

Hospital Pre-review Questionnaire (PRQ)

Level III Trauma Center | Adult & Children

IMPORTANT INFORMATION:

- **This questionnaire is based on the American College of Surgeons (ACS) PRQ Template for Verification Review**
- **Reporting period is defined as 12 months with a 2 month lag from the date of the site visit. Data cannot be older than 14 months prior to the site visit.**
- **Questions with **CD#**, refers to the ACS criteria that must be in compliance for Level III Verification.**
- **Questions that have **§ in blue** are requirements referenced in Californian Code of Regulations (CCR), Title 22, Division 9, Prehospital Emergency Medical Services, Chapter 7 Trauma Care Systems.**
- **The clarification document, previously known as the frequently asked questions (FAQ), and the Verification Change Log should be used in conjunction with the Resources manual, www.facs.org/quality-programs/trauma/vrc/resources.**
 - **The clarification document contains clarification to criteria noted in the resources manual.**
 - **The Verification Change Log contains changes made to the requirements from the publication date.**

PURPOSE OF SITE REVIEW

Reporting year for this review (12 months and should not be older than 14 months):

From month/year:

To month/year:

HOSPITAL INFORMATION

A. What is the hospital Payer Mix (use whole numbers, do not include percent sign):

Payer	All Patients (%)	Trauma Patients (%)
Commercial		
Medicare		
Medicaid		
HMO/PPO		
Uncompensated/Indigent		
Other		
Total	100%	100%

- Define Other:

B. Hospital Beds (do not include neonatal beds):

Hospital Beds	Adult	Pediatric	Total
Licensed			
Staffed			
Average Census			

I. REGIONAL TRAUMA SYSTEMS: OPTIMAL ELEMENTS, INTEGRATION, AND ASSESSMENT

1. Does the trauma center leadership participate actively in a state and regional system? **(CD 1-1, CD 1-2, CD 1-3) Type II** (Yes/No)

- If 'Yes', please briefly describe:

II. DESCRIPTION / TRAUMA LEVEL AND ROLES

1. Does the trauma center have an integrated, concurrent performance improvement and patient safety (PIPS) program to ensure optimal care and continuous improvement in care? **(CD 2-1) Type I §100265** (Yes/No)

- Does the trauma center demonstrate surgical commitment? **(CD 2-2) Type I**
(Yes/No)
If 'No', please describe:

2. Does the trauma center provide the necessary human and physical resources (physical plant and equipment) to properly administer acute care consistent with their level of designation? **(CD 2-3) Type II §100263** (Yes/No)

For 2016 admissions: complete the table below for total number of emergency department (ED) visits for reporting year with ICD-9 code between 800.00 and 959.9 or ICD-10 codes as listed below for 2017 admissions

For 2017 admissions: a trauma patient is defined as a patient sustaining a traumatic injury and meeting the following criteria:

At least one of the following injury diagnostic codes defined as follows: ICD-10-CM: S00-S99 with 7th character modifiers of A, B, or C ONLY. (Injuries to specific body parts – initial encounter)

T07 (unspecified multiple injuries)

T14 (injury of unspecified body region)

T20-T28 with 7th character modifier of A ONLY (burns by specific body parts – initial encounter)

T30-T32 (burn by TBSA percentages)

T79.A1-T79.A9 with 7th character modifier of A ONLY (Traumatic Compartment Syndrome – initial encounter)

Excluding the following isolated injuries:

ICD-10-CM:

S00 (Superficial injuries of the head)

S10 (Superficial injuries of the neck)

S20 (Superficial injuries of the thorax)

S30 (Superficial injuries of the abdomen, pelvis, lower back and external genitals)

S40 (Superficial injuries of shoulder and upper arm)

S50 (Superficial injuries of elbow and forearm)

S60 (Superficial injuries of wrist, hand and fingers)

S70 (Superficial injuries of hip and thigh)

S80 (Superficial injuries of knee and lower leg)

S90 (Superficial injuries of ankle, foot and toes)

Late effect codes, which are represented using the same range of injury diagnosis codes but with the 7th digit modifier code of D through S, are also excluded.

ED Visits	Total
Admitted ED Trauma Visits (Regardless of Service)	
Blunt Trauma Percentage	
Penetrating Trauma Percentage	
Thermal Percentage	

6. Disposition ED Trauma Visits

Discharged	
Transferred Out	
Admitted	
DIED in the ED Excluding DOAs	
DOAs	
Total	

7. Total Trauma Admissions by Service.

Service	Number of Admissions
Trauma	
Orthopaedic	
Neurosurgery	
Other Surgical	
Burn	
Non-Surgical	
Total Trauma Admissions	

8. Based on the number of Non-surgical admits (NSA) from Table 7, please complete the following:

Non-surgical admissions (NSA)	ISS			
	0-9	10-15	16-24	>=25
Number of patients admitted to a non-surgical service (from Table 7)				
Percent of total NSA				
Total NSA w/ trauma consult				
Total NSA w/any surgical consult (including trauma)				
Total NSA secondary to single level falls				
Total mortality (for each ISS category)				

9. Does the trauma program admit more than 10% of injured patients to non-surgical services? **(CD 5-18) Type II** (Yes/No)

- a. Were all patients in table 8 reviewed by the TPM and TMD for appropriateness of admission and other opportunities for improvement? (Yes/No)

10. Total number of direct admissions:

11. Injury Severity and Mortality.

ISS	(A) Total Number of Admissions	(B) Total Number of Death from Admissions by ISS	Percent Mortality (B over A)	Number Admitted to Trauma Service
0-9				
10-15				
16-24				
>or=25				
Total				

The total admissions for tables 7 and 11 should be the same. If there is an inconsistency in the totals, please explain:

- 12. Does the trauma director have responsibility and authority for determining each general surgeon's ability to participate on the trauma panel based on an annual review through the trauma PIPS program and hospital policy? **(CD 2-5) Type II §100263 (a) (1)** (Yes/No)
- 13. What percent of the time is the attending trauma surgeon present in the ED on patient arrival or within 30 minutes of arrival for the highest level of activation? **(CD 2-7, CD 5-14, CD 5-15) Type II §100241 §100263 (i) (1)**
- 14. Is the attendance threshold of 80% met for the attending trauma surgeon presence in the emergency department? (This includes responding for trauma patients who are subsequently transferred to another facility). **(CD 2-8) Type I** (Yes/No)
- 15. Is the trauma attending surgeon's arrival (within 30 minutes) for patients appropriately monitored by the hospital's trauma PIPS program? **(CD 2-9) Type I** (Yes/No)
- 16. Does the trauma surgeon on call provide care for emergency general surgery? (Yes/No)

17. Does the trauma center have continuous general surgical coverage? **(CD 2-12) Type II §100263 (i) (1)** (Yes/No)

- If 'No', please explain:

18. Does the facility participate in regional disaster management plans and exercises? **(CD 2-22) Type II** (Yes/No)

III. PREHOSPITAL TRAUMA CARE

1. Describe the area and identify the number and level of other trauma centers within a 50-mile radius of the hospital.

- Have a map of your referral area available at the time of the site visit labeled as attachment 3-1.

2. Briefly describe the air medical support services available for your trauma program, including roto-wing and fixed wing services:

3. Does your hospital provide on-line medical control for prehospital trauma patients? (Yes/No)

- If 'Yes', please briefly describe:

4. How does the trauma program participate in the training of prehospital personnel, the development and improvement of prehospital care protocols, and performance improvement and patient safety programs? **(CD 3-1) Type II §100263 (n) (4)**

5. Is the trauma director involved in the development of the trauma center's bypass (divert) protocol? **(CD 3-4) Type II** (Yes/No)

6. Is the trauma surgeon involved in the bypass (divert) decision? **(CD 3-5) Type II** (Yes/No)

7. Was the trauma center on bypass (divert) less than 5 percent of the time during the reporting year? **(CD 3-6) Type II** (Yes/No)

- Please complete Bypass (Divert) Appendix #3.

