

# Texas Department of Health

## ESSENTIAL GENERAL TRAUMA FACILITY CRITERIA DEFINED

General Trauma Facility (Level III) - provides resuscitation, stabilization, and assessment of injury victims and either provides treatment or arranges for appropriate transfer to a higher level designated trauma facility; provides ongoing educational opportunities in trauma related topics for health care professionals and the public; and implements targeted injury prevention programs (see attached standards).

Lead trauma facility - a trauma facility that has made an additional commitment to its trauma service area. This commitment, which usually is offered by the highest level of trauma facility in a given trauma service area, includes receipt of major and severe trauma patients transferred from lower level trauma facilities. It also includes on-going support of the regional advisory council and the provision of regional outreach, prevention, and trauma educational activities to all trauma care providers in the trauma service area regardless of health care system affiliation. *[The responsibilities may be shared by trauma facilities.]*

The purpose of this document is to clarify what is required to fulfill each of the **essential** criterion included in the Texas Trauma Facility Criteria - General (each essential criterion is listed and followed by an explanatory statement in italics.. It is hoped that these clarifications will assist hospital representatives in working to prepare their facility for Level III designation.

### A. HOSPITAL ORGANIZATION

#### 1. TRAUMA SERVICE

*A trauma service represents a structure of care for the injured patient. The service includes personnel and other resources necessary to ensure appropriate and efficient care delivery. This may require a method to identify the injured patients, monitor the provision of health care services, make periodic rounds, and hold formal and informal discussions with individual practitioners.*

**\*This requirement is an essential element for the "lead" hospitals in a trauma service area.**

#### 2. TRAUMA SERVICE COMPONENTS (for hospitals with no trauma service.

- a. An identified Trauma Medical Director (TMD. who is a general surgeon and is charged with overall management of trauma services provided by the hospital.

The TMD shall be credentialed by the hospital to participate in the resuscitation and treatment of trauma patients to include board certification, trauma continuing medical education, compliance with trauma protocols, and participation in the trauma performance improvement program.

The TMD shall be currently credentialed in Advanced Trauma Life Support (ATLS. or an equivalent course approved by the Texas Department of Health (TDH..

There shall be a defined job description and organization chart delineating the TMD's role and responsibilities.

*The trauma medical director should have the authority to affect all aspects of trauma care, including recommending trauma team privileges; cooperating with the nursing administration to support the nursing needs of the trauma patients; developing treatment protocols; coordinating the performance improvement peer review; correcting deficiencies in trauma care or excluding from trauma call those trauma team members who do not meet criteria; and coordinating the budgetary process for the trauma program.*

- b. An identified Trauma Nurse Coordinator/Trauma Program Manager, who is a registered nurse and has the authority and responsibility to monitor trauma patient care from ED admission through discharge.

There shall be a defined job description and organizational chart delineating the Trauma Nurse Coordinator's/Trauma Program Manager's role and responsibilities.

*Trauma nurse coordinator/trauma program manager - a registered nurse with demonstrated interest, education, and experience in trauma care and who, in partnership with the trauma medical director and hospital administration, is responsible for coordination of trauma care at a designated trauma facility. This coordination should include active participation in the trauma performance improvement program, the authority to positively impact care of trauma patients in all areas of the hospital, and targeted prevention and education activities for the public and health care professionals.*

**\* This should be a full-time position in "lead" trauma facilities.**

- c. An identified Trauma Registrar who has appropriate training in injury severity scaling.

