: <ul style="list-style-type: none"> • an in-house Post Graduate Year 4 (PGY4) or senior general surgical resident, at a minimum, who is a member of that hospital's surgical residency program and responds within 20 minutes of notification • a trauma attending (see clinical qualifications) whose presence at the patient's bedside within 20 minutes of notification is documented and who participates in therapeutic decisions and is present at all operative procedures • an emergency physician (see clinical qualifications) who is present in the emergency department 24-hours-per-day and serves as a designated member of the trauma team until the arrival of the trauma surgeon 	E	E	E

The items listed below as “E” are essential (required) in order to obtain and maintain the respective level (I, II or III) of trauma center designation.	Levels		
	I	II	III
<ul style="list-style-type: none"> neurosurgery and orthopaedic surgery specialists (see clinical qualifications) who are never simultaneously on-call at another Level II or higher trauma center, who are promptly available, if requested by the trauma team leader, unless there is either an in-house attending neurosurgeon/orthopaedic surgeon, a Post Graduate Year 2 (PGY2) or higher in-house neurosurgery/orthopaedic surgery resident or an in-house trauma surgeon or emergency physician as long as the institution can document management guidelines and annual continuing medical education for neurosurgical/orthopaedic emergencies. There must be a specified written back-up on the call schedule whenever the neurosurgeon/orthopaedist is simultaneously on-call at a hospital other than the trauma center. an in-house anesthesiologist or a clinical anesthesiology year 3 (CA3) resident as long as an anesthesiologist on-call is advised and promptly available if requested by the trauma team leader Registered nursing personnel trained in the care of trauma patients 	E		
For a Level II:			
<ul style="list-style-type: none"> a trauma attending (see clinical qualifications) whose presence at the patient’s bedside within 20 minutes of notification is documented and who participates in therapeutic decisions and is present at all operative procedures an emergency physician (see clinical qualifications) who is present in the emergency department 24-hours-per-day and serves as a designated member of the trauma team until the arrival of the trauma surgeon neurosurgery and orthopaedic surgery specialists (see clinical qualifications) who are never simultaneously on-call at another Level II or higher trauma center, who are promptly available, if requested by the trauma team leader, as long as there is either an in-house attending neurosurgeon/orthopaedic surgeon; a Post Graduate Year 2 or higher in-house neurosurgery/orthopaedic surgery resident; or in-house emergency physician or the on-call trauma surgeon as long as the institution can document management guidelines and annual continuing medical education for neurosurgical/orthopaedic emergencies. There must be a specified written back-up on the call schedule whenever the neurosurgeon/orthopaedic surgeon is simultaneously on-call at a hospital other than the trauma center an in-house anesthesiologist or a clinical anesthesiology year 3(CA3) resident unless an anesthesiologist on-call is advised and promptly available after notification or an in-house CRNA under physician supervision, practicing in accordance with G.S. 90-171.20(7)e., pending the arrival of the anesthesiologist 	E	E	
For a Level III:			
<ul style="list-style-type: none"> a trauma attending (see clinical qualifications) whose presence at the patient’s bedside within 30 minutes of notification is documented and who participates in therapeutic decisions and is present at all operative procedures an emergency physician (see clinical qualifications) who is present in 			E
			E

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	I	II	III
<p>the emergency department 24-hours-per-day who serves as a designated member of the trauma team until the arrival of the trauma surgeon</p> <ul style="list-style-type: none"> an anesthesiologist who is on-call and promptly available after notification by the trauma team leader or an in-house CRNA under physician supervision, practicing in accordance with G.S. 90-171.20(7)e, pending the arrival of the anesthesiologist within 20 minutes of notification 			E
Trauma program medical director	E	E	E
Trauma program manager/nurse coordinator (must be full-time for a Level I or II, but may be part time for a III)	E	E	E
Trauma registrar (must be full-time for a I or II, but may be part time for a III)	E	E	E
A written credentialing process established by the Department of Surgery to approve mid-level practitioners and attending general surgeons covering the trauma service.	E	E	E
HOSPITAL DEPARTMENTS/DIVISIONS/SECTIONS (with designated chair or physician liaison to the trauma program for each of the following):			
General Surgery	E	E	E
Neurological Surgery	E	E	
Orthopaedic Surgery	E	E	E
Emergency Medicine	E	E	E
Anesthesiology	E	E	E
CLINICAL CAPABILITIES			
<p>Level I and II:</p> <p>clinical capabilities in general surgery with two separate posted call schedules. One shall be for trauma, one for general surgery. In those instances where a physician may simultaneously be listed on both schedules, there must be a defined back-up surgeon listed on the schedule to allow the trauma surgeon to provide care for the trauma patient. The trauma service director shall specify, in writing, the specific credentials that each back-up surgeon must have. These, at a minimum, must state that the back-up surgeon has surgical privileges at the trauma center and is boarded or eligible in general surgery (with board certification in general surgery within five years of completing residency). If a trauma surgeon is simultaneously on call at more than one hospital, there shall be a defined, posted trauma surgery back-up call schedule composed of surgeons credentialed to serve on the trauma panel.</p> <p>Level III:</p> <p>clinical capabilities in general surgery with a written posted call schedule that indicates who is on call for both trauma and general surgery. If a trauma surgeon is simultaneously on call at more than one hospital, there must be a defined, posted trauma surgery back-up call schedule composed of surgeons credentialed to serve on the trauma panel. The trauma service director shall specify, in writing, the specific credentials that each back-up surgeon must have. These, at a minimum, must state that the back-up surgeon has surgical privileges at the trauma center and is boarded or eligible in general surgery (with</p>	E	E	E

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	I	II	III
board certification in general surgery within five years of completing residency).			
Standard written protocols (routinely updated) relating to trauma care management	E	E	E
Criteria to ensure team activation within 20 minutes prior to arrival of trauma/burn patients to include the following: <ul style="list-style-type: none"> • shock • respiratory distress • airway compromise • unresponsiveness (Glasgow Coma Scale less than 8) with potential for multiple injuries • gunshot wound to head, neck or torso 	E	E	E
Surgical evaluation, based upon the following criteria, by the health professional who is promptly available: <ul style="list-style-type: none"> • proximal amputations • burns meeting institutional transfer criteria • vascular compromise • crush to chest or pelvis • two or more proximal long bone fractures • spinal cord injury 	E	E	E
Surgical consults, based upon the following criteria, by the health professional who is promptly available: <ul style="list-style-type: none"> • falls greater than 20 feet • pedestrian struck by motor vehicle • motor vehicle crash with; <ul style="list-style-type: none"> ○ ejection (includes motorcycle); ○ rollover; ○ speed greater than 40 mph; or ○ death of another individual at the scene • extremes of age, < 5 or > 70 years 	E	E	E
Clinical capabilities (promptly available if requested by the trauma team leader, with a posted on-call schedule), to include individuals credentialed in the following:			
Cardiac surgery	E		
Critical Care	E	E	
Hand surgery	E	E	
Microvascular/replant surgery	E		
Neurosurgery The neurosurgeon must be dedicated to one hospital or a back-up call schedule must be available. If fewer than 25 emergency neurosurgical trauma operations are done in a year, and the neurosurgeon is dedicated only to that hospital, then a published back-up call list is not necessary	E	E	
Obstetrics/gynecologic surgery	E	E	
Ophthalmic surgery	E	E	
Oral/maxillofacial surgery	E	E	

