FAQ for Resources for Optimal Care of the Injured Patient: 2006

<table>
<tr><th>Chapter</th><th>Level</th><th>CD Number</th><th>Criteria (CD)</th><th>FAQ</th><th>Date Updated</th></tr>
<tr><td colspan="3">In an effort to clarify the current edition of Resources for Optimal Care of the Injured Patient, the Committee on Trauma has developed the following grid.

It is expected that a trauma program manager is 1 FTE in a Level I Trauma Center, or a Level I Pediatric Trauma Center.

It is expected that a trauma program manager is 1 FTE in a Level II Trauma Center.*

In a Level II Trauma Center and Level II Pediatric Trauma Center both the role of the TPM and Pediatric TPM may be fulfilled by the same person.</td><td colspan="2">
<table>
<tr><th>Which Level or Levels are you applying for?</th><th>Do you need a TPM?</th><th>Does the TPM need to be full time and dedicated?</th><th>Do you need a separate pediatric TPM or coordinator?</th><th>Does the separate pediatric TPM/coordinator need to be full time and dedicated?</th></tr>
<tr><td>Level I Trauma Center</td><td>Yes</td><td>Yes</td><td>No</td><td></td></tr>
<tr><td>Level II Trauma Center</td><td>Yes</td><td>Yes*</td><td>No</td><td></td></tr>
<tr><td>Level III Trauma Center</td><td>Yes</td><td>No</td><td>No</td><td></td></tr>
<tr><td>Pediatric Level I Trauma Center</td><td>Yes</td><td>Yes</td><td></td><td></td></tr>
<tr><td>Pediatric Level II Trauma Center</td><td>Yes</td><td>No</td><td></td><td></td></tr>
<tr><td>Level I Trauma Center and Level I Pediatric Trauma Center</td><td>Yes</td><td>Yes</td><td>Yes</td><td>Yes</td></tr>
<tr><td>Level I Trauma Center and Level II Pediatric Trauma Center</td><td>Yes</td><td>Yes</td><td>Yes</td><td>No</td></tr>
<tr><td colspan="5">• Requirement changed 10/14/2008
• Note: A TPM in a Level II center may also serve as the prevention coordinator.</td></tr>
</table>
</td><td></td></tr>
<tr><td>1</td><td>I,II,III</td><td>1.1</td><td>There is insufficient involvement by the hospital trauma program staff in state/regional trauma system planning, development, and/or operation.</td><td>Some examples are but not limited to: State trauma planning committees or commissions, EMS bureaus, State COT, local EMS rule-making bodies.</td><td>5/22/07</td></tr>
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2	I	2.3	The Level I trauma Center does not meet admission volume performance requirements	A trauma admission includes an injured patient who has either inpatient admission or a 23-hour observation status, regardless of the location of care. Determination of volume of admissions per year for a Level I trauma center based on Injury Severity Score (ISS) of more than 15, includes a total of 1200 admissions per year to the trauma service, or 240 admissions with an ISS>15, or an average of 35 patients with an ISS>15 for the "core" trauma surgeons on the trauma call panel. The following type of patients should not be included in the number of admissions: 1. patients with an isolated hip fracture secondary to a same level fall from standing 2. drowning and near drowning 3. poisoning 4. foreign bodies 5. suffocation injuries 6. DOAs.	10/8/07
2	I,II,III	2.7	The 80% compliance of the surgeon's presence in the emergency department is not confirmed or monitored by PIPS (15 minutes for Level I and II; 30 minutes for Level III). Demonstration of the attending surgeon's prompt arrival for patients with appropriate activation criteria must be monitored by the hospital's trauma PIPS program.	The response times are for compliance with the hospital's criteria for the highest level of activation. The highest level of activation must include the Committee on Trauma's (COT) minimum requirements, refer to CD 6.7.	10/8/07
2	I,II,III	2.14	Trauma surgeons in adult trauma centers that treat more than 100 injured children annually are not credentialed for pediatric trauma care by the hospital's credentialing body.	Credentialing is to be determined by the hospital. Suggestions/possibilities of credentialing qualifications could be (but are not limited to) the following: 1. Completion of pediatric fellowship, 2. Pediatric Advanced Life Support completion, or 3. Involvement in the care of a significant number (ie 90) of injured children over the last three years.	5/22/07