8. When the trauma center is required to go on bypass or to divert, what is your process? **(CD 3-7) Type II**

IV. INTERHOSPITAL TRANSFER

1. Are there well-defined transfer plans? **(CD 2-13) Type II §100263 (e)** (Yes/No)
 - a. If 'Yes', have documentation available at the time of the site visit labeled as attachment 2-3.
 - b. List the types of neurotrauma patients for the following:
 - Retained:
 - Transferred:

2. Does your facility have a set of criteria that identifies patients who should be considered for transfer? **(CD 4-2) Type II §100263 (e)** (Yes/No)
 - If 'Yes', please describe:

3. Is there direct physician-to-physician or midlevel contact when patients are transferred out of your facility? **(CD 4-1) Type II** (Yes/No)
 - If 'Yes', how is this contact initiated and documented?

Is there direct physician-to-physician or midlevel contact when patients are transferred into your facility? (Yes/No)

- If 'Yes', how is this contact initiated and documented?

4. Does your trauma service routinely evaluate all transfers through the PIPS program? **(CD 4-3, CD 16-8) Type II §100265 (a)** (Yes/No)
 - If 'Yes', please describe the process:

5. Total number of transfers:

Please complete the table below. The total of transfers in column 2 + column 3 in the table should = the total number of transfers out.

Transfer Category	Number of transfers out < 24 hrs	Number of transfers out > 24 hrs
Pediatrics		
Hand		
Spine		
Orthopaedics*		
Pelvic ring/acetabular fxs		
Soft tissue coverage		
Other orthopaedics		
Neurosurgery*		
Replantation		
Vascular/aortic injuries		

Cardiac (Bypass)		
Facial trauma		
Health Plan Repatriation		
Burns		
Other- specify		
Total		

****Orthopaedics and neurosurgery categories should exclude hand and spine injuries.***

6. What is your benchmark for the length of time between patient arrival, decision to transfer, and patient departure?
7. Is this parameter tracked as a part of the PIPS process? (Yes/No)

V. HOSPITAL ORGANIZATION AND THE TRAUMA PROGRAM

A. Hospital Commitment

1. Does the hospital have the commitment of the institutional governing body and medical staff to become a trauma center? **(CD 5-1) Type I** (Yes/No)
 - Please have resolutions available at the time of the site visit labeled as attachment 5-1.
2. Is the administrative support reaffirmed continually (every 3 years) and current at the time of the visit? **(CD 5-2) Type II** (Yes/No)
 - Briefly describe the administrative commitment to the trauma program (list items by numbers or bullet points):
3. Please list specific budgetary support for the trauma program such as personnel, education and equipment: **§100263 (a) (6)**
4. Is the medical staff support reaffirmed continually (every 3 years) and current at the time of the visit? **(CD 5-3) Type II** (Yes/No)
 - Briefly describe the medical staff commitment to the trauma program (List items by numbers or bullet points):
5. Does the trauma program involve multiple disciplines and transcend normal departmental hierarchies? **(CD 5-4) Type II** (Yes/No)
 - Have an organizational chart available at the time of the site visit labeled as attachment 5-2.

B. Trauma Program Manager (TPM)

6. Trauma program manager (name):
 - Have the TPM job description available at the time of the site visit labeled as attachment 5-3.
7. Education: **§100263 (b)**
 - a. Associate in Nursing (Yes/No)
 - b. Bachelor in Nursing (Yes/No)
 - c. Masters in Nursing (Yes/No)
 - d. Other Degree (Yes/No)
If 'Other' degree, please describe:
8. TPM reporting status. (Check all that apply)
 - a. TMD
 - b. Administration
 - c. Other (if other, please define):
9. How many years has the TPM been at that position or date of appointment to this position?
10. Total number of FTE's:
 - List the number of support personnel including names, titles, and FTEs:
11. Does the TPM show evidence of educational preparation (clinical experience in the care of injured patients)? **(CD 5-22) Type II §100263 (b)** (Yes/No)

C. Trauma Medical Director (TMD)

12. Is the TMD a current board-certified/eligible for certification surgeon or an ACS Fellow with a special interest in trauma care? **(CD 5-5) Type I §100263 (a); §100242** (Yes/No)
 - a. Does the TMD participate in trauma call? **(CD 5-5) Type I** (Yes/No)
 - b. Briefly describe the TMD's reporting structure:
 - c. Provide information about the TMD on Appendix #1.
 - d. Have the job description for the TMD available at the time of the site visit labeled as attachment 5-4.

13. Does the TMD have the authority to manage all aspects of trauma care? **(CD 5-9) Type II** (Yes/No)
14. Does the TMD chair **(CD 5-25)** attend a minimum of 50% of the multidisciplinary trauma peer review committee meetings? **(CD 5-10, CD 16-15) Type II** (Yes/No)
15. Does the TMD, in collaboration with the TPM have the authority to correct deficiencies in trauma care or exclude from trauma call the trauma team members who do not meet specified criteria? **(CD 5-11) Type II §100263 (a) (5)** (Yes/No)
16. Does the TMD perform an annual assessment of the trauma panel providers in the form of Ongoing Professional Practice Evaluation (OPPE) and Focused Professional Practice Evaluation (FPPE) when indicated by findings of the PIPS process? **(CD 5-11) Type II** (Yes/No)
- a. Describe the assessment process at your center:
 - b. Have documentation available at the time of the site visit labeled as attachment 5-5.
17. Does the TMD have the responsibility and authority to ensure compliance with the regulatory/contractual requirements? **(CD 5-9, CD 5-11) Type II** (Yes/No)
18. Does the TMD direct one trauma center? **(CD 5-12) Type II** (Yes/No)

D. Trauma Activations

19. Are the required criteria for the highest level of activation included? **(CD 5-13) Type II** (Yes/No)
- List your highest level of activations:
20. Who has the authority to activate the trauma team? (check all that apply)
- a. EMS
 - b. ED Physician
 - c. ED Nurse
 - d. Trauma Surgeon
21. Does the facility have a multilevel response? **§100263 (h)** (Yes/No)

22. Do you have geriatric-trauma activation criteria? (Yes/No)

- If 'Yes', please describe:

23. Number of levels of activation (include consults)

Statistics for level of response **(CD 5-14, 5-15, 5-16)**

Level	Number of activations	Percent of total activations
Highest		
Intermediate		
Lowest (Consult)		
Total		= 100%

24. Which trauma team members respond to each level of activation? **(CD 5-13, CD 5-14)**

Activation Level			
Responder	Highest	Intermediate	Lowest

25. Do you evaluate your activation criteria as part of the PIPS process? **(CD 5-16)**
Type II (Yes/No)

26. Does the center have a clearly defined response expectation for the trauma surgical evaluation of the limited tier patients requiring admission? **(CD 5-16)**
Type II (Yes/No)

27. 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? **(CD 5-21)** **Type I** (Yes/No)

- If 'Yes', please describe:

VI. GENERAL SURGERY

1. Describe the organization of your trauma service *(Also, include number of residents, midlevel providers, etc.... that participate on the trauma service):*

2. Are all of the general surgeons (trauma surgeons on call panel) U.S. or Canadian board-certified/eligible for certification according to the current requirements? **(CD 6–2) Type II §100263 (i) (1) §100242** (Yes/No)

- List all surgeons currently taking trauma call on Appendix #2.

If 'No', Surgeons/Physicians who have trained outside the United States or Canada may be eligible to participate in the trauma program with a substantiation of need procedure. §100242(b)

3. List those panelists who have previously or are currently utilizing the “substantiation of need” procedure, and have available at the time of the site visit as Appendix #6-1.
4. Do all of the trauma panel surgeons have privileges in general surgery? **(CD 6–4) Type II** (Yes/No)
5. Define the credentialing criteria/qualifications for serving on the trauma panel in addition to hospital credentials (list by bullet points or numbers):
6. Briefly describe how the TMD oversees all aspects of the multi-disciplinary care, from the time of injury through discharge:
7. Is there 50% greater attendance documented by each of the general surgeons at the multidisciplinary trauma peer review committee? **(CD 6-8, CD 16-15) Type II** (Yes/No)

- List each general surgeon and his/her annual percentage of trauma peer review committee meeting attendance in Appendix #2.