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	I	II	III
Orthopaedics Dedicated to one hospital or a back-up call schedule must be available Promptly available if requested by the trauma team leader, with a posted on-call schedule	E E	E E	E E
Pediatric Surgery	E		
Plastic Surgery	E	E	
Radiology Available 24 hours-per-day Promptly available if requested by the trauma team leader, with a posted on-call schedule	E	E	E
Thoracic Surgery	E	E	
Urologic Surgery	E	E	
CLINICAL QUALIFICATIONS			
For trauma program medical director: <ul style="list-style-type: none"> board-certified general surgeon has a minimum of three years clinical experience on a trauma service or trauma fellowship training serves on the center’s trauma service participates in providing care to patients with life-threatening or urgent injuries participates in the North Carolina Chapter of the ACS Committee on Trauma participates in other regional and national trauma organizations remains a current provider in the ACS’ Advanced Trauma Life Support (ATLS) course and in the provision of trauma-related instruction to other health care personnel is involved with trauma research and the publication of results and presentations 	E E E E E E E	E E E E E E E	E E E E E
For attending general surgeons on trauma service: <ul style="list-style-type: none"> Board certif. in general surgery (w/in 5 years of completing residency) Completion of an ATLS course 	E E	E E	E E
For the designated emergency department physician director: <ul style="list-style-type: none"> Board certified or prepared in emergency medicine, by the American Board of Emergency Medicine or the American Osteopathic Board of Emergency Medicine Completion of an ATLS course 	E E	E E	E E

The items listed below as “E” are essential (required) in order to obtain and maintain the respective level (I, II or III) of trauma center designation.	Levels		
	I	II	III
<p>For the emergency department physician attending who, for all levels, shall be physically present in the emergency department 24 hours-per-day:</p> <p>For a Level I:</p> <ul style="list-style-type: none"> at least one physician on every shift in the Emergency Department who is either board-certified or prepared in emergency medicine (by the American Board of Emergency Medicine or the American Osteopathic Board of Emergency Medicine) to serve as the designated member of the trauma team at least until the arrival of the trauma surgeon. Emergency physicians caring only for pediatric patients may, as an alternative, be boarded or prepared in pediatric emergency medicine. All these physicians must be board-certified within five years after successful completion of a residency in emergency medicine all remaining emergency physicians, if not board-certified or prepared in emergency medicine as outlined above, must be board-certified or eligible by the American Board of Surgery, American Board of Family Practice, or American Board of Internal Medicine, with each being board-certified within five years after successful completion of a residency if not boarded in emergency medicine, must be current in ATLS must practice emergency medicine as their primary specialty <p>For a Level II and III:</p> <ul style="list-style-type: none"> all must be either board-certified or prepared in emergency medicine (by the American Board of Emergency Medicine or the American Osteopathic Board of Emergency Medicine) or board-certified or eligible by the American Board of Surgery, American Board of Family Practice, or American Board of Internal Medicine. These physicians must be board-certified within five years after successful completion of a residency. are designated members of the trauma team until the arrival of the trauma surgeon if not boarded in emergency medicine, must be current in ATLS must practice emergency medicine as their primary specialty 	E		
	E		
	E		
	E		
		E	E
		E	E
		E	E
Orthopaedists serving the trauma service must currently be board certified or eligible. Those who are eligible must be board certified within five years after successful completion of the residency.	E	E	E
Neurosurgeons serving the trauma service must currently be board certified or eligible. Those who are eligible must be board certified within five years after successful completion of the residency.	E	E	
Trauma Program Manager/Nurse Coordinator must be a registered nurse licensed by North Carolina Board of Nursing	E	E	E
Trauma Registrar must have a working knowledge of medical terminology, be able to operate a personal computer and have demonstrated ability to extract data from medical records	E	E	E
Nursing personnel with experience in trauma care who continually monitor the trauma patient from hospital arrival to disposition to an intensive care unit, operating room, or patient care unit	E	E	E

The items listed below as “E” are essential (required) in order to obtain and maintain the respective level (I, II or III) of trauma center designation.	Levels		
	I	II	III
FACILITIES/RESOURCES/CAPABILITIES			
Emergency Department			
A designated physician director (see clinical qualifications)	E	E	E
24 hour-per-day staffing by physicians physically present in the emergency department (see clinical qualifications)	E	E	E
Equipment for patients of all ages, to include:			
Airway control & ventilation equipment (laryngoscopes, endotracheal tubes, bag-mask resuscitators, pocket masks, and oxygen)	E	E	E
Pulse oximetry	E	E	E
End-tidal carbon dioxide determination equipment	E	E	E
Suction devices	E	E	E
Electrocardiograph-oscilloscope-defibrillator w/internal paddles	E	E	E
Apparatus to establish central venous pressure monitoring	E	E	E
Intravenous fluids and administration devices to include large bore catheters and intraosseous infusion devices	E	E	E
Sterile surgical sets for airway control/cricothyrotomy, thoracotomy, vascular access, thoracostomy, peritoneal lavage, and central line insertion	E	E	E
Apparatus for gastric decompression	E	E	E
24 hour-per-day x-ray capability	E	E	E
Two-way communication equipment for communication with the emergency transport system	E	E	E
Skeletal traction devices Including capability for cervical traction	E	E	E
Arterial catheters	E	E	
Thermal control equipment			
For patients	E	E	E
For blood and fluids	E	E	E
Rapid infuser system	E	E	E
Broselow tape	E	E	E
Sonography	E	E	
Doppler	E	E	E
Operating Suite			
Immediately available 24 hours/day	E	E	
24 hour-per-day immediate availability of in-house staffing	E	E	
Personnel available 24-hours-a-day, on-call and available within 30 minutes of notification unless in-house			E
Equipment for patients of all ages to include:			
Cardiopulmonary bypass capability	E		
Operating microscope	E		
Thermal control equipment			
For patients	E	E	E
For blood and fluids	E	E	E
24 hour-per-day x-ray capability, including c-arm image intensifier	E	E	E
Endoscopes and bronchoscopes	E	E	E
Craniotomy instruments	E	E	
Capability of fixation of long-bone and pelvic fractures	E	E	E

