



ARKANSAS DEPARTMENT OF HEALTH
HOSPITAL PRE-REVIEW QUESTIONNAIRE (PRO)
FOR LEVEL I & II FACILITIES

PLEASE USE THIS DOCUMENT TO ASSEMBLE YOUR HOSPITAL INFORMATION.

**THIS DATA WILL BE USED FOR COMPLETING THE REPORT AND MAY BE USED FOR ANALYSIS.
ALL HOSPITAL IDENTIFIERS WILL BE REMOVED AND WILL NOT BE INCLUDED IN ANY
SUBSEQUENT ANALYSIS.**

**PLEASE REVIEW THE DOCUMENT CAPTIONED “INSTRUCTIONS FOR COMPLETION OF THE
HOSPITAL PRE-REVIEW QUESTIONNAIRE (PRQ) FOR LEVEL I AND II FACILITIES” PRIOR TO
COMPLETING THIS PRQ.**

DEMOGRAPHICS

1. Name of Hospital
Hospital Address
City, State, ZIP

PURPOSE OF SITE REVIEW

1. Type of Review:
 - a) Consultation
 - b) Verification
 - c) Reverification
2. Level of Review: (Check all that apply)
 - a) Level I Trauma Center
 - b) Level II Trauma Center
 - c) Level I Pediatric Trauma Center
 - d) Level II Pediatric Trauma Center
3. Facility treats what type of patients:
 - a) Adults Only (age equal to or greater than 15 years of age)
 - b) Children only (age equal to or less than 15 years of age)
 - c) Adults and Children (list the number of children \leq 15 years of age admitted in the past year)
4. Reporting period for this review (must be 12 months of data none older than 15 months).
 - a) From month/year
 - b) To month/year
5. Date of most recent review if one has occurred (mm/yyyy): (consultation, verification or reverification)
6. Indicate here if there has been no previous review: (skip to Hospital Information if no previous review)

7. If verified, date of verification (mm/dd/yyyy)
 - a) Reviewer's Names:

8. Most recent review was for:
 - a) Verification
 - b) Reverification
 - c) Focus
 - d) Consultation

9. Level of trauma center for most recent review: (check all that apply)
 - a) Level I Trauma Center
 - b) Level II Trauma Center
 - c) Level I Pediatric Trauma Center
 - d) Level II Pediatric Trauma Center
 - e) None

10. Last Verification was for (type):
 - a) Adults Only
 - b) Children Only
 - c) Adults and Children

11. Were there any deficiencies found at last review (consultation, verification or reverification) (Yes/No)?
 - a) List all deficiencies and how they were corrected

12. Were there any weaknesses found at last review (consultation, verification or reverification) (Yes/No)?
 - a) List all weaknesses and how they were addressed

13. Describe any program changes (Administrative, TMD, TPM or registrar) that have occurred since the last review. Did you notify the Arkansas Department of Health of the program change? (Yes/No) **(A1. Sec. 6., a., b.)** Please attach a copy of all notification forms that were sent to the ADH as Attachment #1. The form can be found on the ADH website at:
<https://www.healthy.arkansas.gov/programs-services/topics/trauma-forms-resources>

HOSPITAL INFORMATION

General Information

1. Tax Status
 - a) community - for profit
 - b) community - not for profit
 - c) university - for profit
 - d) university - not for profit
 - e) public entity

2. Is there is a Medical School Affiliation (Yes/No) If 'Yes', Name:

3. What is the Payer Mix? (as a **percentage**)

Payer	All Hospital Patients	Trauma Patients (Registry Eligible)	Trauma Patients transferred in	Trauma Patients transferred out
Commercial				
Medicare				
Medicaid				
HMO/PPO				
Uncompensated/Indigent				
Other –Define other below				

Define:

Note: Questions that have L1, L2, refers to the level of your trauma center and the criteria number as outlined in the Arkansas Trauma System Rules and Regulations

4. Are all of the trauma facilities on one campus? (Yes/No) If 'No', describe

5. Hospital Beds (Do not include neonatal beds)

Hospital Beds	Adult	Pediatric	Total
Licensed			
Staffed			
Average Census			

PRE-HOSPITAL SYSTEM

A. Pre-hospital system description

1. Describe the area and identify the number and level of other verified trauma center within a 50-mile radius of the hospital. **Do not include the names of those facilities.**
2. Please provide a list as Attachment #2 of your local EMS support.

B. EMS

1. Describe the air medical support services available in the area and the type: fixed wing and/or rotor wing.
2. Does the trauma program serve as a base station for EMS operations? (Yes/No)
3. Does the trauma program provide medical control? (Yes/No)
4. Does the facility monitor EMS communications systems regularly? (**A2. Sec. 5., B.,1**) (Yes/No)
5. Is the trauma program team involved in pre-hospital training? (**11.13**) (Yes/No)
If 'Yes', briefly describe
6. Does the trauma program participate in pre-hospital protocol development? (**1.6**) (Yes/No)
If 'Yes', briefly describe and provide one example.
7. Is there a representative from the emergency department that participates in a QI program with pre-hospital providers? (Yes/No) If 'Yes', who is the representative?

Trauma Program

1. **SUPPORT/INFRASTRUCTURE**

Institutional Support (1.1-1.4)

1. Is there a resolution within the past three years supporting the trauma program from the hospital governing body (hospital board)? **(1.1)** (Yes/No) If 'Yes', please provide the resolution as Attachment #3.
2. Is there a medical staff resolution within the past three years supporting the trauma program? **(1.1)** (Yes/No) If 'Yes', please provide the resolution as Attachment #4.
3. Is there specific budgetary support for the trauma program such as personnel, education and equipment? **(1.2)** (Yes/No) If 'Yes', briefly describe (List items by numbers or bullet points).
4. Briefly describe the administrative commitment to the trauma program. (List items by numbers or bullet points)
5. Does the trauma program's leadership and committees have the authorization to perform their required duties? **(1.3)** (Yes/No)
6. Is there a clear defined line of reporting for the TMD and TPM within the organization? **(1.4)** (Yes/No)
7. Briefly describe the medical staff commitment to the trauma program. (List items by numbers or bullet points)
8. Does the hospital trauma program staff participate in the state and/or regional trauma system planning, development, or operation? (Yes/No) **(11.7 – 11.8)** If 'Yes', briefly describe
9. Does the hospital participate in the TRAC? **(11.7-11.8)** (Yes/No) (State Trauma Nurse Coordinator will have attendance sheet during the site survey).

Trauma Program Administration and Infrastructure (1.5)

1. Does the trauma program within the acute care facility with defined leadership (TMD, TPM) have the authority to develop, oversee and improve the care of the injured within the facility? **(1.5)** Yes/No If 'No', briefly explain

2. **STAFFING**

Trauma Medical Director (TMD) (2.1-2.12)

1. Name (first name, last name)
2. Please complete Appendix #1 TMD
3. Is the TMD a board-certified/board-eligible general surgeon (pediatric surgery in a pediatric facility) and in good standing in the institution with state licensure, has membership in professional organizations, possesses clinical knowledge and expertise and has a personal interest and the time to be the champion for trauma patient care to the medical staff and the trauma center? **(2.1) (2.2)** (Yes/No)

4. Is the TMD either a provider or an instructor in ATLS or attendance and documentation of self-assessment CME at an ADH-approved national trauma meeting? **(2.3)** (see FAQ) (Yes/No)
5. Does the TMD participate in trauma call? **(2.4)** (Yes/No)
6. Does the TMD lead the trauma QI and patient safety program within the trauma center? **(2.5)** (Yes/No)
7. Does the TMD have a method to identify injured patients, monitor the provision of health care services, make periodic rounds, and hold formal and informal discussions with individual practitioners? **(2.6)** (Yes/No)
8. Does the TMD perform annual review of the performance of all surgeons on the trauma call panel? **(2.7)** (Yes/No) Please provide as Attachment #5.
9. Does the TMD have the ability to contribute to the TPM's performance evaluation? **(2.8)** (Yes/No)
10. Does the TMD demonstrate with his/her signature awareness of the facility's invoices to the ADH for payment? **(2.9)** (Yes/No)
11. Is the TMD a member and an active participant in national or regional trauma organizations? (see FAQ) (Yes/No) If **'Yes'**, please list
12. Does your TMD have the required verifiable 18 hours of Category I trauma-specific CME, or 18 hours of trauma-specific internal education every three years? **(3.5)** **(4.10)**
13. Does the TMD have sufficient authority to set the qualifications for the trauma service members? (Yes/No) **(2.10)** **(2.11)**
14. Does your TMD have a job description? **(2.10)** (Yes/No) Please include as Attachment #6.
15. Does the structure of the trauma program allow the TMD to have oversight and authority for the care of injured patients who may be admitted to individual surgeons? (Yes/No) If **'No'**, please explain
16. Does the TMD have the authority to remove members from and/or appoint members to the trauma panel? **(2.11)** (Yes/No) If **'Yes'**, briefly describe mechanism
17. Does your TMD have the responsibility and authority to ensure compliance with verification requirements; and report changes in the program that would affect the designation of the facility to ADH. **(2.12)** (Yes/No)

Trauma Program Manager (TPM) (2.13-2.19)

1. Name: (First name, last name)
2. Education
 - a) Associate Nursing Degree (Yes/No)
 - b) Bachelor Nursing Degree (Yes/No)
 - c) Masters Nursing Degree (Yes/No)
 - d) Other Degree (Yes/No) If **'Other'** degree, please describe:

3. Is the TPM a RN that has responsibility for monitoring and evaluating nursing care of the trauma patients and coordination of QI and patient safety programs for the trauma center in conjunction with the TMD? **(2.13)** (Yes/No) If 'No', briefly explain
4. Does the trauma program manager show evidence of educational preparation, continuing trauma education and clinical experience in the care of injured patients? **(2.14)** (Yes/No) If 'Yes', please describe:
5. Is the TPM current in ATCN, TNCC, or ADH-approved equivalent course certifications current? **(2.15)** (Yes/No) (see FAQ)
6. How long has the TPM held this position? _____ years _____ months, less than 6 months has he/she registered to take a QI course, and an AIS coding course or state sponsored coding course? **(2.16)** (Yes/No)
7. Does the TPM have a job description? **(2.17)** (Yes/No) Please provide as Attachment #7.
8. Does your facility's trauma program dedicate at least 1.0 FTE to your TPM if trauma patient record volume is 500 or greater? **(2.18)** (Yes/No)
9. TPM reporting status. (Check all that apply)
 - a) TMD
 - b) Administration
 - c) ED Director
 - Briefly describe
 - Date of appointment to this position
 - d) Other – please describe
10. List the number of support personnel including names, titles, and FTE's.
 - a) Total number of FTE's:
11. Are the time and resources allocated sufficient for the TPM to be effective in the job of QI, community education, clinical education, IVP, and research as required? **(2.19)** (Yes or No) If 'No', briefly explain

Trauma Registrar (2.20 -2.21)

1. Name: (First name, last name)
2. Does your Trauma Registrar have a job description? Please provide as Attachment #8. **(2.20)** (Yes/No)
3. Is the Registrar a full-time position? (Yes/No) If 'No', briefly explain
4. Has the Registrar attended the AAAM course or a state sponsored coding course? **(2.20)** (Yes/No)
5. Does the facility have adequate resources to maintain accurate and timely collection, evaluation and submission of trauma data? **(2.21)** (Yes or No)

Trauma Program Staff (2.22)

1. Does the trauma program staff have adequate support resources to efficiently and effectively oversee and administer the trauma program and remain engaged in an effective QI process? **(2.22)** (Yes/No) Do not answer, surveyors will verified during site survey.

