Chapter HFS 118

APPENDIX A

Key: E = Essential
D = Desirable

Level III & IV Hospital Assessment and Classification Criteria

	III	IV	YES	NO	COMMENTS
GENERAL STANDARDS					
1. Trauma Care Facility (TCF) Commitment	**E**[1]	**E**[1]			
2. Acceptance of Patients	**E**[2]	**E**[2]			
3. Membership and participation in Regional Trauma Advisory Council(s)	**E**	**E**			
A. HOSPITAL OR EMERGENCY CARE FACILITY ORGANIZATION					
1. Trauma Service	**E**[3,5,6]	**D**[4,5] **or E**[6]			
2. Trauma Service Director	**E**[7]	**E**[8]			
3. Trauma Multidisciplinary Committee	**E**	**D**[9]			
4. Hospital Departments, Divisions or Sections					
a. General Surgery	**E**	——			
b. Orthopedic Surgery	**D**	——			
c. Emergency	**E**	**E**			
d. Anesthesia	**E**	——			
B. CLINICAL CAPABILITIES – Specialty Availability					
1. On Call & Promptly Available[10]					
a. General Surgery	**E**[11]	——			
b. Orthopedic Surgery	**D**[12]	——			
c. Emergency Medicine	**E**[13]	**E**[13]			
d. Anesthesiology	**E**[14]	——			
e. Internal Medicine	**D**	——			
f. Obstetric or Gynecologic Surgery	**D**	——			
g. Pediatrics	**D**	——			
h. Radiology	**D**[16]				
i. Neurosurgery	——	——			
C. FACILITIES OR RESOURCES OR CAPABILITIES					
1. Emergency Department					
a. Personnel					
1. Designated Physician Director	**E**[17]	**D**[17]			
2. Physician capable of initial resuscitation who is on call & promptly available to the ED upon arrival of the trauma patient.	**E**[13]	**E**[13]			
3. Nursing personnel assigned to the ED with special capability in trauma care who provide continual monitoring of the trauma patient from hospital arrival to disposition in ICU, OR, patient care unit, or until transfer.	**E**[18]	**D**			

4. Nursing personnel in–house 24 hours a day responsible for and capable of responding to the ED and initiating the assessment or care of the trauma patient prior to the arrival of the physician in the ED and who can provide continual monitoring of the trauma patient from hospital arrival until transfer.	——	**E**[18]			
b. Equipment for resuscitation of patients of ***all*** ages shall include but not be limited to:					
1. Airway control & ventilation equipment, including laryngoscopes and endotracheal tubes of all sizes, bag–mask resuscitator, pocket masks, and oxygen.	**E**	**E**			
2. Pulse oximetry	**E**	**E**			
3. End Tidal $C0_2$ determination	**E**	**E**			
4. Suction devices	**E**	**E**			
5. ECG monitor or defibrillator	**E**	**E**			
6. CVP monitoring apparatus	**E**	**D**			
7. Standard intravenous fluids & large bore administration devices & catheters	**E**	**E**			
8. Sterile surgical sets for:					
a. Airway or Cricothyrotomy	**E**	**E**			
b. Thoracostomy	**E**	**D**			
c. Vascular access	**E**	**E**			
d. Chest decompression	**E**	**E**			
9. Gastric decompression	**E**	**E**			
10. Drugs necessary for emergency care	**E**	**E**			
11. 24 hour x–ray availability	**E**[19]	**D**[19]			
12. Two–way radio communication with ambulance or rescue	**E**[20]	**E**[20]			
13. Skeletal & cervical immobilization devices	**E**	**E**			
14. Arterial catheters	**E**	**D**			
15. Thermal Control Equipment					
a. For patient	**E**	**E**			
b. For blood & fluids	**E**	**E**			
16. Capability for rapid infusion of fluids	**E**	**E**			
2. Operating Suite					
a. Personnel & Operating Room					
1. Immediately available to patient on arrival in the OR or when requested by the surgeon	**E**[21]	——			

