Pre-Review Questionnaire (PRQ)
Guidance
For
Kansas Level IV
Trauma Center Designation

November 4, 2015

Bureau of Community Health Systems
Kansas Department of Health and Environment
1000 S.W. Jackson, Suite #340
Topeka, KS 66612-1365

www.kstrauma.org

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Kansas Trauma System

History and Purpose

In 1999, the Kansas legislature recognized injuries as a threat to Kansas citizens and authorized the establishment of the Kansas Trauma Program (KTP). Direction was issued to the Secretary of Kansas Department of Health and Environment (KDHE) to develop and implement a statewide trauma system that included a trauma center designation process, quality improvement, regional trauma councils and a trauma data collection system. Legislation established the Advisory Committee on Trauma (ACT) as a mechanism for the provision of stakeholder input to the Secretary and to assist with the trauma system development. In 2006, regulations were approved giving KDHE the authority to designate Kansas hospitals as Level I, II, or III trauma centers based on trauma care capabilities and resources. In 2012, Level IV trauma center designation was added.

The overall goal of a trauma system is to match the needs of a trauma patient with available resources and appropriate hospital capabilities as quickly and efficiently as possible. This process is made possible through the provision of resources to address educational needs and other support mechanisms. All of these components of the trauma system help ensure that trauma patients who can be cared for in their local communities are not sent to distant facilities, and provides assistance to local facilities to better assess, stabilize and identify those patients requiring a greater level of care.

Level IV trauma centers are one component of the overall trauma system in Kansas. These trauma centers provide initial evaluation and stabilization of injured patients to identify those in need of higher-level trauma center care. Level IV trauma centers must commit to having a practitioner (at the minimum of an RN) present in the ED upon arrival of a patient meeting trauma team activation criteria, a physician or midlevel provider available in the ED upon patient arrival or capable of presenting in the ED within 30 minutes of trauma patient arrival and a well-organized resuscitation team.

Hospital participation in the trauma center designation process is voluntary. However, wide-scale participation ensures a truly cooperative effort to improve trauma care across Kansas.

The Pre-Review Questionnaire (PRQ)

KDHE, the Kansas Trauma Program (KTP), the Advisory Committee on Trauma (ACT), and the Regional Trauma Councils (RTCs) are pleased that your hospital wishes to participate in the statewide trauma system. In order to assist with preparation for the onsite survey, please complete the “PRQ for Kansas Level IV Trauma Center

Designation".

The PRQ allows site surveyors to have a preliminary understanding of the trauma care capabilities of your hospital and trauma performance capabilities of medical staff before beginning the survey. The PRQ is intended to assist with gathering hospital data. Please note, the site survey team may ask for additional documentation to validate information on any question that is answered with a "yes."

Please do not use abbreviations, write legibly, and attach additional pages if necessary. Ensure all attachments are labeled appropriately and included in the application packet. Two checklists have been provided at the end of the document to assist in completing the PRQ. The checklist titled "Documentation List-PRQ" is a list of supporting documents to attach to the PRQ. The second list titled "Documentation List-Site Survey", is a list of documents to have available for the site surveyors during the onsite survey. The PRQ must be submitted at least 30 days prior to the scheduled site survey visit. Keep a copy of your PRQ for reference during the site visit.

Information used to complete the PRQ will be considered in both the initial designation and redesignation determinations. The data submitted may be used for analysis of trends associated with the application process by KDHE-KTP.

The trauma registry reporting period is defined as six (6) months--preferably twelve (12) months--for initial designation review and twelve (12) months for redesignation. The data cannot be earlier than fifteen (15) months prior to the date of application. There must be at least six (6) months of concurrent data in the state trauma registry and the trauma program must demonstrate that protocols/policies, performance improvement program/initiatives, timely registry submission, and injury prevention efforts have been in place and continuous for a minimum of six (6) months--preferably (12) twelve months--prior to submission for initial designation. Ongoing data submission (quarterly) is a criterion for redesignation.

The PRQ can be submitted by paper or electronically. Alternatively, the PRQ can be mailed to:

Kansas Department of Health and Environment
Kansas Trauma Program
1000 SW Jackson, Suite 340
Topeka, KS 66612

Application Submission Process

Any hospital that desires designation as a trauma center shall request such from the KDHE-KTP. Only hospitals possessing a Certificate of Trauma Center Designation may represent themselves to the public as a Kansas designated trauma center.

The designation process consists of four phases:

1. **First Phase: Letter of Intent -** Begins when the hospital submits a "Letter of Intent to Submit Application for Level IV Trauma Center Initial Designation" to the KDHE-KTP. Following receipt of the "Letter of Intent", the hospital will provide documentation of trauma care consistent with the KDHE-KTP regulations for Level IV trauma centers for at least six (6) months prior to submitting an application.

2. **Second Phase: Application Phase –** (The trauma program nurse manager identified on the PRQ will receive electronic confirmation of receipt.) Following receipt of the "Application for a Level IV Trauma Center Site Survey" and associated fee, the KTP staff will work with the hospital's Trauma Program Nurse Manager to schedule an onsite survey. The onsite survey will be scheduled to occur within ninety (90) days of receipt of application.

   The PRQ is due at least 30 days prior to the scheduled onsite survey visit. The PRQ will be reviewed for completeness using criteria identified in this document.

3. **Third Phase: Onsite Survey - Review Phase**
   The onsite survey serves to confirm the information submitted in the PRQ and for evaluating the hospital's capability and commitment to serve as a trauma center.

   Following an onsite survey, the Survey Team will report its findings and recommendations to the KTP. The report will include:

   A. An overview of the hospital's capabilities.
   B. An overview of deficiencies, strengths, weaknesses, and recommendations for improvements.
   C. Recommendation for designation as a Level IV Trauma Center or recommended corrective action plan listing deficiencies that must be remedied for a hospital to meet trauma center requirements.

KTP staff will forward the report to the ACT Level IV Review Committee along with the PRQ for their review and final recommendations. The ACT Level IV Review Committee will evaluate the Site Survey Team's findings and issue a preliminary decision that shall:

1. Affirm the findings and recommendation of the Site Survey Team, or
2. Issue recommendations for improvement.

4. **Fourth Phase: Review and Final Recommendation by the Secretary of KDHE**

The final phase begins with the Secretary of KDHE reviewing the recommendations and ends with his/her final decision for designation.

Appeals Process:

Notice of findings and a copy of the review report will be sent to the hospital. The hospital may appeal a KDHE decision within thirty (30) days of notification of denial of initial or redesignation; revocation or suspension by submitting a written request.

A final decision of any appeal shall be made upon review by the Secretary of KDHE.

An applicant requesting an appeal shall pay the established appeal fee (fee to be determined) which shall be used by KDHE to cover all costs associated with the appeal process.

Deficiencies

As adopted by the ACT, the criteria outlined on page 159 of *"Resources for Optimal Care of the Injured Patient: 2014,"* which addresses:

All **Type I** criteria must be in place at the time of the verification site visit in order to achieve designation.

If any **Type I** deficiency or more than **three Type II** deficiencies are present at the time of the site visit, the hospital will not receive designation. The facility cannot reapply for trauma center designation until six months from the date of the notification of denial.

If **three or less Type II** deficiencies are present at the time of the site visit, a one year certificate of designation will be issued, during which time if the trauma center successfully corrects the deficiencies, the period of verification will be extended to three years from the date of the initial site visit.

Should deficiencies prohibit the issuance of trauma center designation, KTP staff will provide a description of deficiencies to assist in resolution of identified concerns.

Any facility found to have deficiencies must submit a plan of action to the ACT for correction of such. During this one year designation period, the facility will work to correct the identified deficiencies and submit supporting documents that assures the facility has fixed the deficiencies and is now in compliance. If the facility is in compliance, the facility will receive designation for the next two (2) years.

If the designation is denied by the ACT, the facility will receive written notification that includes the criteria that were not met. Notification will include instructions on the process for resubmission. The facility must wait a minimum of six (6) months prior to reapplying.

Unrestricted Designation

Final determination of designation status will be provided to hospitals in writing. This designation will be valid for three (3) years from the date of issuance.

Revocation of Designation

KDHE as the designating agency may deny, revoke or suspend trauma center designation for failure to maintain designation level criteria. Refusal to allow onsite survey may result in revocation of trauma center designation.

The Site Survey

The onsite survey is an opportunity for site surveyors to tour your hospital, meet with staff, examine policies and procedures, consider the performance improvement program and review trauma care. Survey teams will include at a minimum a physician with trauma care experience and a trauma program manager who contracts with the ACT for onsite surveys of Level IV Trauma Centers. Onsite survey teams will offer advice and support to assist facilities in successful trauma program development. Trauma Program Staff may accompany the team to serve as a resource for both the onsite survey team and the hospital.

Please remember, the purpose of the trauma system is to develop and improve trauma care in Kansas, and to collaboratively assist facilities in developing and improving their trauma care programs. There is no intent to place an unnecessary burden on the hospital or unrealistic expectations on hospital staff and resources. Onsite survey teams strive to provide feedback that will improve trauma care for the injured patient.