The items listed below as “E” are essential (required) in order to obtain and maintain the respective level (I, II or III) of trauma center designation.	Levels		
	I	II	III
Rapid infuser system	E	E	E
Postanesthetic Recovery Room or Surgical Intensive Care Unit			
24 hour-per-day in-house staffing by registered nurses	E	E	
24 hour-per-day availability of registered nurses within 30 minutes from inside or outside hospital			E
Equipment for patients of all ages, to include:			
Capability for resuscitation and continuous monitoring of temperature, hemodynamics & gas exchange	E	E	E
Capability for continuous monitoring of intracranial pressure	E	E	
Pulse oximetry	E	E	E
End-tidal carbon dioxide determination capability	E	E	E
Thermal control equipment			
For patients	E	E	E
For blood and fluids	E	E	E
Intensive or Critical Care Unit for Trauma Patients			
Designated surgical director for trauma patients	E	E	E
Physician on duty in the ICU 24 hours-per-day or immediately available from within the hospital as long as this physician is not the sole physician on call for the emergency department	E	E	
Physician on duty in the ICU 24 hours/day or immediately available from within the hospital (which may be a physician who is the sole physician on call for the emergency department)			E
Ratio of one nurse per two patients on each shift	E	E	
Equipment for patients of all ages, to include:			
Airway control and ventilation equipment (laryngoscopes, endotracheal tubes, bag-mask resuscitators, and pocket masks)	E	E	E
Oxygen source with concentration controls	E	E	E
Cardiac emergency cart	E	E	E
Temporary transvenous pacemaker	E	E	E
Electrocardiograph-oscilloscope-defibrillator w/internal paddles	E	E	
Electrocardiograph-oscilloscope-defibrillator			E
Cardiac output monitoring capability	E	E	E
Electronic pressure monitoring capability	E	E	E
Mechanical ventilator	E	E	E
Patient weighing devices	E	E	E
Pulmonary function measuring devices	E	E	E
Temperature control devices	E	E	E
Intracranial pressure monitoring devices	E	E	
Within 30 minutes of request, the ability to perform blood gas measurements, hematocrit level, and chest x-ray studies	E	E	E
Radiological Services			
24 hour-per-day in-house radiology technologist	E	E	
Radiology technologist available w/in 30 minutes of notification or documentation that procedures are available within 30 minutes			E
Angiography	E	E	
Sonography	E	E	E
Computed tomography	E	E	E

The items listed below as “E” are essential (required) in order to obtain and maintain the respective level (I, II or III) of trauma center designation.	Levels		
	I	II	III
24 hour-per-day in-house computer tomography technologist	E	E	
Computer technology technologist available within 30 minutes of notification or documentation that procedures are available within 30 minutes			E
Magnetic Resonance Imaging	E		
Resuscitation equipment to include airway management and IV therapy	E	E	E
Respiratory Therapy Services			
Available in-house 24 hours-per-day	E	E	
On-call 24 hours-per-day			E
Clinical Laboratory Service (to be available 24 hours/day for all levels)			
Standard analysis of blood, urine, and other body fluids, including micro-sampling when appropriate	E	E	E
Blood typing and cross-matching	E	E	E
Coagulation studies	E	E	E
Comprehensive blood bank or access to a community central blood bank with storage facilities	E	E	E
Blood gases and pH determinations	E	E	E
Microbiology	E	E	E
Acute Hemodialysis Capability OR written transfer agreement	E	E	E
Burn Care – Organized Physician directed burn center staffed by nursing personnel trained in burn care OR a written transfer agreement with a burn center	E	E	E
Acute Spinal Cord Management Acute spinal cord management capability OR written transfer agreement with a hospital capable of caring for a spinal cord injured patient	E	E	E
Acute Head Injury Management Acute head injury management capability OR written transfer agreement with a hospital capable of caring for a patient with a head injury			E
REHABILITATION SERVICES			
For a Level I and II:			
• a professional staff trained in rehabilitation care of critically injured patients	E	E	
• for major trauma patients, functional assessment and recommendations regarding short and long term rehabilitation needs within one week of the patient’s admission to the hospital or as soon as hemodynamically stable	E	E	
• full in-house rehabilitation service OR a written transfer agreement with a rehabilitation facility accredited by the Commission on Accreditation of Rehabilitation Facilities	E	E	
• physical, occupational, speech therapies, and social services	E	E	
• substance abuse evaluation and counseling capability	E	E	
For a Level III:			
• full in-house rehabilitation service OR written transfer agreement with a rehabilitation facility accredited by the Commission on Accreditation of Rehabilitation Facilities			E
• physical therapy and social services			E

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	I	II	III
PERFORMANCE IMPROVEMENT PROGRAM			
A performance improvement program as outlined in the North Carolina Chapter of the American College of Surgeons Committee on Trauma document “Performance Improvement Guidelines for North Carolina Trauma Centers”, incorporated by reference, that must include the following:	E	E	E
<ul style="list-style-type: none"> participation in the trauma registry agreed to by the North Carolina State Trauma Advisory Committee and OEMS whose data is submitted to the OEMS at least quarterly and includes all the center’s trauma patients as defined in Rule .0801 (33) who are either diverted to an affiliated hospital, admitted to the trauma center for greater than 23:59 hours (24 hours or more) from an ED or hospital, die in the ED, are DOA or are transferred from the ED to the OR, ICU, or another hospital (including transfer to any affiliated hospital) 	E	E	E
<ul style="list-style-type: none"> morbidity and mortality reviews to include all trauma deaths 	E	E	E
<ul style="list-style-type: none"> trauma performance committee that meets at least quarterly, to include physicians, nurses, pre-hospital personnel, and a variety of other healthcare providers, and reviews policies, procedures, and system issues and whose members or designees attend at least 50% of the regular meetings 	E	E	E
<ul style="list-style-type: none"> multidisciplinary peer review committee that meets at least quarterly and includes physicians from trauma, neurosurgery, orthopaedics, emergency medicine, anesthesiology, and other specialty physicians as needed specific to the case, and the trauma program manager/nurse coordinator and whose members or designees attend at least 50% of the regular meetings 	E	E	E
<ul style="list-style-type: none"> identification of discretionary and non-discretionary audit filters 	E	E	E
<ul style="list-style-type: none"> documentation and review of times and reasons for trauma-related diversion of patients from the scene or referring hospital 	E	E	E
<ul style="list-style-type: none"> documentation and review of response times for trauma surgeons, neurosurgeons, anesthesiologists or airway managers, and orthopaedists, all who must demonstrate 80% compliance 	E	E	
<ul style="list-style-type: none"> documentation and review of response times for trauma surgeons, airway managers and orthopaedists, all who must demonstrate 80% compliance 			E
<ul style="list-style-type: none"> monitoring of trauma team notification times 	E	E	E
<ul style="list-style-type: none"> review of pre-hospital trauma care to include dead on arrivals 	E	E	E
<ul style="list-style-type: none"> review of times and reasons for transfer of injured patients 	E	E	E
<ul style="list-style-type: none"> documentation (unless in-house) and review of emergency department response times for anesthesiologists or airway managers and computerized tomography technologist 			E
<ul style="list-style-type: none"> documentation of availability of the surgeon on-call for trauma, such that compliance is 90% or greater where there is no trauma surgeon back-up call schedule 			E
<ul style="list-style-type: none"> trauma performance and multidisciplinary peer review committees that may be incorporated together or included in other staff meetings as appropriate for the facility performance improvement rules 			E