b. Equipment for ***all*** ages shall include but not be limited to:					
1. Thermal Control Equipment					
a. For patient	**E**	——			
b. For blood & fluids	**E**	——			
2. X–Ray capability available 24 hours per day	**E**	——			
a. C–arm intensifier	**D**	——			
3. Endoscopes or Bronchoscope	**D**	——			
4. Equipment appropriate for fixation of long–bone and pelvic fractures	**D**	——			
5. Rapid infusion or rapid fluid recovery capability	**E**	——			
3. Post–Anesthetic Recovery Room (Surgical ICU Acceptable)					
a. RNs and other essential personnel in–house or on call promptly available when patient arrives in recovery or ICU	**E**	——			
b. Equipment for the continuous monitoring of temperature, hemodynamics and gas exchange.	**E**	——			
c. Pulse oximetry	**E**	——			
d. End–Tidal $C0_2$ monitoring	**E**	——			
e. Thermal control	**E**	——			
4. Intensive Care Unit (ICU) for Trauma Patients					
a. Personnel					
1. Designated Physician Director for Trauma Patients	**D**[22]	——			
2. Physician with TCF privileges in critical care and approved by the trauma director, on call and immediately available to the hospital.	**D**	——			
b. Appropriate monitoring or resuscitation equipment	**E**	——			
c. Support Services					
1. Immediate access to clinical diagnostic services	**E**[23]	——			
5. Acute Hemodialysis Capability or Transfer Agreement	**E**	——			
6. Organized Burn Care	**E**	**E**			
a. Physician–directed burn center staffed and equipped to care for extensively burned patients **OR**	—	—			
b. Facilitate Transfer	**E**	**E**			
7. Acute Spinal Cord or Head Injury Management	**E**	**E**			
a. If a designated spinal cord rehabilitation center exists in region, early transfer should be considered.	**E**	**E**			
b. If a head injury center exists in the region, early transfer should be considered.	**E**	**E**			

8. Radiological Capabilities available 24 hours per day	**E[19]**	**D[19]**			
a. Angiography	**D or E[15]**	——			
b. Sonography	**D or E[15]**	——			
c. Nuclear Scanning	**D or E[15]**	——			
d. Computed Tomography	**D or E[15]**	——			
9. Rehabilitation					
a. Rehabilitation service staffed by personnel trained in rehabilitation care and properly equipped for the acute care of the critically injured patient OR	**D**	——			
b. Facilitate Transfer	**E**	**E**			
10. Clinical Laboratory Service	**E[24]**	**E[24]**			
a. Blood Typing & Cross Matching	**E**	**D**			
b. Coagulation Studies	**E**	**D**			
c. Comprehensive blood bank or access to a community central blood bank and adequate storage facilities	**E[25]**	**D**			
d. Blood gas & pH determination capability	**E**	**D**			
e. Microbiology capability	**E**	**D**			
f. Alcohol screening capability	**E**	**D**			
g. Drug screening capability	**D**	**D**			
D. QUALITY IMPROVEMENT					
1. Quality Improvement Programs	**E[26]**	**E[26]**			
2. Trauma Registry	**E[27]**	**E[27]**			
3. Special audit for *all* trauma deaths	**E[28]**	**E[28]**			
4. Morbidity & Mortality Review	**E[28]**	**E[28]**			
5. Trauma review, multidisciplinary	**E**	**D[29]**			
6. Medical Nursing Audit, Utilization Review, Tissue Review	**E[28]**	**E[28]**			
7. Review of Out−of−Hospital Trauma Care	**E[28]**	**E[28]**			
8. Published on−call schedule shall be maintained for surgeons, anesthesiology, and other major specialists.	**E**	——			
9. Quality Improvement personnel specifically responsible for the trauma program.	**E[26 or 33]**	**E[26 or 33]**			
10. Times of and reasons for trauma−related bypass documented and reviewed by the QI Program	**E**	**E**			
E. OUTREACH PROGRAM					
1. Availability of telephone, computer network, or on−site consultations with physicians of higher level TCF	**E**	**E**			