Fees

The fee for Level IV Trauma Center designation is $250.00 and should be submitted with the “Application for Level IV Trauma Center Site Survey”.

Trauma Systems

(**CD = criteria deficiency as referenced in *Resources for Optimal Care of the Injured Patient: 2014*. Example (CD1-1) referenced criteria deficiency 1-1**)

Hospital Commitment

Standard: A hospital must have written, signed administrative commitment from the institution's governing body and the medical staff. (CD 5-1) This commitment must be continually reaffirmed (every three (3) years) and must have been reaffirmed within six (6) months of application for designation.

The hospital will commit to having a practitioner (at the minimum of an RN) present in the emergency department upon the arrival of a patient meeting trauma team activation criteria.

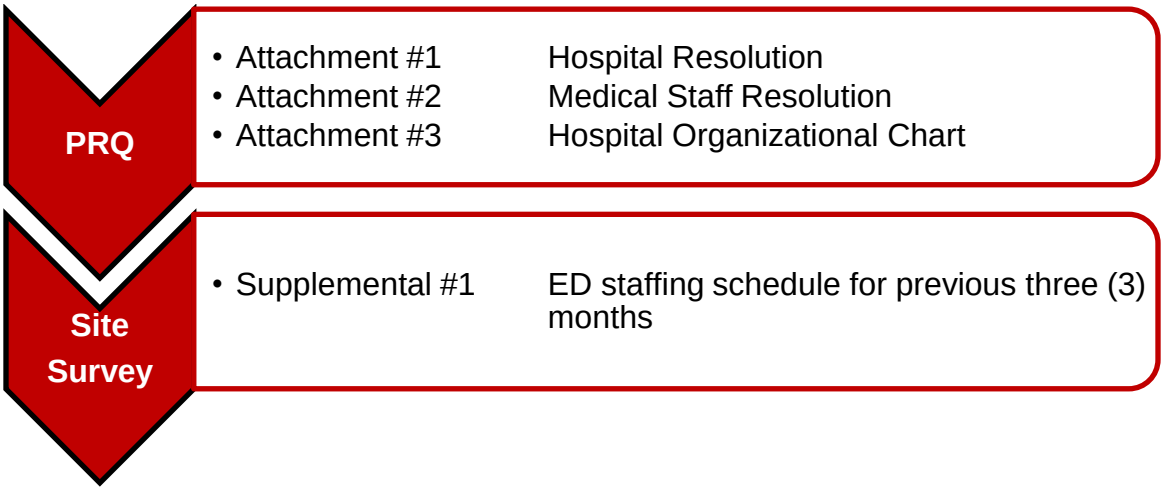
Forms of commitment must include:

- Copies of resolutions or statements of support from the hospital's governing body. (CD 5-1)
- Copies of resolutions or statements of support from all medical staff. (CD 5-1)
- An organizational chart that includes a trauma program component. This may be shown in an existing department or hospital organizational chart (i.e. emergency department, critical care, surgery).
- Emergency Department staffing schedule for the previous three (3) months.

Level IV trauma centers must be able to provide the necessary human and physical resources (physical plant and equipment) to properly administer acute care consistent with Level IV designation. (CD 2-3)

Rationale: Passage of a resolution, affixing of signatures to such document, and inclusion in a department or the hospital's organizational chart demonstrates an informed and deliberate decision to maintain compliance as a Level IV trauma center.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2, Chapter 5*



Trauma Medical Director (TMD)

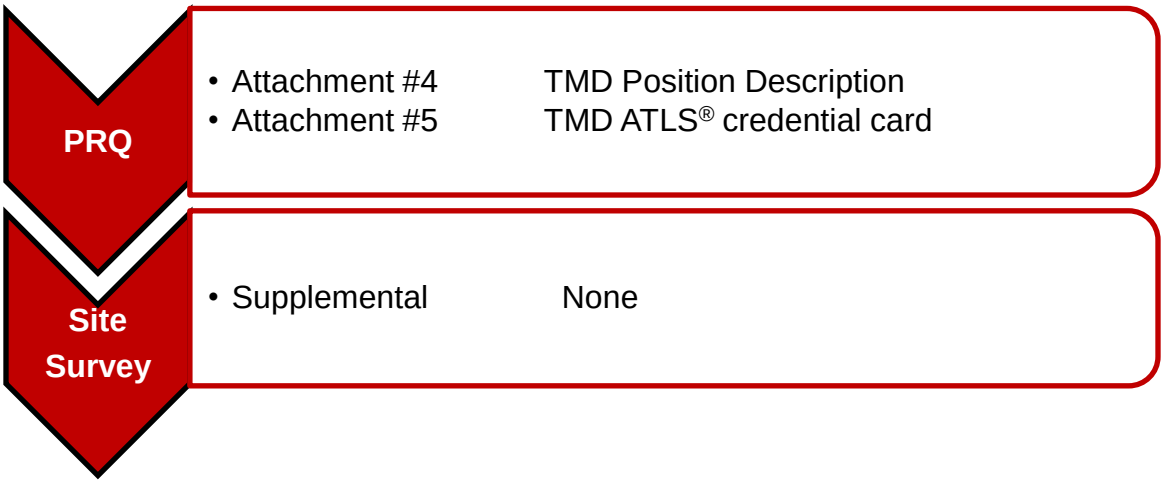
Standard: The TMD shall be a physician on staff whose job description defines his/her roles and responsibilities for:

- Trauma patient care
- Trauma team formation
- Supervision
- Leadership
- Trauma training
- Trauma continuing education.

The TMD shall act as the medical staff liaison for trauma care with out-of-hospital medical directors, nursing staff administration, and higher level trauma hospitals. The TMD must maintain current Advanced Trauma Life Support® (ATLS®) as part of their competencies in trauma. (CD 2-16, CD 5-6)

Rationale: The TMD is a physician who will provide clinical oversight for the hospital's trauma program. The TMD and the trauma program manager must work together with guidance from the trauma peer review committee to identify events, develop corrective action plans, and ensure methods of monitoring, reevaluation, and benchmarking. (CD 2-17) The TMD's job description should provide him/her with authority to act on performance improvement issues across hospital departments.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2, Chapter 5*

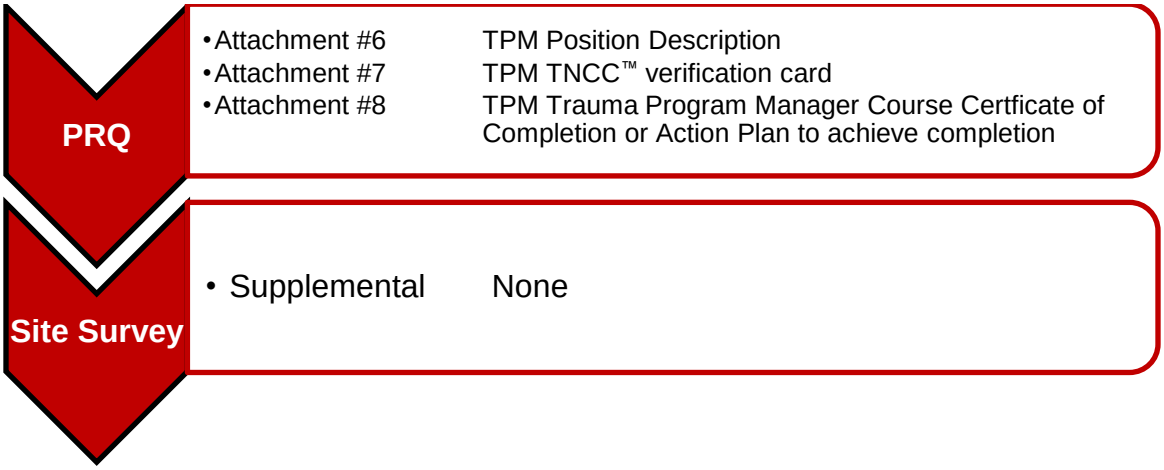


Trauma Program Manager (TPM)

Standard: The TPM shall be a professional licensed nurse (RN), advanced practice registered nurse (APRN), or physician assistant (PA) with clinical experience in the care of injured patients. The TMD and the TPM must work together with guidance from the trauma peer review committee to identify events, develop corrective action plans, and ensure methods of monitoring, reevaluation, and benchmarking. (CD 2-17) The TPM serves as a fundamental contributor to the development, implementation and evaluation of the trauma program; and in organizing and coordinating the facility's trauma care response. The TPM must be Trauma Nurse Core Course™ (TNCC™) verified and have completed either a KTP sponsored or American Trauma Society (ATS) Trauma Program Manager Course within one (1) year of entering the position.