The items listed below as “E” are essential (required) in order to obtain and maintain the respective level (I, II or III) of trauma center designation.	Levels		
	I	II	III
CONTINUING EDUCATION PROGRAM			
A documented continuing education program for staff physicians, nurses, allied health personnel, and community physicians to include:	E	E	E
<ul style="list-style-type: none"> • a general surgery residency program 	E		
<ul style="list-style-type: none"> • 20 hours of category I or II trauma-related continuing medical education (as approved by the Accreditation Council for Continuing Medical Education) every two years for all attending general surgeons on the trauma service, orthopaedists, and neurosurgeons, with at least 50% of this being extramural 	E	E	
<ul style="list-style-type: none"> • 20 hours of category I or II trauma-related continuing medical education (as approved by the Accreditation Council for Continuing Medical Education) every two years for all attending general surgeons on the trauma service, with at least 50% of this being extramural 			E
<ul style="list-style-type: none"> • 20 hours of category I or II trauma-related continuing medical education (as approved by the Accreditation Council for Continuing Medical Education) every two years for all emergency physicians, with at least 50% of this being extramural 	E	E	E
<ul style="list-style-type: none"> • 20 contact hours of trauma-related continuing education (beyond in-house in-services) every two years for the trauma program manager/nurse coordinator 	E	E	E
<ul style="list-style-type: none"> • 16 hours of trauma registry-related or trauma-related continuing education every two years, as deemed appropriate by the trauma program manager/nurse coordinator, for the trauma registrar 	E	E	E
<ul style="list-style-type: none"> • at least an 80% compliance rate for 16 hours of trauma-related continuing education (as approved by the trauma program manager/nurse coordinator) every two years related to trauma care for RN’s and LPN’s in transport programs, emergency departments, primary intensive care units, primary trauma floors, and other areas deemed appropriate by the trauma program manager/nurse coordinator 	E	E	E
<ul style="list-style-type: none"> • 16 hours of trauma-related continuing education every two years for mid-level practitioners routinely caring for trauma patients 	E	E	E
OUTREACH PROGRAM			
Written transfer agreements to address the transfer and receipt of trauma patients	E	E	E
Programs for physicians within the community and within the referral area (to include telephone and on-site consultations) about how to access the trauma center resources and refer patients within the system	E	E	
Development of a Regional Advisory Committee (RAC) as specified in Rule .1102	E	E	
Participation in a Regional Advisory Committee (RAC)			E
Development of regional criteria for coordination of trauma care	E	E	
Assessment of trauma system operations at the regional level	E	E	
ATLS	E		

The items listed below as “E” are essential (required) in order to obtain and maintain the respective level (I, II or III) of trauma center designation.	Levels		
	I	II	III
INJURY PREVENTION and PUBLIC EDUCATION PROGRAM			
For a Level I: <ul style="list-style-type: none"> epidemiology research to include studies in injury control, collaboration with other institutions on research, monitoring progress of prevention programs, and consultation with qualified researchers on evaluation measures surveillance methods to include trauma registry data, special emergency department and field collection projects designation of an injury prevention coordinator; and outreach activities, program development, information resources and collaboration with existing national, regional, and state trauma programs 	E E E E		
For a Level II: <ul style="list-style-type: none"> designation of an injury prevention coordinator; and outreach activities, program development, information resources and collaboration with existing national, regional, and state trauma programs 		E E	
For a Level III: <ul style="list-style-type: none"> coordination and/or participation in community prevention activities 			E
RESEARCH PROGRAM			
For a Level I: <ul style="list-style-type: none"> a trauma research program designed to produce new knowledge applicable to the care of injured patients to include: <ul style="list-style-type: none"> identifiable institutional review board process; extramural educational presentations which must include 12 education/outreach presentations over a three-year period; and ten peer-reviewed publications over a three-year period that could come from any aspect of the trauma program. 	E		

*Every effort has been taken to ensure the accuracy of this document. However, in the event of a discrepancy between this document and the rules, the rules take precedence, serving as the actual requirements for determining a level of designation and for dictating the trauma designation process, enforcement procedures, etc. The North Carolina trauma rules are contained in 10A NCAC 13P .0801 through .1103.

A glossary, provided with these criteria, will help with some of the terms included as part of the criteria.

GLOSSARY OF TERMS

Rule .0801 (entitled Trauma System Definitions) of North Carolina's trauma rules includes a set of definitions that are identical in content to those listed below. As stated at the beginning of this document, information contained in these definitions is as important as the trauma criteria. Specifically, the definitions provide the clarification of a number of terms, especially in the Level I, II and III criteria, which are utilized by the state to determine whether a hospital is in compliance with the criteria for designation.

A good example is the term "Post Graduate Year Four (PGY4)" which is defined in the rules, and below, as "any surgery resident having completed three clinical years of general surgical training. A pure laboratory year shall not constitute a clinical year." A hospital's contention that it presumed this term, as used in the criteria, could be interpreted to mean a surgery resident who had completed two clinical years and one pure laboratory year would not merit consideration since the rules (which include these definitions) clearly define the term.

DEFINITIONS

ACS: stands for the American College of Surgeons

Advanced Trauma Life Support (ATLS): refers to the course sponsored by the American College of Surgeons

Affiliated Hospital: a non-trauma center hospital that is owned by the trauma center such that a contract or other agreement exists between these facilities to allow for the diversion or transfer of the trauma center's patient population to this non-trauma center hospital

Attending: a physician who has completed medical or surgical residency and is either eligible to take boards in a specialty area or is boarded in a specialty.

Board Certified, Board Certification, Board Eligible, Board Prepared, or Boarded means approval by the American Board of Medical Specialties, the Advisory Board for Osteopathic Specialties, or the Royal College of Physicians and Surgeons of Canada unless a further sub-specialty such as the American Board of Surgery or Emergency Medicine is specified.