VII. EMERGENCY MEDICINE

1. Have a copy of the ED trauma flow sheet available at the time of the site visit labeled as attachment 7-1.
2. Briefly describe the initial credentialing requirements for nurses who treat trauma patients in the ED:
 - a. Nursing staff demographics (use whole numbers, do not include percent sign)
 - i. Average years of experience:
 - ii. Annual turnover %:
 - iii. Percentage of nurses that are travelers:
 - b. Nursing Education (use whole numbers, do not include percent sign)
 - i. % ATCN:
 - ii. % ENPC:
 - iii. % TNCC:

- iv. % PALS:
 - v. % ACLS:
 - vi. % TCAR:
 - vii. % Other (enter description and percentage):
 - c. Extra certifications for ED nursing staff (use whole numbers, do not include percent sign)
 - i. % CCRN:
 - ii. % CEN:
 - iii. % PCEN:
 - iv. % CNOR:
 - v. % CPAN:
 - vi. % Other (enter description and percentage):
3. Briefly describe continuing trauma related education for the nurses working in ED:
4. 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? **(CD 7-1) Type I §100263 (j) (1)** (Yes/No)
5. Please describe hours of physician coverage and physician staffing patterns:
6. Do emergency physicians ever respond to in-house emergencies? (Yes/No)
 - If so, briefly describe how the ED covered in their absence:
7. If the emergency physicians cover in-house emergencies, is there a PIPS process demonstrating the efficacy of this practice? **(CD 7-3) Type II** (Yes/No)
 - a. Please describe the PIPS process for evaluating impact of this practice:
 - b. Describe coverage plan for trauma patients presenting to the emergency department when the EM physician is out of the department:
8. Is there an emergency medicine residency training program? (Yes/No)
 - If 'Yes', is there supervision provided by an in-house attending emergency physician 24 hours per day? **(CD 7-4) Type II** (Yes/No)
9. Are the roles of emergency physicians and trauma surgeons defined, agreed on, and approved by the director of trauma services? **(CD 7-5) Type II** (Yes/No)
10. Are all of the emergency physicians who care for injured patients U.S. or Canadian board certified/eligible for certification according to the current requirements? **(CD 7-6) Type II §100263 (j) (1) §100242** (Yes/No)

- List all emergency department physicians taking trauma call on Appendix #9.

If 'No', Surgeons/Physicians who have trained outside the United States or Canada may be eligible to participate in the trauma program with a substantiation of need procedure. §100242(b)

11. Please list those panelists who have previously or are currently utilizing the “substantiation of need” procedure, and have available at the time of the site visit as Appendix #6-1.
12. Are the emergency physicians on the call panel regularly involved in the care of injured patients? (CD 7-7) Type II (Yes/No)
13. Is there a representative from the emergency department participating in the prehospital PIPS program? (CD 7-8) Type II (Yes/No)
14. Is there a designated emergency physician liaison available to the trauma director for PIPS issues that occur in the emergency department? (CD 7-9) Type II (Yes/No)
15. Provide information about the emergency medical liaison to trauma program on Appendix #8.
16. Describe how the emergency physicians are actively involved with the overall trauma PIPS program: (CD 7-10) Type II
17. Does the emergency medicine liaison on the multidisciplinary trauma peer review committee attend a minimum of 50% of the committee meetings? (CD 7-11, CD 16-15) Type II (Yes/No)
18. Have all of the physicians who are board certified/eligible in emergency medicine successfully completed the ATLS course at least once? (CD 7-14) Type II (Yes/No)
19. Do the other physicians who are board certified/eligible other than emergency medicine have current ATLS status? (CD 7-15) Type II (Yes/No)

VIII. NEUROSURGERY

Does the trauma service provide Neurosurgery capabilities? §100263 (i) (3) (Yes/No)

If 'Yes' complete the following section

If 'No' is there a transfer agreement in place for this service? §100263 (i) (3) (Yes/No)

If 'No' only complete questions 12 (CD 8-7), 13 (CD 8-8) and 14 (CD 8-9)

1. Is there a designated neurologic surgeon liaison? (Yes/No)

- Provide information about the neurosurgeon liaison to the trauma program on Appendix #4.
- 2. Is there a mechanism in place to monitor the neurosurgeons response within 30 minutes of notification based on the institutions criteria (diagnosis)? **§100263 (i) (3) §100241** (Yes/No)
 - a. List the institutional criteria (diagnosis) that have been identified for the neurosurgeons 30 minute response:
- 3. Are qualified neurosurgeons credentialed by the hospital with general neurosurgical privileges? (Yes/No)
- 4. What is the number of emergency craniotomies in TBI patients done within 24 hours of admission during the reporting period?
- 5. What percentage of patients with TBI does this present (denominator all TBI or severe TBI)?
- 6. What is the percentage of severe TBI patients having ICP monitors inserted within 48 hours of admission during the reporting period?
 - a. For those severe TBI patients who do not undergo ICP monitoring, is there a PI process in place to review for appropriateness? (Yes/No)
- 7. Does the facility have an ACGME-certified neurosurgery residency program?
 - a. If 'Yes', how many neurosurgery residents are there in the ACGME-certified training program?
 - b. Does the facility have any other neurosurgery training programs (e.g., osteopathic residency, fellowship programs)? (Yes/No)
 - c. If so, please list:
- 8. Is there a published backup call schedule or system to care for neurotrauma patients when the neurosurgeon or system is overwhelmed? (Yes/No)
- 9. Does the center have a predefined and thoroughly developed neurotrauma diversion plan that is implemented when the neurosurgeon on call becomes encumbered?
- 10. If there is no back-up schedule, does the hospital provide a formal published contingency plan for times in which a neurosurgeon is encumbered upon the arrival of a neurotrauma case? **(CD 8-5) type II**
 - a. Please list the mechanisms used for contingency planning,

- b. Are all of the following included in the neurotrauma contingency plan?
 - i. A credentialing process to allow the trauma surgeon to provide initial evaluation and stabilization of the neurotrauma patient.
 - ii. Transfer agreements with a similar or higher-level verified trauma center. **§100263 (i) (3)**
 - iii. Direct contact with the accepting facility to arrange for expeditious transfer or ongoing monitoring support.
 - iv. Monitoring of the efficacy of the process by the PIPS program.
11. Are the neurosurgeons dedicated to this hospital when on trauma call (i.e. - not taking simultaneous call at another hospital)? **(CD 8-6) Type II** (Yes/No)
 - a. If 'No', is there a published back-up call schedule? (Yes/No)
12. Is there a trauma medical director approved plan that determines which types and severity of neurologic injury patients should remain at the facility when no neurosurgical coverage is present? **(CD 8-7) Type II** (Yes/No)
 - Please describe:
13. Are there transfer agreements with appropriate Level I and Level II trauma centers? **(CD 8-8) Type II §100266** (Yes/No)
 - Please describe:
14. In all cases, whether patients are admitted or transferred, is the care timely, appropriate, and monitored by the PIPS program? **(CD 8-9) Type I** (Yes/No)
15. Are all of the neurosurgeons who take trauma call U.S. or Canadian board certified/eligible for certification according to the current requirements? **(CD 8-10) Type II** (Yes/No)
 - a. What is the number of neurosurgeons on the call panel?
 - b. List all neurosurgeons taking trauma call on Appendix #5.

*If 'No', Surgeons/Physicians who have trained outside the United States or Canada may be eligible to participate in the trauma program through a substantiation of need procedure. **§100242 (b)***

- a. Please list those panelists who have previously or are currently utilizing the “substantiation of need” procedure, and have available at the time of the site visit as Appendix #6-1.

IX. ORTHOPAEDIC SURGERY

1. Is there an Orthopaedic trauma OR available daily? **(CD 9–2) Type I** (Yes/No)
 - Please describe:
2. Is there an orthopaedic surgeon who is identified as the liaison to the trauma program? **(CD 9–4) Type I** (Yes/No)
 - Provide information about the Orthopaedic surgeon liaison to the trauma program on Appendix #6.
3. Are the on call orthopaedic team members dedicated to the hospital (i.e. Do not take call simultaneously at another hospital)? **CD 9-12 Type II** (Yes/No)
 - a. If 'No', is there an effective back-up call system? (Yes/No)
 - b. If 'Yes', please describe the back-up call system:
4. Does the PIPS process review the appropriateness of the decision to transfer or retain major orthopaedic trauma patients? **(CD 9-13) Type II 4** (Yes/No)
5. Does this Level III facility have an orthopaedic surgeon on call and promptly available 24 hours a day? **(CD 9-11, CD 11-72) Type I §100263 (i) (2) §100241** (Yes/No)
6. Average time to wash out of open tibial fractures secondary to a blunt mechanism; report as average and range:
7. Average time to first antibiotic administration for open tibial fractures secondary to a blunt mechanism:
8. The number of operations performed at this institution during the reporting year for pelvic ring and acetabular fractures secondary to a trauma mechanism, excluding isolated hip fractures:
 - a. Pelvic ring injuries:
 - b. All acetabular fracture patterns:
 - c. How many of these patients had neurological deficits?