Rationale: The trauma program is essential to ensuring quality care for injured patients.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2*



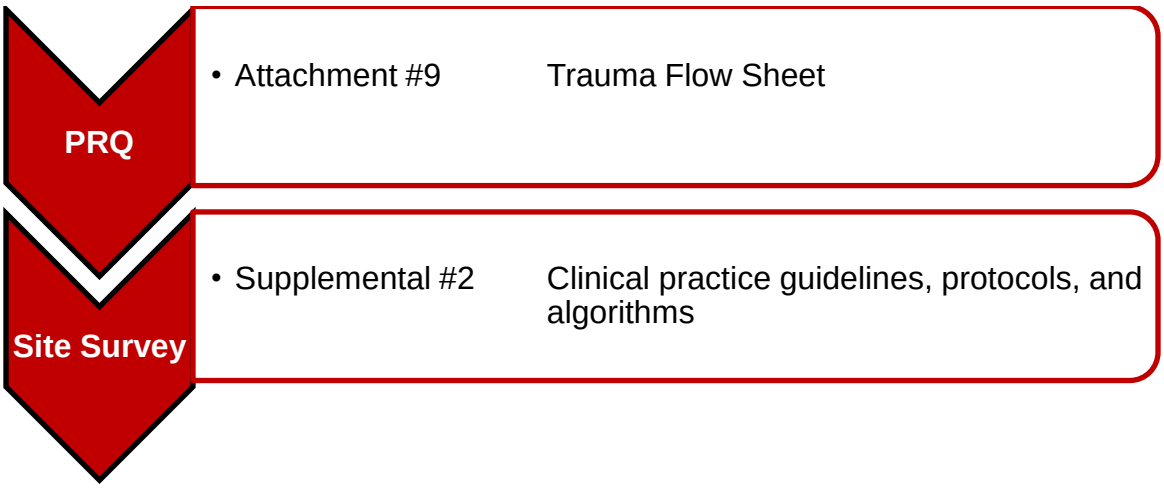
Trauma Program

Standard: Trauma programs must involve multiple disciplines (CD 5-4) and use clinical practice guidelines, protocols, and algorithms derived from evidenced-based validated resources or consensus-based institutional guidelines that have been established according to the most current peer-reviewed literature and clinical experience and acumen. Regular review should include:

- Tracking of compliance with guidelines, protocols, and/or algorithms.
- Monitoring for effects on outcome.

Rationale: Optimal care extends from the scene of an injury through the acute care setting to discharge from a rehabilitation center; the trauma program should have appropriate specialty representation from all phases care and should seek to reduce unnecessary variation in care provided throughout this continuum.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 5, Chapter 16*



Trauma System Planning

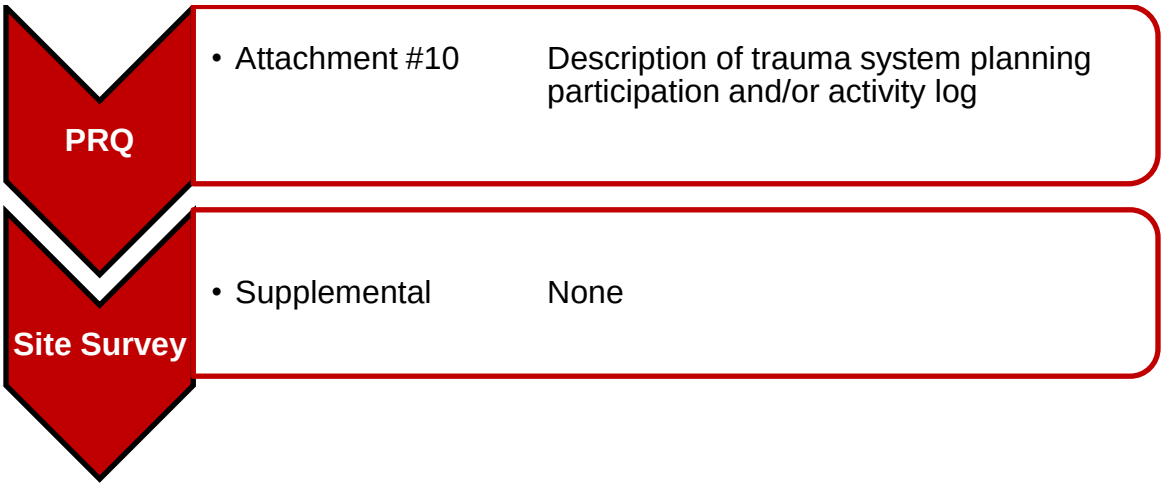
Standard: The individual trauma center and their health care providers are essential system resources that must be active and engaged participants. (CD 1-1) They must function in a way that pushes trauma center-based standardization, integration, and performance improvement and patient safety (PIPS) out to the region while engaging in inclusive trauma system planning and development. (CD 1-2) Meaningful involvement in state and regional trauma system planning, development and operation is essential for all designated trauma centers and participating acute care facilities within the region. (CD 1-3) Because of the greater need for collaboration with receiving trauma centers, the Level IV trauma center must also actively participate in regional and statewide trauma system meetings and committees that provide oversight. (CD 2-20) The following are examples of system participation:

- Advisory Committee on Trauma (ACT)
- Regional Trauma Council (RTC)
- Media and legislative education to promote and develop trauma systems
- Needs assessment and injury surveillance groups
- Trauma registry policy and user groups
- Regional Performance Improvement Meetings/Activities
- Provision of technical assistance to other regional providers

All verified trauma centers must engage in public and professional education. (CD 17-1)

Rationale: Trauma centers are viewed as experts on the care of injured patients. For this reason meaningful involvement in state and regional trauma system planning is essential for all designated trauma centers and participating acute care facilities within a region. Trauma centers are also viewed as subject matter experts by the public and other professionals and should incorporate education for these groups as a part of its purpose.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 1, Chapter 2, Chapter 17*



Trauma Team Activation

Trauma Team Activation (TTA)

Standard: The emergency department at Level IV trauma centers must be continuously available for resuscitation with coverage by an RN and physician or midlevel provider, and it must have a physician director. (CD 2-15)

Criteria for all levels of TTA must be defined and reviewed annually. Trauma team activation protocols and policies **must be continuously applied for a minimum of six (6) months**, **preferably twelve (12) months, prior to submission of application for designation.**

- The criteria for a graded activation must be clearly defined by the trauma center, with the highest level of activation including the following: (CD 5-13)
  1. Confirmed blood pressure less than 90 mmHg at any time in adults and age-specific hypotension in children.
  2. Gunshot wounds to the neck, chest, or abdomen or extremities proximal to the elbow/knee.
  3. Glasgow Coma Score less than nine (9), with mechanism attributed to trauma.
  4. Transfer patients from other hospitals receiving blood to maintain vital signs.
  5. Intubated patients transferred from the scene
  6. Patients who have respiratory compromise or are in need of an emergent airway
     a. Includes intubated patients who are transferred from another facility with ongoing respiratory compromise (does not include patients intubated at another facility who are now stable from a respiratory standpoint)
  7. Emergency physician's discretion.

Other potential criteria for trauma team activation that have been determined by the trauma program to be included in the various levels of trauma activation must be evaluated on an ongoing basis in the PIPS process to determine their positive predictive value in identifying patients who require the resources of the full trauma team. (CD 5-16)

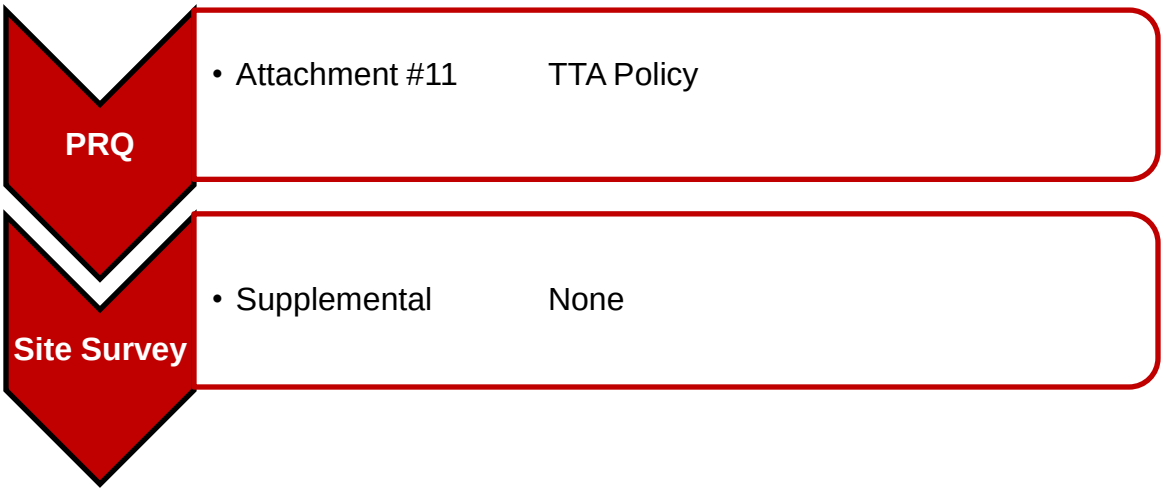
Trauma centers shall have a TTA protocol and/or policy to include:

1. A list of all trauma team members.
2. Expectation that the physician (if available) or midlevel provider will be in the emergency department on patient arrival, with adequate notification from the field. The maximum acceptable response time is thirty (30) minutes for the highest level of activation, tracked from patient arrival. The PIPS program must demonstrate that the physician's (if available) or midlevel provider's presence is in compliance at least eighty (80) percent of the time. (CD 2-8)
3. The entire trauma team must be fully assembled within thirty (30) minutes. (CD 5-15)