Bypass: the transport of an emergency medical services patient past an emergency medical services receiving facility for the purposes of accessing a designated trauma center or a higher-level trauma center

Contingencies: conditions placed on a trauma center's designation which, if unmet, can result in the loss or amendment of a hospital's designation

Deficiency: the failure to meet essential criteria for a trauma center's designation as specified in Section .0900 of North Carolina's trauma rules, which can serve as the basis for a focused review or denial of a trauma center designation

Department: the North Carolina Department of Health and Human Services

Diversion: when a hospital of its own volition reroutes a trauma patient to a trauma center from the scene or referring hospital

E-Code: a numeric identifier that defines the cause of injury, taken from the International Classification of Diseases (ICD)

Essential Criteria: those items listed in Rules .0901, .0902, and .0903 of North Carolina's trauma rules that are the minimum requirements in staffing, equipment, services, etc., for the respective level of trauma center designation (I, II, or III).

Focused Review: an evaluation of the trauma center's corrective actions to remove contingencies (as the result of deficiencies) placed upon it following a renewal site visit

Hospital: a licensed facility as defined in G.S. 131E-176

Immediately Available: the physical presence of the health professional in a location in the trauma center as defined by the needs of the trauma patient

Lead RAC Agency: the agency (comprised of 1 or more Level I or II trauma centers) that provides staff support and serves as the coordinating entity for trauma planning in a region

Level I Trauma Center: a regional resource trauma center that has the capability of providing leadership, research and total care for every aspect of injury from prevention to rehabilitation

Level II Trauma Center: a hospital that provides definitive trauma care regardless of the severity of the injury, but may not be able to provide the same comprehensive care as a Level I trauma center, and does not have trauma research as a primary objective

Level III Trauma Center: a hospital that provides prompt assessment, resuscitation, emergency operations, and stabilization, and arranges for hospital transfer as needed to a Level I or II trauma center

Mid-level Practitioner: a physician assistant or nurse practitioner who routinely cares for trauma patients

OEMS: the Office of Emergency Medical Services

Post Graduate Year Four (PGY4): any surgery resident having completed three clinical years of general surgical training. A pure laboratory year shall not constitute a clinical year.

Promptly Available: the physical presence of health professionals in a location in the trauma center within a short period of time, that is defined by the trauma system (director) and continuously monitored by the performance improvement program

RAC: stands for "Regional Advisory Committee" which is comprised of a lead RAC agency and a group representing trauma care providers and the community, for the purpose of regional trauma planning, establishing, and maintaining a coordinated trauma system

Revocation: the removal of a trauma center designation for concerns related to patient morbidity or mortality or failure to meet essential criteria or recurrent contingencies

RFP: stands for "Request for Proposal" which is a standardized state document that must be completed by each hospital seeking initial or renewal trauma center designation

Transfer Agreement: a formal written agreement between two agencies specifying the appropriate transfer of patient populations delineating the conditions and methods of transfer

Trauma Center: a hospital facility designated by the State of North Carolina and distinguished by its ability to immediately manage, on a 24-hour basis, the severely injured patient or those at risk for severe injury

Trauma Center Criteria: essential criteria to define Level I, II or III trauma centers

Trauma Center Designation: a formalized process of approval in which a hospital voluntarily seeks to have its trauma care capabilities and performance evaluated by experienced on-site reviewers

Trauma Guidelines: suggested standards for practice in a variety of situations within the trauma system

Trauma Minimum Data Set: the basic data required of all hospitals for submission to the trauma statewide database

Trauma Patient: any patient with an ICD-9-CM discharge diagnosis 800.00-959.9 excluding 905-909 (late effects of injury), 910.0-924 (blisters, contusions, abrasions, and insect bites), and 930-939 (foreign bodies)

Trauma Performance Improvement Program (TPIP): a system in which outcome data is used to modify the process of patient care and prevent repetition of adverse events

Trauma Program: an administrative entity that includes the trauma service and coordinates other trauma-related activities. It must also include, at a minimum, the trauma medical director, trauma program manager/trauma coordinator and trauma registrar. This program's reporting structure shall give it the ability to interact with at least equal authority with other departments providing patient care.

Trauma Protocols: standards for practice in a variety of situations within the trauma system

Trauma Registry: an OEMS maintained database to provide information for analysis and evaluation of the quality of patient care, including epidemiological and demographic characteristics of trauma patients

Trauma Service: a clinical service established by the medical staff that has oversight of and responsibility for the care of the trauma patient

Trauma System: an integrated network that ensures that acutely injured patients are expeditiously taken to hospitals appropriate for their level of injury

Trauma Team: a group of health care professionals organized to provide coordinated and timely care to the trauma patient

Triage: a predetermined schematic for patient distribution based upon established medical needs

**ADDITIONAL GUIDANCE ON NORTH CAROLINA
TRAUMA CENTER DESIGNATION CRITERIA
November 1, 2003**

OEMS often renders interpretations, guidance or clarifications of areas in its trauma rules in order to strive for some standardization or common agreement for designated trauma centers or hospitals seeking designation. To this end, this is to serve as a support document to North Carolina's current trauma rules and trauma center criteria.

It is important to note that OEMS often confers with appropriate professional organizations or groups before rendering interpretations. In the past, we have discussed items with groups such as the North Carolina Committee on Trauma, the trauma program managers, etc.

Questions on the items addressed below should be directed to Sharon Rhyne, Hospitals Specialist, North Carolina Office of Emergency Medical Services at telephone (919) 855-3951 or email sharon.rhyne@ncmail.net.

Guidance on Continuing Education for Nursing

With respect to nursing continuing education, preference is for approved contact hour programs, but appropriate types of alternative education are exemplified by in-service education programs, videos, educational demonstrations by manufacturers' representatives, etc. Continuing education hours that are accrued in hopes of meeting the required hours under the state trauma rules should be clearly related to improving trauma patient care. For example, a program on tumor care would not qualify.