Note: Do not include hip fractures or injuries that result from a trip/fall.

9. Percent of femoral shaft fractures (defined as intramedullary rod, external fixation or ORIF) stabilized within 24 hours of admission:

10. Does the orthopaedic service participate actively with the overall trauma PIPS program and the multidisciplinary trauma peer review committee? **(CD 9–15) Type II** (Yes/No)
11. Does the orthopaedic trauma liaison attend a minimum of 50% of the multidisciplinary trauma peer review meetings? **(CD 9–16, CD 16-15) Type II** (Yes/No)
12. Are all of the orthopaedic surgeons who take trauma call U.S. or Canadian board-certified/eligible for certification according to the current requirements? **(CD 9–17) Type II** (Yes/No) **§100263 (i) (2) §100242**
- Number of orthopaedic surgeons on the trauma call panel?
 - List all orthopaedic surgeons taking trauma call on Appendix #7.
- If 'No', Surgeons/Physicians who have trained outside the United States or Canada may be eligible to participate in the trauma program through a substantiation of need procedure. §100242 (b)*
13. Please list those panelists who have previously or are currently utilizing the “substantiation of need” procedure, and have available at the time of the site visit as Appendix #6-1.

X. PEDIATRIC TRAUMA SURGERY

A. Pediatric Nursing

- Define the age of the pediatric patient at your institution:

Note: State definition is less than 15 years of age. For completing of data tables in this section only include pediatric totals for patients < 15 years of age.

B. Splenic Injuries

- Pediatric patients (<15 years of age) admitted with splenic injuries during the reporting year.

Grade of Spleen Injury	# of Splenic Injuries	# Undergoing (IR) Embolization	# of Splenorrhaphy	# of Splenectomy
Grade I				
Grade II				
Grade III				
Grade IV				
Grade V				
TOTALS				

C. Pediatric Trauma Admissions

3. Did your trauma program admit 100 or more injured children younger than 15 years of age during your reporting year? **(CD 2– 23) Type II** (Yes/No)

a. If 'Yes', are the following present **(CD 2–24) Type II**:

- 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 PIPS program (Yes/No)

b. Are the trauma surgeons credentialed for pediatric trauma care by the hospital’s credentialing body? **(CD 2-23) Type II** (Yes/No)

c. Please describe credentialing process:

4. If 'No', does your trauma program review the care of injured children through the PIPS program? **(CD 2–25) Type II** (Yes/No)

5. Pediatric Trauma Admissions

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

6. Based on the number of Non-surgical admits (NSA) from Table 7, please complete the following:

Non-surgical admissions (NSA)	ISS			
	0-9	10-15	16-24	>=25
Number of patients admitted to a non-surgical service (from Chapter 10, Table 5)				
Percent of total NSA				
Total NSA w/ trauma consult				
Total NSA w/any surgical consult (including trauma)				
Total NSA secondary to single level falls				
Total mortality (for each ISS category)				

7. Does the trauma program admit more than 10% of injured patients to non-surgical services? **(CD 5-18) Type II** (Yes/No)
 - a. Were all patients in table 6 reviewed by the TPM and TMD for appropriateness of admission and other opportunities for improvement? (Yes/No)
 - b. Have documentation available at the time of the site visit labeled as attachment 10-1.
8. Injury and Severity and Mortality

ISS	(A) Total Number of Pediatric Admissions	(B) Total Number of Death from Pediatric Admissions by ISS	Percent Mortality (B over A)	Number Admitted to Pediatric Trauma Service
0-9				
10-15				
16-24				
>or=25				
Total				

XI. COLLABORATIVE CLINICAL SERVICES

A. Anesthesiology

1. Are anesthesiology services available within 30 minutes for emergency operations? **(CD 11-1) Type I §100263 (j) (2) §100241** (Yes/No)
2. Are anesthesiology services promptly available within 30 minutes for airway problems? **(CD 11-2) Type I** (Yes/No) **§100263 (j) (2) §100241**
3. Is there an anesthesiologist/CRNA* who is highly experienced and committed to the care of injured patients and who serves as the designated liaison to the trauma program? **(CD 11-3) Type I**
 *Only for Level III, where CRNAs are licensed to practice independently may function as the anesthesia liaison, refer to Clarification Document.
4. Number of anesthesiologists on staff?
5. How many anesthesiologists are on backup call during off hours?
 - Describe the anesthesiology on call schedule:
6. Is the availability of the anesthesia services and the absence of delays in airway

control or operations documented by the hospital PIPS process? **(CD 11-6) Type II** (Yes/No)

7. Are the anesthesia services available 24 hours a day and present for all operations? **(CD 11-7) Type I** (Yes/No)
 - Describe how this is monitored at your institution:
8. If the trauma center does not have in-house anesthesia services, are protocols in place to ensure the timely arrival at the bedside of the anesthesia provider within 30 minutes of notification and request? **(CD 11-8) Type 1 §100263 (j) (2)** (Yes/No)
 - If 'Yes', please describe:
9. If the trauma center does not have in-house anesthesia services, is there documentation of the presence of physicians skilled in emergency airway management? **(CD 11-9) Type I** (Yes/No)
 - If 'Yes', please describe:
10. Does the anesthesiology liaison participate in the trauma PIPS process and attend at least 50% of the multidisciplinary trauma peer review meetings? **(CD 11-12, CD 11-13, CD 16-15) Type II** (Yes/No)

B. Operating Room

11. Is there a mechanism for documenting trauma surgeon presence in the operating room for all trauma operations? **(CD 6-7) Type II** (Yes/No)
 - If 'Yes', please describe:
12. Is the operating room adequately staffed and available within 30 minutes? **(CD 11-17) Type I §100263 (k) (3)** (Yes/No)
 - a. Number of operating rooms:
 - b. Briefly describe the location of the operating suite relative to the ED and ICU:
13. Does the PIPS program evaluate operating room availability and delays when an on call team is used? **(CD 11-18) Type II** (Yes/No)
 - a. Describe the process for notifying the on call team:
 - b. Describe the mechanism for opening the OR:
 - c. Describe how on call team availability for trauma cases is documented by the PIPS program:

14. Does the operating room have all essential equipment? **(CD 11–19) Type I §100263 (k) (3) (B)** (Yes/No)

Skip question #7 if Level III trauma centers does not offer neurosurgery service

15. Does the trauma center have the necessary equipment to perform craniotomy? **(CD 11–20) Type I** (Yes/No)

C. Post-Anesthesia Care Unit (PACU)

16. Number of beds:

17. Is the PACU ever used as an overflow for the ICU? (Yes/No)

18. Does the PACU have qualified nurses available 24 hours per day as needed during the patient's post-anesthesia recovery phase? **(CD 11-24) Type I** (Yes/No)

19. If the PACU is covered by a call team from home, is there documentation by the PIPS program that PACU nurses are available and delays are not occurring? **(CD 11–25) Type II** (Yes/No)

- If 'Yes', please describe:

20. Briefly describe credentialing requirements for nurses who care for trauma patients in PACU:

- a. Nursing Education (use whole numbers, do not include percent sign)
 - i. % ENPC:
 - ii. % TNCC:
 - iii. % PALS:
 - iv. % ACLS:
 - v. % TCAR:
 - vi. % Other (enter description and percentage):
- b. Extra certifications for PACU nursing staff (use whole numbers, do not include percent sign)
 - i. % CCRN:
 - ii. % CEN:
 - iii. % PCEN:
 - iv. % CNOR:
 - v. % CPAN:
 - vi. % Other (enter description and percentage):