Trauma Liaisons (2.23-2.24)

1. Does your trauma program have official physician liaisons in EM, orthopedics, neurosurgery, anesthesia, critical care, and radiology? **(2.23)** (Yes/No) Do the liaisons disseminate information from the trauma meetings back to their service members? (Yes/No) How does the dissemination of information occur?
2. Do your liaisons attend 50% of the Trauma Program Operational Review Committee meetings and 50% of the Trauma Peer Review Committee Meetings? **(2.24)** (Yes/No) If 'No', briefly explain

Trauma Team (2.25)

1. Is there a predetermined set of care providers and ancillary personnel (physicians, mid-level practitioners, nurses, X-ray technologists, laboratory, respiratory therapists, etc.) needed to provide resuscitation, rapid triage, and transfer of the severely injured. **(2.25)** (Yes/No) If 'No', briefly explain

Consultant Coverage (2.26)

1. Do you have an internal policy identifying the expectations for consultant's responses? **(2.26)** (Yes/No) Please provide as Attachment # 9.

3. PARTICIPATION

General Surgery Participation (3.1 - 3.9)

1. Does your facility provide 24/7 general surgical coverage? **(3.1)** (Yes/No)
2. List all surgeons currently taking trauma call on Appendix #2. **Identify core and non-core surgeons.** (*Definition of core - those surgeons identified by the trauma medical director who participate in the Trauma Multidisciplinary Peer Review Committee meetings and take 60% of the trauma call.*)
 - a) Number of trauma surgeons taking call?
3. Do all of the trauma panel surgeons have privileges in general surgery? **(3.2)** (Yes/No) **(L1, L2)**
4. Are all of the general surgeons (trauma surgeons on call panel) board-certified/eligible* or a FACS or FACO? **(3.3)** (Yes/No) **(L1, L2)** If 'No', is the non-board certified/eligible trauma surgeon applying for Alternate Pathway? (Yes/No) If 'Yes', please notify the Department immediately and submit a CV for the surgeon as well as a letter from the TMD outlining the surgeon's competencies to participate on the trauma call panel.
5. Have all general surgeons on the trauma team successfully completed the ATLS course at least once? **(3.4)** (Yes/No) **(L1, L2)** If 'No', please explain (see FAQ)
6. What percent of general surgeons are current in ATLS?
7. Do all the trauma surgeons who take trauma call have documented 18 hours of Category I trauma specific CME or 18 hours of trauma-specific internal education every three years. **(3.5)** (Yes/No)
 - a) Have they participated in an internal education process conducted by the trauma program based on the principles of practice-based learning? (Yes/No)
 - b) If the trauma program uses an internal education process, please describe:
8. Has the 'Core' group of trauma surgeons been adequately defined by the trauma medical director?

(Yes/No)

9. Does the 'Core' group take at least 60% of the total trauma call hours each month? (Yes/No)
10. Does the 'Core' group each participate in 50% of the Trauma Peer Review Committee meetings and disseminate information back to all non-core surgeons? **(3.6)** (Yes/No)
11. What is the number of 'Core' trauma surgeons?
12. What is the number of 'Non-core' trauma surgeons taking call?
 - a) How is information about clinical feedback, service changes and process improvement disseminated to the 'Non-core' surgeons?
13. Is the trauma surgeon dedicated to the trauma center while on call? (Yes/No)
14. Do trauma surgeons take in-house call? (Yes/No)
 - a) Level II – Attending General Surgeon on call and promptly available to the patient upon activation of the trauma protocol. **(3.7)** (Yes/No)
 - b) Level I - Attending general surgeons or appropriate substitute (PGY-3 or higher general surgery resident) must be in house 24 hours a day for major resuscitations. **(3.9)** (Yes/No)
15. Do trauma surgeons respond promptly to activations, remain knowledgeable in trauma care principles, whether treating patients locally or transferring them to a center with resources, and participate in QI activities? **(3.8)** (Yes/No) **Do not answer, surveyors will verified during site survey.**
16. What percent of the time is the attending trauma surgeon present in the ED on patient arrival or within 15 minutes (30 minutes for Level II, III Trauma Centers and Level IV Trauma Centers when capability is available) of arrival for the highest level of activation? **(L1, L2) (3.8)** Please show percentage as Attachment #10.
17. Does the trauma surgeon provide care for non-trauma emergencies when on call? (Yes/No)
18. Is there a published backup call schedule for the trauma surgeons? (Yes/No)
19. Number of trauma surgeons with added certifications in critical care?
20. Number of trauma fellowship-trained surgeons on call panel?

Orthopedic Surgery Participation (3.10 – 3.15)

(Out of state hospital when a question asks for numbers please include total number of patients/cases as well as AR registry eligible patients/cases)

1. Does your facility provide 24/7 orthopedic coverage. On-call and promptly available when requested by the trauma surgeon or EM specialist. **(3.10)** (Yes/No)
2. Is there an orthopedic surgeon who is identified as the liaison to the trauma program? (Yes/No)
3. Provide information about the orthopedic liaison to the trauma program on Appendix #3.
4. Have the orthopedic surgeons documented at least an average of 18 hours in three years of verifiable Category I trauma-specific CME, or 18 hours of trauma-specific internal education every three

- years? **(3.11)** (Yes/No)
5. Does the orthopedic surgeon liaison participate in 50% of the Trauma Peer Review Committee meetings and disseminate information back to all orthopedic surgeons on the call panel? **(3.12)** (Yes/No)
 6. List all orthopedic surgeons taking trauma call on Appendix #4.
 7. Number of orthopedic surgeons on the trauma call panel?
 8. Are all of the orthopedic surgeons who care for injured patients board-certified/eligible or a Fellow of an organization? (Yes/No)
 9. Do all of the orthopedic surgeons have privileges in general orthopedic surgery? **(3.13)** (Yes/No) If 'No', please explain:
 10. Does the trauma program use an internal education process, please describe:
 11. Are the operating rooms promptly available to allow for emergency operations on musculoskeletal injuries, such as open fracture debridement and stabilization and compartment decompression? **(6.1)** (Yes/No) Please describe:
 12. Are the on-call orthopedic surgeons dedicated to the hospital (i.e. Do not take call simultaneously at another hospital)? (Yes/No) In the case where the orthopedic is not dedicated to the facility 24/7, does your facility have orthopedic backup plan? **(3.14)** (Yes/No) Is the back-up plan approved by your TMD? (Yes/No)
 13. Does the OR has provision for the timely completion of semi-urgent cases so as not to cause delay to the patient (orthopedic cases)? **(6.2)** (Yes/No)
 14. Is there a mechanism to ensure operating room availability without undue delay for patients with semi-urgent orthopedic injuries? **(6.2)** (Yes/No) Please describe:
 15. Does the trauma center (Level I or II) provide sufficient resources, including instruments, equipment, and personnel, for modern musculoskeletal trauma care, with readily available operating rooms for musculoskeletal trauma procedures? (Yes/No) Please describe:
 16. Are plastic surgery, hand surgery, microvascular surgery, and spinal injury care capabilities present at this Level I trauma center? **(3.35)** (Yes/No/NA) **(L1)** If 'No', for any of these four, please describe
 17. Is there an orthopedic team member promptly available in the trauma resuscitation area when consulted by the surgical trauma team leader for multiple injured patients? (Yes/No) **(L1 L2)**
 18. Are the following orthopedic-specific QI filters in place and tracked? **(3.15)** (Yes/No) Please provide average time data as Attachment #11.
 - a) time from injury to washout for open fractures;
 - b) time from injury to ORIF for femur fracture; and,
 - c) appropriateness and timing of IV antibiotics for all open fractures.
 19. Is there an orthopedic back up call system designed by the orthopedic liaison and approved by the TMD? (Yes/No) If 'No', Please explain:

20. Is the orthopedic back up call system approved by the Trauma Program Operation Review Committee, and disseminated to the ED physicians and surgeons in the program? (Yes/No)
21. Does the QI process review the appropriateness of the decision to transfer or retain major orthopedic trauma patients? (Yes/No) Please describe:
22. Number of orthopedic operative procedures performed within 24 hours of admission.
23. Number of complex pelvis and acetabular cases performed at this institution during the reporting year?
24. Number of complex pelvis and acetabular cases transferred out during the reporting year? If there are cases transferred out, please explain:
25. Number of trauma fellowship-trained orthopedic surgeons on the trauma call panel:
26. Does facility have an orthopedic surgery residency program? (Yes/No)
27. Does the facility have an orthopedic trauma fellowship? (Yes/No)
28. Are there physical and occupational therapists and rehabilitation specialists involved in the acute and rehabilitation phases of care? (Yes/No)
29. Provide the number of patients transferred out of the facility during the reporting year for potential re-implantation.
30. Provide the number of patients with significant hand injuries admitted to the facility during the reporting period.
31. Provide the number of hand injuries transferred out of the facility (including ED) during the reporting period.

Neurosurgical Participation (3.16 – 3.20)

1. Do you provide 24/7 neurosurgical coverage. On-call promptly available when requested by the trauma surgeon or EM specialist? **(3.16)** (Yes/No)
2. Is there a designated neurosurgeon liaison? (Yes/No)
3. Provide information about the neurosurgeon liaison to the trauma program if one exists on Appendix #5.
4. List all neurosurgeons taking trauma call on Appendix #6.
5. What is the number of neurosurgeons on the call panel?
6. What percentage of the time is a neurosurgeon **not** available at the institution? (level I and II)
7. Are there physicians with special competence in caring for the patient with neuro trauma in house and immediately available? (Yes/No) please describe.
8. Are these physicians credentialed to initiate diagnostic procedures and initial stabilization of neurotrauma patients by the Chief of Neurosurgery? (Yes/No) **(L1, L2)** Please provide documentation.

9. Are all of the neurosurgeons that care for trauma patient board-certified/eligible or a fellow of a national neurosurgical organization? (see FAQ) (Yes/No)
10. Do the other neurosurgeons who take trauma call have verifiable 18 hours of Category I trauma-specific CME, or 18 hours of trauma-specific internal education every 3 years? **(3.17)** (Yes/No)
If the trauma program uses an internal education process, please describe:
11. Does the neurosurgeon liaison participate in 50% of the Trauma Peer Review Committee and disseminate information back to all neurosurgeons on the call panel. **(3.18)** (Yes/No)
12. Are the neurosurgeons dedicated to this hospital when on trauma call (i.e. - not taking simultaneous call at another hospital)? (Yes/No) If 'No', briefly describe:
In the case where the neurosurgeon is not dedicated to the facility 24/7, does your facility have neurosurgical backup plan? **(3.19)** (Yes/No) Is the back-up plan published and approved by your TMD? (Yes/No)
13. What is the number of emergency craniotomies done within 24 hours of admission during the reporting period (period should not be older than 14 months). (Please do not include isolated EVD or monitor placements)
14. Does the facility have a neurosurgery residency program? (Yes/No)
15. Is there a QI review of all neurotrauma patients who are diverted or transferred? (Yes/No) Please provide a log of all neurotrauma diversions as Attachment #12.
16. Are qualified neurosurgeons regularly involved in the care of head - and spinal cord - injured patients and are credentialed by the hospital with general neurosurgical privileges? **(L1, L2)** (Yes/No)
17. What percentage of time is such a neurosurgeon not available for care?
18. Is there a trauma-director approved plan that determines which types and severity of neurologic injury patients should remain at the facility when no neurosurgical coverage is present? (Yes/No) Please describe:
19. Are the following neurosurgical specific QI filters tracked: **(3.20)** (Yes/No) Please have evidence at the site survey as Attachment #13.
 - a) all cases requiring the backup to be called in, or the trauma center is Charlie Temp or bypassed due to unavailability of the neurosurgeon on-call; and,
 - b) neurotrauma care shall be reviewed for compliance with the Brain Trauma Foundation Guidelines.