F. PREVENTION					
1. Epidemiology research					
a. Conduct studies in injury control	——	——			
b. Collaborate with other institutions in research	**D**[30]	**D**[30]			
c. Consult with qualified researchers on evaluation measures	**D**[30]	**D**[30]			
2. Surveillance					
a. Special ED and field collection projects	——	——			
b. Expanded Trauma Registry data	**D**	——			
c. Minimal Trauma Registry data	**E**[27]	**E**[27]			
3. Prevention					
a. Designated prevention coordinator	**D**	**D**			
b. Outreach activities and program development	**D**	**D**			
c. Information resource	**D**	**D**			
d. Collaboration with existing national, regional (Midwest) and state programs	**E**	**E**			
G. CONTINUING EDUCATION					
1. Formal Programs in continuing education provided by the hospital for:					
a. Staff physicians	**E**[31]	**E**[31]			
b. Nurses	**E**[31]	**E**[31]			
c. Allied health personnel	**E**[31]	**E**[31]			
d. Community physicians	**E**[31]	——			
e. Out−of−hospital personnel	**D**[31]	——			
H. TRAUMA SERVICE SUPPORT PERSONNEL					
1. Trauma coordinator	**E**[32]	**E**[33]			
I. ORGAN PROCUREMENT ACTIVITIES					
1. Organ procurement activities	**E**	**E**			
J. TRANSFER AGREEMENTS					
1. As transferring facility	**E**	**E**			
2. As receiving facility	**E**[34]	——			

Footnotes

[1A] Trauma Care Facility (TCF), specifically its board of directors, administration, medical staff, and nursing staff, shall make a commitment to providing trauma care commensurate to the level at which they are classified. Written documentation of such by each of these groups shall include but not be limited to appropriate dedicated financial, physical, and human resources and organizational structure necessary to provide optimal trauma care with outcome evaluation through a quality assessment and quality improvement process.

[2A] TCF shall agree to accept all patients who present to their facility requiring trauma stabilization or care appropriate to their classified level regardless of race, sex, disability, creed, or ability to pay.

[3] Trauma patients admitted to a Level III TCF are not required to be admitted to a separate trauma service but may be admitted to the service of the physician caring for the patient. However, the TCF shall have policies, protocols, and an organizational chart that 1) defines how trauma care is managed at the TCF, and 2) identifies trauma team members and their respective responsibilities in the care of the trauma patient.

[4] The Level IV TCF is not required to have the same type of trauma service and team as the upper level facilities. However, the administration, physicians, nurses and support personnel, with aid of guidelines, protocols, and transfer agreements, make a commitment to assess, stabilize, and transfer patients to the appropriate level TCF. Any inpatients admitted to a Level IV TCF shall not have injuries requiring major surgical or surgical specialty care.

[5] Level III and Level IV TCF physicians involved in the care of trauma patients shall take the Advanced Trauma Life Support (ATLS) Course and the refresher course every four years to meet CME requirements. If a physician currently is Emergency Medicine Board Certified, ATLS course only needs to be completed once.

[6] Level III and Level IV TCFs shall have a Trauma Team Activation Protocol or Policy that 1) defines response requirements for all team members when a trauma patient is enroute or has arrived at the TCF, 2) establishes or identifies the criteria, based on patient severity of injury,

for activation of the trauma team, and 3) identifies the person(s) authorized to activate the trauma team. The Trauma Protocol or Policy can be facility specific but team member roles should be clearly documented.

[7] Level III TCFs shall have a physician on staff whose job description defines his or her role and responsibilities for trauma patient care, trauma team formation, supervision or leadership, and trauma training or continuing education. This physician acts as the medical staff liaison for trauma care with out−of−hospital medical directors, nursing staff, administration, and higher level TCFs.

[8] Level IV TCFs shall have a physician on staff whose job description defines his or her role and responsibilities for trauma patient care, trauma team formation, supervision or leadership, and trauma training or continuing education. This physician acts as the medical staff liaison for trauma care with out−of−hospital medical directors, nursing staff, administration, and higher level TCFs.

[9] The activities of the Trauma Multidisciplinary Committee in a Level IV TCF may be handled by an appropriate standing committee of that facility that directly deals with patient care issues pertaining to quality assessment and quality improvement.

[10] Refer to each "essential" specialty footnote. Promptly shall be defined as, "without delay."