4. Response requirements for all team members when a trauma patient is enroute or has arrived.
5. TTA criteria based on anatomic, physiologic and mechanism of injury criteria and comorbid conditions.
6. A list of individuals authorized to initiate TTA.
7. Criterion clearly defined by the trauma center and regularly evaluated by the PIPS program to determine a positive predictive value in identifying patients who require the resources of the full trauma team.
8. TTA criteria for upgrading or downgrading a tiered response based on anatomic, physiologic and mechanism of injury criteria and comorbid conditions as defined in the Guidelines for Field Triage of Injured Patients. (Appendix A)

Rationale: Trauma centers must have predetermined and organized methods for responding to trauma resuscitation. Protocols and/or policies serve to facilitate this process.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2, Chapter 5*



Trauma Team Leader & Other Advanced Practitioners

Standard: The trauma team leader who may be a physician, physician assistant (PA), advanced practice registered nurse (APRN), or Locum Tenens and all other advanced practitioners who participate in the initial evaluation of trauma patients must:

- Maintain current ATLS ® certification as part of their competencies in trauma. (CD 2-16) (CD 11-86)
- The trauma program must demonstrate appropriate orientation, credentialing processes, and skill maintenance for advanced practitioners, as witnessed by an annual review by the TMD. (CD 11-87)
- Current ATLS® credentials are required for all general surgeons, emergency medicine physicians and midlevel providers on the trauma team. (CD 17-5)

In addition, all Trauma Team Leaders must meet the following criteria:

- Ensure the provision of 24-hour coverage by a physician or midlevel provider. (CD 2-14)
- Be present at all trauma resuscitations.
- Coordinate stabilization and transfer to definitive care, as necessary.
- Be in the emergency department upon patient arrival, with adequate notification from the field. The maximum acceptable response time is thirty (30) minutes for the highest level of activation. The PIPS program must demonstrate that the physician's (if available) or midlevel provider's presence is in compliance at least (eighty) 80% of the time. (CD 2-8)
- Until arrival of practitioner, an RN should be the supervising medical personnel.

NOTE: This requirement is for scheduled emergency department advanced practitioners. It does not apply to those who are called in to back up the attending provider during an unusual and rare event.

Rationale: Trauma is a time-sensitive disease and requires prompt response of all trauma team members upon notification of trauma activation.

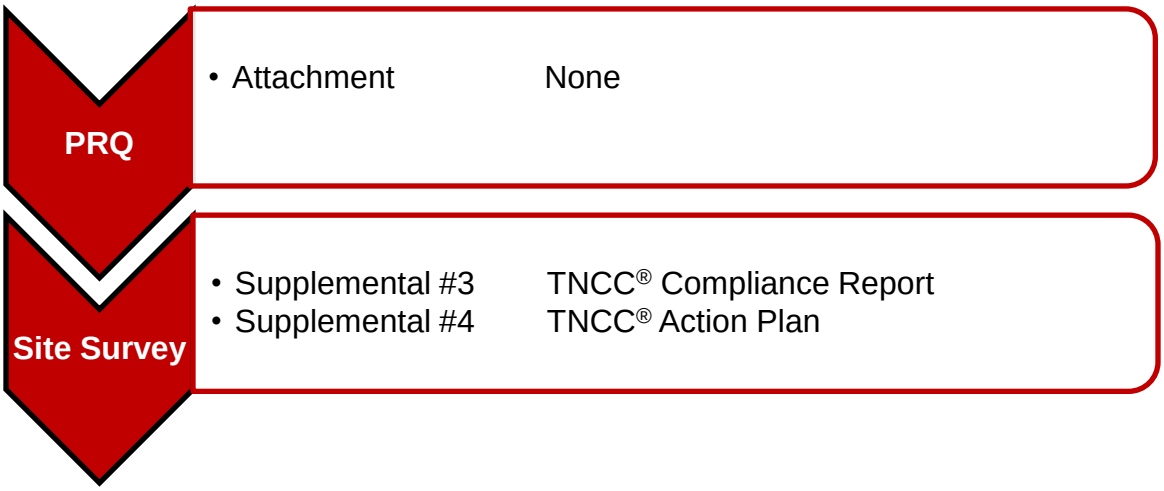
Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2, Chapter 11*

Trauma Team Nurse

Standard: RNs serving as trauma team members must maintain current verification of successful completion of TNCC®.

Rationale: This standard applies to all nurses providing care for trauma patients during the acute phase, i.e. emergency department. Any nurse "floating" to the department, however infrequently, must also meet the training standard. Job descriptions for nurses providing emergency care should articulate necessary training requirements.

Reference: *Kansas Trauma Program*

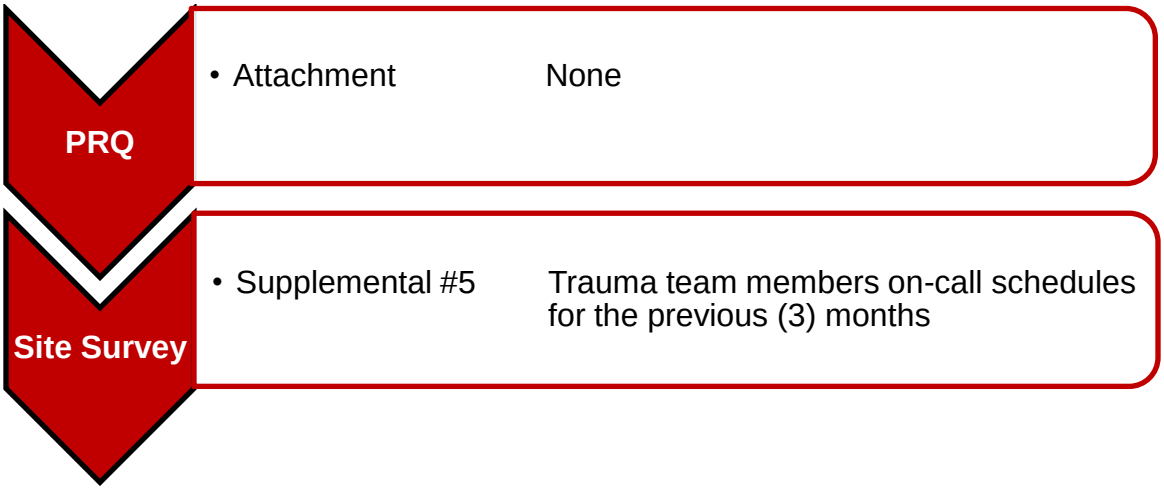


On-Call Schedules

Standard: Level IV trauma centers must be able to provide the necessary human and physical resources (physical plant and equipment) to properly administer acute care consistent with level IV verification. (CD 2-3) Published "on-call" schedules for all trauma team members must be available at all times.

Rationale: Trauma is a time critical disease which requires a prompt response when a trauma team activation occurs. A plan must be in place to cover known gaps in the call schedule to facilitate coverage at all times.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2*



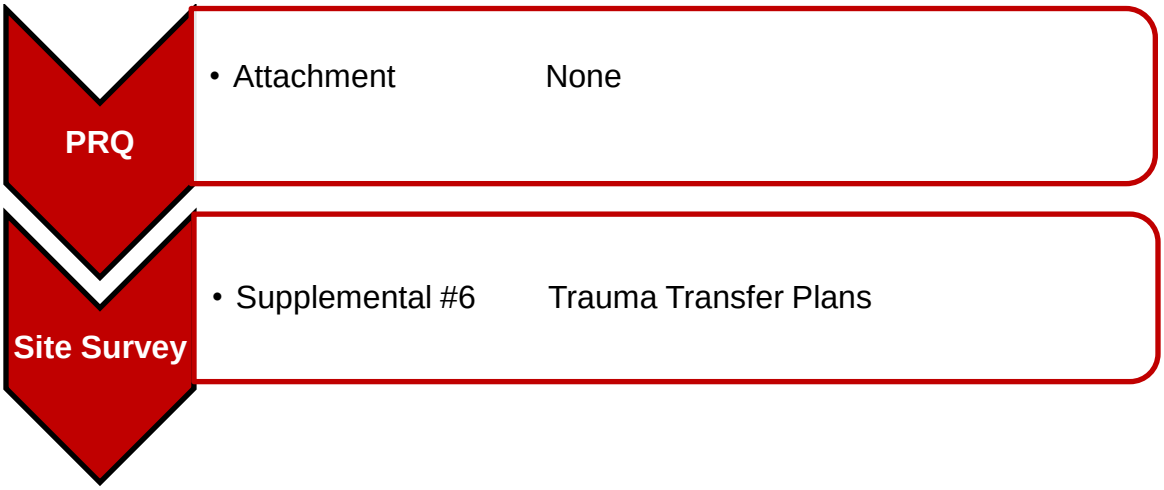
Transfer Plans

Standard: Specialty coverage may or may not be available, but a well-organized resuscitation team is important. Well-defined transfer plans are essential. (CD 2-13) These plans should include:

- Collaborative treatment and transfer guidelines reflecting the Level IV facility's capabilities and must be developed and regularly reviewed, with input from the higher-level trauma centers that patients are transferred to. (CD 2-13)
- Direct contact of the physician or midlevel provider with a physician at the receiving hospital is essential. (CD 4-1)
- PIPS review of all transfers. (CD 4-3)
- Sufficient mechanisms must be available to identify events for review by the trauma PIPS program: (CD 16-10)
    - System and process, such as documentation and communication
    - Clinical care, including identification and treatment of immediate life-threatening injuries
    - Appropriateness of decisions to transfer
- Trauma centers that refer burn patients to designated burn centers must have in place written transfer agreements with the referral burn center. (CD 14-1)

Rationale: Level IV trauma centers provide initial evaluation and assessment of injured patients, with the understanding that most patients will require transfer to higher-level trauma and burn centers.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2, Chapter 4, Chapter 14, Chapter 16*



Diversion

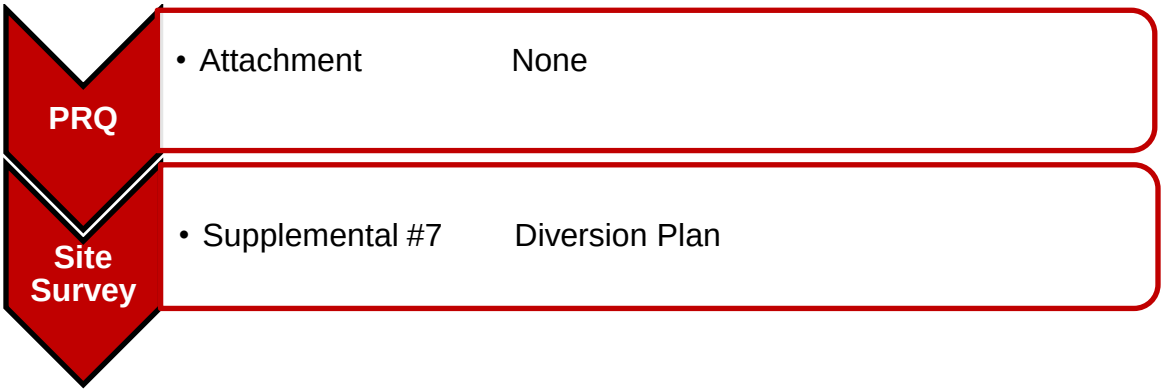
Standard: When a trauma center is required to go on bypass or to divert, the center must have a system to notify dispatch, EMS agencies, and surrounding hospitals. (CD 3-7) Trauma diversion plans must have the following:

- Clearly defined criteria for placing the trauma center on diversion status.
- Prearranged alternative destinations with transfer agreements in place.
- Specific process and procedure to alert/notify dispatch, prehospital personnel and surrounding hospitals/medical centers of divert or advisory status.
- Maintenance of a divert log.
- Subject all diverts and advisories to PIPS procedures.

The trauma center shall not be on bypass more than five (5) percent of the time

Rationale: Trauma center diversion/bypass should be held to an absolute minimum. However, when diversion is necessary, there must be a specific process and procedure in place to alert dispatch, prehospital personnel and surrounding hospitals.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 3*



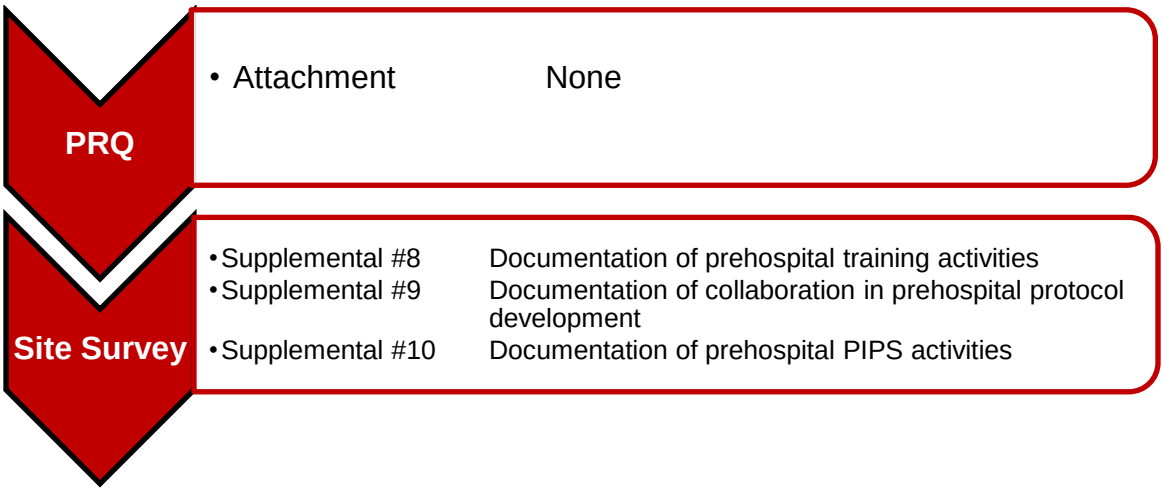
Prehospital Trauma Care

Prehospital Trauma Care

Standard: The trauma program must participate in the training of prehospital personnel, the development and improvement of prehospital care protocols, and PIPS programs. (CD 3-1) Protocols that guide prehospital trauma care must be established by the trauma health care team, including surgeons, emergency physicians, medical directors for EMS agencies, and basic and advanced prehospital personnel. (CD 3-2) The level IV trauma center must also be the local trauma authority and assume the responsibility for providing training for prehospital and hospital-based providers. (CD 2-21)

Rationale: Improving the final outcome of injured patients is dependent on effectively monitoring, integrating, and evaluating all components of patient care. Prehospital personnel should be involved in the multidisciplinary performance improvement process and be accountable to the medical direction system that is in place at the trauma center. A team approach helps establish continuity of care between prehospital care and hospital protocols. Prehospital trauma care protocols should be consistent throughout the system and be based on principles contained in Prehospital Trauma Life Support® (PHTLS®) or similar standardized and medical approved trauma training programs.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2, Chapter 3*



Trauma Center Responsibilities

Emergency Department Equipment

Standard: The emergency department at Level IV centers must be continuously available for resuscitation, with 24-hour emergency coverage by an RN and physician or midlevel provider, and it must have a physician director. (CD 2-14, CD 2-15) Level IV trauma centers must have the following equipment available in sizes for **all ages**: (Presence of this equipment will be verified during onsite surveys.)

- Airway control and ventilation equipment[3] including laryngoscopes and laryngoscope blades[4], ET tubes, oxygen and pocket masks
- Pulse oximetry
- Suction devices
- Electrocardiograph/oscilloscope/defibrillator
- Standard IV fluids and administration sets
- Large-bore intravenous catheters including intraosseous (I/O)
- Sterile surgical sets for:
  - Airway control/cricothyrotomy
  - Vascular access
  - Chest decompression/chest tubes
- Gastric decompression
- Drugs necessary for emergency care[5]
- Spinal immobilization equipment
- Pediatric length-based resuscitation tape
- Qualitative end-tidal CO_2 detector
- Thermal control equipment for patient
- Equipment to facilitate communication with EMS

[3]*bag-valve mask equipment acceptable*

[4]*Adult and pediatric sizes*

[5]*appropriate antibiotics, sedation & pain relief*

Rationale: Any facility designated as a trauma center must have the capability to provide care to any and all injured patients.

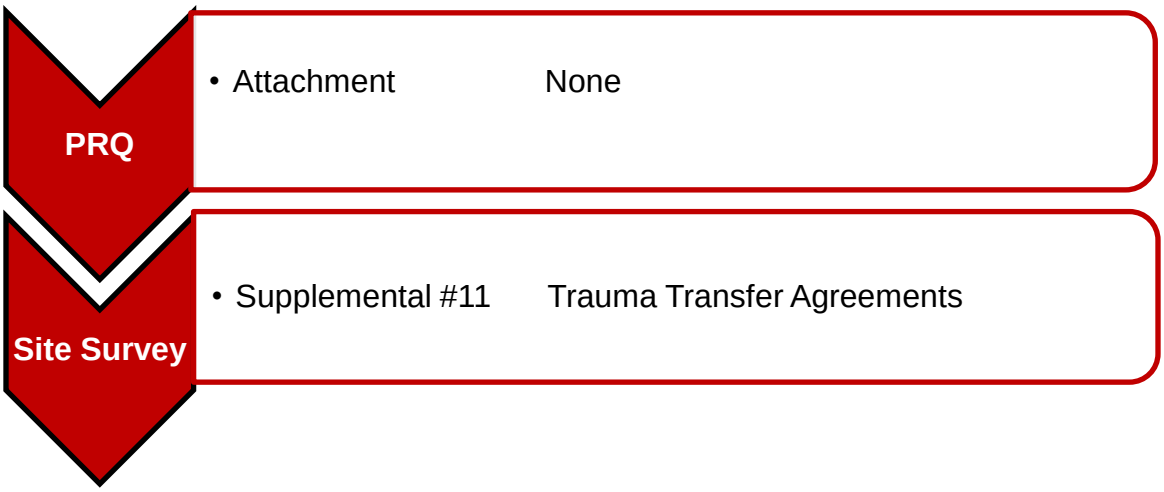
Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2 and Kansas Trauma Program*