Anesthesiology Participation (3.21 – 3.30)

1. Anesthesia services:
 - a) Is anesthesia available in-house 24/7. (This may be fulfilled by an anesthesiologist, PGY4 or greater anesthesia resident or a CRNA? **(3.21) (L1)** (Yes/No)
 - b) If a CRNA is utilized, is he/she approved by the Chief of Anesthesiology? **(3.21) (L1)** (Yes/No)
2. Are anesthesiology services promptly available for emergency operations 24/7? **(3.22) (L2)** (Yes/No)

3. Are anesthesiology services promptly available for airway problems? **(3.23)** (Yes/No)
4. Is there a fully credentialed anesthesia provider present for all trauma operations? **(3.24)** (Yes/No)
5. Is there an anesthesiologist liaison designated to the trauma program? **(3.25)** (Yes/No)
6. Is the availability of the anesthesia services and the absence of delays in airway control or operations documented by the trauma QI program. **(3.26)** Yes/No
7. Number of anesthesiologists on staff?
8. How many anesthesiologists are on backup call during off-hours?
9. Have all of the anesthesiologists taking call successfully completed an anesthesiology residency? Yes/No
10. When anesthesiology chief residents or CRNAs are used to fulfill availability requirements, are the staff anesthesiologists on call advised, promptly available at all times, and present for all operations? (Yes/No)
11. In a Level II trauma center without in-house anesthesia services (house wide), are protocols in place to ensure the timely arrival at the bedside of the anesthesia provider? **(3.27)** (Yes/No) If 'Yes', please describe:
12. In a Level II trauma center without in-house anesthesia services, is there documentation of the presence of physicians skilled in emergency airway management? **(3.28)** (Yes/No) If 'Yes', please describe:
13. Does the hospital use CRNAs? (Yes/No)
 - a) If 'Yes', how many provide in-house call?
 - b) If 'Yes', how many are on backup call?
 - c) If 'Yes', are they involved in the care of the trauma patient? (Yes/No)
 - d) Are they credentialed by the hospital to begin an emergency case without MD presence? (Yes/No)
14. Provide information about the anesthesia liaison to the trauma program on Appendix #7.
15. The anesthesia liaison participates in the trauma QI program. **(3.29)** (Yes/No), If 'No', explain
16. The anesthesiology representative or designee to the trauma QI program attends at least 50% of the Trauma Peer Review Committee meetings. **(3.30)** (Yes/No)

Emergency Medicine Participation (3.31 - 3.33)

1. Do you have a liaison from the EM Service to the Trauma Program who effectively disseminating information back to the EM service? **(3.31)** (Yes/No)
2. Provide information about the emergency medical liaison to trauma program on Appendix #8.
3. Is there a designated emergency physician available to the trauma director for QI issues that occur in the emergency department? (Yes/No)

4. Does the EM liaison have the required verifiable 18 hours of Category I trauma- specific CME, or 18 hours of trauma-specific internal education every three years. **(3.32)** (Yes/No)
5. The EM liaison regularly attends 50% of the trauma QI meeting and has documented 50% attendance at the Trauma Peer Review Committee meetings. **(3.33)** (Yes/No)
6. List all emergency department physicians who treat trauma patients on Appendix #9.
7. Number of emergency physicians who treat major trauma patients?
8. Does the emergency department have a designated emergency physician director supported by an appropriate number of additional physicians to ensure immediate care for injured patients? (Yes/No)
9. Have all of the emergency physicians successfully completed the ATLS course at least once? (Yes/No) **(L1, L2)**
10. What percent of ED physicians are current in ATLS?
11. Are there any physicians who are not board certified in emergency medicine who work in the emergency department (Yes/No)
12. Are physicians that are non-boarded in emergency medicine current in ATLS? (Yes/No)
13. Does the trauma program use an internal education process? please describe:
14. Are emergency department physicians present in the emergency department at all times? (Yes/No) **(L1, L2)** If 'No', please explain:
 - a) What percentage of time is the emergency room not covered by an in-department physician?
 - b) If covered out of house, what is the expected response time of the physician to the ED?
 - c) What percentage of time is this achieved? Please have verification of this available.
15. Is there an emergency medicine residency program? (Yes/No) If 'Yes', is there supervision provided by an in-house attending emergency physician 24 hours per day? (Yes/No)
16. Are the roles of emergency physicians and trauma surgeons defined, agreed on, and approved by the director of trauma services? (Yes/No)
17. Are all of the emergency physicians who care for injured patients board-certified/eligible? (Yes/No) **(L1, L2)**
18. Does coverage of out of department emergencies such as “code blue” or ICU calls leave the emergency department without appropriate physician coverage? (Yes/No)
19. Have a copy of the ED nursing trauma flow sheet as Attachment #14 available on site at the time of the survey.
20. Describe the credentialing requirements for nurses who treat trauma patients in the ED:
21. Describe any trauma-related continuing education for nurses working in the ED:
22. Nursing staff demographics (use **whole numbers**):

- a) Average years of experience:
- b) Annual rate of turnover:

23. Have all nurses working in the Emergency Department who would attend to a critical trauma patient taken a Health Department approved trauma life support class? **(L1, L2)** (Yes/No) (see FAQ)

24. Extra certifications for ED nursing staff (use **whole numbers**):

- a) % TNCC:
- b) % PALS:
- c) % ACLS:
- d) % Audit ATLS:
- e) % CEN:
- f) % ATCN:
- g) % Other (enter description and percentage):

Medical Specialty Support (3.34)

1. For this Level I or Level II center, are all of the following medical specialists available? **(3.34)** (Yes/No) **(L1 L2)** (Check all available medical specialists)

- a) critical care medicine
- b) pathology
- c) internal medicine/pulmonary
- d) interventional radiology
- e) pediatrics
- f) cardiology
- g) nephrology

Surgical Specialty Support (L1) (3.35)

2. For this Level I center, are all of the following surgical specialists available? **(3.35)** (Yes/No) **(L1)** (Check all available surgical specialists)

- a) urology
- b) cardiac surgery with pump capability
- c) hand surgery with microvascular capability
- d) maxillofacial coverage
- e) plastics/reconstructive
- f) ophthalmology
- g) *obstetric and Gynecologic surgery

Surgical Specialty Support (L2) (3.36)

3. For this Level II center, are all of the following surgical specialists available 24/7? **(3.36)** (Yes/No) (Check all available surgical specialists) Do you have these specialist 90% of the time? (Yes/No) If 'No' List % of time each specialty is available.

- a) cardiac surgery _____%
- b) urology _____%
- c) maxillofacial coverage (any specialty, such as plastics, ENT, and OMFS) _____%
- d) ophthalmology _____%
- e) plastics/reconstructive surgery _____%

- f) *hand surgery _____%
- g) *obstetric and gynecologic surgery _____%

4. In this Level II facility, are specialists from internal medicine, pediatrics, nephrology, hematology, cardiology available on staff? (Yes/No) (L2)

5. In this Level II facility, are specialty consultants from internal medicine, pediatrics and radiology on call and promptly available? (Yes/No) (L2)

*not required (see FAQ)

Trauma Facility and Operations

4. **EMERGENCY DEPARTMENT**

Leadership (4.1- 4.2)

1. Does your emergency department (ED) have a designated emergency physician director supported by additional physicians to ensure immediate care for injured patients? (4.1) (Yes/No) If 'No', briefly explain.
2. Does your ED have an ED nursing liaison available to the trauma team? (4.2) (Yes/No)

Communication with ED Physicians and Nurses (4.3)

3. Does your ED have a method to communicate changes in trauma process to all staff members caring for injured patients? (4.3) (Yes/No), If 'Yes', briefly explain.

Physician, Mid-level Practitioners and Nursing Availability. (4.4 – 4.9) CME Requirements (4.10) & Trauma Education (4.11)

1. Does your ED have 24/7 in house emergency coverage by physicians and nurses? (4.4) (Yes/No)
2. Are there Board-certified/Board-eligible EM providers' recognized by ABEM, AOBEM and ABP in the ED 24/7? (4.5) (Yes/No) (L1) If 'No', briefly explain.
3. Do you have a tracking mechanism in place and reviewed in the QI program, when a ED physician leaves the ED uncovered in order to respond to an emergency in house? (4.6) (Yes/No) If 'No', briefly explain.
4. Are all EM physicians on the call panel regularly involved in the care of injured patients (4.7) (Yes/No)
5. Is there EM physician participation with the overall trauma QI program? (4.9) (Yes/No)
6. Do your EM physicians and mid-level practitioners have 18 hours of Category I trauma-specific CME, or 18 hours of trauma-specific internal education every three years? (4.10) (Yes/No), If 'No', briefly explain.

7. Are your EM physicians and mid-level practitioners current in ATLS? **(4.11)** (Yes/No), If 'No', are they Board-certified/Board-eligible recognized by ABEM, AOBEM and ABP? (Yes/No)

Trauma Nursing Education (4.12 – 4.14) and Nursing Trauma Continuing Education (4.14)

1. Are 80% of the ED nurses current in one of the trauma nursing courses (ATNC, TNCC or and ADH-approved equivalent course) including new hires within the first year of hire? **(4.12)** (Yes/No)
2. Are 80% of the ED nurses current in ACLS and PALS or ENPC? **(4.13)** (Yes/No)
3. Do all the ED nurses that assist with trauma resuscitations have 12 hours of trauma-specific nursing CE or 12 hours of trauma-specific internal education every three years? **(4.14)** (Yes/No)

Activation Criteria (4.15-4.21)

1. Do patients that don't meet the activation criteria undergo appropriate ED screening and evaluation as prescribed by the state protocol and CMS/EMTALA requirements? **(A3. Sec. 5 B., 3.)** (Yes/No)
2. Is the criteria for the highest level of trauma team activations clearly defined and evaluated by the QI program? **(4.15)** (Yes/No)
3. Are patients' ≤ 15 years of age who meets your criteria for the highest level of activation or is classified as either a major or moderate trauma patient under the triage protocol and requires transfer, transferred to a designated pediatric trauma center? **(4.16)** (Yes/No)
4. For the highest level of activation which of the following are included? **(4.17)** (highlight all that apply)
- a) confirmed hypotension (< 90 mmHg adults or age appropriate for children), attributed to trauma;
 - b) GCS < 9 with mechanism due to trauma (general surgeon response can be at the discretion of the ED physician);
 - c) respiratory distress attributed to trauma;
 - d) gunshot wounds to the neck, chest or abdomen;
 - e) transfer of a patients from other hospitals receiving blood or pressure support to maintain vital signs and;
 - f) any patient for whom the ED physician feels the highest level of activation is warranted.
5. Describe the number of levels and criteria for each level of response.
- a) number of levels of activation
 - b) describe the criteria for each level of activation (provide your activation criteria as Attachment # 16)
 - c) describe the policy for when the trauma team physician is expected to respond to the ED for the different levels of activation as well as when a surgeon is notified:
 - d) provide data from your facility on how often your internal policy for trauma team physician arrival and surgeon notification is adhered to. (This includes responding for trauma patients who are subsequently transferred to another facility)
6. Who has the authority to activate the trauma team? (check all that apply)
- a) EMS
 - b) ED Physician
 - c) ED Nurse
 - d) Trauma Surgeon

7.