21. Does the PACU have the necessary equipment to monitor and resuscitate patients? **(CD 11-26) Type I** (Yes/No)

D. Radiology

1. Does the trauma center have 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? **(CD 11–28) Type II** (Yes/No)
 - Please describe:
2. Who provides FAST for trauma patients? (Check all that apply)
 - a. Radiology
 - b. Surgery
 - c. ED Physician
 - d. None
3. Describe your institution's policy for obtaining FAST exams for injured patients:
4. Describe your institution's QI policy for FAST exams:
5. Is there adult and pediatric resuscitation and monitoring equipment available in the radiology suite? (Yes/No)
6. Are conventional radiography **(CD 11-29) §100263 (k) (1)** and computed tomography **(CD 11-30 Type I)** available 24 hours per day? (Yes/No)
7. Are radiologists available within 30 minutes in person or by teleradiology, when requested for the interpretation of radiographs? **(CD 11-32) Type I** (Yes/No)
 - a. Are radiologists in-house 24/7? (Yes/No)
 - b. If 'No', who reads x-rays after hours?
 - c. How is diagnostic information from radiologic studies communicated to the trauma team?
 - d. If an error is identified on initial radiologic interpretation, what is the policy for notifying the physician?
8. Is diagnostic information communicated in a written electronic form and in a timely manner? **(CD 11-34) Type II** (Yes/No)
9. Is critical information deemed to immediately affect patient care verbally communicated to the trauma team in a timely manner? **(CD 11–35) Type II** (Yes/No)

10. Do final reports accurately reflect the chronology and content of communications, including changes between preliminary and final interpretations? **(CD 11-36) Type II** (Yes/No)
11. Are changes in interpretation between preliminary and final reports, as well as missed injuries monitored through the PIPS program? **(CD 11-37) Type II** (Yes/No)
- a. Describe your institution's process for tracking changes in radiology interpretation and missed injuries:
 - b. Describe how these are monitored through PIPS:
12. Does the PIPS program document the response times when the CT technologist responds? **(CD 11-47) Type II**
- If 'Yes', briefly describe:

E. Intensive Care Unit (ICU)

1. ICU Beds.
 - a. Total ICU beds (Includes medical, coronary, surgical, pediatric, etc.):
 - b. Total Pediatric:
 - c. Total Surgical:
 - d. Do you have a step-down or intermediate care unit? (Yes/No)
 - e. Describe how quality of care issues are resolved in the ICU:
2. Does your institution have palliative care available? (Yes/No)
 - a. If 'Yes', describe how this palliative care team is incorporated into end of life issues:
 - b. Total number of Trauma ICU deaths:
 - c. Of total ICU deaths, # of withdrawal of care:
 - d. Of total of ICU deaths, # transferred to hospice care:
3. Does the trauma center have a surgical director or co-director for the ICU who is responsible for setting policies and administration related to trauma ICU patients? **(CD 11-53) Type II** (Yes/No)

4. Is the ICU director or co-director a surgeon who is board certified/eligible for certification by the current standard requirements? **(CD 11–54) Type II** (Yes/No)
5. When the patient is critically ill, is there a mechanism in place to provide ICU physician coverage within 30 minutes 24 hours per day? **(CD 11–56) Type I §100263 (g) (2)** (Yes/No)
 - a. During the day:
 - b. During after-hours:
 - c. Who responds to acute issues in the ICU after hours?
6. Does the PIPS program review all ICU admissions and transfers of ICU patients ensure appropriateness of patients being selected to remain at the Level III trauma center vs. being transferred to a higher level of care? **(CD 11–57) Type II** (Yes/No)
7. Does the trauma surgeon retain responsibility for the patient and coordinate all therapeutic decisions in the ICU? **(CD 11-58) Type I** (Yes/No)
8. Is the trauma surgeon kept informed of and concurs with major therapeutic and management decisions made by the ICU team? **(CD 11-59) Type I** (Yes/No)
9. Does the PIPS program document the timeliness and appropriate ICU care and coverage is being provided? **(CD 11-60) Type II** (Yes/No)
10. Is there designated ICU liaison to the trauma service? **(CD 11–61) Type II** (Yes/No)
 - Name:
11. Does the ICU liaison attend at least 50% of the multidisciplinary trauma peer review committee meetings? **(CD 11–62, CD 16-15) Type II** (Yes/No)
12. Are qualified critical care nurses available 24 hours per day to provide care during the ICU phase? **(CD 11-65) Type I** (Yes/No)
13. Briefly describe the initial credentialing requirements for nurses who care for trauma patients in the ICU:
 - a. Nursing staff demographics (use whole numbers, do not include percent sign)
 - i. Average years of experience:
 - ii. Annual turnover %:
 - iii. Percentage of nurses that are travelers:

- b. Nursing Education (use whole numbers, do not include percent sign)
 - i. % ATCN:
 - ii. % ENPC:
 - iii. % TNCC:
 - iv. % PALS:
 - v. % ACLS:
 - vi. % TCAR:
 - vii. % Other (enter description and percentage):
 - c. Extra certifications for ICU nursing staff (use whole numbers, do not include percent sign)
 - i. % CCRN:
 - ii. % CEN:
 - iii. % PCEN:
 - iv. % CNOR:
 - v. % CPAN:
 - vi. % Other (enter description and percentage):
14. Briefly describe continuing trauma related education for the nurses working in ICU:
15. The patient/nurse ratio does not exceed 2:1 for critically ill patients in the ICU. **(CD 11-66) Type II** (Yes/No)
- If 'No', please describe:
16. Does the ICU have the necessary equipment to monitor and resuscitate patients? **(CD 11-67) Type I §100263 (g) (1)** (Yes/No)
17. Is intracranial pressure monitoring equipment available? **(CD 11-68) Type I** (Yes/No)

F. Primary Care Physicians

1. Are trauma patients admitted or transferred by a primary care physician with the knowledge and consent of the trauma service? **(CD 11-69) Type II** (Yes/No)
 - If 'Yes', describe how the PIPS process monitor adherence to this guideline: **(CD 11-69) Type II**

G. Other Surgical Specialists

1. For all patients being transferred for specialty care, such as burn care or replantation surgery, cardiopulmonary bypass capability, complex ophthalmologic surgery, or high complexity pelvic fractures, agreements with a similar or higher qualified verified trauma center should be in place. **§100266**

- a. For complex cases being transferred out, does the contingency plan **(CD 8–5) Type II** include the following:
 - i. A credentialing process to allow the trauma surgeon to provide initial evaluation and stabilization of the patient.
 - ii. Transfer agreements with similar or higher-verified trauma centers.
 - iii. Direct contact with the accepting facility to arrange for expeditious transfer or ongoing monitoring support.
 - iv. Monitoring of the efficacy of the process by the PIPS programs.
- b. Which patients are being transferred for specialty care from your institution?

H. Medical Consultants

1. Do the medical specialists on staff include the following:
 - i. Cardiology (Yes/No)
 - ii. Internal medicine **(CD 11-74) Type II** (Yes/No)
 - iii. Gastroenterology (Yes/No)
 - iv. Infectious disease (Yes/No)
 - v. Pulmonary medicine (Yes/No)
 - vi. Nephrology (Yes/No)
 - vii. Respective support teams (for example: respiratory therapy / dialysis team / nutrition support) (Yes/No)

I. Support Services

1. Is a respiratory therapist available and on call 24 hours per day? **(CD 11–76) Type I** (Yes/No)
2. Does the trauma center have either dialysis capabilities or a transfer agreement? **(CD 11-78) Type II** (Yes/No)

J. Clinical Laboratory and Blood Bank

1. Are laboratory services available 24 hours per day for the standard analysis of blood, urine, and other body fluids, including microsampling when appropriate? **(CD 11-80) Type I §100263 (k) (2)** (Yes/No)
2. Is the blood bank capable of blood typing and cross matching? **(CD 11-81) Type I** (Yes/No)
 - a. What is the average turnaround time for type-specific blood (minutes)?
 - b. What is the average turnaround time for full cross-matched blood (minutes)?