[11] For all trauma patients requiring surgical care, upon notification the surgeon shall respond to the ED. Should the surgeon be unavailable for any reason, a back−up plan for surgical coverage shall be in effect, that is, a second call surgeon available or transfer policy activated. The appropriateness and timeliness of the surgeon's response shall be evaluated in the TCF's quality assessment and quality improvement process. A 24−hour−per−day call schedule for surgeons covering trauma shall be published monthly and posted in all areas of the TCF caring for trauma patients.

[12]Having an orthopedic surgeon on staff at a Level III TCF is desirable. However, if an orthopedic surgeon is not on staff, the general surgeon and physician covering the ED for trauma shall be capable of stabilizing and immobilizing fractures prior to transfer to a higher level TCF. A transfer agreement shall be in place.

[13]Optimally, in a Level III and Level IV TCF the physician providing initial ED care for trauma patients should be in−house 24−hours−per−day. As an alternative for both Level III and Level IV TCFs, the physician may be on call and notified to meet the patient upon arrival at the TCF to assume immediate care responsibilities. The appropriateness and timeliness of the physician's response to the ED shall be evaluated in the TCF's quality assessment and quality improvement process. A 24−hour per day call schedule for the physicians providing initial ED trauma care shall be published monthly and posted in all areas of the TCF caring for trauma patients. Current Advanced Trauma Life Support (ATLS) is required of the ED physicians. The ED physicians will have three years, from the TCF's classification date or from the date of the ED physician joining the trauma team at the TCF to successfully complete this course. Physicians Board Certified in Emergency Medicine only need to complete ATLS course once.

[14]Level III TCF anesthesia requirements can be filled by an anesthesiologist or by a certified registered nurse anesthetist capable of assessing emergent situations in trauma patients and initiating preoperative and operative anesthetic care. Local criteria shall be established to allow the anesthesia provider to take call from outside the hospital, but with clear commitment that an anesthesiologist or CRNA will be immediately available for airway or operative management. Ongoing anesthesia outcome studies shall be performed by the TCF as part of the quality assessment and quality improvement process. The availability of anesthesia services and the absence of delays in airway control or operative anesthesia shall be documented by the hospital's quality assessment and quality improvement process.

[15]Essential if the institution's scope of practice includes definitive care of the organ system.

[16]Teleradiology may be an option. If utilized, this process shall be a part of the TCF's quality assessment and quality improvement process.

[17]In Level III and Level IV TCFs, one of the physicians who takes ED call, perhaps the chairperson of the ED committee (or similar committee responsible for the ED), shall be responsible for 1) physician staffing of the ED, 2) Out−of−Hospital medical direction, 3) acting as the physician liaison for other ED physicians with nursing staff and TCF administration, and 4) ensuring that physician quality assessment and quality improvement activities are in place and performed.

[18]The nursing personnel staffing the ED should be physically present in the ED prior to the arrival of the trauma patient to ensure that the room and equipment are available and ready for use. These activities shall be assessed in the TCF's quality assessment and quality improvement process. In addition, they may act as physician designees and provide communication with the out−of−hospital personnel prior to the arrival of the physician. The nurses shall attend appropriate continuing education courses in trauma care. EXCEPTION: hospitals designated as critical access hospitals will meet nursing personnel availability standards per Medicare conditions of participation.

[19]The Level III and Level IV TCF radiology technician shall be on call and promptly available to the ED. The technician is part of the trauma team and shall be notified as part of the trauma alert activation protocol. A call schedule shall be posted in all areas of the TCF caring for trauma patients. The technician's availability and response shall be monitored as part of the TCF's quality assessment and quality improvement process.

[20]On−line medical direction (two−way communications) shall be available to all out−of−hospital services in the TCF area, with physicians or physician designees trained in receiving patient reports and giving pre−approved standing orders for patient treatment interventions or destination decisions.

[21]The operating room staff shall be on−call and promptly available when notified to respond. The OR staff is part of the trauma team and shall be notified as part of the trauma alert activation protocol. A call schedule shall be posted in all areas of the TCF caring for trauma patients. The OR staff's availability and response times shall be part of the TCF's quality assessment and quality improvement process.

[22]This function may be performed by a surgeon or the TCF's ICU, or otherwise appropriate Committee.