It is recommended that nurses completing the following courses receive full credit hours for attendance:

Advanced Trauma Care for Nurses (ATCN)	17 hours
Advanced Trauma Life Support (ATLS)	18 hours
Basic Trauma Life Support (BTLS)	16 hours
Course for Advanced Trauma Nursing (CATN)	15.6 hours
Emergency Nurses Pediatric Course (ENPC)	18.6 hours for provider course/ 9 hours (recert); 9.6 hours for instructor course (if new material)
EMS for Children Child Abuse Recognition Education (EMS –C C.A.R.E.)	4 hours for instructor course 2 hours (max) for provider course
Prehospital Trauma Life Support (PHTLS)	16 hours
Sexual Assault Nurse Examiners Course (SANE)	40 hours (must be the NC course)
Trauma Nursing Core Course (TNCC)	19.1 hours for provider course/ 9 hours (recert); 9.3 hours for instructor course (if new material)
Trauma Outcome & Performance Improvement Course (TOPIC)	7.5 hours

Partial credit hours should be granted for the following courses:

Advanced Cardiac Life Support (ACLS)	8 hours or 9 hours if trauma case included/4 hours (recert)
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Basic Cardiac Life Support (BCLS)	4 hours/2 hours (recert)
Pediatric Advanced Life Support (PALS)	8 hours/4 hours (recert)
Pediatric Education for Prehospital Professionals (PEPP)	8 hours

The trauma program managers at each trauma center will approve other acceptable educational offerings and the hours to be granted for attendance. The independent review of videos or articles without a developed means of evaluating learner outcome is not acceptable. The criteria requiring that nurses in trauma care areas complete sixteen hours of trauma related education every two years should have at least an 80% compliance rate.

Trauma Response Time for Surgical Evaluations and Consults

Each trauma program should include written documentation that, as part of its Performance Improvement Program, provides evidence of the following:

- (1) tracking of prompt surgical evaluations (to include, at a minimum, proximal amputations; burns meeting institutional transfer criteria; vascular compromise; crush to chest or pelvis; two or more proximal long bone fractures; and spinal cord injury);
- (2) definition of the criteria for a prompt surgical evaluation;
- (3) what response times should be;
- (4) who is capable of performing an evaluation (PGY level, for example); and
- (5) documentation of attending presence or participation.

The same is true for surgical consults for, at a minimum, falls greater than 20 feet; pedestrian struck by motor vehicle; motor vehicle crash (with ejection, rollover, speed greater than 40 mph or death of another individual at the scene); and extremes of age, <5 or > 70 years.

OEMS will be happy to review any trauma center's written documentation developed in conjunction with this part of its Performance Improvement Program. In fact, OEMS urges each trauma center to submit this documentation for initial approval and whenever it is updated.

PGY3 and PGY4 Staff

Any surgery resident having completed 3 clinical years of general surgical training will meet the Level I state criteria for "an in-house Post Graduate Year 4 or senior general surgical resident, at a minimum, who is a member of that hospital's surgical residency program and responds within 20 minutes of notification." A pure laboratory year will not constitute a clinical year.

This position is in keeping with the American College of Surgeon's Committee and their trauma verification review criteria.

Any "hybrid" years will need to be considered on a case-by-case basis (i.e., a lab year in which the resident takes regular night call on a trauma or similar emergency care service, thus gaining experience in managing seriously injured/ill patients). OEMS would strongly urge any trauma center with a "hybrid" situation to provide written details well in advance of a trauma site visit in order to allow adequate time for consideration of the situation by the agency.

Multiple Emergency Departments and Orthopedic Coverage

A question has arisen in the past as to whether a hospital needs to continue its back-up orthopedic call schedule if, for example, it chooses to send all of its isolated orthopedic cases to another hospital in its immediate locale that are under its management. In this situation, two separate emergency departments still exist and both handle orthopedic patients and require orthopedic coverage.

OEMS will render a decision on this type situation on a case-by-case basis. In order to decide whether back-up orthopedic coverage can be dropped, OEMS will need the following documentation: (1) the protocol or policy as to when and how patients are triaged between the two facilities' operating rooms (i.e., if one is busy, are patients sent to the other?); (2) how patients are triaged between the two emergency departments (i.e., are ambulances rerouted to the second emergency department if the first one is swamped?); and (3) how the trauma patients are triaged within EMS (i.e., what is the protocol for trauma and its EMS destination?).

Multiple Emergency Departments and Trauma Registry Reporting

In situations where a trauma center has merged with or purchased another facility within its immediate locale such that there are two emergency departments and physical facilities being operated under the same management, the question has arisen as to whether trauma patients from both facilities have to be entered into the trauma registry. This question has largely arisen with orthopedic patients, as described in the section immediately above this one.

In this situation, the registry shall include all the trauma patients, including those seen at the trauma center itself or at its affiliated hospital that might, for example, handle all the isolated orthopedic injuries. If the state is eventually able to get a trauma database established at every hospital in the state, OEMS will reconsider this since it may be acceptable, given the above scenario, to at some point maintain a reduced set of data on isolated orthopedic injuries.

Seeking Initial Trauma Center Designation

The North Carolina Office of Emergency Medical Services urges any hospital interested in seeking Level I, II or III trauma center designation in North Carolina to contact them as early as possible to arrange a consultation. The contact person is Sharon Rhyne, Hospitals Specialist, at telephone 919-855-3951 or email address <sharon.rhyne@ncmail.net>. There is no fee associated with a consultation. Ms. Rhyne will also be happy to assist a hospital with the information (costs, hardware and software requirements) related to joining the North Carolina Trauma Registry (referenced below).

The specific steps to be followed in the initial designation process are outlined in Rule .0904 of North Carolina's administrative code. The specific criteria that must be met by a hospital seeking Level I, II or III designation are included in Rules .0901, .0902, and .0903, although attention must also be paid to Rule .0801 (Trauma System Definitions).

Basically, in addition to the fact that each hospital must meet the respective criteria associated with the specific level of designation being sought, each potential applicant should be aware there are at least four, and sometimes five, additional requirements for any hospital seeking trauma center designation in North Carolina. Before making actual application, a hospital must also meet the following requirements:

1. Maintain a trauma program and trauma service for at least 6 months prior to application for designation;
2. Maintain membership in and include all trauma patient records in the North Carolina Trauma Registry for at least six months prior to submitting a Request for Proposal (RFP);
3. Hold a consult visit with OEMS within one year prior to submission of the RFP;
4. Submit a letter of intent to OEMS 180 days prior to the submission of an RFP to OEMS that defines the hospital's primary catchment area; and
5. If a Level I or II applicant, demonstrate the need for trauma center designation by submitting one original and three copies of a document that addresses, at a minimum:
 - Population to be served and extent to which population is underserved for trauma care, including methodology used to reach this conclusion;
 - Geographic considerations to include trauma primary and secondary catchment area and distance from other trauma centers; and
 - Trauma patient volume and severity of injury for the facility for the 24-month period of time preceding the application. The hospital shall show that its trauma service will be taking care of at least 200 trauma patients with an Injury Severity Score ≥ 15 during the first two-year period of its designation. This criteria shall be met w/out compromising quality of care or cost effectiveness of any other designated Level I or II trauma center sharing all or part of its catchment area or by jeopardizing the existing center's ability to meet this same 200-patient minimum.