3. Does the blood bank have an adequate supply of packed red blood cells and fresh frozen plasma available within 15 minutes? **(CD 11-83) Type I §100263 (k) (2) (A)** (Yes/No)
4. Does the facility have a massive transfusion protocol developed collaboratively between the trauma service and the blood bank? **(CD 11-84) Type I** (Yes/No)
 - a. Describe your MTP:
 - b. Number of times activated in the last year:
 - c. Describe your PIPS process, if any, for MTP activation:
5. Do you have an anticoagulation reversal protocol? (Yes/No)
 - a. Please describe:
 - b. Which products do you have available for rapid anticoagulation reversal other than Vitamin K and fresh frozen plasma?
 - c. Do they require approval for emergent use? (Yes/No)
6. Is there 24 hour per day availability for coagulation studies, blood gas analysis, and microbiology studies? **(CD 11-85) Type I** (Yes/No)

K. Advanced Practitioners

1. Does the trauma or ED utilize APs in the initial evaluation of trauma patients during the activation phase? **(CD 11-86) Type II** (Yes/No)
 - a. If yes, are the APs current in ATLS? (Yes/No)
 - b. Have information about the advanced practitioners available at the time of the site visit labeled as attachment 11-1.
2. Which advanced practitioners participate in the initial evaluation of trauma patients? (Check all that apply)
 - a. Trauma
 - b. Emergency medicine
 - c. Orthopaedics
 - d. Neurosurgery
 - e. Anesthesiology
 - f. Other (if other, please describe):

3. Does the trauma program demonstrate appropriate orientation, credentialing processes, and skill maintenance for advanced practitioners, as witnessed by an annual review by the TMD? **(CD 11-87) Type II** (Yes/No)

XII. REHABILITATION SERVICES

1. Who is the medical director of the rehabilitation program?
Name:
 - a. Is this physician board certified? (Yes/No)
 - b. If 'Yes', what specialty?
2. Describe the composition of your in-house rehabilitation team:
3. Describe the role and relationship of the rehabilitation services to the trauma service (include where and when rehabilitation begins): **§100263 (j) (3) (C)**
4. Is there a pediatric rehabilitation service? (Yes/No)
 - a. If 'Yes', please describe:
 - b. If 'No', please describe how rehabilitation service are adapted for pediatric patients:
5. Which of the following services does the hospital provide? (Check all that apply)
 - a. Physical therapy **(CD 12-3) Type I**
 - b. Social services **(CD 12-4) Type II**
 - c. Occupational therapy
 - d. Speech therapy
6. Is there a dedicated social worker for trauma service? (Yes/No)
 - If 'No', what is the commitment from Social Services to the trauma patient?
7. Describe the support services available for crisis intervention and individual/family counseling:
8. Is there a screening program in place for PTSD? (Yes/No)

XIV. 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 trauma center that refer burn patients to a designated burn center have in place a written transfer agreement with the referral burn center? **(CD 14-1) Type II §100263 (j) (3) (B)** (Yes/No)

XV. TRAUMA REGISTRY

1. What registry program does the hospital use?
2. Are trauma registry data collected and analyzed? **(CD 15-1) Type II** (Yes/No)
3. Is this data submitted to the National Trauma Data Bank® (NTDB®) every year in a timely fashion so that they can be aggregated and analyzed at the national level? **(CD 15-2, CD 10-35) Type II** (Yes/No)
4. Does the trauma registry support the PIPS process? **(CD 15-3) Type II** (Yes/No)
 - Describe how the registry is used in the PIPS process to identify and track opportunities for improvement:
5. Does the center participate in a risk-adjusted benchmarking program? **(CD 15-5) Type II** (Yes/No)
 - a. What risk-adjusted benchmarking program does the hospital participate in? (select one)
TQIP/Other
 - b. If TQIP, Please share your TQIP report with the onsite team or have it available at the time of the visit.
 - c. For 'Other', please describe and provide contact information (i.e. website):
 - d. Provide an example of how the risk-adjusted benchmarking data is shared within the PI committees or with trauma program stakeholders.

6. Are at least 80% of the trauma cases entered into the trauma registry within 60 days of discharge? **(CD 15-6) Type II** (Yes/No)
7. Has the registrar attended or previously attended two courses within 12 months of being hired? **(CD 15-7) Type II** (Yes/No)
 - a. If 'Yes', please check all that apply.
 - a. The American Trauma Society's Trauma Registrar Course or
 - b. (Other) equivalent provided by a regional/state trauma program
 - c. The Association of the Advancement of Automotive Medicine's Injury Scaling Course
 - b. If 'Other', please briefly describe:
8. Does the trauma program ensure that trauma registry confidentiality measures are in place? **(CD 15-8) Type II** (Yes/No)
 - If 'Yes', please explain:
9. Is there one full-time equivalent employee dedicated to the registry available to process the data capturing of the NTDS data set for each 500–750 admitted trauma patients annually? **(CD 15-9) Type II** (Yes/No)
10. Please describe the FTE staffing model for the registry:
11. Are there strategies for monitoring data validity for the trauma registry? **(CD 15-10) Type II** (Yes/No)
 - If 'Yes', please explain:
12. Describe the registry data validation process used by the center. For example provide the percentage of charts abstracted by another registrar, audits performed by benchmark sources, state audits, etc.:

XVI. PERFORMANCE IMPROVEMENT AND PATIENT SAFETY (PIPS)

A. Performance Improvement PI Program

1. Are the TMD and TPM knowledgeable and involved in trauma care collaboratively with guidance from the trauma peer review committee to identify events, develop corrective action plans, and ensure methods of monitoring, reevaluation, and benchmarking? **(CD 2-17) Type II §100263 (a) (4) §100263 (b) (2)** (Yes/No)
2. Describe how your PI plan incorporates or assigns levels of review (primary, secondary, tertiary) for events/issues identified through the PI process:

3. Does the multidisciplinary trauma peer review committee meet regularly, with required attendance of medical staff active in trauma resuscitation, to review systemic and care provider issues, as well as propose improvements to the care of the injured? **(CD 2–18) Type II §100265** (Yes/No)
4. Is there a rigorous multidisciplinary performance improvement to evaluate overtriage and undertriage rates to attain the optimal goal of less than 5 percent undertriage? **(CD 3–3) Type II** (Yes/No)
 - Describe how your center defines over and undertriage and your PI process for undertriage: **(CD 16–7) Type II**
5. Are nursing issues reviewed in the trauma PI Process? (Yes/No)
 - If 'No', briefly describe how nursing units ensure standards and protocols are followed:
6. Autopsies have been performed on what percentage of the facility's trauma deaths?
 - How are the autopsy findings reported to the trauma program?
7. Describe the PIPS plan that includes a comprehensive written plan outlining the configuration and identifying both adequate personnel to implement that plan and an operational data management system: **(CD 16–1) Type II**
 - a. Does the PIPS program have audit filters to review and improve pediatric and adult patient care? **(CD 2–19) Type II** (Yes/No)
 - b. List at least 3 adult specific PI filters:
 - c. List at least 3 pediatric specific PI filters:
8. How is loop closure (resolution) achieved? **(CD 16–2) Type II**
 - a. Who is responsible for loop closure of both system and peer review issues?
 - b. List 2 examples of loop closure involving peer review issues during the reporting year:
 - c. List 2 examples of loop closure involving system issues during the reporting year:
9. How is PI integrated with the overall hospital PIPS program and the provision of feedback? **(CD 16–3) Type II**
10. In an effort to reduce unnecessary variation in care provided, does the trauma program use clinical practice guidelines, protocols, and algorithms derived from evidenced based validated resources? **(CD 16–4) Type II** (Yes/No)

11. Are all the process and outcome measures documented within the PIPS program plan and reviewed and updated annually? **(CD 16–5) Type II** (Yes/No)

B. Mortality Review

12. Are all trauma related mortalities systematically reviewed with opportunities for improvement? **(CD 16–6, CD 16-17, CD 16-18, CD 16-19) Type II §100265** (Yes/No)

- Briefly describe the process:
 - a. How many trauma deaths were there during the reporting year?
 - b. DOA:
 - c. Deaths in ED (DIED):
 - d. In hospital (include OR):

13. List the number of deaths categorized as follow:

- a. Mortality without Opportunity for Improvement:
- b. Anticipated mortality with Opportunity for Improvement:
- c. Unanticipated mortality with Opportunity for Improvement:

C. Event Identification Review

14. Are there sufficient mechanisms available to identify events for review by the trauma PIPS program? **(CD 16–10) Type II** (Yes/No)

- Describe how the events are verified and validated through the PIPS process: **(CD 16–11) Type II**

15. Is there a Multidisciplinary Trauma Systems/Operations Committee? **(CD 16–12). Type II** (Yes/No)

16. Is there documentation (minutes) reflecting the review of operational events and, when appropriate, the analysis and proposed corrective actions? **(CD 16–13) Type II** (Yes/No)

17. Do identified problem trends undergo multidisciplinary trauma peer review? **(CD 16–14) Type II** (Yes/No)

- If 'Yes', please describe:

18. Does the TMD ensure and document dissemination of information and findings from the multidisciplinary trauma peer review meetings to the non-liaisons physicians/surgeons on the trauma call panel? (CD 16-16, CD 16-17, CD 16-18, CD 16-19) Type II (Yes/No)

- If 'Yes', please describe:

19. Does the PIPS program systematically review mortalities, significant complications, and process variances associated with unanticipated outcomes and determine opportunities for improvement? (CD 16-17) Type II §100265 (Yes/No)

20. When an opportunity for improvement is identified, are appropriate corrective actions to mitigate or prevent similar future adverse events developed, implemented, and clearly documented by the trauma PIPS program? (CD 16-18) Type II (Yes/No)

21. Does the performance improvement program demonstrate through documentation that identified opportunities for improvement lead to specific interventions that result in an alteration in conditions such that similar adverse events are less likely to occur? (CD 16-19) Type II (Yes/No)

22. Provide a description of the two committees with trauma PI involvement, including Multidisciplinary Peer Review (Appendix #11a) and Multidisciplinary System Review in Appendix #11b.