Transfer of Care Within and Outside the Facility

Standard: Well defined transfer plans are essential. (CD 2-13) Transfers to a higher level of care within the institution must be routinely monitored and cases identified must be reviewed to determine the rationale for transfer, adverse outcomes, and opportunities for improvement. (CD16-8) Collaborative treatment and transfer guidelines reflecting the Level IV facility's capabilities must be developed and regularly reviewed with input from higher-level trauma centers in the region. (CD 2-13) Direct physician-to-physician or midlevel to physician at receiving hospital is essential. (CD 4-1)

Rationale: Unexpected outcomes should be examined to determine the need for process changes associated with interfacility transfer of patients.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2, Chapter 4, Chapter 16*

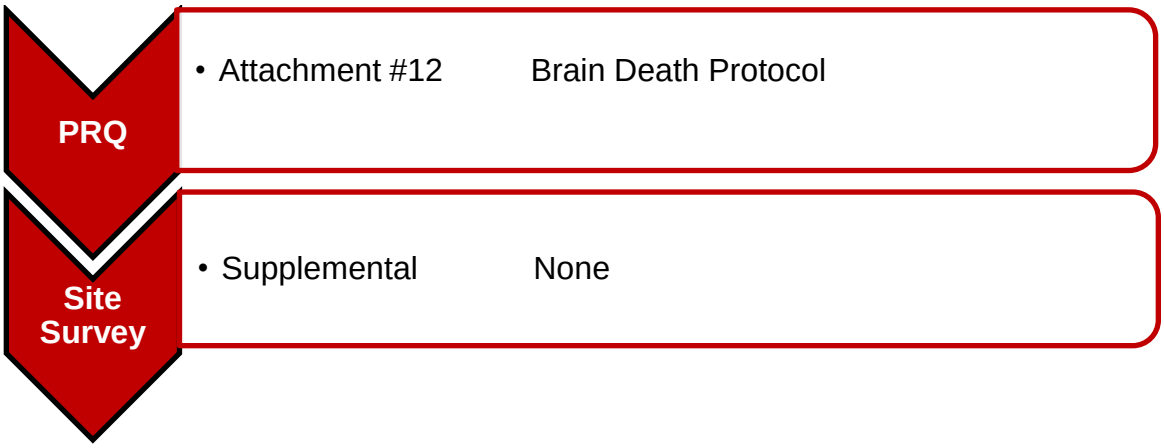


Diagnosis of Brain Death

Standard: It is essential that all trauma centers have written protocols defining the clinical criteria and confirmatory tests for the diagnosis of brain death. (CD 21-3) Establishment of a systematic approach for a rapid declaration of death of patients who have lost function of the brain and brain stem is critical to avoid losing potential organ donors. The convenience of an individual specialist should not influence or delay the declaration of brain death. Consider including Comfort Care Protocol for those patients staying at your trauma center.

Rationale: The Uniform Determination of Death Act has defined the criterion for brain death as the complete and irreversible loss of function of the brain and brain stem. Although there are national guidelines regarding the clinical criteria and confirmatory studies for declaration of brain death, there is some variation among states and trauma centers.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 21*



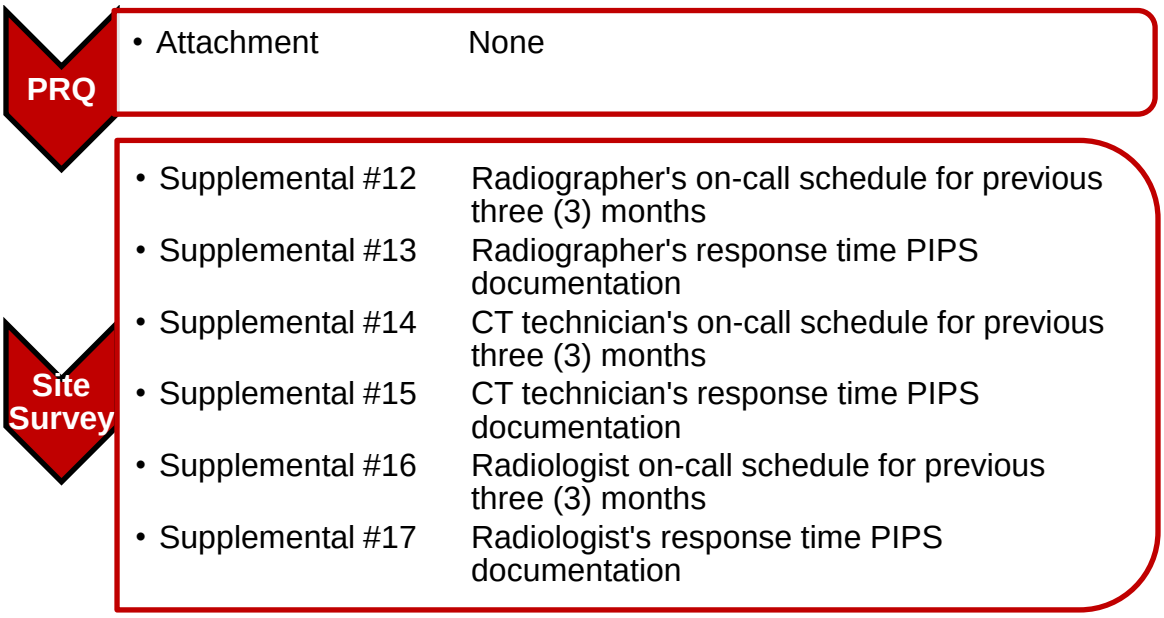
COLLABORATIVE SERVICES

Radiography

Standard: Conventional radiography must be available in all trauma centers 24 hours per day. (CD 11-29) If the patient's condition warrants rapid transfer to a facility capable of providing definitive care, transfer should not be delayed in order to obtain radiography. All delays associated with obtaining of radiography should be reviewed through the PIPS program.

Rationale: Appropriate use of radiology services are critical in the management of severely injured patients.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 11*



Laboratory

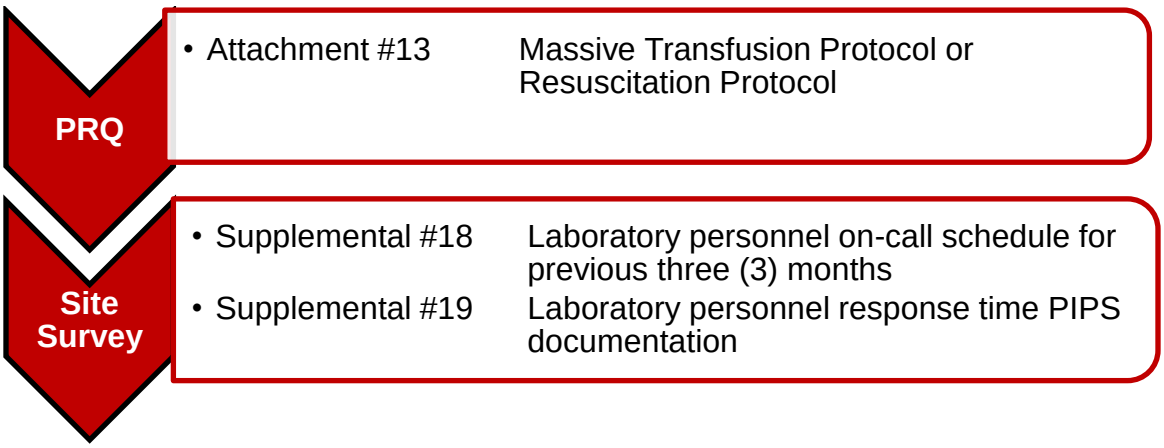
Standard: Laboratory services must be available 24-hours per day for the standard analyses of blood, urine, and other body fluids, including microsampling when appropriate. (CD 11-80) Laboratory services must be available that are capable of providing the following:

- Analyses of blood, urine, and other body fluids, including microsampling when appropriate. (CD 11-80)
- Blood bank capability of blood typing and cross-matching. (CD 11-81)
  Note: The ACT has determined that availability of a blood bank is optional for Kansas Level IV Trauma Centers. (Meeting minutes May 6, 2015)

Level IV trauma centers must also have a Massive Transfusion Protocol developed collaboratively between the trauma service and the blood bank. (CD 11-84) Level IVs that do not have blood bank capabilities must develop Hypovolemic Resuscitation Protocol.

Rationale: In trauma centers, laboratory services must be available 24 hours per day.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 11*



PERFORMANCE IMPROVEMENT & PATIENT SAFETY

Performance Improvement & Patient Safety (PIPS) Program

Standard: The TMD and TPM must work together with guidance from the trauma PIPS committee to identify events; develop corrective action plans; and ensure methods of monitoring, reevaluation, and benchmarking. (CD 2-17) The trauma PIPS committee should be a multidisciplinary group that meets regularly with required attendance of medical staff active in trauma resuscitation, to review systemic and care provider issues, as well as propose improvements to care of the injured. (CD 2-18) A PIPS program must have audit filters to review and improve pediatric and adult patient care. (CD 2-19) The trauma PIPS program should be integrated within the hospital's existing PIPS and must be performed by a multidisciplinary trauma committee or by an appropriate multidisciplinary committee in existence within the hospital infrastructure.