3	I,II,III	3.4	The facility exceeds the maximum divert time.	The maximum amount of time a hospital can be on divert (bypass) is 5% of the time.	4/24/08
5	I, II, III	5.5	The trauma medical director must be board-certified or board-eligible, or must be an ACS Fellow.	The trauma medical director may be board-eligible The trauma medical director (TMD) must be dedicated to one trauma center. The TMD cannot administer two trauma centers.	11/10/09 COT 10/8/07
5	I,II,III	5.10	The criteria for a graded activation must be clearly defined by the trauma center and continuously evaluated by PIPS.	Typically trauma centers have a tiered trauma response/activation process for identifying pre-hospital information to determine which patients need the full trauma team present prior to the patient's arrival, and which patients need a partial trauma team response. The pre-hospital information may include physiologic criteria, anatomic criteria, and mechanism of injury criteria (these types of criteria are listed in the chart on page 22 of the "Green Book"). Using these criteria as a guide, a trauma center can determine which criteria would constitute activation criteria for the levels of activation. Most trauma centers have two levels of trauma response/activation (some have only one), along with a "Consult" level - for patients that did not meet the activation criteria and have been identified by either the emergency physician or a surgical subspecialist (who is evaluating or admitting the patient), that an evaluation by the trauma team is needed. Some hospitals refer to the "Consult" level as the lowest level of activation, since it is the emergency physician and emergency department nurse who respond to see those trauma patients who do not meet the activation criteria. The highest level of activation requires the response of the full trauma team prior to the arrival of the patient, and the criteria may typically include physiologic criteria, some or several of the anatomic criteria (listed on page 22), and occasionally some mechanism of injury criteria. At a minimum, the American College of Surgeons (ACS) requires the six criteria listed for CD 6.7 to be included in the highest level of activation for Level I, II, and III trauma centers. The remaining physiologic, anatomic, and mechanism of injury criteria that are listed on page 22 (or similar type criteria - using these as a guide), and other potential criteria	11/10/08

				for trauma team activation, that have been determined by the trauma program to be included in the various levels of trauma activation, should be evaluated on an ongoing basis in the performance improvement and patient safety process, to determine if there should be revisions in the activation criteria for the levels of trauma activation. Again, the six criteria listed by the ACS must remain in the highest level of activation. Refer to CD 6.7	
5	I,II,III	5.11	Programs that admit more than 10% of injured patients to nonsurgical services do not demonstrate the appropriateness of that practice through the PIPS process.	Surgical services include: general surgery, neurosurgery, orthopaedics, urology, plastics, ENT, ophthalmology, burns, vascular, surgical critical care, pediatric surgery, trauma, emergency general surgery. The appropriateness of admitting more than 10% of injured patients to nonsurgical services must be demonstrated by criteria, such as: 1. The number of patients that had a trauma consult, 2. The number of patients with other surgical service consults, 3. The number due to same height falls, 4. The number of drownings, poisonings, or hangings, 5. ISS less than or equal to 4 and do not meet the criteria in #s 3 and 4, and 6. Identification of which patients should not have been admitted to nonsurgical service and documentation of the reason, follow-up and loop closure.	10/8/07