*There shall be a defined job description delineating the Trauma Registrar's role and responsibilities. Trauma registrar - person with demonstrated interest, education and experience in abstraction and entry of trauma data into the registry. Education and training maybe filled by documented completion of an injury-scaling course (ATLS Trauma Registry Course, AAA Injury Scaling Course and/or equivalent course approved by Texas Department of Health (TDH)).*

- d. Written protocols for, developed with the approval of the hospital's medical staff, for:

1. Trauma team activation

*The Trauma Team Activation Protocol should be an organized approach that delineates specific types of injuries/patient conditions (i.e., physiologic, anatomic and mechanism of injur). which activate the team, list team members, and include notification and response times of team members, both in-house and off-site.*

2. Identification of trauma team responsibilities during resuscitation

*The trauma team consists of physicians, nurses and allied health personnel. The size of the trauma team may vary with hospital size and with the severity of injury, which leads to trauma team activation. The roles of each trauma team member during the initial assessment and emergent care of the trauma patient should be outlined ( what each team member does immediately upon arrival of a critical patient to determine priorities of care, the secondary assessment and interventions.. This information may be developed as a separate protocol, or may be included in the Trauma Team Activation Protocol.*

3. Resuscitation and Treatment

*All team members should coordinate their interventions defined by established principles and guidelines. Resuscitation is an intense period of medical care where initial and continuous patient assessment guidelines, concurrent diagnostic and therapeutic procedures, and, at times, even commencement of surgery to save life or limb. Resuscitation is the group of coordinated actions performed to secure airway, support breathing, and restore circulation.*

4. Admission and transfer

*Admission and transfer protocols should describe the process for admission of a trauma patient as a hospital inpatient, and the process for preparation and movement of a patient to another trauma facility for definitive, or tertiary care. All existing state and federal laws related to patient transfers continue to be applicable (e.g. COBRA..*

*Admission of injury patients, including transfers into the facility, to a surgical service. Multi-system injury patients should be admitted to general surgery/trauma service; true single system injury patients may be admitted to a specialty surgical service (i.e. a fractured femur may be admitted to orthopedics).*

*Hospital Triage Guidelines for Transfer should include a list of injuries/patient conditions, which have a high, index of suspicion for multiple injuries related to mechanism of injury and are beyond the hospital's capability to treat definitively; transfer procedures should begin immediately upon arrival of these types of patients.*

- e. All major and severe trauma patients should be admitted to an appropriate surgeon and all multi-system trauma patients should be admitted to a general surgeon.

*Admission of injury patients, including transfers into the facility, to a surgical service. Multi-system injury patients should be admitted to general surgery/trauma service; true single system injury patients may be admitted to a specialty surgical service (i.e. a fractured femur may be admitted to orthopedics).*

- f. Written standards on nursing care for trauma patients for all units (i.e. ED, ICU, OR, PACU, general wards) in the trauma facility are to be implemented.

*Standards of care for trauma patients should be established in all patient care areas and should guide all nursing care provided for the pediatric and adult trauma patient. These standards should reflect nationally recognized standards for trauma care. Trauma standards of Care are statements of the principles your facility follows when caring for trauma patients; they may include goals and objectives, identified tasks, patient outcome criteria, etc.*

### **3. SURGERY DEPARTMENTS/DIVISIONS/SERVICES/SECTIONS**

#### **a. General Surgery**

A general surgery department/division/service/section represents structured of care for the injured patient. The service includes personnel and other resources necessary to ensure appropriate and efficient care delivery. A formal posted call and back up call schedule should be maintained and easily accessible in appropriate patient care areas i.e.: ED, OR, ICU, and Medical/Surgical Unit.

### **4. EMERGENCY DEPARTMENT/DIVISION/SERVICE/SECTION/ROOM**

An emergency department/division/service/section represents structured of care for the injured patient. The service includes personnel and other resources necessary to ensure appropriate and efficient care delivery.

### **5. SURGICAL SPECIALTIES AVAILABILITY**

- a. On-call and promptly available within 30 minutes of request from inside or outside hospital.

The staff specialist on-call will be immediately advised and will be promptly available within 30 minutes of request. This capability will be continuously monitored by the performance improvement program.

#### **1. General Surgery**

A physician who is providing this coverage shall be credentialed by the TMD to participate in the resuscitation and treatment of trauma patients to include requirements such as board certification/eligibility, trauma continuing medical education, compliance with trauma protocols, and participation in the trauma performance improvement program.