D. Evidenced-Based Guideline

23. Does the facility have a manual for evidenced based trauma guidelines and protocols? (Yes/No)

- a. If 'Yes', have a copy available at the time of the site visit labeled as attachment 3-2.
- b. How many and how are they developed?

24. Has the trauma program instituted any 'evidenced based' trauma guidelines and protocols since the last review? (Yes/No)

- a. If 'Yes', briefly describe:
- b. Briefly describe how compliance with the guidelines and protocols are monitored:

E. Geriatric Trauma

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

For the following include only patients 65 and older. Do not include isolated hip fractures from same level falls.

1. Table 1:

ISS	(A)Total Number of Trauma Admissions	(B)Total Number of Trauma Deaths	Percent Mortality (B over A x 100)	Number Admitted to Trauma Service	Number Admitted to Other Surgical Services	Number Admitted to Non-Surgical Services
0-9						
10-15						
16-24						
>or=25						
Total						

2. Does the trauma program admit more than 10% of injured patients to non-surgical services? **(CD 5-18) Type II** (Yes/No)
 - a. Were all patients in table 1 reviewed by the TPM and TMD for appropriateness of admission and other opportunities for improvement? (Yes/No)
 - b. Have documentation available at the time of the site visit labeled as attachment 16-1.
3. From the total number of geriatric trauma patients admitted (column (a) from table), the number of patients admitted after a fall from standing height, excluding patients with isolated hip fractures:
4. Does the hospital have an end of life policy for patients? (Yes/No)
5. Do you have geriatric trauma guidelines or performance improvement projects? (Yes/No)
 - If 'Yes', please describe:
6. Do you have a geriatric- trauma unit in your hospital? (Yes/No)
 - If 'Yes', please describe:
7. Do your nurses caring for geriatric trauma patients receive any geriatric trauma training? (Yes/No)
 - If 'Yes', please describe:
8. Are patients with isolated hip fractures included in your registry data? (Yes/No)
 - If 'Yes', # of admissions:
9. Describe the hospital's policy for admission of patients with isolate hip fracture:

XVII. EDUCATION ACTIVITIES / OUTREACH PROGRAMS

1. Is the trauma center engaged in public and professional education? **(CD 17-1) Type II §100263 (n)** (Yes/No)
2. Does the facility have a trauma or surgical critical care fellowship? (Yes/No)
 - If 'Yes', briefly describe:
3. Does the hospital provide a mechanism for trauma related education for nurses involved in trauma care? **(CD 17-4) Type II §100263 (n) (2)** (Yes/No)
4. Is there any hospital funding for physician, nursing or EMS trauma education? (Yes/No)
 - If 'Yes', briefly describe:
5. Describe the trauma education program, including examples (list no more than 3 examples of each) for:
 - a. Physicians:
 - b. Nurses:
 - c. Prehospital providers:

XVIII. PREVENTION

1. Does the trauma center demonstrate the presence of prevention activities that center on priorities based on local data? **(CD 18-1) Type II §100263 (m)** (Yes/No)
2. What are the three leading causes of injury in your community?
3. Does the trauma center have someone in the leadership position that has injury prevention part of his or her job description? **(CD 18-2) Type II** (Yes/No)
4. Does the PIPS process ensure there is universal screening for alcohol use for all injured trauma patients? **(CD 19-3) Type II** (Yes/No)
5. Which screening instrument and cutoff scores are being used? (Check all that apply)
 - a. If 'BAC' was selected, please enter cutoff score:
 - b. If 'Consumption' was selected, please enter cutoff score:
 - c. If 'AUDIT' was selected, please enter cutoff score:

- d. If 'CAGE' was selected, please enter cutoff score:
 - e. If 'CRAFFT' was selected, please enter cutoff score:
 - f. If 'Other', please describe:
6. How do you track compliance with screening of all injured trauma patients?
 7. Is there a lead person from the trauma program overseeing 'alcohol screening and brief intervention'?
 - a. Who is the lead for SBI?
Have job description available at the time of the site visit labeled as attachment 18-2.
 8. 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, please describe):
 9. How do you track compliance with interventions for all patients who screen positive?
 10. Does the trauma registry identify injury prevention priorities that are appropriate for local implementation? **(CD 15-4) Type II** (Yes/No)

XIX. RESEARCH

1. Is there a trauma research program? (Yes/No)
2. What is the number of ongoing research projects with IRB approval?
 - Provide a LIST of ongoing trauma research projects with IRB approval:
3. Does the hospital have any trauma-related grants?
 - a. If 'Yes', how many?
 - b. Provide a LIST of trauma-related research grants:

XX. DISASTER PLANNING

1. Can the hospital respond to the following hazardous materials?
 - a. Radioactive (Yes/No)
 - b. Chemical (Yes/No)
 - c. Biological (Yes/No)
2. Does the hospital meet the disaster-related requirements of JCAHO or equivalent? **(CD 20-1) Type II** (Yes/No)
3. Is a trauma panel surgeon a member of the hospital's disaster committee? **(CD 20-2) Type II** (Yes/No)
4. Are there hospital drills that test the hospital's disaster plan conducted at least twice a year, including actual plan activations that can substitute for drills? **(CD 20-3) Type II** (Yes/No)
 - a. Is there at least one drill of the notification system? (Yes/No)
 - b. Is there at least one drill with an influx of patients? (Yes/No)
 - c. Is there at least one drill that involves the community plan? (Yes/No)
 - d. Is there an action review of your drills? (Yes/No)
5. Does the trauma center have a hospital disaster plan described in the hospital's policy and procedure manual or equivalent? **(CD 20-4) Type II** (Yes/No)

XXI. SOLID ORGAN PROCUREMENT

1. Does the facility have a solid organ procurement program? (Yes/No)
 - If 'Yes', how many trauma referrals were made to the regional organ procurement organization the reporting year?
2. How many trauma patient donors in the reporting year?
 - Number of donations from meeting brain death criteria and after cardiac death (excluding eyes and skin):
3. Does the trauma center have an established relationship with a recognized OPO? **(CD 21-1) Type II** (Yes/No)
 - Briefly describe how you identify OPO:

4. Are there written policies for triggering notification of the OPO? **(CD 21-2) Type II** (Yes/No)
5. Does the PIPS process review the solid organ donation rate annually? **(CD 16-9) Type II** (Yes/No)
 - The number of trauma deaths vs. number of organ donation referrals vs successful donations:
6. Are there written protocols defining the clinical criteria and confirmatory tests for the diagnosis of brain death? **(CD 21-3) Type II**
 - Briefly describe the protocols and who is privileged to declare brain death:

Appendix #1 - Trauma Medical Director (TMD)

1. Name:
(First name Last name Only; do not include Dr., M.D., or D.O.)
2. Medical School:
 - Year Graduated:
3. Type of Residency:
4. Post graduate training institution (residency):
 - Year Completed:

5.

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

6. Board Certified: (Yes/No)
 - If 'Yes', year of current certification (enter expiration date):
 - Specialty:
7. List added qualifications/certifications giving the Specialty and date received:
8. Is the TMD a Fellow of the American College of Surgeons? (Yes/No)
9. ATLS current: (Yes/No)
Highest Level:
 - a. Instructor
 - b. Provider
10. Trauma CME - External (within the last three years):
11. Trauma admissions per year:
12. Number of admits where ISS > 15 per year:
13. Trauma-related Societal Memberships (check all that apply)
 - a. AAST
 - b. EAST
 - c. WST
 - d. State COT Chair or Vice Chair
 - e. Other

- If 'Other', please list:

14. Number of non-trauma operative cases per year:

15. Number of trauma operative cases per year (Trauma operations limited to those requiring spinal or general anesthesia in the operating room).