6	I,II,III	6.7	The criteria for the highest level of activations are not clearly defined and evaluated by the PIPS program.	The following are the Committee on Trauma's minimally acceptable criteria for the highest level of activation. These six criteria must be included with a hospital's criteria for highest level of activation. Additional institutional criteria may also be included. 1. Confirmed blood pressure <90 at any time in adults and age-specific hypotension in children; 2. Gunshot wounds to the neck, chest, or abdomen; 3. GCS <8 with mechanism attributed to trauma; 4. Transfer patients from other hospitals receiving blood to maintain vital signs; 5. a. Intubated patients transferred from the scene, - OR - b. Patients with respiratory compromise or obstruction -Includes intubated patients who are transferred from another facility, with ongoing respiratory compromise (does not include patients intubated at another facility and are now stable from a respiratory standpoint) 6. Emergency physician's discretion. Note: Patients who are transported to a trauma center after cardiac arrest must be activated at the highest level. Note: Patients who are the victim of hanging must be activated at the highest level if they meet any of the six criteria above.	10/8/07

6	I,II	6.13	Other trauma surgeons who take trauma call do not have the documented 16 hours annually or 48 hours in three years of trauma-related Continued Medical Education (CME) or an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.	Internal CME may count towards CME requirements for the other members of the trauma surgeon call panel. Examples of internal CME include the following: In-service, educational conference, grand rounds, internal trauma symposium, in-house publication disseminating information gained from a local conference, or an individual's recent participation (through trained analysis) reviewing a trauma center. The Internal Educational Process (IEP) may be used for the trauma surgeons in place of the required 16 trauma related CME hours per year on average. The IEP should include presentations/discussions on a quarterly basis, ideally related to issues identified in the PIPS process, with either the TMD, or designee, providing the leadership of this educational process for the physicians in the department. These presentations should be documented in the PI process. CME will be prorated for surgeons new to the trauma service or new liaisons. If a surgeon has been taking trauma call for one year, he or she must have 1/3 CME. CME will be prorated for a hospital seeking ACS verification for the first time; it will not be prorated because of updated versions of the Resources for Optimal Care of the Injured Patient document.	5/22/07
6	I,II	6.14	The trauma medical director is not a member of and does not participate in regional or national trauma organizations.	For a Level I trauma medical director national organizations include: EAST, AAST, COT, WTA, and Regional committees on trauma (including past and present region chiefs, State Chair and Vice-Chair, provincial, or international chairs). This does **NOT** include members of the state COT, other than State Chairs and Vice-Chairs. For a Level II trauma medical director national organizations include: EAST, AAST, COT, WTA, and Regional committees on trauma (including past and present region chiefs, State Chair and Vice-Chair, provincial, or international chairs).A Level II trauma medical director may also be an active participant in the state COT. A Level II trauma medical director can be an active participant in their state Regional council/advisory committee. Participation in a national organization during the review	10/8/07 3/19/09 3/19/09

				cycle (3 years) in a regional committee APSA for pediatric trauma medical directors does not meet this requirement.	
7	I,II,III	7.1	The emergency department does not have a designated emergency physician director supported by an appropriate number of additional physicians to ensure immediate care for injured patients.	The designated emergency physician director may be fulfilled by a surgeon who is in charge of the surgical side of the ED.	5/22/07
7	I,II	7.13	Other emergency physicians who take trauma call do not have the documented 16 hours annually or 48 hours in three years of trauma-related Continued Medical Education (CME) and do not participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.	Internal CME may count towards CME requirements for the other members of the trauma surgeon call panel. Examples of internal CME include the following: In-service, educational conference, grand rounds, internal trauma symposium, in-house publication disseminating information gained from a local conference, or an individual's recent participation (through trained analysis) reviewing a trauma center. The Internal Educational Process (IEP) may be used for the trauma surgeons in place of the required 16 trauma related CME hours per year on average. The IEP should include presentations/discussions on a quarterly basis, ideally related to issues identified in the PIPS process, with either the TMD, or designee, providing the leadership of this educational process for the physicians in the department. These presentations should be documented in the PI process. CME will be prorated for surgeons new to the trauma service or new liaisons. If a surgeon has been taking trauma call for one year, he or she must have 1/3 CME. CME will be prorated for a hospital seeking ACS verification for the first time; it will not be prorated because of updated versions of the Resources for Optimal Care of the Injured Patient document.	5/22/07
8	I,II	8.2	Neurotrauma care is not promptly and continuously available for severe traumatic brain injury and spinal cord injury and for less severe head and spine injuries when necessary.	It is acceptable, but not required, for an institution to credential both neurosurgeons and orthopaedic surgeons to treat spine injuries or to share spine call.	5/22/07