*Implementation of a formal credentialing process for physicians who are on-call for trauma patients; it should address such issues as board certification, ATLS certification, trauma CME hours, attendance requirements at trauma QI meetings, and compliance with department/division/service section trauma protocols, policies, and procedures.*

In hospitals with surgical residency programs, a team of surgeons that will include a PGY4 or more senior surgical resident who is a member of that hospital's residency program may start evaluation and treatment. The attending surgeon's participation in major therapeutic decisions, presence in the emergency department for major resuscitations, and presence at operative procedures are mandatory. This capability will be continuously monitored by the performance improvement program.

*Attendance of a least a PGY4 surgeon on arrival of critical trauma patients at least 90% of the time (Class 1 Trauma Activations, when pre-arrival notification has been received from EMS. Maximum response time of the PGY4 surgeon should be 20 minutes from page.*

*Participation of faculty attending surgeons in the management of critical trauma patients (Class 1 Trauma Activation) at least 90% of the time. Maximum response time of the faculty-attending surgeon should be 20 minutes from page.*

A physician who is providing this coverage shall be currently credentialed in ATLS or an equivalent course approved by TDH.

Communication should be such that the general surgeon will be present in the ED at the time of arrival of the severe or major trauma patient; maximum response time of the surgeon should be 30 minutes from trauma team activation. This capability will be continuously monitored by the performance improvement program.

When the surgeon is not activated initially and it had been determined by the emergency physician that a surgical consult is necessary, maximum response time of the surgeon should be 60 minutes from notification. A surgical consultation should not be utilized for Trauma Team activation/Code Level I response, but maybe utilized for Level II Trauma Team Alert and/or mechanism of injury criteria. This capability will be continuously monitored by the performance improvement program.

There shall be a documented system for obtaining general surgery care for situations when the general surgeon on call is unavailable. The performance improvement program will continuously monitor this system.

*A formal call protocol should be established and address the following issues: a posted call roster, response time, and posted back - up call schedule for a surgeon on-call at multiple facilities. A protocol for bypass and or diversion should be established for occasions when general surgery is not available to respond to Trauma Team Activation involving a major and/or severely injured trauma patient. An organized system should be established for notification of appropriate personnel and prehospital providers to facilitate the routing of patient to an appropriate facility. The performance improvement program will continuously monitor this system.*

#### **4. Orthopedic Surgery**

A physician who is providing this coverage should be currently credentialed in ATLS or an equivalent course approved by TDH.

*A formal call protocol should be established and address the following issues: a posted call roster, response time, and posted back - up call schedule for a surgeon on-call at multiple facilities. The performance improvement program will continuously monitor this system.*

**\*This requirement is an essential criterion for "lead" trauma facilities.**

**6. NON-SURGICAL SPECIALTIES AVAILABILITY**

- a. In-house 24 hours a day

**1. Emergency Medicine**

A physician who is providing this coverage shall be currently credentialed in ATLS or an equivalent course approved by the TDH. A board certified emergency physician is exempt from this requirement if the physician participates in the care of at least 10 major or severe trauma patients in the previous 12-month period or completes an ATLS-equivalent number of trauma continuing medical education hours.

*Documentation to fulfill this requirement should be available at the time of survey.*

A physician who is providing this coverage shall be credentialed by the hospital to participate in the resuscitation and treatment of trauma patients to include requirements such as board certification, trauma continuing medical education, compliance with trauma protocols, and participation in the trauma performance improvement program.

- b. On-call and promptly available within 30 minutes of request from inside or outside the hospital:

**1. Anesthesiology**

Requirements may be fulfilled by a member of the anesthesia care team credentialed by the hospital to participate in the resuscitation and treatment of trauma patients, which may include requirements such as board certification, trauma continuing education, compliance with trauma protocols, and participation in the trauma performance improvement program.