The trauma registry is an important management tool that contains detailed, reliable, and readily accessible information needed to operate a trauma center. Trauma data must be collected and analyzed. (CD 15-1) The trauma registry data is essential to the PIPS program and must be used to support the PIPS process. (CD 15-3)
The program policies must at a minimum include:

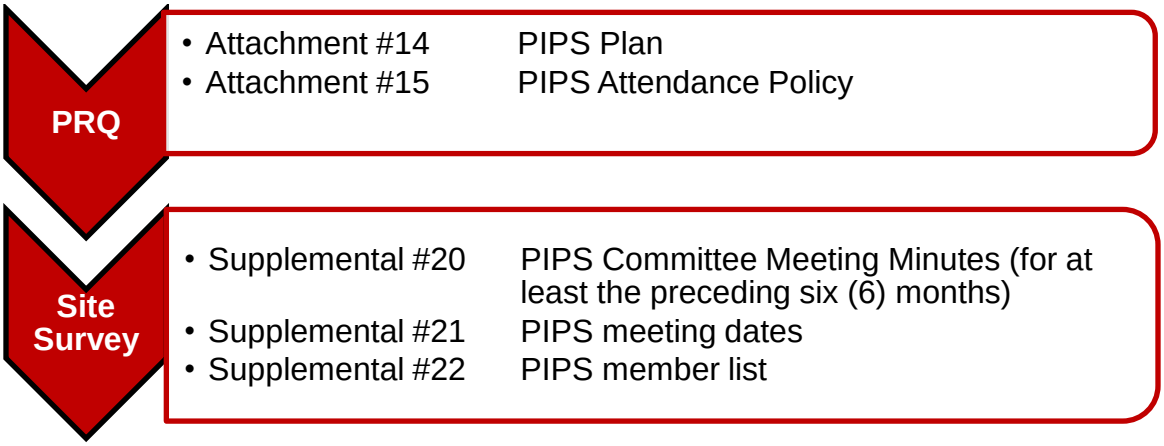
- An integrated, concurrent PIPS program to ensure optimal care and continuous improvement in care. (CD 2-1)
- Description of the process used to identify cases that should be referred for further information or peer review. (CD 2-17)
- Description of how the trauma PIPS program will verify and validate identified events. Hospital specific filters to monitor areas that the trauma center believes should be monitored, e.g., length of stay > 1 hour, GCS <9 and not intubated. (CD 16-11)
- The requirement of multidisciplinary physician involvement (when physicians of multiple disciplines are involved with trauma care).
- Define a set of indicators/audit filters, which must minimally include: (CD 2-19)
  - Emergency department provider non-compliance with on-call response times
  - Identification of training issues, including in ability to validate 100% of practitioners are verified in ATLS® or TNCC™.
  - All TTAs.
  - All trauma deaths.
  - All trauma transfers in or out of the facility. It is important to evaluate interhospital transfer/transport activities. (CD 4-3)
  - Include pediatric (child maltreatment assessment, and adult patient care (fluid resuscitation, radiation exposure, pain management). (CD 2-19)
- Define trauma standards of care. (Reviewed during site visit)

- All process and outcome measures must be documented within the trauma PIPS program's written plan and reviewed and updated at least annually. (CD 16-5)
- Outline the process used to accomplish loop closure and resolution.
- For facilities admitting patients to internal ICU care, documentation must demonstrate timely and appropriate ICU care and coverage are provided (CD 11-60)
- All trauma patients who are diverted or transferred during the acute phase of hospitalization to another trauma center, acute care hospital, or specialty hospital or patients requiring cardiopulmonary bypass or when specialty personnel are unavailable must be subjected to PIPS to determine the rationale for transfer, appropriateness of care, and opportunities for improvement. Follow-up from the center to which the patient was transferred should be obtained as part of the case review.
- Affirm that the hospital will work with KDHE and the regional trauma council in statewide/regional PI activities.

Rationale: Trauma centers must engage in formalized PIPS activities that include the three basic elements of performance improvement:

(1) Issue recognition
(2) Corrective action planning
(3) Monitoring, reevaluation, and benchmarking of the result.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2, Chapter 4, Chapter 11, Chapter 15, Chapter 16*



TRAUMA REGISTRY

Trauma Registry

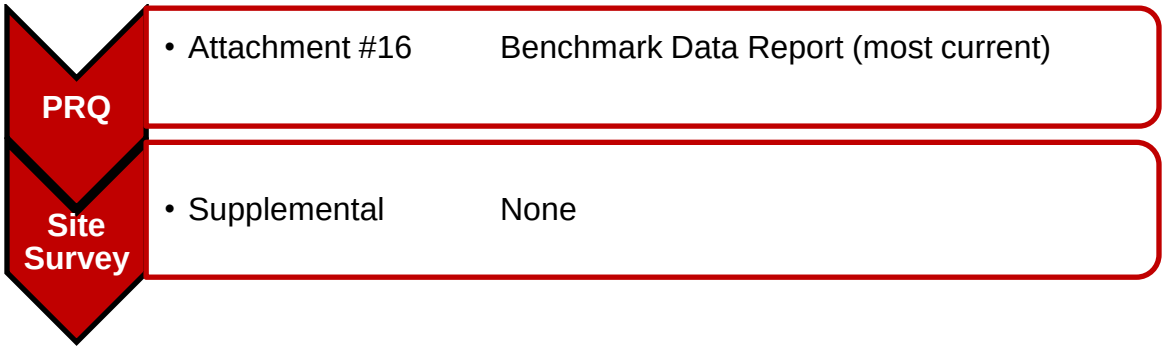
Standard: Trauma registry data must be collected and reported by every trauma center. (CD 15-1) Trauma registry data shall be collected in compliance with the Kansas Data Dictionary which is modeled after the National Trauma Data Standard (NTDS). Trauma centers must demonstrate that all trauma patients have been identified that meet the Kansas Inclusion Criteria. Trauma registry data should be analyzed to:

- Determine validity of data (CD 15-10)
- Identify injury prevention priorities for local implementation (CD 15-4)
- Support the PIPS process (CD 15-3)

Trauma registries should be current (Appendix B). At a minimum, 80 percent of the trauma cases for the time period in question must be entered within 60 days of the end of the quarter. (CD 15-6) Trauma registry data may be filtered to obtain benchmarking information. The hospital trauma program must ensure that appropriate measures are in place to meet confidentiality requirements of the data. (CD 15-8)

Rationale: Kansas Statute Annotated 75-5666 states: "All … medical care facilities that provide any service or care to or for persons with trauma injury in this state shall collect and report to the trauma registry data and information deemed appropriate by the secretary to monitor patient outcome." To facilitate this process trauma registry software is available to all hospitals at no cost.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 15*



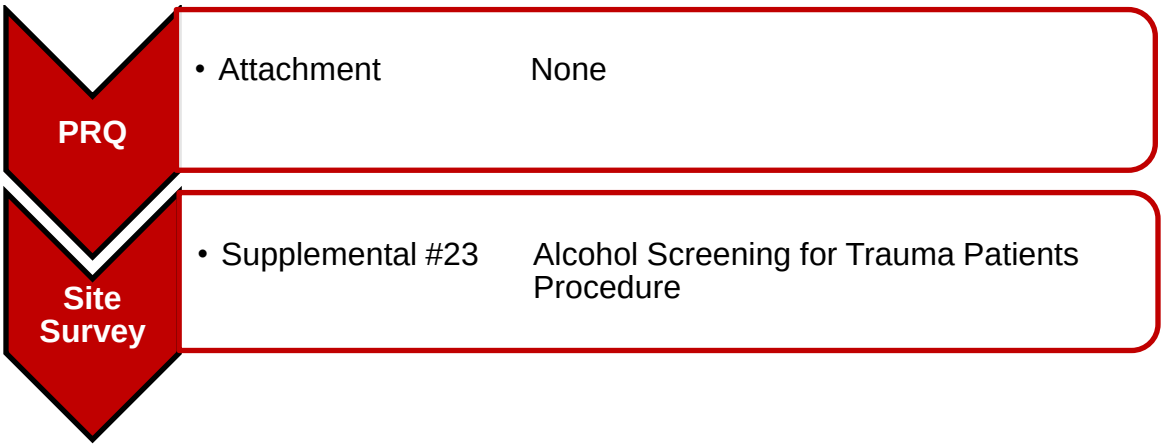
PREVENTION

Universal Screening for Alcohol Use for Trauma Patients

Standard: Universal screening for alcohol use must be performed for all injured patients (all patients that meet registry inclusion criteria with a hospital stay of > 24 hours) and must be documented. (CD 18-3)

Rational: Data suggests high rates of problematic drug use among trauma patients who screen positive for alcohol use. Best practices include implementing screening procedures that capture drug use co-morbidity and appropriate treatment referral.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 18*