Statistics for level of response		
Level	Number of activations	Percent of total activations
Highest		
Intermediate		
Lowest		
Direct Admits		
Total		

8. The highest level of activation is instituted by:

- a) group pager
- b) telephone page
- c) other, please define

9. Is your activation of the trauma team for the highest level based on pre-hospital notification when available? **(4.18)** (Yes/No)

10. Does your trauma center have a tiered activation system with variable response from hospital and physician personnel? **(4.19)** (Yes/No)

11. Can you demonstrate your under and over-triage rates based on your activation criteria? (Yes/No) **(4.20)**
Please provide as Attachment #16.

12. Does your facility have a mechanism in place to track the arrival times of the physicians who respond to a given level of activation? **(4.21)** (Yes/No)

13. Which trauma team members respond to each level of activation?
(please list all members – add lines as necessary)

Responder	Activation Level		
	Highest	Intermediate	Lowest

Trauma/Hospital Statistical Data

1. Total number (trauma and non-trauma) of emergency department (ED) visits for reporting year.
2. Total number of trauma-related ED visits for same reporting year, with ICD-9 code between 800.00 and 959.9
3. Total number of trauma registry eligible visits for the same reporting year.

4.

Total Trauma Admissions by Service (Include Pediatric admissions in section 3 through 5).	
Service	Number of Admissions
Trauma	
Orthopedic	
Neurosurgery	
Other Surgical	
Burn	
Non-Surgical*	
Total Trauma Admissions	

- a) Blunt Trauma Percentage:
- b) Penetrating Trauma Percentage:
- c) Thermal Percentage:
- d) Intentional Injury Percent:

5.

Distribution from ED for trauma patient admissions		
Disposition Total Number	Number	Number admitted to the General Surgery/Trauma Service
ED to OR		
ED to ICU		
ED to Floor		
Total		

6.

Injury Severity and Mortality				
ISS	Total Number of admissions	Admitted to General/Trauma Surgery Service	Deaths (within this category)	% Mortality for this category
0-9				
10-15				
16-24				
> or = 25				
Total				

(The totals in #4-6 should match. If they do not, please provide an explanation of the difference.)

7. Number of patients with an ISS > 9 admitted to non-surgical services.
How are non-surgical admissions reviewed by the PI program? Briefly describe.

8.

Number of Trauma Transfers	Air	Ground	POV	Total
Transfers In				
Transfers Out				

9. Is there a mechanism for direct physician to physician contact present for arranging patient transfers?
(Yes/No)

10. The decision to transfer an injured patient to a specialty care facility in an acute situation is based solely on the needs of the patient; for example, payment method is not considered. (Yes/No)

11. Has the facility gone on trauma bypass during the previous year? (Yes/No) If 'Yes', please complete Appendix #10

12. The percentage of total time that the facility was on trauma diversion? **Do not answer, will be verified during site survey**

13. Is the trauma surgeon involved in the bypass decision? (Yes/No) If 'Yes', briefly describe.

Helipad or Landing Zone (4.22)

1. Does the facility have a helipad or landing zone? (4.22) (Yes/No)

Trauma Image Repository (TIR) (4.23 – 4.24)

1. Are you able to send and receive images to and from TIR in the ED? (4.23) (Yes/No) If 'No', briefly explain.

2. Are you utilizing TIR when appropriate for expediting trauma patient care? (4.24) (Yes/No)

Roles and Responsibilities in the Trauma Bay (4.25)

1. Does the facility have written protocols for roles and responsibilities of all team members during a trauma team resuscitations? (4.25) (Yes/No) If 'Yes' please have available on site as Attachment #17 during the survey.

Safe transport of patients within and out of the ED (4.26)

1. Does the facility have a policy describing the level of resources required for the safe movement of patients out of the trauma bay within the ED or to other departments in the trauma center? (4.26) (Yes/No)

5. ESSENTIAL EQUIPMENT (SHALL INCLUDE BUT NOT LIMITED TO) (5.1 – 5.20)

1. Is the State required equipment present in the Emergency Department? (5.1 -5.20) (L1, L2) (Yes/No), to be verified during the site survey. Have a drop down list- see last page.

6. OPERATIVE SERVICES

Operating Room (OR) (6.1 – 6.5)

1. Number of operating rooms:

a) Briefly describe the location of the operating suite related to the ED and ICU.

2. Is the operating room adequately staffed and immediately available? (6.1) (Yes/No) (L1) (In a Level I trauma center, this criteria is met by having a complete operating team in the hospital at all times, with individuals who are dedicated only to the operating room.) (Level II facilities may satisfy this with one nurse in house and the remainder of the crew on call and promptly available)(L2)

3. Is the operating room team fully dedicated to the duties in the operating room and does not have

- functions requiring its presence outside the operating room? (Yes/No)
4. Does the operating room have all essential equipment? **(6.3)** (Yes/No)
 5. Does the trauma center have the necessary equipment for a craniotomy? (Yes/No) **(L1, L2)**
 6. Is there a mechanism for providing additional staff for a second operating room when the first operating room is occupied? **(6.4)** (Yes/No) If 'Yes', please describe
 - a) What is the time expectation of beginning a second case if the first team is occupied?
 7. Is the operating room adequately staffed and promptly available? (Yes/No)

(In Level II trauma centers, this criteria can be met by a team on call from outside the hospital, depending upon patient population served, pre-hospital communications, the volume of urgent cases, and other relevant factors. If an on-call team is used, availability of the operating room personnel and timeliness of starting operations must be evaluated by the hospital QI process and measures implemented to ensure optimal care.)
 8. Does the QI program evaluate operating room availability and delays when an on-call team is used? **(6.5)** (Yes/No)
 9. Does the hospital have operating room personnel in-house 24/7 to start an operation? (Yes/No) If 'No', provide the number of teams on call and expected response time.
 10. Describe how the backup team is called if the primary team is busy.
 - a) Describe your mechanism for OR availability for urgent trauma cases.
 - b) Describe your mechanism for OR availability for non-urgent trauma cases during daylight hours.
 11. Describe the mechanism for opening the OR if the team is not in-house 24/7.
 12. Are devices available for warming? (Yes/No)
 - a) Patient: (Yes/No)
 - b) Fluids: (Yes/No)
 - c) Rooms: (Yes/No)
 13. Is there a mechanism for documenting trauma surgeon presence in the operating room for all trauma operations? (Yes/No) If 'Yes', please describe:
 14. Does the trauma center have cardiopulmonary bypass **(L1, L2)** and an operating microscope **(L1)** available 24 hours per day? (Yes/No)

PACU (Post-Anesthesia Care Unit) (6.6 – 6.10)

1. Number of Beds?
2. Does the PACU have qualified nurses available 24 hours per day as needed during the patient's post-anesthesia recovery phase? **(6.6)** (Yes/No) **(L1, L2)**
3. If the PACU is covered by a call team from home, is there documentation by the QI program that PACU nurses are available and delays are not occurring? **(6.7)** (Yes/No) If 'Yes', please describe:
4. Briefly describe credentialing requirements for nurses who care for trauma patients in PACU.
5. Extra certifications for PACU staff (Use **whole numbers**).

- a) % TNCC:
- b) % ACLS :
- c) % PALS:
- d) % Audit ATLS:
- e) % CCRN:
- f) % CPAN:

6. Does the PACU have the necessary equipment to monitor and resuscitate adult and pediatric patients? **(6.8) (L1, L2)** (Yes/No)
7. Does the QI program ensure that the PACU has the necessary equipment to monitor and resuscitate patients? **(6.9)** (Yes/No) If 'Yes', please describe:
8. Does the PACU serve as ICU overflow? **(6.10)** (Yes/No) Do the nurses in the PACU have similar qualifications as the ICU nurse for the care of trauma patients? **(6.10)** (Yes/No)

7. INTENSIVE CARE UNIT

Intensive Care Unit (ICU) (7.1 – 7.13)

1. ICU Beds.
 - a) Total ICU beds: (Includes medical, coronary, surgical, pediatric, etc)
 - b) Total Pediatric:
 - c) Total Surgical:
2. Do you have a step-down unit? (Yes, No)
3. Who is the surgical director of the ICU? Name:
4. Are there physicians, properly trained, experienced and credentialed available to the injured patient in the ICU 24/7? **(7.1)** (Yes/No)
5. Is there a provision for immediate, in-house 24/7 physician response to a patient emergency? **(7.2)** (Yes/No) If 'Yes', please describe:
6. Does the surgical director or coordinator of the ICU have the appropriate training and experience for the role (board certified in critical care or has equivalent training)? (Yes/No)
7. Does the trauma center have a surgical director or co-director for the ICU who is a core surgeon, who is responsible for setting policies and administration related to trauma ICU patients? **(7.3)** (Yes/No)
8. Has the surgical director of the ICU obtained critical care training during residency or fellowship and does he/she have expertise in peri-operative and post-injury care of injured patients? (Yes/No) If 'Yes', please explain:
9. Does the surgical director of the ICU have added qualification in surgical critical care from the American Board of Surgery? (Yes/No)
10. Is the surgical director or the surgical co-director a surgeon, who is credentialed by the hospital to care for ICU patients, and participate in the QI process? **(7.3)** (Yes/No)
11. Does coverage of emergencies in the ICU leave the ED without an appropriate physician coverage plan? **(7.4)** (Yes/No)

12. Is there a surgically directed ICU physician team? (Yes/No) If 'Yes', please describe the composition and function of the team:
13. Does the trauma surgeon remain in charge of patients in the ICU? (7.5) (Yes/No)
14. Do physicians covering critically ill trauma patients respond rapidly to urgent problems as they arise? (Yes/No) If 'Yes', please describe:
15. Does the trauma service retain the responsibility for patients and coordinate all therapeutic decisions appropriate for its level? (Yes/No) Please describe:
16. Is the trauma surgeon kept informed of and concurs with major therapeutic and management decisions made by the ICU team? (Yes/No)
- 17. Is there in-house physician coverage for the ICU at all times? (Yes/No) (L1, L2)**
18. Does the QI program review admissions and transfers of critically ill patients to ensure appropriateness? (Yes/No)
19. Describe how quality of care issues are resolved in the ICU.
20. Briefly describe the credentialing requirements for nurses who care for trauma patients in the ICU.
21. Nursing staff demographics:
 - a) Average years of experience:
 - b) Annual turnover %:
22. Extra certifications for ICU Nursing Staff (use whole numbers):
 - a) % TNCC:
 - b) % PALS:
 - c) % ACLS:
 - d) % Audit ATLS:
 - e) % CCRN:
 - f) % CPAN:
23. Do nurses caring for trauma patients have appropriate initial training and do they maintain competency in the care of injured patients? (7.6) (Yes/No)
24. Is a qualified nurse available 24 hours per day to provide care during the ICU phase? (7.7) (Yes/No) (L1, L2)
25. The patient/nurse ratio averages 2:1 on a shift for critically ill patients in the ICU. (7.8) (Yes/No) (L1, L2) If 'No', please describe:
- 26. Does the ICU have the necessary equipment to monitor and resuscitate patients? (Yes/No) (7.9) (L1, L2) to be verified during the site survey**
27. Are there are written protocols for declaration of brain death? (7.10) (Yes/No)
28. If ICU patients are held in other locations (PACU, ED) due to temporary lack of bed space, do all requirements for the ICU apply in those locations? (7.11) (Yes/No)
- 29. Is intracranial pressure monitoring equipment available? (7.12) (Yes/No) (L1, L2)**