**5. Internal Medicine**

The patient's primary care physician should be notified at an appropriate time. *This maybe full filled by a family practice physician in non-lead facility.*

**B. SPECIAL FACILITIES/RESOURCES/CAPABILITIES**

**1. EMERGENCY DEPARTMENT**

- a. Designated physician director

There be shall a defined job description and organization chart delineating the physician director's role and responsibilities.

The physician director should have the responsibility and authority to monitor and promote all trauma related activities. The role of the physician director should be described in a written job description. The organizational chart serves to define how the position of trauma nurse coordinator is integrated into the hospital organization and identifies the lines of authority and responsibility of that role.

- b. Physician with special competence in care of critically injured who is designated member of the trauma team and physically present in the ED 24 hours a day

A physician who is providing this coverage shall be credentialed in ATLS or an equivalent course approved by TDH

A physician credentialed by the hospital to provide emergency medical services may fulfill this requirement.

- c. Nurse staffing in initial resuscitation area is based on patient acuity and trauma team composition based on historical.

2. Nursing documentation for trauma patients is systematic and meets the trauma registry guidelines.

*Guidelines should be in place, which facilitate organized, thorough documentation of the care provided to trauma patients. This documentation should include the information identified in the "Texas Hospital Standard Data Set".*

4. 100% of registered nursing staff has successfully completed TNCC or TDH approved equivalent, within 18 months of date of employment in the ED or date of designation

*There shall be formal documentation of course completion by nursing staff.*

- d. Two-way communication with vehicles of prehospital emergency medical services

*The ability to communicate with ambulances transporting patients to the hospital must be maintained. This criteria may be accomplished by utilizing a telephone, cellular telephone, radio or other device.*

- e. Equipment and services for resuscitation, evaluation, and to provide life support for the critically or seriously injured shall include but not be limited to:

1. Airway control and ventilation equipment including laryngoscope and endotracheal tubes of all sizes, ba-mask resuscitator, pocket mask, oxygen and mechanical ventilator

2. Suction devices

*Standard mechanical suction devices such as wall suction or a portable mechanical suction and suction catheters (in sizes for all ages. should be readily available.*

3. Electrocardiograph-oscilloscope-defibrillator

*An electronic monitoring device with the capability to monitor heart rate and a defibrillator equipped with pediatric and adult paddles should be readily available.*

4. Apparatus to establish central venous pressure monitoring

5. All standard intravenous fluids and administration devices, including intravenous catheters and rapid infusion devices

*Intravenous fluids (including normal saline, lactated ringers solution and lactated ringers solution with dextrose., intravenous infusion catheters (14 gauge - 24 gauge., intraosseous cannula and a blood pump should be easily accessible.*

6. Sterile surgical sets for procedures standard for ED, such as thoracostomy, venesection diagnostic peritoneal lavage, cricothyrotomy, etc.

*Thoracostomy, venesection, diagnostic peritoneal lavage, and cricothyroidotomy trays should be available along with written guidelines for these procedures. Other types of trays identified by hospital staff may also be utilized, but also require documented procedures.*

7. Gastric lavage equipment

*Vented nasogastric tubes (in sizes for all ages. and catheter tip syringes should readily*

available

8. Drugs and supplies necessary for emergency care

*Appropriate drugs and supplies shall be readily available and easily accessible utilization during the care of a trauma patient.*

9. Cervical spine stabilization device

*Backboards, stiff cervical immobilization collars, head immobilizers, towel rolls or 1000cc IV solution bags along with wide adhesive tape and child safety seats are all acceptable cervical stabilization devices.*

10. Long bone stabilization device

*Splints, armboards, pillows, gauze dressing material (such as kling., triangular bandages or similar equipment are all acceptable. A device for traction splinting (such as a Hare traction splint. sized to fit pediatric and adult patients should also be available.*