8	I,II	8.14	Other neurosurgeons who take trauma call do not have the documented 16 hours annually or 48 hours in three years of verifiable, external trauma-related Continued Medical Education (CME) and do not participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.	Internal CME may count towards CME requirements for the other members of the trauma surgeon call panel. Examples of internal CME include the following: In-service, educational conference, grand rounds, internal trauma symposium, in-house publication disseminating information gained from a local conference, or an individual's recent participation (through trained analysis) reviewing a trauma center. The Internal Educational Process (IEP) may be used for the trauma surgeons in place of the required 16 trauma related CME hours per year on average. The IEP should include presentations/discussions on a quarterly basis, ideally related to issues identified in the PIPS process, with either the TMD, or designee, providing the leadership of this educational process for the physicians in the department. These presentations should be documented in the PI process. CME will be prorated for surgeons new to the trauma service or new liaisons. If a surgeon has been taking trauma call for one year, he or she must have 1/3 CME. CME will be prorated for a hospital seeking ACS verification for the first time; it will not be prorated because of updated versions of the Resources for Optimal Care of the Injured Patient document.	5/22/07
9	I,II	9.7	An orthopaedic team member is not promptly available in the trauma resuscitation area when consulted by the surgical trauma team leader for patients with multiple injuries.	Documentation of response times is not required, but the program needs to assure that this is possible.	10/8/07
9	I,II	9.9	Level I and II centers do not provide sufficient resources, including instruments, equipment, and personnel, for modern musculoskeletal trauma care, with readily available operating rooms for musculoskeletal trauma procedures.	Best method for providing a readily available OR is to have a designated orthopaedic fracture room that can be posted the night before. It is acceptable to document sufficient available unblocked OR time to accommodate these fractures.	5/22/07
9	I,II,III	9.15	The orthopaedic surgeon does not have privileges in general orthopaedic surgery.	It is not acceptable for orthopaedic coverage to be provided by surgeons who are not on the staff and credentialed by the hospital to provide general acute hospital coverage.	5/22/07

9	I,II	9.17	The orthopaedic trauma team member does not have documentation of the acquisition of 16 hours of Continued Medical Education (CME) per year on average and has not participated in an internal educational process conducted by the trauma program and the orthopaedic liaison based on the principles of practice-based learning and the PIPS program.	Internal CME may count towards CME requirements for the other members of the trauma surgeon call panel. Examples of internal CME include the following: In-service, educational conference, grand rounds, internal trauma symposium, in-house publication disseminating information gained from a local conference, or an individual's recent participation (through trained analysis) reviewing a trauma center. The Internal Educational Process (IEP) may be used for the trauma surgeons in place of the required 16 trauma related CME hours per year on average. The IEP should include presentations/discussions on a quarterly basis, ideally related to issues identified in the PIPS process, with either the TMD, or designee, providing the leadership of this educational process for the physicians in the department. These presentations should be documented in the PI process. CME will be prorated for surgeons new to the trauma service or new liaisons. If a surgeon has been taking trauma call for one year, he or she must have 1/3 CME. CME will be prorated for a hospital seeking ACS verification for the first time; it will not be prorated because of updated versions of the Resources for Optimal Care of the Injured Patient document.	5/22/07
10	PTC I,II	10.2 10.3	A Level I pediatric trauma center does not annually admit 200 or more injured children younger than 15 years of age. A Level II pediatric trauma center does not annually admit 100 or more injured children younger than 15 years of age.	A pediatric admission is defined as a child less than 15 years of age who has either inpatient admission or 23-hour observation status, regardless of the location of care. The following type of patients should not be included in the number of admissions: 1. patients with an isolated hip fracture secondary to a same level fall from standing 2. drowning and near drowning 3. poisoning 4. foreign bodies 5. suffocation injuries 6. DOAs	10/8/07
10	PTC I,II	10.4	A pediatric trauma center does not have a pediatric trauma program manager or coordinator.	It is acceptable to have the pediatric trauma program manager report (TPM) to the overseeing Director/TPM in a facility that treats both adults and children.	4/22/08