Appendix #3 – Trauma Bypass Occurrences

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

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

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

Appendix #4 - Neurosurgeon Liaison to the Trauma Program

1. Name:
(First name Last name Only; do not include Dr., M.D., or D.O.)
2. Medical School:
 - Year Graduated:
3. Post graduate training institution (residency):
 - Year Completed:
4. Type of Fellowship:
 - Year Completed:
5. Board Certified: (Yes/No)
 - If 'Yes', year of current certification (enter expiration date):
6. Ever ATLS certified? (Yes/No)
ATLS Level:
 - a. Instructor
 - b. Provider
 - c. None
7. FACS: (Yes/No)
8. Trauma-related Societal Memberships (check all that apply)
 - a. American Association of Neurological Surgery (AANS)
 - b. Congress of Neurological Surgery (CNS)
 - c. Other
 - i. If 'Other' list other societal memberships:
9. Trauma CME - External (within the last 3 years):

Appendix #6 - Orthopaedic Liaison to the Trauma Program

1. Name:
(First name Last name Only; do not include Dr., M.D., or D.O.)
2. Medical School:
 - Year Graduated:
3. Post graduate training institution (residency):
 - Year Completed:
4. Type of Fellowship:
 - Year Completed:
5. Board Certified: (Yes/No)
 - If 'Yes', year of current certification(enter expiration date):
6. Ever ATLS certified? (Yes/No)
ATLS Level:
 - a. Instructor
 - b. Provider
 - c. None
7. FACS: (Yes/No)
8. Trauma-related Societal Memberships (check all that apply)
 - a. Orthopaedic Trauma Association (OTA)
 - b. American Academy of Orthopaedic Surgery (AAOS)
 - c. Other
 - i. If 'Other' list other societal memberships:
9. Trauma CME - External (within the last 3 years):

Appendix #8 - Emergency Medicine Liaison to the Trauma Program

1. Name:
(First name Last name Only; do not include Dr., M.D., or D.O.)
2. Medical School:
 - Year Graduated:
3. Post graduate training institution (residency):
 - Year Completed:
4. Board Certified in Emergency Medicine: (Yes/No)
 - If 'Yes', year of current certification (enter expiration date):
5. Ever ATLS certified? (Yes/No)
ATLS Level:
 - a. Instructor
 - b. Provider
 - c. None
6. Complete if board certified in another specialty, such as Family practice, internal medicine, etc. (Yes/No)
 - If 'Yes', please specify:
 - Year of current certification:
 - Current ATLS: (Yes/No)
 - i. ATLS Level
 1. Instructor
 2. Provider
 3. None
7. Trauma CME - External (within the last 3 years):

Appendix #10 - Anesthesiologist Liaison to the Trauma Program

1. Name:
(First name Last name Only; do not include Dr., M.D., or D.O.)
2. Medical School:
 - Year Graduated:
3. Post graduate training institution (residency):
 - Year Completed:
4. Fellowship:
 - Year Completed:
5. Board Certified by the American Board of Anesthesiology: (Yes/No)
 - If 'Yes', year of current certification (enter expiration date):
6. Ever ATLS certified? (Yes/No)
ATLS Level:
 - a. Instructor
 - b. Provider
 - c. None

Appendix #11a – PIPS Committee- MULTIDISCIPLINARY TRAUMA PEER REVIEW

Performance Improvement and Patient Safety (PIPS) COMMITTEES

MULTIDISCIPLINARY TRAUMA PEER REVIEW

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 (CD5.18, CD5.19, CD5.20, and CD5.21)

1. Name of Committee:
2. What is the purpose of the committee? Multidisciplinary Peer Review
3. Name / Title of Chairperson:
4. How often does this committee meet?
5. Attendance of specialty panel members:

TMD:	%
TPM:	%
Trauma Surgeons:	Refer to appendix #2
Emergency Medicine Liaison or Designated Representative:	%
Neurosurgery Liaison or Designated Representative:	%
Orthopaedics Liaison or Designated Representative:	%
Anesthesia Liaison or Designated Representative:	%
Radiologist Liaison or Designated Representative:	%
ICU Director Liaison or Designated Representative:	%
Pediatric TMD:	%
Pediatric TPM:	%
Pediatric Trauma Surgeons:	Refer to appendix #2
Pediatric Emergency Medicine Liaison or Designated Representative::	%
Pediatric Neurosurgery Liaison or Designated	%

Representative:	
Pediatric Orthopaedics Liaison or Designated Representative:	%
Pediatric Anesthesiologist Liaison or Designated Representative:	%
Pediatric Radiologist Liaison or Designated Representative:	%
Pediatric ICU Director Liaison or Designated Representative:	%

6. Committee reports to whom?

Appendix # 11b – PIPS Committee – Multidisciplinary Trauma Systems/Operations Committee

**Performance improvement and Patient Safety (PIPS) COMMITTEES
Multidisciplinary Trauma Systems / Operations Committee**

Name of Committee:

What is the purpose of the committee? Multidisciplinary Trauma Systems/Operations

Name / Title of Chairperson:

Are there attendance requirements? (Yes/No)

If 'Yes', describe:

Attendance of specialty panel members:

TMD:	%
TPM:	%
Trauma Surgeons:	%
Emergency Medicine:	%
Neurosurgery:	%
Orthopaedics:	%
Anesthesiologist	%
Radiologist	%
ICU Director:	%
Pediatric TMD:	%
Pediatric TPM:	%
Pediatric Trauma Surgeons:*	%
Pediatric Emergency Medicine:*	%
Pediatric Neurosurgery:*	%
Pediatric Orthopaedics:*	%
Pediatric Anesthesiologist:*	%
Pediatric Radiologists:*	%
Pediatric ICU Director:*	%
Other Attendees:	%

Committee reports to whom?

Appendix #12 - Radiologist Liaison to the Trauma Program.

1. Name:
(First name Last name Only; do not include Dr., M.D., or D.O.)
2. Medical School:
 - a. Year Graduated:
3. Post graduate training institution (residency):
 - a. Year Completed:
4. Fellowship:
 - a. Year Completed:
5. Board Certified by the American Board of Radiology: (Yes/No)
 - a. If 'Yes', year of current certification (enter expiration date):
6. Ever ATLS certified? (Yes/No)
ATLS Level:
 - a. Instructor
 - b. Provider
 - c. None

Appendix #13 - Critical Care Liaison to the Trauma Program – complete if the TMD is a different surgeon.

1. Name:
(First name Last name Only; do not include Dr., M.D., or D.O.)
2. Medical School:
 - Year Graduated:
3. Type of Residency:
4. Post graduate training institution (residency):
 - Year Completed:

5.

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

6. Board Certified: (Yes/No)
 - If 'Yes', year of current certification (enter expiration date):
7. Specialty:
 - List added qualifications/certifications giving the Specialty and date received:
8. Is a Fellow of the American College of Surgeons? (Yes/No)
9. ATLS current: (Yes/No)

Highest Level:

 - a. Instructor
 - b. Provider
10. Trauma CME - External (within the last three years):

Appendix #14 - Pediatric TMD (if applicable)

1. Name:
(First name Last name Only; do not include Dr., M.D., or D.O.)
2. Medical School:
 - Year Graduated:
3. Type of Residency:
4. Post graduate training institution (residency):
 - Year Completed:

5.

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

6. Board Certified: (Yes/No)
 - If 'Yes', year of current certification (enter expiration date):
7. Specialty:
 - List added qualifications/certifications giving the Specialty and date received:
8. Is the TMD a Fellow of the American College of Surgeons? (Yes/No)
9. ATLS current: (Yes/No)
Highest Level:
 - a. Instructor
 - b. Provider
10. Trauma CME - External (within the last three years):
11. Trauma admissions per year:
12. Number of admits where ISS > 15 per year:
13. Trauma-related Societal Memberships (check all that apply)
 - a. AAST
 - b. EAST
 - c. WST
 - d. State COT Chair or Vice Chair
 - e. Other

- If 'Other' please list

14. Number of non-trauma operative cases per year:

15. Number of trauma operative cases per year (Trauma operations limited to those requiring spinal or general anesthesia in the operating room).