11. Thermal control equipment for patients and a rapid warming device for blood and fluids

for patient

*A mechanical patient warming device (such as a K-pad, or warming lamp. is the preferred equipment for patient warming. Blankets, preferably warmed blankets, are also acceptable. The blanket warmer may be located outside the emergency room as long as it is readily accessible to the emergency room staff at all times.*

a warming device for blood and fluids

*A mechanical blood warming apparatus is preferred equipment in the warming of intravenous solutions and blood products during infusion. A tubing coil and warm water bath will meet this criteria, as long as the process is monitored through the QI program. Storage of blood warming equipment outside the emergency room is acceptable as long as it is readily accessible to the emergency room staff at all times.*

12. Non-invasive continuous blood pressure monitoring devices

*A mechanical blood pressure monitoring apparatus, capable of continuous monitoring, will meet this criteria. Storage of this equipment outside the emergency room is acceptable as long as it is immediately accessible to the emergency room staff.*

13. Transcutaneous oximeter

*A non-invasive photoelectric monitoring device for determining the amount of oxygen in the blood, capable of continuous monitoring, will meet this criteria. Storage of this equipment outside the emergency room is acceptable as long as it is immediately accessible to the emergency room staff.*

14. End tidal CO2 monitor

*An end tidal carbon dioxide device for determining the correct placement of endotracheal tubes. Storage of this equipment outside the emergency room is acceptable as long as it is immediately accessible to the emergency room staff.*

15. X-ray capability

Technician on-call and promptly available within thirty minutes of request

*Consideration should be given to inclusion of the radiology technician as a trauma team member. On-call response times should be monitored through the QI program.*

**2. OPERATING SUITE**

a. Operating room services will be available 24 hours a day. With advanced notice, the Operating Room should be opened and ready to accept a patient within 30 minutes. The performance improvement program will continuously monitor this system.

b. Equipment - special requirements shall include but not be limited to:

1. Thermal control equipment for patient and for blood and fluids

for patient

*A mechanical patient warming device (such as a K-pad, Bear hugger or warming lap) is the preferred equipment for patient warming. Blankets, preferably warmed blankets, are also acceptable.*

for blood and fluids

*A mechanical blood warming apparatus is preferred equipment in the warming of intravenous solutions and blood products during infusion. A tubing coil and warm water bath will meet this criteria, as long as the process is monitored through the QI program.*

3 Endoscopes, all varieties

*Age appropriate sizes of endoscopes (a device consisting of a tube and optical system for observing the inside of an organ or cavity. shall be readily available for utilization in the care of a trauma patient.*

4. Monitoring Equipment

**3. POSTANESTHETIC RECOVERY ROOM** (surgical intensive care unit is acceptable).

a. Registered nurses and other essential personnel 24 hours a day

*Registered nurse and/or other essential personnel will be available 24 hours a day, either in house or on call.*

b. Appropriate monitoring and resuscitation equipment

*An electronic device with the capability of monitoring heart rate and respiratory rate, and defibrillator equipped with pediatric and adult paddles should be available in the operative suite and post anesthesia recovery area. Oxygen mask, nasal cannula, bag-valve-masks, laryngoscopes, endotracheal tubes, Magill forceps, and endotracheal sytlets in sizes for all ages (from neonates to large adults. should be stocked in these areas, as well.*

**4. INTENSIVE CARE CAPABILITY**

a. Designated surgical director

A physician who is providing this coverage should be credentialed by the TMD to participate in the resuscitation and treatment of trauma patients to include requirements such as board certification, trauma continuing medical education, compliance with trauma protocols, and participation in the trauma performance improvement program.



- b. Physician, credentialed in critical care by the trauma director, on duty in ICU 24 hours a day or immediately available from in-hospital. This system will be monitored by the performance improvement program

*A physician who is providing this coverage should be credentialed by the TMD to respond upon notification to the Intensive Care Unit. This requirement may be full filled by an in-house Emergency physician.*

- c. Nurse-patient minimum ratio of 1:2 on each shift for patients identified as critical acuity

*A validated acuity-based patient classification protocol utilized to meet the patients needs, define workload and appropriate number of nursing staff to provide safe optimal care for all trauma patients throughout their hospitalization.*