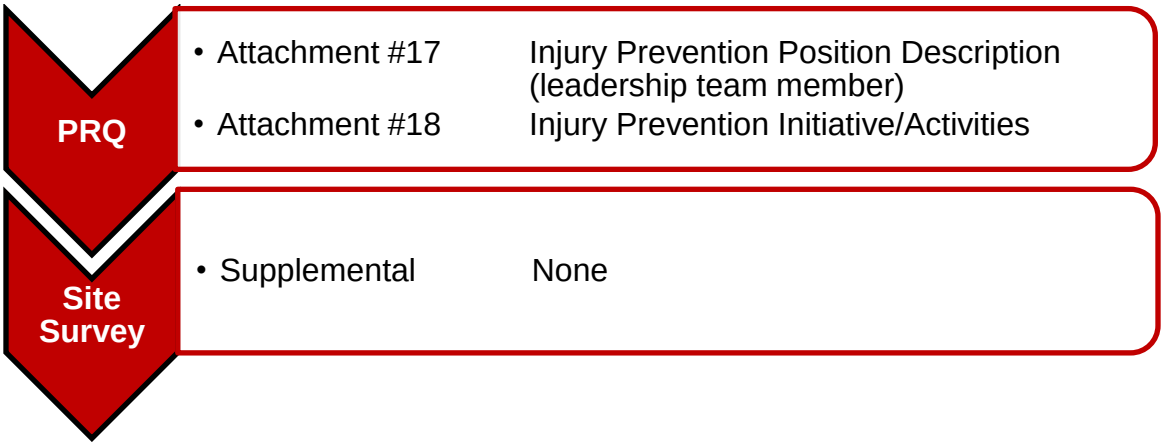
Injury Prevention

Standard: Each trauma center must have:

- A leadership position that has injury prevention as part of his/her job description. (CD 18-2)
- An organized and effective approach to injury prevention and must prioritize those efforts based on local trauma registry and epidemiologic data. (CD 18-1) Furthermore, these findings must be used to identify injury prevention priorities that are appropriate for local implementation. (CD 15-4)
- A system for ensuring universal screening and brief intervention for alcohol use are performed on all injured patients (all patients that meet registry inclusion criteria with a hospital stay of > 24 hours), with full documentation. (CD 18-3)

Rationale: Injury prevention is the responsibility of all trauma team members working in collaboration with the community.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 15, Chapter 18*



DISASTER MANAGEMENT & PLANNING

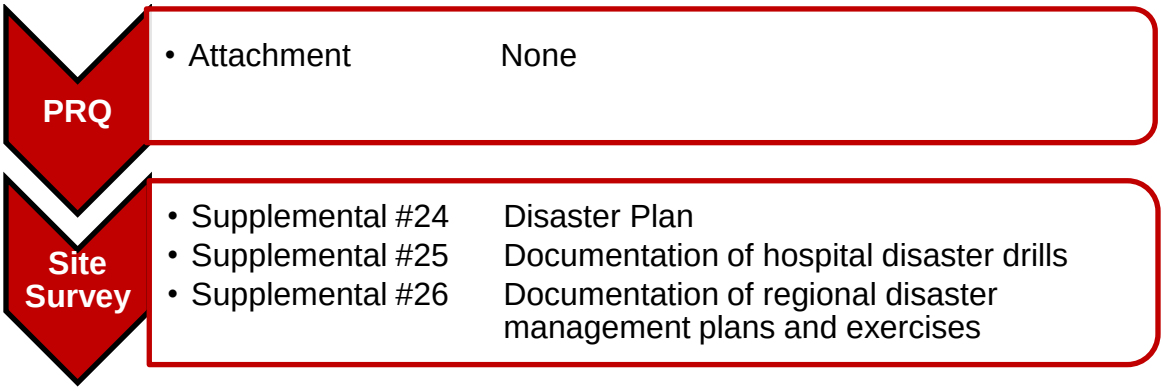
Disaster Management & Planning

Standard: All trauma centers must:

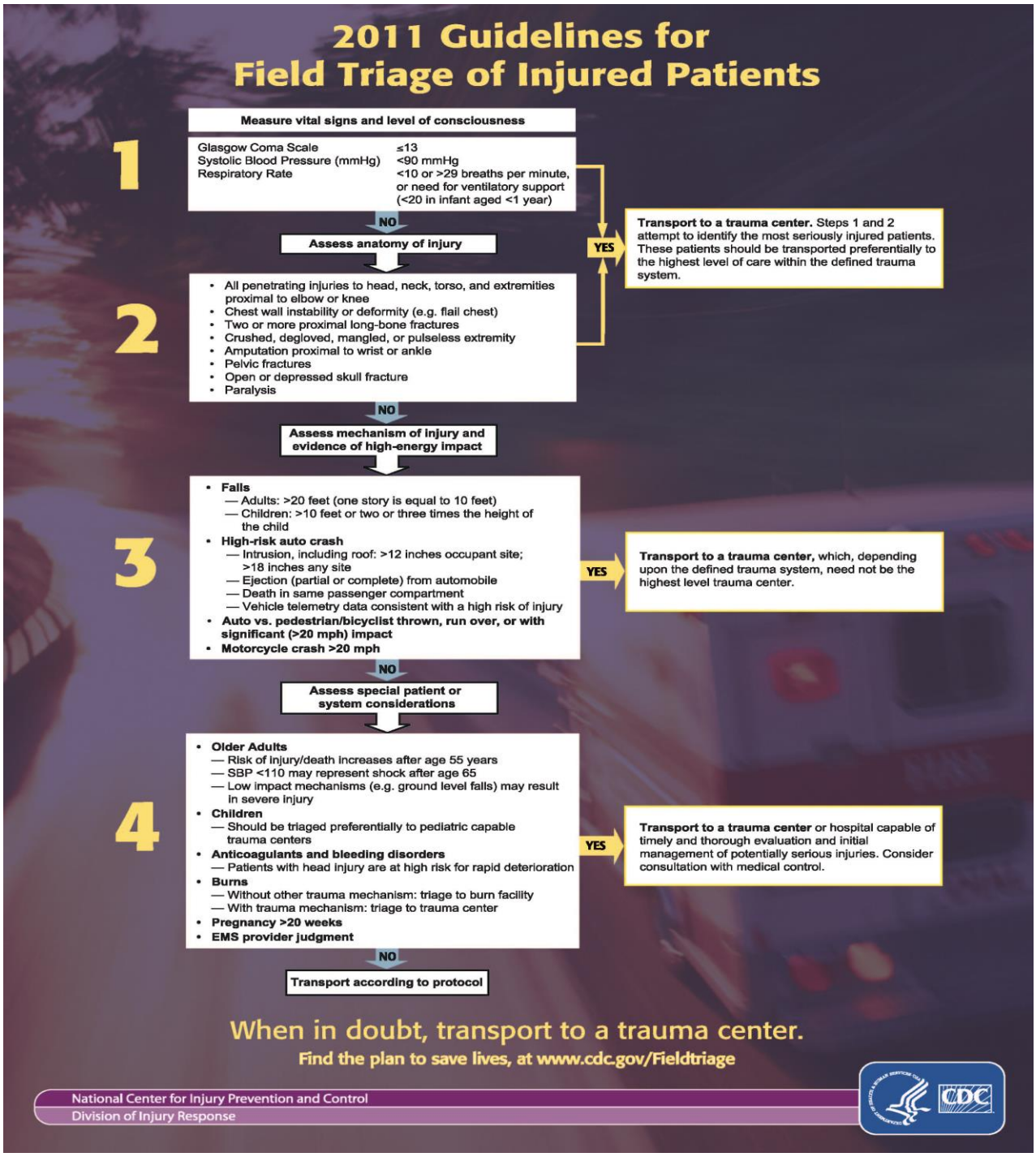
- Meet the disaster-related requirements of the Joint Commission. (CD 20-1) Equivalent program may be acceptable if it follows the Joint Commission structure.
- Hold hospital drills that test the individual hospital's disaster plan. These drills must be conducted at least twice a year, including actual plan activations that can substitute for drills. (CD 20-3)
- Have a hospital disaster plan described in the hospital's policy and procedure manual or equivalent (will be reviewed at time of site visit). (CD 20-4)
- Participate in regional disaster management plans and exercises. (CD 2-22)

Rationale: Hospital disaster plans detail the hospital's role in community emergency preparedness, implementation of specific procedures, management of key materials and activities, staff preparation, deployment and roles, management of patient care services, disaster drills, and monitoring and evaluation of hospital performance.

Reference: *Resources for Optimal Care of the Injured Patient: 2014, Committee on Trauma, American College of Surgeons. Chapter 2, Chapter 20*



Appendix A
2011 CDC Guidelines for Field Triage of Injured Patients



Appendix B
Kansas Trauma Registry
Data Submission Due Dates

Discharged In	***Submission Due***
1st Quarter	May 31
2nd Quarter	August 31
3rd Quarter	November 30
4th Quarter	March 1

Quarters are Calendar Year Quarters:
1st Quarter includes discharges January 1 through March 31
2nd Quarter includes discharges April 1 through June 30
3rd Quarter includes discharges July 1 through September 30
4th Quarter includes discharges October 1 through December 31

Due dates are the same every year