30. Is there intracranial pressure monitoring equipment in the Level II or III center that admits neurotrauma patients? **(7.12)** (Yes/No)
31. Does an internal Clinical Practice Management Guidelines (CPMG) for the care of the patient with a severe traumatic brain injury exist? (see the ADH website for CPMGs) **(7.13)** (Yes/No) (see FAQ) If 'Yes', please provide as Attachment #18.
32. Is compliance with the internal CPMG for traumatic brain injury tracked in the QI meetings? (Yes/No) (see FAQ) Please provide as Attachment #19.
33. Is acute hemodialysis available? **(L1)** (Yes/No)
34. Are nutritional support services available? (Yes/No)

8. OTHER TRAUMA CARE AREA AND SERVICES

A. **Pediatric Care (8.1-8.3)** - To be filled out by all facilities that admit any patients under the age of 15 years.

1. Define the age of the pediatric patient at your institution.
2. This question: only list those patients **younger** than 15 years of age

Pediatric Trauma Admissions	
Service	Number of Admissions
Pediatric Surgery	
Orthopedic	
Neurosurgical	
Other Surgical	
Non-Surgical	
Total Trauma Admissions	

- 3.

Injury Severity and Mortality						
ISS	Total Number of admissions	Total Number of admissions < 15years	Admitted to Trauma/Pediatric Surgery	Admitted to Non-Surgical	Deaths (from total)	%Mortality (from total)
0-9						
10-15						
16-24						
>25						
Total						

4. Did your trauma program admit 100 or more injured children younger than 15 years of age during your reporting year? **(8.1)** (Yes/No)
 - a) If 'Yes', you admitted more than 100 injured children', are the trauma surgeons credentialed for pediatric trauma care by the hospital's credentialing body? (Yes/No)
 - b) If 'Yes', you admitted more than 100 injured children' is there:

- i. A pediatric emergency area (Yes/No)
 - ii. A pediatric intensive care area (Yes/No)
 - iii. Appropriate resuscitation equipment (Yes/No)
 - iv. A pediatric-specific trauma QI program (Yes/No)
5. If '**No**', you did not admit more than 100 injured children', does your trauma program review the care of injured children through the QI program? **(8.2)** (Yes/No)
6. Is there a separate pediatric trauma team? (Yes/No) If '**Yes**', briefly describe.
7. Who is the director of the pediatric ICU?
8. Who is the surgical director of the pediatric ICU?
9. Does the Surgical Director of the PICU have additional certification in surgical critical care?(Yes/No)
10. Which physician maintains primary responsibility for the care of the patient in the PICU?
- a) Surgeon
 - b) Pediatric ICU intensivist
 - c) Other
 - d) If '**Other**', please explain.
11. Number of physicians with additional pediatric training (Fellowship):
- a) Pediatric Surgery:
 - b) Neurosurgery:
 - c) Orthopedic Surgery:
 - d) Emergency Medicine:
12. Are nurses caring for pediatric patients properly trained and equipped? **(L1, L2)** (Yes/No) Please document the training if present.
- 13.** Does your facility have pediatric resuscitation equipment available in all pediatric care areas? **(8.3)** (Yes/No)
14. Nursing staff demographics. (use **whole numbers**)
- a) Average years of experience:
 - b) Annual turnover:
15. Extra certifications for PICU nursing staff:
- a) % TNCC:
 - b) % PALS:
 - c) % ACLS:
 - d) % Audit ATLS:
 - e) % CCRN:
 - f) % CPAN:
16. Pediatric patients admitted with splenic injuries during the reporting year
- a) Number of pediatric patients (<15 years of age) admitted with splenic injury for the reporting year.
 - b) Number of these patients who underwent Splenectomy/Splenorrhaphy.
 - c) Number managed without intervention

17. During the reporting year:

Grade of Spleen Injury (for Pediatric)	# of Splenic Injuries	# of Undergoing (IR) Embolization	# of Splenorrhaphy	# of Splenectomy
Grade I				
Grade II				
Grade II				
Grade IV				
Grade V				
Totals				

Geriatric Care/Special Needs (8.4 – 8.5) - to be filled out by all facilities that admit patients age >65 years/special needs (non-burn)

1. Geriatric Trauma Admissions, (age 65 or >) during the reporting year:

ISS	Number	Admit to Trauma Service	Admit to Non-Surgical Service	Death of Total	% of Total Mortality (from admitted)
0-9					
10-15					
16-24					
> or = 25					
Total					

2. Number of patients admitted after a fall from standing height. (Same level falls do not have to be included in the trauma registry.)

3. If the total number of non-surgical admissions is > 10% - these cases must be reviewed to make sure they are appropriate admissions to medicine, and if not it must be documented in the PI process)

4. Are patients with isolated hip fractures included in your registry data? If 'Yes', please describe:

5. Does the hospital have an end of life policy for patients?

6. Does the facility have an internal CPMG for the admission and care of geriatric/special needs patients (age > 65 years). (8.4) (Yes/No) If 'Yes', please provide as Attachment #20. (see the ADH website for CPMGs)

7. Is compliance with the internal CPMG for care of geriatric/special needs patients (age >65 years) tracked in the QI meetings? (Yes/No) (see FAQ) Please provide evidence as Attachment #21 (The protocol may exclude patients who are on aspirin only.) (see the ADH website for CPMGs)

8. Is compliance with the internal CPMG for patients with head injuries who are on anticoagulants, including a component addressing the rapid reversal of such agents when possible tracked in the QI meetings? (Yes/No) (see FAQ) (see the ADH website for CPMGs) (8.5) Please provide as Attachment # 22.

Burn Patients

1. Number of burn patients admitted during the reporting year.

2. Is there a separate burn team? (Yes/No)
3. Is the institution a verified burn center? (Yes/No)
4. Number of burn patients transferred for acute care during reporting year.
 - a) Transferred In:
 - b) Transferred Out:
5. Does the facility have transfer arrangements for burn patients? (Yes/No) **(L1, L2)**

Vertebral Column Injuries

1. Number of vertebral column injuries treated during the reporting year:
2. How many of these patients had neurological deficits?
3. Number of patients with acute vertebral column injury transferred during the reporting year?
 - a) Transferred In:
 - b) Transferred Out:
4. Are there any transfer arrangements for acute vertebral or spinal cord injury patients? (Yes/No)

Hand Surgery

1. Does the facility have a hand service? (Yes/No) **(L1)**
2. Does the facility ever perform microvascular procedures? (Yes/No)
3. How many were performed in the last year? (trauma and non-trauma)
4. Has the facility ever performed a re-implantation for trauma? (Yes/No)
5. How many re-implantations for trauma were attempted in the past year?
6. Number of hand patients transferred into and out of your institution in the last year?
7. List the facilities where your facility has transferred hand patients.

Laboratory Services (8.6 – 8.8)

1. Are laboratory services available 24 hours per day for the standard analysis of blood, urine, blood gases and pH determination and other body fluids, including micro sampling for pediatric patients when appropriate? **(8.6)**
(Yes/No)
2. Is there 24 hour day availability for coagulation studies, blood gases, and microbiology? **(8.7)** (Yes/No)
(L1, L2)
3. Is there immediate access to the following:
 - a) Cryoprecipitate
 - b) FFP
 - c) Platelets
 - d) Factor VIII

- e) Factor IX
- f) Factor VII a

Describe further if needed:

4. Does your facility have thromboelastography? **(8.8)** (Yes/No) **(L1)**

Blood Bank/Ability to Transfuse Blood (8.9 – 8.13)

1. Source of blood products is
 - a) hospital processed
 - b) regional blood bank, name and location:
2. Is the blood bank capable of blood typing and cross matching? **(8.9)** (Yes/No) **(L1, L2)**
3. Does the blood bank have an adequate supply of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, and appropriate coagulation factors to meet the needs of injured patients through a regional source and tracked through the QI program? **(8.10)** (Yes/No)
4. Does the MTP strive for a 1:1:1 transfusion ration (Cells: Products: Platelets)? (Yes/No)
5. Does the facility have universal donor blood immediately available? **(8.12)** (Yes/No)
6. Does your facility have an internal protocol for the rapid reversal of anticoagulants when available? **(8.13)** (Yes/No) (see FAQ) Please provide as Attachment # 23 (see the ADH website for CPMGs) Show tracking of compliance as Attachment #24.
7. Does the facility have a massive transfusion protocol (MTP)? **(8.11)** (Yes/No) If 'Yes', provide as Attachment # 25.
8. What is the average turnaround time for?
 - a) Type specific blood (minutes)
 - b) Full cross-match (minutes)

Radiology (8.14 – 8.24)

1. Are radiologists promptly available, in person or by teleradiology, when requested for the interpretation of radiographs, performance of complex imaging studies, **AND** interventional procedures? **(8.14)** (Yes/No) If 'No', please describe:
2. Are X-ray technologists promptly available 24/7 upon activation of the trauma team? **(8.15)** (Yes/No)
3. Is diagnostic information communicated in a written form and in a timely manner? **(8.16)** (Yes/No)
4. Is critical information verbally communicated to the trauma team? **(8.17)** (Yes/No)
5. Are final reports timely and do they accurately reflect communications, including changes between preliminary and final interpretations? **(8.18)** (Yes/No)
6. Are changes in interpretation monitored through the QI program? **(8.19)** (Yes/No)

7. Is there a radiologist who is appointed as liaison to the trauma program? (Yes/No) If 'Yes', what is his/her name?
8. Does the Radiology department participate in the trauma QI program by at least being involved in protocol development and trend analysis that relate to diagnostic imaging? (Yes/No) Please describe:
9. Does the radiology department report on over-read errors? (Yes/No)
10. Is there adult and pediatric resuscitation and monitoring equipment available in the radiology suite? (Yes/No)
11. The trauma center has policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to and while in the radiology department. **(8.20)** (Yes/No) Please describe:
12. Are conventional radiography and computed tomography available 24 hours per day? **(8.21)** (Yes/No)
13. Is there an in-house radiographer (x-ray tech) 24 hours per day? (Yes/No) **(L1, L2)**
14. Is there a CT technician available in hospital 24/7? (Yes/No) **(L1, L2)**
15. When the CT technologist responds from outside the hospital, does the QI program document the response times? (Yes/No) If 'Yes', please briefly describe:
16. Who provides Focused Assessment with Sonography for Trauma (FAST) for trauma patients? (Check all that apply)
 - a. Radiology
 - b. Surgery
 - c. ED Physician
 - d. None
17. Are radiologists in-house 24/7? (Yes/No) If 'No', who reads x-rays after hours?
18. If an error is identified on initial interpretation, what is the policy for notifying the physician?
19. What are the afterhours response times for starting the following procedures?
 - a) Angiography
 - b) MRI
 - c) CT (If CT technician is not in-house at a Level II or III center, Level I must be in-house)
20. Are conventional catheter angiography and sonography available 24 hours per day? (Yes/No) **(L1, L2)**
21. Is MRI and interventional radiology capability available 24 hours per day? **(8.22)** (Yes/No)
22. Do radiologists over-read trauma films sent from referring facilities and render written reports when requested? **(8.23)** (Yes/No)
23. Is the TIR utilized to expedite care of patients being transferred in and out when appropriate? **(8.24)** (Yes/No)