- d. Equipment

- 1. Appropriate monitoring and resuscitation equipment

*An electronic device with the capability of monitoring heart rate and respiratory rate, and defibrillator equipped with pediatric and adult paddles should be available in the operative suite and post anesthesia recovery area. Oxygen mask, nasal cannula, bag-valve-masks, laryngoscopes, endotracheal tubes, Magill forceps, and endotracheal sytlets in sizes for all ages (from neonates to large adults. should be stocked in these areas, as well)*

- e. Support Services - Immediate access to clinical diagnostic services

*Toxicology screens need not be immediately available but are desirable. If available, results should be included in all performance improvement reviews.*

## **5. NURSING SERVICE**

- a. All nurses caring for trauma patients throughout the continuum of care have ongoing documented knowledge and skill in trauma nursing to include pediatric and burn patients (i.e., trauma specific orientation, skills checklist, annual competencies, continuing education).

*An organized, trauma related, orientation should be in place for nurses assigned to the emergency room, including a skills checklist. Staff attendance at trauma related continuing education presentations should be documented. A credentialing mechanism to demonstrate maintenance of specific skills related to trauma patient care is encouraged.*

- c. A validated acuity-based patient classification is utilized to define workload and number of nursing staff to provide safe patient care for all trauma patients throughout their hospitalization.

*An acuity-based patient classification protocol utilized to meet the patients needs, define workload and appropriate number of nursing staff to provide safe optimal care for all trauma patients throughout their hospitalization.*

- d. A written plan for acquisition of additional staff on a 24-hr. basis to support units with increased patient acuity, multiple emergency procedures and

*The hospital disaster plan may be used to fulfill this criteria. The plan should be functional and appropriate. During the site survey questions will probably be asked about the hospital's participation in disaster drills (facility- wide, local, and/or regional).*

## **6. CLINICAL LABORATORY SERVICE (available 24 hours a day)**

- a. Standard analyses of blood, urine, and other body fluids

*Laboratory tests such as CBC and blood chemistries, urinalysis, stool and gastric guiac should be*

- available.*
- b. Blood typing and cross-matching, to include massive transfusion and emergency release of blood policies
 

*The laboratory should have a procedure in place to release uncross matched blood.*
  - c. Coagulation studies
 

*Coagulation studies such as prothrombin time (PT) and partial thromboplastin time (PTT) should be available.*
  - d. Comprehensive blood bank or access to a community central blood bank and adequate hospital storage facilities
 

*Immediate access to an adequate supply of blood products should be maintained by the laboratory and a plan should exist for the procurement of additional blood products as necessary. The definitions of “adequate” should be determined by the historical data of the facility.*
  - e. Blood gases and pH determinations
 

*The capability to perform analyses of arterial/venous blood to ascertain gas and Ph values should exist.*
  - g. Microbiology
 

*The capability to perform micro-sampling analyses of blood should exist.*
  - i. Infectious disease Standard Operating Procedures
 

*The capability to provide optimal equipment (gloves, sharps containers, goggles, gowns, etc.. and guidelines for compliance of OSHA standards.*

**7. SPECIAL RADIOLOGICAL CAPABILITIES**

- d. Computerized tomography
 

*The capability to provide computerized tomography diagnostics evaluations. The technician will be on-call and promptly available. The performance improvement program will continuously monitor this system.*

**9. ORGANIZED BURN CARE**

- a. Physician-directed burn center staffed by nursing personnel trained in burn care and equipped properly for care of the extensively burned patient, or
 

*A physician providing this coverage should be credentialed by the hospital to participate and direct trained staff in the care of the burn patient and ensure the proper equipment is available and readily accessible.*

Transfer agreement with nearby burn center or hospital with a burn unit.

A formal transfer agreement and/or protocol should describe the process for preparation and movement of the burn patient to a tertiary burn facility for definitive care.

**10. SPINAL CORD/HEAD INJURY REHABILITATION MANAGEMENT CAPABILITY**

or appropriate services made available.