[23]Clinical diagnostic services such as, but not limited to, radiology, laboratory, and respiratory care shall be available to the operating room, post anesthesia recovery, intensive care unit, and all other trauma patient care areas just as they are for the ED.

[24]Level III and Level IV TCF laboratory personnel shall be on call and promptly available to the ED. They are part of the trauma team and shall be notified as part of the trauma alert activation protocol. A call schedule shall be posted in all areas of the TCF caring for trauma patients. Laboratory personnel availability and response times shall be part of the TCF's quality assessment and quality improvement process. There shall be a policy delineating the priority of a trauma patient in the collection and processing of blood and urine for evaluation.

[25]Level III TCFs shall be capable of storing blood received from out−of−hospital blood banks and providing non−crossmatched blood on patient arrival to the ED. The TCF shall have a massive transfusion protocol with the ability to perform massive transfusions.

[26]Level III and IV TCFs shall perform all quality assessment and quality improvement activities that are required of an acute care hospital as they relate to trauma. The trauma quality assessment and quality improvement process may be performed by the TCF's trauma care committee or by the TCF's standing quality assessment and quality improvement committee. This process may also be performed through agreements with higher level TCFs.

[27]Following trauma system implementation, data submission from Level III and Level IV TCFs will be phased in beginning with year two. Initial Level III and IV data submission will be either on paper or via electronic submission with data entry coordinated by the State Trauma Registrar. Level III and IV TCFs will submit data for all trauma patients meeting ***any*** of the following three criteria:

1. Persons who are admitted to the hospital or transferred to another facility for trauma care and have ICD−9 discharge diagnoses from 800.00 to 959.9, with the exception of any of the following:
   a. 905−909 (late effects of injury).
   b. 910−924 (blisters, contusions, abrasions, insect bites).
   c. 930−939 (foreign bodies).
   d. Drowning, unless it was a consequence of a motor vehicle crash.
   e. Strangulation or asphyxiation.
   f. Poisoning or a drug overdose.
   g. Falls from the same level resulting in isolated closed distal extremity fracture or isolated hip fracture.
2. Persons transported to the hospital and who are dead on arrival.
3. Persons who have an injury−related death in the emergency department or after admission to the hospital.
4. Facility−specified trauma response has been activated.

[28]Level III and Level IV TCFs shall establish a procedure or process for a special audit on all trauma deaths, trauma morbidity and mortality, utilization, medical nursing audit, tissue, and out−of−hospital trauma care review as part of the TCF quality assessment and quality improvement process. This review may be performed by a TCF standing committee or through an agreement(s) with higher level TCFs.

[29]Level IV TCFs may be involved with Level I, Level II or Level III TCF multidisciplinary trauma review via, but not limited to, closed circuit TV, or computer network.

[30]Level III and Level IV TCFs shall cooperate with trauma researchers approved by the Institutional Review Board or Ethics Committee if the demands for data, time and money are not excessive.

[31]Continuing trauma education programs in Level III and Level IV TCFs may be provided by, but not limited to, the facility in−house, regular or closed circuit TV, computer networks, etc. Level III and Level IV TCFs at a minimum shall provide for educational offerings for nursing and allied health personnel. Arrangements can be made with a Level I or Level II TCF.

[32]The Trauma Care Coordinator for a Level III TCF should ideally be a RN with clinical experience in trauma care. As an alternative, other qualified allied health personnel with clinical experience in trauma care may be appropriate. A job description shall be clearly defined and available. Developing this job description should be a collaborative effort with the Level I or Level II TCF.

[33]Level IV TCFs shall have an individual who works in conjunction with the physician(s) responsible for trauma care helping to organize and coordinate the TCF's trauma care response. Ideally, this individual should be a staff or administrative RN with emergency or trauma care experience. As an alternative other allied health personnel with clinical experience in emergency or trauma care may fulfill this role. A job description shall be clearly defined and available. This position may be shared by individuals with different qualifications in clinical care, quality improvement, and data collection. These individuals shall hold the responsibility for the education of the facility trauma team in the varied aspects of trauma care within the facility. Development of this job description should be a collaborative effort with the Level I or Level II TCF.

[34]If a Level III TCF is receiving patients from a Level III or Level IV TCF, transfer protocols shall be in place.