Respiratory Therapy Services (8.25)

1. Is a respiratory therapist available to care for trauma patients 24 hours per day? **(8.25)** (Yes/No)

Rehabilitation Services (8.26 – 8.31)

1. Who is the medical director of the rehabilitation program? Name:

2. Is this physician board certified? (Yes/No) If 'Yes', what specialty?

3. Does the facility have an inpatient rehabilitation unit? (If 'No', see question 4 below) (Yes/No)

- a) Number of inpatient beds:
- b) CARF approved (Yes/No)

4. (If the answer to #3 was 'No, the facility doesn't have a rehabilitation unit') Are rehabilitation services available through a transfer agreement? (Yes/No) **(L1, L2)**

5. Describe the role and relationship of the rehabilitation services to the trauma service. (Include where and when rehabilitation begins)

6. Are rehabilitation consultation services, occupational therapy, speech therapy, physical therapy, and social services available during the acute phase of care? **(8.26)** (Yes/No)

7. Is protocol development and consultation available from a physician with training in physical medicine and rehabilitation or with a physician whose practice focuses on rehabilitation? **(8.27)** (Yes/No)

8. Is there a pediatric rehabilitation service? (Yes/No) If 'Yes', please describe:

9. What system is used to measure rehabilitation patient outcome? (check all that apply)

- a) FIM
- b) GOS
- c) Rancho Los Amigos
- d) DRS

10. Are Protocols in place for timely consultation with rehabilitation services if they do not exist within the facility? **(8.28)** (Yes/No)

11. Are transfer agreements in place for transfer of injured patients if an in-house facility does not exist? **(8.29) (L1, L2)** (Yes/No)

12. Please describe barriers (if they exist) to moving patients to rehab.

13. Estimate additional patient days spent in your acute care facility because of lack of rehabilitation beds. Please provide justification for estimate.

14. Are patients with spinal cord injury reported to the Spinal Cord Commission within five business days of patient arrival? **(8.30)** (Yes/No)

15. Are functional outcome measurements made on discharge obtained per institutional protocol until such time when there are state protocols adopted? **(8.31)** (Yes/No)

Therapy Services (8.32- 8.34)

1. Which of the following services does the hospital provide?
 - a) Physical therapy (8.32)
 - b) Occupational therapy (8.33)
 - c) Speech therapy (8.34)

Social Services (8.35)

1. Is there a social worker team actively involved with injured patients?
(Yes/No) If 'Yes', please describe:
2. Is there a dedicated social worker for trauma service? (Yes/No) If 'No', what is the commitment from Social Services to the trauma patient?
3. Describe the support services available for crisis intervention and individual/family counseling.
4. Do you provide social work, case management, chaplain service and child life services – if the pediatric hospital and hospital admitting more than 100 pediatric patients annually)? (8.35) (Yes/No)

9. EFFECTIVE TRANSFER OF PATIENTS

Coordinate All Trauma Transfers through the ATCC (9.1-9.3)

1. Are your transfers coordinated through the ATCC? Compliance shall be 95% of the aggregate over the reporting period. (9.1) (Yes/No) What percentage of time? Is the decision to accept or not accept a patient to the facility made in 10 minutes of contacting the ATCC at least 90% of the time? (Yes/No)
2. Do you track the denials for acceptance of transfers in your trauma program's QI process? (9.2) (Yes/No)
3. Do you track all diversions (Bravo, Charlie Temp, and Delta) in your programs QI process? (9.3) (Yes/No)

Appropriate Documentation of Patient Records for Transferred Patients (9.4-9.6)

1. Do you receive a copy of the patient's pertinent medical records along with radiographic studies from the transferring facilities? (by TIR when available or readable CD when TIR is not available) (9.4) (Yes/No) What percentage of time?
2. Are the final readings by the referring facility's radiologists sent to the receiving facility as soon as available when requested by the receiving facility? (9.5) (Yes/No)
3. Are copies of original run sheets and readings of the X-ray studies sent to the receiving hospital no later than the next business day? (9.6) (Yes/No)

Well-defined Transfer Plans are Essential (9.7)

1. Is the well-defined transfer plan codified in the facility? (9.7) (Yes/No) Please have as Attachment # 26.
2. Is the well-defined transfer plan approved by the Trauma Program Operation Review Committee, and disseminated to the ED physicians and surgeons in the program? (Yes/No)

Teletrauma (9.8)

1. Does your trauma center utilize telemedicine when requested to do by other trauma centers or the ATCC? (A3 Sec.5.,B., 6.) (Yes/No)
2. Does the hospital have collaborative agreements with referral trauma centers and demonstrate successful use? (9.8) (Yes/No)

10. QUALITY IMPROVEMENT AND PEER REVIEW PROCESS

Quality Improvement (QI (10.1- 10.2))

1. Provide a description of the two committees with trauma QI involvement, including Multidisciplinary Peer Review and Multidisciplinary Process Improvement and Quality in Appendix #11a &11b.
2. Does the trauma center have a clearly defined QI program for the trauma patient population? (10.1) (Yes/No)
3. Does TMD (or his/her respective physician designee), the TPM (or his/her respective nurse designee), and specialty representatives in EM, orthopedics, neurosurgery, anesthesia, critical care, and radiology attend at least 50% of the Trauma Peer Review Committee meetings? (10.2) (Yes/No)
4. Describe the Quality Improvement Plan. (L1, L2)
5. Describe how the QI problems are identified, tracked, documented and discussed.
6. Describe the staffing and administrative support for the QI process.
7. How do you track trauma patients that are not admitted to the trauma service?
8. How is loop closure (resolution) achieved?
9. Who is responsible for loop closure of both system and peer review issues?
10. List 2 examples of loop closure involving peer review issues during the reporting year.
11. List 2 examples of loop closure involving system issues during the reporting year.
12. How is trauma PI integrated with the overall hospital QI program?
13. List at least 3 pediatric specific QI filters if your hospital treats 100 or more injured children less than 15 years of age.
14. Are nursing issues reviewed in the trauma QI Process? (Yes/No) (L1, L2) If 'No', briefly describe how nursing units ensure standards and protocols are followed.
15. How many trauma deaths were there during the reporting year? (Include ED deaths, and in-house deaths.)
 - a) Total:
 - b) Deaths in ED:
 - c) In-hospital (include OR):
 - d) DOA:
16. List the number of deaths categorized as preventable, non-preventable, and possibly preventable.

- a) Non-preventable:
- b) Possibly preventable:
- c) Preventable:

17. Autopsies have been performed on what percentage of the facility's trauma deaths?
18. How are the autopsy findings reported to the trauma program?
19. Are all deaths presented and discussed in the multi-disciplinary trauma conference? **(L1, L2)**
(Yes/No)

Audit Filters (10.3-10.8)

1. Does your trauma center use the current mandatory Arkansas State QI Audit Filters? (See FAQ) **(10.3)**
(Yes/No)
2. Does your trauma center track and trend the cases that trigger one of the state audit filters? **(10.4)**
(Yes/No)
3. Do identified problem trends undergo review in the multidisciplinary QI with action plans generated, documented, and followed by loop closure? **(10.5)** (Yes/No)
4. Are orthopedic, neurosurgical and geriatric/special needs-specific audit filters tracked? **(10.6)** (Yes/No)
5. Does your trauma center admit more than 10% of admitted trauma patients to a non-surgical service? **(10.7)** (Yes/No), If 'Yes', do you:
 - a) run a Trauma Registry report of all patients admitted to a non-surgical service;
 - b) determine the number of non-surgical admits (NSAs) that had an appropriate surgical service consult;
 - c) determine the number of NSAs from same level falls;
 - d) determine the number of NSAs resulting from drowning and hangings; and,
 - e) determine the number of NSAs with ISS \leq 9.
6. Do all NSA patients that do not meet criteria b-e (from above), reviewed in the QI meeting for appropriateness of admission to a non-surgical service? **(10.8)** (Yes/No)

Trauma Chart Reviews (10.9-10.11)

1. Does your trauma center review charts on all trauma patients meeting state Trauma Registry inclusion criteria, including deaths, unexpected outcomes, all pediatric patients, and other patients who meet state QI audit filter criteria? **(10.9)** (Yes/No)
2. Does your trauma center's review of the entire patient's encounter with the trauma system, from EMS through hospital treatment and discharge, transfer, or death, with identification of opportunities for improvement in any and all aspects of care? **(10.10)** (Yes/No)
3. Are identified opportunities for improvement followed by an action plan and loop closure documenting the effect of the action plan? **(10.11)** (Yes/No)

Trauma – Specific QI Program (10.12 – 10.28)

1. Is your program a structured process, led by the trauma program, to demonstrate continuous evaluation to improve care for injured patients that is coordinated with the hospital-wide QI program? (10.12)(Yes/No)
2. Does your trauma QI program have the following components? **(10.12)**
 - a) a reliable method of identifying trauma patients presenting to and/or admitted to the facility; **(10.13)** (Yes/No)
 - b) the infrastructure to abstract patient information from the hospital and prehospital records in order to identify quality of care issues that is reliable and consistently obtains valid and objective information necessary to identify opportunities for improvement; **(10.14)** (Yes/No)
 - c) a clearly defined set of data points and audit filters to be abstracted from the patient's record; **(10.15)** (Yes/No)
 - d) proper identification and ICD-9, ICD-10 (or newer version), and AIS coding of all injuries; **(10.16)** (Yes/No)
 - e) selection of facility-specific process and outcome measures that are related to patient care and can be benchmarked to national standards; **(10.17)** (Yes/No)
 - f) a functional trauma registry that supports the QI program; **(10.18)** (Yes/No)
 - g) validation of data abstraction, injury identification, and ISS coding is mandatory; **(10.19)** (Yes/No)
 - h) a multidisciplinary review process that occurs at frequent, regular intervals and analyzes trauma care in the institution in order to identify opportunities for improvement; **(10.20)** (Yes/No)
 - i) multidisciplinary involvement as evidenced by both meeting an attendance threshold and submission of case reviews in specialty areas; **(10.21)** (Yes/No)
 - j) the results of this multidisciplinary review process leads to corrective actions that are documented which may include a letter to inform the responsible party with or without response, an educational offering related to the identified issue, a policy change or development of new policy, counseling of the responsible person, or removal from the trauma call panel; **(10.22)** (Yes/No)
 - k) when a consistent problem or inappropriate variation is identified, corrective actions are taken and documented; **(10.23)** (Yes/No)
 - l) tracking and trending of identified performance issues is necessary to ensure compliance to process changes; **(10.24)** (Yes/No)
 - m) the TMD and TPM shall be empowered by the hospital's administration to address issues that involve multiple disciplines and perform loop closure for issues identified; **(10.25)** (Yes/No)
 - n) the TMD and TPM shall be aware of current national standards of trauma care and hold their call panel physicians to this expectation; **(10.26)** (Yes/No)
 - o) creation of protocols, guidelines, or pathways based on the findings from multidisciplinary meetings; and, **(10.27)** (Yes/No)
 - p) the QI program reviews the appropriate referral of patients to the regional organ procurement organization and subsequent organ donation rate. **(10.28)** (Yes/No)