- a. In circumstances where a designated spinal cord injury rehabilitation center exists in the region, early transfer should be considered; transfer agreements should be in effect.

*A formal transfer agreement and/or protocol should describe the process for preparation and movement of a head injured patient to a designated head injury rehabilitation center for definitive care.*

- b. In circumstances where a designated spinal cord injury rehabilitation center exists in the region, early transfer should be considered; transfer agreements should be in effect.

*A formal transfer agreement and/or protocol should describe the process for preparation and movement of a spinal cord patient to a designated spinal cord injury rehabilitation center for definitive care*

## **11. REHABILITATION MEDICINE**

- a. Physician-directed rehabilitation service, staffed by personnel trained in rehabilitation care and equipped properly for care of the critically injured patient, or

*A physician providing this coverage should be credentialed by the hospital to participate and direct trained staff in the rehabilitative care of the trauma patient and ensure the proper equipment is available and readily accessible.*

Transfer agreement when medically feasible to a rehabilitation facility.

*A formal transfer agreement and/or protocol should establish patient criteria for transfer and describe the process for preparation and movement of a patient to a rehabilitation facility.*

## **C. PERFORMANCE IMPROVEMENT**

- 1. Organized Performance Improvement Program, established by the hospital, to include trauma audit filters (**see attached standard list.**)

*An organized performance improvement program, in which systematic and concurrent trauma case reviews should include, but not be limited to, all deaths, trauma admissions, transfers in and out, re-admissions 48 hours post discharge, and all trauma team activations. Trauma indicators should focus on a broad spectrum of trauma care issues that includes the full continuum of care. The PI program should also include the monitoring of documentation of patient care in the medical record, the audit of trauma charts for completeness of care and ongoing mortality and morbidity review, including all trauma deaths. All issues and actions should be well documented to demonstrate resolution and loop closure. This function may be integrated into the hospital's infrastructure. The Trauma Medical Director's active involvement in the PI program should be evident. Multi-disciplinary trauma conferences are encouraged, but are only essential for "lead" hospitals in a trauma service area.*

- 2. Special audit for all trauma deaths and other specified cases.

*The medical records of all trauma deaths and other identified cases should be critically reviewed, in depth; to assure that appropriate, complete care was delivered according to identified standards of care. Any issues identified in the audit process should be addressed through the Performance Improvement Program.*

- 3. Morbidity and mortality review.

Trauma patients, especially all trauma deaths and complications be should critically reviewed, in depth, regarding system issues or care issues that may have contributed and should be classified as to their preventability (frankly preventable, preventable, potentially preventable, and non-preventable). This may be done through the hospital Performance Improvement Process, but

should also include the TMD and physician review process.

4. Multi-disciplinary trauma conference for performance improvement activities, continuing education and problem solving to include documented nurse and prehospital participation.

Regular and periodic multi-disciplinary trauma conferences that include all members of the trauma team should be held. This conference will be for the purpose of performance improvement through critiques of individual cases.

**\* This requirement is an essential element for the “lead” hospitals in a trauma service area.**

5. Medical and nursing care audit, utilization review, and tissue review for compliance with trauma protocols and appropriate and quality patient care throughout the continuum.

*Charts should be audited to assure quality of care and/or deviations from standard practices of care that may or may not be addressed by audit filters. Charts should also be reviewed to assure effective use of resources and maximum organ donation.*

6. Feedback regarding trauma patient transfers will be provided to all transferring facilities.

An documented organized approach for identifying trauma patient transfers in and out of your facility for the purpose of obtaining trauma patient information related to patient outcome, condition on arrival, concurrence of diagnosis, and identified care issues. This should include follow-up regarding the outcome of transferred patients and appropriate incorporation of information obtained into the trauma QI program.

7. Trauma registry

Documentation of severity of injury (by revised trauma score, age, injury severity score) and outcome (survival, length of stay, ICU length of stay, with monthly review of statistics) Data will be forwarded to the state trauma registry on at least a quarterly basis.