The remaining steps, as outlined in Rule .0904, are as follows:

1. Following receipt of the letter of intent by OEMS, any designated Level I or II trauma center(s) sharing all or part of the applicant's catchment area must provide to OEMS a trauma registry download for the same two-year period used by the applicant. This download shall be provided within 30 days of the request of OEMS.

2. OEMS shall review the regional data, from both the applicant and the existing trauma center(s), and ascertain the applicant's ability to satisfy the justification of need information. Simultaneously, the applicant's primary RAC shall be notified of the application and be provided the regional data submitted by the applicant for review and comment. The RAC shall be given a minimum of 30 days to submit any concerns in writing for OEMS' consideration. If no comments are received, OEMS shall proceed.
3. OEMS shall notify the hospital in writing of its decision to allow submission of an RFP. The RAC shall also be notified so that any necessary changes in protocols can be considered.
4. OEMS shall also notify the respective Board of County Commissioners in the applicant's trauma primary catchment area of the request for initial designation to allow for comment.
5. Hospitals desiring to be considered for initial trauma center designation shall complete and submit an original and five copies of a bound, page-numbered RFP to the OEMS at least 90 days prior to the proposed site visit date.
6. For Level I, II, and III applicants, the RFP shall demonstrate that the hospital meets the standards for the designation level applied for as found in Rules .0901, .0902, or .0903 of this Section.
7. If OEMS does not recommend a site visit, based upon failure to comply with Rules .0901, .0902, or .0903, the reasons shall be forwarded to the hospital in writing within 30 days of the decision. The hospital may reapply for designation within six months following the submission of an updated RFP. If the hospital fails to respond within six months, the hospital shall reapply following the process outlined herein.
8. If the OEMS recommends the hospital for a site visit, the hospital shall be notified within 30 days and the site visit shall be conducted within six months of the recommendation. The site visit shall be scheduled on a date mutually agreeable to the hospital and the OEMS.
9. Any in-state reviewer for a Level I or II visit (except the OEMS representatives) shall be from outside the planning region in which the hospital is located. The composition of a Level I or II state site survey team shall be as follows:
 - One out-of-state Fellow of the ACS, experienced as a site surveyor, who shall be designated the primary reviewer;
 - One emergency physician who currently works in a designated trauma center, is a member of the North Carolina College of Emergency Physicians, and is boarded in emergency medicine (by the American Board of Emergency Medicine or the American Osteopathic Board of Emergency Medicine);
 - One in-state trauma surgeon who is a member of the North Carolina Committee on Trauma;
 - One out-of-state trauma nurse coordinator/program manager;
 - The medical director of the OEMS; and
 - The Hospitals Specialist of the OEMS.
10. All site team members for a Level III visit shall be from in-state, and all (except for the OEMS representatives) shall be from outside the planning region in which the hospital is located. The composition of a Level III state site survey team shall be as follows:

- One Fellow of the ACS who is a member of the North Carolina Committee on Trauma and shall be designated the primary reviewer;
 - One emergency physician who currently works in a designated trauma center, is a member of the North Carolina College of Emergency Physicians, and is boarded in emergency medicine (by the American Board of Emergency Medicine or the American Osteopathic Board of Emergency Medicine);
 - A trauma nurse coordinator/program manager;
 - The medical director of the OEMS; and
 - The Hospitals Specialist of the OEMS.
11. On the day of the site visit the hospital shall make available all requested patient medical charts.
 12. A post-conference report based on the consensus of the site review team shall be given verbally during a summary conference. A written consensus report will be completed, to include a peer review report, by the primary reviewer and submitted to OEMS within 30 days of the site visit.
 13. The report of the site survey team and the staff recommendations shall be reviewed by the State Emergency Medical Services Advisory Council at its next regularly scheduled meeting which is more than 45 days following the site visit. Based upon the site visit report and the staff recommendation, the State Emergency Medical Services Advisory Council shall recommend to the OEMS that the request for trauma center designation be approved or denied.
 14. All criteria defined in Rule .0901, .0902, or .0903 of this Section shall be met for initial designation at the level requested. Initial designation shall not be granted if deficiencies exist.
 15. Hospitals with a deficiency(ies) may be given up to 12 months to demonstrate compliance. Satisfaction of deficiency(ies) may require an additional site visit. If compliance is not demonstrated within the time period, to be defined by OEMS, the hospital shall be required to submit a new application and updated RFP and follow the process outlined herein.
 16. The final decision regarding trauma center designation shall be rendered by the OEMS.
 17. The hospital shall be notified, in writing, of the State Emergency Medical Services Advisory Council's and OEMS' final recommendation within 30 days of the Advisory Council meeting.
 18. If a trauma center changes its trauma program administrative structure (such that the trauma service, trauma medical director, trauma nurse coordinator/program manager and/or trauma registrar are relocated on the hospital's organizational chart) at any time, it shall notify OEMS of this change in writing within 30 days of the occurrence.
 19. Initial designation as a trauma center is valid for a period of three years.

Seeking Renewal of Trauma Center Designation: Two Options

When the North Carolina Office of Emergency Medical Services (OEMS) began an update of its trauma center criteria and designation procedures in 2001, it also considered changes to the trauma center renewal process. While North Carolina only requires a trauma center to undergo a state site visit to obtain a renewal, some trauma centers made it clear they might also want American College of Surgeons (ACS) verification. Therefore, a few trauma centers requested a method by which one site visit could accomplish both reviews. The current rules reflect this change.

This does not change the fact that each trauma center in North Carolina must still undergo a state arranged site visit in order to receive **initial** trauma center designation. But there are now two options (see Rule .0905 of the rules) a hospital can consider when seeking **renewal** of its state trauma center designation.

Option 1 is when OEMS automatically arranges and conducts a site visit for a North Carolina trauma center seeking a **four**-year renewal of its state trauma center designation. In this case, the trauma center would not simultaneously be seeking ACS verification.

Option 2 is when a hospital undergoes a verification visit arranged by the ACS and attended by the OEMS in order to obtain ACS verification as well as a **three** year renewal (the length of an ACS verification) of its state trauma center designation.

Utilization of Option 1 or 2 is at the discretion of each hospital. It should also be noted that a hospital can still seek both a state renewal and an ACS verification completely independent of each other.

No matter which option is chosen, it is each trauma center's responsibility to make sure it works with the state to make sure its designation is renewed before the end of its state designation period. OEMS will automatically assume a state designated trauma center is following Option 1 for its first renewal unless notified otherwise. In this case, OEMS will automatically contact the trauma center in a timely manner to establish an agreed upon site visit date to ensure the state conducts the visit in time to assure renewal before the end of the center's designation period.