1. This process is led by the TMD and the TPM with representation from all core surgeons, specialties, and services, participates on the trauma team at the facility, which is authorized by the facility to establish, review, and improve the care of the injured? **(10.29)** (Yes/No) Does the TMR process include: (Yes/No)
 - a) establish trauma treatment protocols;
 - b) oversee compliance with these protocols;
 - c) identify opportunities for improvement;
 - d) develop plans for resolution and ensures improvement of identified issues;
 - e) monitor loop closure of issues identified in the process;
2. Does your multidisciplinary process consist of two distinct parts? (Trauma Program Operations Review Committee; and Trauma Peer Review Committee) **(10.30)** (Yes/No)
3. Are the minutes of these discussions recorded separately? **(10.31)** (Yes/No)
4. Does the trauma center's peer review portion report through the hospital's trauma QI program to assure protection and continuity of practitioner data for credentialing processes? **(10.32)** (Yes/No) Is the method in which the peer review meeting is conducted compliant with state and federal law to ensure confidentiality and patient protection? (Yes/No)
5. Do meetings occur with a frequency that ensures timely resolution of issues identified through the trauma QI program? **(10.33)** (Yes/No)
6. Are attendance by the ED director or EM liaison, TMD, all core surgeons, specialties (including, but not limited to, neurosurgical, orthopedic, radiology, and critical care liaisons), and services required and do they attend at least 50% of the Trauma Peer Review Committee meetings? **(10.34)** (Yes/No)
7. In circumstances when attendance is not mandated (non-core members), does the TMD ensure dissemination of information from the trauma peer review committee? **(10.35)** (Yes/No) Does the TMD document the dissemination of information from the trauma peer review committee? (Yes/No)
8. Is there a method to identify injured patients, monitor the provision of health care services, make periodic rounds, and hold formal and informal discussions with individual practitioners? (Yes/No) If 'Yes', please describe:

11. RESPONSIBILITY TO THE ARKANSAS DEPARTMENT OF HEALTH (ADH)

Trauma Registry Data and Submission to the Trauma Registry (11.1-11.4)

1. What registry program does the hospital use? **Do not answer, will be verified during site survey.**
2. Are trauma registry data collected and analyzed? (Yes/No)
3. Does your facility have any state or regional affiliation for the trauma registry? **Do not answer, will be verified during site survey.**
 - a) state
 - b) regional
4. Is trauma data submitted to the Arkansas Trauma Registry? (Yes/No)

- a) date of most recent submission to the State registry:
5. Does the trauma registry support the quality improvement process? (Yes/No)
 - a) describe how the registry is used in the quality improvement process to identify and track opportunities for improvement?
 6. Is abstracted charts of injured patients who meet the inclusion criteria entered into the Trauma Registry and closed within 60 days of discharge? **(11.1)** (Yes/No)
 7. For what percentage of patients is the trauma registry data entry completed within two months of discharge?
 8. Data is submitted into the Trauma Registry when requested by the ADH? **(11.2)** (Yes/No)
 9. When submitting your designation site survey pre-review questionnaire, all trauma patient records were submitted to the Trauma Registry even if the submission was not within the standard reporting time period? **(11.3)** (Yes/No)
 10. What are the selection criteria for patient entry into the trauma registry?
 11. Does the trauma program ensure that trauma registry confidentiality measures are in place? (Yes/No)
If 'Yes', please explain:
 12. Are there strategies for monitoring data validity for the trauma registry? (Yes/No) If 'Yes', please explain:
 13. Does the facility assign an ISS to all patients in the registry (Yes/No)
 14. Does the facility use trauma registry data to show trend analysis and protocol compliance? **(11.4)** (Yes/No)

Accuracy of the Trauma Data Submitted to the Trauma Registry (11.5-11.6)

1. Is the facilities' documentation of data complete and accurate for all trauma patients meeting state Trauma Registry inclusion criteria. **(11.6)** (Yes/No)
2. What is the accordance between the hospital ISS coding & Trauma Registry? **Do not answer, will be verified during site survey.**

Participation in Trauma Regional Advisory Council (TRAC) (11.7-11.8)

1. Does your TMD or physician designee participate in at least 50% of the required (to be determined by the TRAC) regional meetings? **(11.7)** (Yes/No)
2. Does and TPM or nurse designee participate in at least 50% of the required (to be determined by the TRAC) regional meetings? **(11.8)** (Yes/No)

Active Participation in the Regional and State OL Review Process (11.9-11.12)

1. Does the TMD (or his/her respective physician designee) and TPM (or his/her respective nurse designee) attend 50% of the regional peer review meetings? **(11.9)** (Yes/No)

2. Does the TMD (or his/her respective physician designee) and TPM (or his/her respective nurse designee) attend 100% of the regional and state peer review meetings when the facility's cases are discussed? **(11.10)** (Yes/No)
3. Does the trauma center provide adequate clinical patient information for meaningful discussion in the protected QI meetings sanctioned by the ADH? **(11.11)** (Yes/No)
4. Does the Trauma Program provide data and participate meaningfully in the regional and state QI meetings as required by the chair of the committee, TRAC MD, or state TMD? **(11.12)** (Yes/No)

Community Outreach and Education in Trauma-specific Opportunities Sponsored by the Hospital (11.13)

1. Is this hospital a teaching facility? (Yes/No) If 'Yes', are the requirements of the Residency Review Committee met? (Yes/No)
2. Is the trauma center engaged in public and professional education? (Yes/No) **(L1, L2)**
3. Does the trauma center provide some means of referral and access to trauma center resources? Example: 1-800 number or trauma web site? (Yes/No) If 'Yes', please describe.
4. Does the facility provide opportunities for staff and community physicians, nurses, allied health personnel, and prehospital providers to receive CME credits? **(11.13)** (Yes/No)
5. Does this trauma center provide or participate in an ATLS course at least annually? (Yes/No) If 'Yes' how many courses were provided during the reporting period:
 - a) Number of provider courses:
 - b) Number of instructor courses:
 - c) Number of refresher courses:
6. Does the hospital provide a mechanism for trauma-related education for nurses involved in trauma care? (Yes/No) **(L1, L2)**
7. Is there any hospital funding for physician, nursing or EMS trauma education? (Yes/No) **(L1, L2)** If 'Yes', briefly describe.
8. Describe the trauma education program; including examples (list no more than 3 examples of each) for:
 - a) Physicians
 - b) Nurses
 - c) Pre-hospital providers
9. Describe the hospital's outreach programs for trauma such as 1-800 referral line, follow-up letters, and community hospital trauma education. (Yes/No)

Accredited Residency Education Program (L1) (11.14)

1. Does your facility provide a continuous rotation in trauma care for residents (PGY2 or higher) that is part of an accredited (adult or pediatric) graduate medical education program in any of the following disciplines: general surgery, orthopedic surgery, EM, or neurosurgery; or support an acute care surgery fellowship consistent with the educational requirements of the American Association for the Surgery of Trauma? **(11.4)** (Yes/No) If 'No' explain.
2. Does the facility have a trauma or surgical critical care fellowship? (Yes/No) If 'Yes', briefly describe

13. **TRAUMA RESEARCH**

Trauma Research (L1) (12.1 – 12.3)

1. Is there a trauma research program? (Yes/No) (L1)
2. Does your facility have a minimum of 10 peer-reviewed articles published or accepted in journals included in Index Medicus in three years or four peer-reviewed articles published in journals included in index Medicus/Medline in 3 years? **(12.1)** (Yes/No) Please have articles available for viewing during survey as Attachment #27
3. What is the number of ongoing research projects with IRB approval?
 - a) List research projects with ongoing IRB Approval.
4. Does the hospital have any trauma-related grants? (Yes/No) If **'Yes'**, how many?
5. Were all of the above publications from work related to this trauma center? (Yes/No) If **'No'**, please explain:
6. Does the facility's research represent work related to the trauma center or as part of a national research consortium? **(12.2)** (Yes/No)
7. Do articles include authorship or co-authorship by a member of the general surgery trauma team, and at least two of the following six disciplines: EM, neurosurgery, orthopedics, radiology, anesthesia, and rehabilitation? **(12.3)** (Yes/No)
8. Which disciplines had authorship or co-authorship of at least one of the articles?
(Check all that apply)
 - a) Emergency Medicine
 - b) Neurosurgery
 - c) Orthopedics
 - d) Radiology
 - e) Anesthesia
 - f) Rehabilitation
9. Are any of the following scholarly activities performed in the institution? Please describe each if applicable to a member of the trauma team.
 - a) leadership in major trauma organizations:
 - b) peer-reviewed funding:
 - c) evidence of dissemination of knowledge:
 - d) display of scholarly application of knowledge:
 - e) participating as a visiting professor or invited lecturer at national or regional trauma conferences:
 - f) support of resident participation in institution-focused scholarly activity.
 - g) mentorship of residents and fellows
10. Does the administration of the trauma center demonstrate support of the research program (Yes/No) If **'Yes'**, please describe:

14. OTHER RESPONSIBILITIES OF COMPREHENSIVE TRAUMA CENTERS

Injury and Violence Prevention (13.1 – 13.4)

1. Does the trauma center have an Injury Prevention and Violence Prevention Coordinator with a demonstrated job description and salary support? (Yes/No) Please have the job description of the Prevention and Violence Prevention Coordinator available on site as Attachment # 28 at the time of the survey.
2. Who is the designated injury prevention coordinator?
3. Does the trauma center demonstrate the presence of prevention activities that center on priorities based on local data? (Yes/No)
4. List and briefly summarize no more than three injury prevention programs. Include any state, regional, or national affiliations for the injury prevention programs. Have injury prevention program information available on-site.
5. Does the facility have an identified staff member who is the point of contact for IVP activities and notify the Trauma Section and the TRAC IVP Committee regarding the identity of the designated person? **(13.1)** (Yes/No)
6. Does the facility demonstrate involvement with the TRAC in regional IVP planning efforts? **(13.2)** (Yes/No)
7. Does the facility work with the ADH-affiliated IVP programs by participating in evidence-based prevention programs, either alone or in collaboration with other facilities, such as the regional Hometown Health Initiative, local EMS agencies, or the TRAC? **(13.3)** (Yes/No)
8. Does the facility demonstrate participation in ADH-affiliated IVP programs and participate in the evaluation efforts for regional IVP programs? **(13.4)** (Yes/No)
9. Is there an injury prevention and violence/public trauma education program? (Yes/No) **(L1, L2)**

Alcohol Screening and Intervention (13.5)

1. Is there a mechanism to identify patients who are problem drinkers? **(13.5)** (Yes/No)
2. Which screening instrument and cutoff scores are being used?
(Check all that apply)
 - a) BAC -Is BAC routinely checked on trauma patients? (Yes/No) If 'No' please explain why not.
 - b) Consumption questions
 - c) AUDIT
 - d) CAGE
 - e) CRAFFT
 - f) Other
 - If a. BAC' was selected, please enter cutoff score:
 - If b. Consumption' was selected, please enter cutoff score:
 - If c. AUDIT' was selected, please enter cutoff score:
 - If d. CAGE' was selected, please enter cutoff score:
 - If e. CRAFFT' was selected, please enter cutoff score:

- If f. Other' was selected, please describe:

3. Is there capability to provide intervention or referral for patients identified as problem drinkers? (Yes/No)

4. What is the mechanism for providing brief intervention? (Check all that apply)

- a) Positive screens are referred to trauma nurse/nurse practitioner/physician assistant/social worker
- b) Person screening provides intervention for positive screens
- c) Positive screens are referred to on-site consult service (psychiatry or psychology or substance abuse counselor)
- d) Other
If 'Other' was selected, please describe

5. Alcohol Screening and Intervention for Trauma Patients

- a) Is there a lead person from the trauma program overseeing 'alcohol screening and brief intervention?(Yes/No)

6. What formal brief intervention training did the lead person have? (Check all that apply)

- a. Formal course
- b. Self-directed
- c. Other
 - If 'a. Formal course' was selected, please enter the course location and date taken:
 - If 'b. Self-directed' was selected, please enter the book or website utilized:
 - If 'c. Other' was select, please describe.