*Trauma patient statistics should be incorporated into the PI process through collecting of data and documentation of severity of injury (by revised trauma score, age, injury severity score) and outcome (survival, length of stay, ICU length of stay). The hospital should be collecting data in a facility or regional trauma registry, including the components of the "Texas Hospital Standard Data Set". The data included in the "Texas Hospital Standard Data Set" should be forwarded to the state trauma registry on at least a quarterly basis.*

*Establish and implement criteria for inclusion of trauma cases into the trauma registry. Trauma Registry inclusion criteria: All patients with at least one injury ICD-9 diagnosis code between 800.00 and 959.9, including 940 - 949(burns), excluding 905 - 909 (late effects of injuries), 910 - 924 (blisters, contusions, abrasions, and insect bites), 930 - 939 (foreign bodies), AND who were admitted OR who died after receiving any evaluation or treatment or who died after receiving any evaluation or treatment or were dead on arrival OR who transferred into or out of the hospital.*

8. Coordination with the regional trauma system, including adherence to regional protocols.

Representation and active participation on Regional Area Advisory Council to facilitate development and adherence to regional protocols.

9. Published on-call schedule must be maintained for general surgeons and neurosurgeons, orthopedic surgeons, and other major specialists if available

*The schedule of on-call physicians should be posted and immediately available to all staff (nursing and clerical, working in the emergency room.*

10. Times of and reasons for diversion must be documented and reviewed by the performance improvement program.

*An organized system should be established and for notification of appropriate personnel and prehospital providers to facilitate the routing of patient to an appropriate facility. The performance improvement program will continuously monitor this system.*

13. Written transfer agreements for patients needing a higher level of, or specialty, care if unavailable

*Written agreements between hospital help to ensure the consistent and efficient movement of patients between institutions, allow for review of the structure of the transfer process with the goal of performance improvement, and results in mutual educational benefit for both institutions. The value of these agreements is to design a process prior to its necessity that allows the injured patient to receive the specialty care needed. Written transfer agreements with all facilities to whom patients are transferred, signed by both parties, are preferred. Verbal agreements with these facilities will fulfill the criteria.*

14. A system for establishing an appropriate landing zone in close proximity to the hospital (if rotor wing services are available).

*A designated landing zone shall be established to meet regulatory guidelines of the FAA and provide for safe and rapid transport of the trauma patient.*

#### **D. OUTREACH PROGRAM**

1. Telephone and on-site consultations with physicians of the community and outlying areas

*A protocol that provides telephone and on-site communication with physicians of the community and outlying areas for consultation on issues regarding care and treatment of trauma patients.*

**\*This requirement is an essential element for the "lead" hospitals in a trauma service area.**

2. Nurse participation in community outreach programs for the public and professionals is evident

*Nursing personnel should participate in activities, which provide education and information to the public in relation to trauma.*

**\*This requirement is an essential element for the "lead" hospitals in a trauma service area.**

#### **E. PUBLIC EDUCATION**

1. A program to address the major injury problems within the hospital's service area. Documented participation in a RAC public education program is acceptable.

*The hospital should be participating in activities, which provide education and information to the public in relation to trauma. CPR classes, babysitter classes, bicycle helmet or safety restraint awareness and/or education and presentations on trauma system development and the Regional Advisory Council (RAC. are a few examples of acceptable activities Participation in RAC sponsored activities may fulfill the criteria.*

*Representatives of the hospital should be attending the Regional Advisory Council (RAC. meetings of their Trauma Service Area. They should also be participating in RAC committees, as appropriate, to assist in the development of the regional trauma system and regional trauma system plan.*

#### **F. TRAINING PROGRAM**

1. Formal programs in trauma continuing education provided by hospital for:

b. Nurses

c. Allied health personnel, including physician's assistants

e Prehospital personnel

**\*This requirement is an essential element for the "lead" hospitals in a trauma service area.**

*Educational opportunities should be made available to all levels of staff (i.e. physicians, nurses, ancillary staff. by the hospital based on needs identified in the trauma QI program)*