With Option 2, the hospital must work with the ACS to arrange a site visit date to make sure the ACS visit is held in time to assure that the state (whose hospitals specialist and medical director will also attend the ACS visit) can make a recommendation to the State EMS Advisory Council in time to make a final decision on renewal by the end of the hospital's trauma center designation period. While by state rule the visit must be at least 45 days prior to the specific State EMS Advisory Council meeting (and w/in 120 days prior to the end of the designation period), this might not provide enough time (if following ACS site visit procedures) for OEMS to have all the necessary paperwork for the required Council meeting.

In choosing Option 2, a trauma center will have to comply with all the ACS' verification criteria and procedures, as well as any additional state criteria and procedures as outlined in the state's trauma rules. It is also important to realize that while the state will be in attendance at the ACS' verification visit, the visit will be arranged by the ACS (whose visit must still incorporate all the site surveyors required by the North Carolina trauma rules). While input obtained during an ACS visit and from the surveyors contracted by the ACS will help serve as the state's basis for a

decision on renewal, the hospital must also provide OEMS all the usual documents (like the Request for Proposal) and information the state needs (which may differ from what the ACS requires) to reach a decision regarding a state renewal.

It is also important that a trauma center realize that a North Carolina renewal of designation is independent from an ACS verification. For example, it is possible the state could grant a three year renewal when the ACS does not recommend or grant its maximum three year verification. Conversely, the state could deny a renewal when the ACS grants a verification.

No matter whether a state or ACS review is held, it is the responsibility of the hospital seeking renewal to assume all financial responsibility for a site visit. This is also true for any revisit that might be necessary to satisfy any contingencies placed on a hospital's state designation.

Should a trauma center that previously used the ACS' verification process (Option 2) choose not to renew again using this process, it must notify the OEMS of this change (to Option 1) at least six months prior to the end of its state trauma center designation period.

Listed below in Option 1 are the specific steps that must be followed when OEMS arranges and conducts a renewal visit. Option 2 outlines the basics of an ACS verification visit attended by the OEMS to determine a state renewal.

OPTION 1 (see .0905(b) of the rules):

1. OEMS contacts the designated trauma center and sets a tentative site visit date (w/in 120 days prior to the end of the designation period and at least 45 days prior to a State EMS Advisory Council meeting) that is mutually agreeable to OEMS and the center.
2. OEMS forwards the state's Request for Proposal (RFP), in electronic and hard copy, to the hospital.
3. Within 10 days of receipt of the RFP, the trauma center provides written verification to OEMS (by email or letter) of its trauma primary catchment area.
4. OEMS notifies Boards of County Commissioners, via County Managers, within the primary catchment area, of the request for renewal to allow comment.
5. OEMS hires a site team that meets the trauma rule requirements.
6. The center sends medical record downloads from its trauma registry to OEMS' central data collection agency on required dates.
7. The center submits a bound and page-numbered RFP (original and 5 copies) to surveyors at least 30 days prior to the site visit date.
8. Site visit is held.
9. Within 30 days of visit, primary reviewer submits a consensus report, including a peer review report, to OEMS.
10. OEMS prepares a staff recommendation for the State EMS Advisory Council and sends a copy to the trauma center.

11. The State EMS Advisory Council meets to consider the consensus and peer review report, as well as the staff recommendation, in order to make a recommendation to OEMS for approval or denial of the renewal. OEMS makes the final decision regarding trauma center renewal.
12. Centers with a deficiency (ies) have two weeks to provide documentation to demonstrate compliance. If a deficiency cannot be corrected in this time frame, the hospital, instead of a renewal, may be given up to twelve months to demonstrate compliance and undergo a focused review, which may require another site visit. Failure to demonstrate compliance within the time period means the designation will not be renewed.
13. The center is notified, in writing, of OEMS' final decision within 30 days of the Advisory Council meeting.
14. If a renewal is granted, the renewal date shall be four years from the end of the previous designation end date and will not be extended due to a focused review period.
15. If a renewal is denied, the hospital shall be required to submit a new RFP and to follow the initial trauma center designation application process.

OPTION 2 (See .0905(c) of the rules):

1. At least six months prior to the end of a trauma center's designation period, the center must notify OEMS of its intent to undergo an ACS verification visit and define, in writing, its trauma primary catchment area.
2. OEMS notifies Boards of County Commissioners, via County Managers, within the primary catchment area, of the request for renewal to allow comment.
3. The center arranges a mutually agreeable site visit date with the ACS and OEMS so that the ACS' final written report, accompanying medical record reviews and ACS cover letter are received by OEMS at least 30 days prior to a regularly scheduled State EMS Advisory Council meeting that is prior to the end of the center's designation period.
4. The composition of the ACS site visit team must, at a minimum, comply with the state trauma rules, except that for Level Is and IIs both the required trauma surgeons and the emergency physicians may be from out-of-state. The Level III team must also comply with the state trauma rules except that the trauma surgeon, emergency physician and trauma program manager may be from out-of-state. For a Level I, II and III visit, neither North Carolina Committee on Trauma nor North Carolina College of Emergency Physician membership will be required of the surgeons or emergency physician, respectively, if from out-of-state.
5. The center must complete the ACS' documentation for verification and simultaneously submit two identical copies to OEMS. It must simultaneously complete documents supplied by OEMS to verify compliance with all the required state criteria for the specific level of designation and forward two copies to the OEMS and the number of copies to the ACS per their request.
6. The center must provide the OEMS' central data collection agency whatever trauma registry downloads may be needed to meet the state medical chart review requirements.

7. The ACS documents received by the hospital (i.e., the ACS' final written report, medical record reviews minus identifiers and cover letter) must be forwarded to OEMS within 10 working days of receipt.
8. Once the OEMS receives the ACS paperwork, OEMS prepares a staff recommendation for the State EMS Advisory Council and sends a copy to the trauma center.
9. The State EMS Advisory Council meets to consider the ACS documentation and staff recommendation in order to make a recommendation to OEMS for approval or denial of the renewal. OEMS makes the final decision regarding trauma center renewal.
10. Centers with contingencies, as the result of a deficiency (ies), may undergo a focused review (conducted by OEMS) whereby the trauma center may be given up to 12 months to demonstrate compliance. Satisfaction of a contingency (ies) may require an additional site visit whose cost will be the responsibility of the trauma center. If compliance is not demonstrated within the time period, as specified by OEMS, the trauma center designation shall not be renewed.
11. The center is notified in writing of OEMS' final decision within 30 days of the Advisory Council meeting.
12. If a renewal is granted by the state, the renewal date shall be three years from the end of the previous designation end date and will not be extended due to a focused review period.
13. If the state denies a renewal, the hospital shall be required to submit a new RFP and to follow the initial trauma center designation application process.

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