Disaster Management (13.6 – 13.10)

1. Does the hospital participate in regional disaster planning and drills? (13.6) (Yes/No)

2. Does your hospital meet the disaster-related requirements of TJC, the AOA/HFAP or an equivalent licensing body? (13.7)

(Check all that apply)

- a) Is there a disaster plan in the hospital policy procedure manual? Are there at least two drills a year?
- b) Is there at least one drill with an influx of patients? Is there at least one drill that involves the community plan?
- c) Is there an action review of your drills?

3. Is a trauma panel surgeon or clinical member of the trauma team a member of the hospital's disaster committee? (13.8) (Yes/No)

4. Are there hospital drills that test the hospital's disaster plan conducted at least every six months? (13.9) (Yes/No)

5. The trauma center has a hospital disaster plan described in the hospital disaster manual. (13.10) (Yes/No)

6. Can the hospital respond to the following hazardous materials?

- a) Radioactive (Yes, No)
- b) Chemical (Yes, No)
- c) Biological (Yes, No)

Organ Procurement Organization (OPO) (13.11- 13.13)

1. Does the facility have an organ procurement program or cooperate with a regional organ procurement agency? (Yes/No) **(13.11)** If 'Yes', how many trauma referrals were made to the regional organ procurement organization the reporting year?
2. How many **trauma patient** donors (solid organ & tissue) were there in the reporting year?
 - a. How many solid organ donors?
 - b. How many tissue donors?
3. Are there written policies for triggering notification of the OPO? **(13.12)** (Yes/No)
4. Does the trauma center track in its quality improvement program the percentage of referral of eligible patients and track the percentage of successful donors from the pool of referred patients? **(13.13)** (Yes/No)

Attachments: (Have all attachments included in the PRQ when submitting to the Department of Health)

1. Program change form (if applicable)
2. Local EMS support
3. Hospital board resolution
4. Medical staff resolution
5. TMD written annual performance reviews of trauma panel surgeons
6. Trauma Medical Director job description
7. Trauma Program Manager job description
8. Trauma Registrar job description
9. Consultant response policy
10. Percentage of time attending trauma surgeon is present in ED on patient arrival or within required timeframe
11. ED nursing flow sheet
12. Activation Criteria
13. Protocols for roles and responsibilities of all team members during a trauma team resuscitations
14. Under and over-triage Rate
15. Written policy for safe transport of patients within and out of the ED or to other departments
16. Clinical Practice Management Guideline (CPMG) for orthopedic open fracture management
17. Tracking of compliance of the orthopedic-specific QI filters
18. CPMG for the care of a severe traumatic brain injury
19. Tracking of compliance in the QI program of CPMG for traumatic brain injury patients
20. Protocol for the rapid evaluation of patient with head injuries who are on anticoagulants and components addressing the rapid reversal of such agents when possible
21. CPMG for rapid evaluation of patients with head injuries who are on anticoagulants and components addressing the rapid reversal of such agents when possible
22. Tracking of compliance in the QI program of rapid reversal of anticoagulants
23. CPMG for admission and care of geriatric/special needs patients
24. Tracking of compliance in the QI program of CPMG for geriatric/special needs patients
25. Massive transfusion protocol (MTP)
26. Well-defined transfer plans
27. Trauma Research peer-review articles

***Instructions**

1. List Hospital Benchmark for item
2. List # of cases eligible for benchmarking
3. List cases that fell out beyond benchmark

Example:

1. Time from admission to washout for open fractures (Gustilo-Anderson Grade II &>)
Hospital Benchmark
II- <12° - 2/10 Fall out/Eligible
III- a&b < 6° - 3/6
III- c <4° - 0/1
2. List 5 cases that fell out

Appendices:

1. TMD Information
2. List of Trauma Call Surgeons (Core & Non-Core)
3. Orthopedic Liaison Information
4. List of Orthopedic Trauma Call Panel Surgeons
5. Neurosurgeon Liaison Information
6. List of Neurosurgeon Trauma Call Panel Surgeons
7. Anesthesia Liaison Information
8. Emergency Medical Liaison Information
9. List of Emergency Medicine Providers on the Trauma Call Panel
10. Trauma Bypass
- 11a. Trauma Multidisciplinary Peer Review Committee
- 11b. Quality Improvement Committees

Appendix #1 Trauma Medical Director

1. Name: (First name, Last name Only)
2. How long has he/she held this position? _____years If months how many? _____month
3. Medical School:
4. Year Graduated:
5. Type of Residency:
6. Post Graduate Training Institution: (Residency)
7. Year Completed:

8.

Fellowships	Where Completed (Institution)	Year Completed
Trauma		
Surgical Critical Care		
Pediatric Surgery		
Other		

9. Board Certified: (Yes/No)
 - a) Year:
 - b) Specialty:
10. List added qualifications/certifications giving the Specialty and date received:
11. Is the TMD a Fellow of an organization? (Yes/No)
12. ATLS current: (Yes/No)
 - a) Instructor
 - b) Provider
 - c) None
13. Trauma CME - External (Within the last three years):
14. Trauma admissions per year:
15. Number of admits where ISS > 15 per year:
16. Trauma-related Societal Memberships (Check all that apply)
 - a) AAST
 - b) EAST
 - c) WST
 - d) State COT Chair or Vice Chair
 - e) Other
17. Number of non-trauma operative cases per year:
18. Number of trauma operative cases per year (Trauma operations limited to those requiring spinal or general anesthesia in the operating room):

Appendix #3 - Orthopedic Liaison to Trauma Program

1. Name: (First name last name only) Do not include MD
2. Medical School:
3. Year Graduated:
4. Post graduate training: (Institution of residency)
5. Year completed:
6. Type of Fellowship:
7. Year completed:
8. Is the Orthopedic liaison to the trauma program certified by the American Board of Orthopedic Surgery? (Yes/No) If '**Yes**', year of certification.
9. Ever ATLS certified? (Yes/No)
10. ATLS Level
 - a) Instructor
 - b) Provider
 - c) None
11. Is the orthopedic surgeon a Fellow of an organization? (Yes/No)
12. Trauma-related Societal Memberships
(Check all that apply)
 - a) Orthopedic Trauma Association(OTA)
 - b) American Academy of Orthopedic Surgery(AAOS)
 - c) Other If '**Other**', list other societal memberships
13. Trauma CME - External (within the last three years)

Appendix #5 - Neurosurgeon liaison to trauma program

1. Name: (First name last name only) Do not include MD
2. Medical School:
3. Year Graduated:
4. Post graduate training institution: (residency)
5. Year Completed:
6. Fellowship:
7. Year Completed:
8. Is this neurosurgeon certified by the American Board of Neurological Surgery? (Yes/No) If '**Yes**', year of certification.
9. Ever ATLS certified? (Yes/No)
10. ATLS Level
 - a) Instructor
 - b) Provider
 - c) None
11. Is the neurosurgeon a Fellow of an organization? (Yes/No)
12. Societal membership:
(Check all that apply)
 - a) American Association of Neurological Surgery (AANS)
 - b) Congress of Neurological Surgery (CNS)
 - c) OtherIf '**other**', list other societal memberships.

Trauma CME - External (within the last three years)

Appendix #7 - Anesthesia Liaison to Trauma Program

1. Name:(First name, last name only) Do not include MD
2. Medical School:
3. Year graduated:
4. Post graduate training institution (residency):
5. Year:
6. Fellowship:
7. Year completed:
8. Is this anesthesiologist certified by the American Board of Anesthesiology? (Yes/No)
Year Certified:
9. Ever ATLS certified (Yes/No)
10. ATLS Level
 - a) Instructor
 - b) Provider
 - c) none

Appendix #8 - Emergency Medicine Liaison to Trauma Program

1. Name: (First name last name only) Do not include MD or FACP
2. Medical School:
3. Year Graduated:
4. Post Graduate Training Institution. (Residency)
5. Year Completed.
6. Board Certification. (Specify Boards and Year Completed)
7. Ever ATLS Certified. (Yes/No)
8. Current ATLS. (Yes/No)
9. Level
 - a) Instructor
 - b) Provider
 - c) None

Trauma CME - External (within the last three years)

Appendix #10 - Trauma Bypass Occurrences

Please complete if you have gone on trauma bypass/divert during the previous year

Date of Occurrence	Time Bypass Occurred	Time Bypass Ended	Reason for Bypass

1. Total number of occurrences of bypass during reporting period:
2. Total number of hours on diversion during reporting period:
3. What is the percentage of time on diversion

Appendix #11a – Quality Improvement

TRAUMA MULTIDISCIPLINARY PEER REVIEW COMMITTEE

Provide a description of the hospital's Multidisciplinary Trauma Peer Review Committee which improves trauma care by reviewing selected deaths, complications, and sentinel events with objective identification of issues and appropriate responses

1. Name of Committee.
2. What is the purpose of the committee? Multidisciplinary Peer Review
3. Describe the membership using titles.
4. Name/Title of Chairperson.
5. How often does the committee meet?
 - a) Are there attendance requirements? (Yes/No) If 'Yes', describe:
6. Attendance of specialty panel members
 - a) Trauma Surgeons:
 - b) Emergency Medicine:
 - c) Anesthesia:
 - d) Orthopaedics:
 - e) Neurosurgeons:
7. Committee reports to whom?

Appendix #11b - OI Committees - Systems Review

Quality Improvement Committees

Provide a description of the committee which addresses, assesses, and corrects global trauma program and system issues.

1. Name of Committee.
2. What is the purpose of the committee? Multidisciplinary Peer Review
3. Describe the membership using titles.
4. Name/Title of Chairperson.
5. How often does the committee meet?
 - a) Are there attendance requirements? (Yes/No) If 'Yes', describe:
6. Attendance of specialty panel members:
 - a) Trauma Surgeons:
 - b) Emergency Medicine:
 - c) Anesthesia:
 - d) Orthopaedics:
 - e) Neurosurgeons:
7. Committee reports to whom?

END OF PRQ (pages 1 to 54)

Essential Equipment (Shall include but not limited to)

Airway Control and Ventilation Equipment (Adult and Pediatric)
Airway Monitoring
Thermal Regulation
Large Bore IV Catheters
Focused Assessment with Sonography for Trauma (FAST)
Standard Procedure Trays
Standard Airway Equipment
Pediatric Resuscitation Equipment
PACS and Lab Results Computer