	PTC I,II	10.5	A pediatric trauma center does not have a pediatric trauma registrar.	The pediatric trauma registrar should be dedicated to the trauma program, and not also to hospital medical records. If there are multiple trauma registrars a single registrar needs to be responsible for the pediatric data. If this is not a full time position then the pediatric registrar may also work as a trauma registrar for adult data.	10/8/07
10	PTC I,II	10.8	A pediatric trauma center does not have all of the following programs: pediatric rehabilitation; child life and family support programs; pediatric social work and child protective services; pediatric injury prevention and community outreach programs; and pediatric trauma education programs.	This does **not** imply a specific FTE per program. A pediatric trauma center may have less or more than 1 FTE per program. Within the pediatric service the pediatric TPM may be responsible for the pediatric PIPS program, pediatric prevention, pediatric research, pediatric surgery service, and other programs within pediatrics. The pediatric TPM must be dedicated to the pediatric trauma program in a Level I pediatric trauma center and should be dedicated to the pediatric trauma program in a Level II pediatric trauma center. The pediatric injury prevention coordinator in a Level II Pediatric Center can be the TPM, as long as there is adequate time. See grid above for additional clarification.	5/22/07
10	PTC I	10.9	A pediatric trauma center does not have identifiable pediatric trauma research.	For a pediatric Level I trauma center that has an accompanying Level I adult trauma center may claim credit for the adult center's research/scholarly activities; however, ten the pediatric center's publications/scholarly activities must be applicable to pediatric injury patients. Stand alone pediatric trauma centers may also use adult-based trauma research. This requirement may not be pro-rated.	5/22/07 9/15/08 10/12/09

10	PTC I	10.10	A Level I pediatric trauma center does not have at least 2 surgeons, board-certified or board-eligible in pediatric surgery by the American Board of Surgery.	Pediatric surgeons who are non-boarded or board-eligible (after 5 years), may be included on the call panel at Level I and II pediatric trauma centers if they are members of the American Pediatric Surgical Association or the Surgical Section of the American Academy of Pediatrics.	5/22/07
10	PTC I	10.11	A Level I pediatric trauma center does not have at least 1 board-certified or board eligible orthopaedic surgeon who has had pediatric fellowship training	If there is not a pediatric fellowship trained orthopaedic surgeon, then a trauma fellowship trained orthopaedic surgeon that has demonstrated expertise and interest in pediatric orthopaedic trauma.	4/25/11
10	PTC I	10.12	A Level I pediatric trauma center does not have at least 1 board-certified or board-eligible neurosurgeon who has had pediatric fellowship training.	If there is not a neurosurgeon with pediatric fellowship training, there must be at least one board-certified or board-eligible neurosurgeon on staff that has demonstrated expertise and interest in pediatric neurotrauma, and can be met by the following: A. Be board certified in pediatric neurosurgery -or- B. Have completed an approved pediatric neurosurgical fellowship, -or- C. Have some pre-visit demonstration of pediatric interest which could include: pediatric-oriented publications and/or research efforts, performing ½ or more of the pediatric neurosurgical operations at that institution, perform more than 25 operations per year on children less than 12, -or- D. Active membership in a pediatric neurosurgical organization which include the American Society of Pediatric Neurosurgeons, the American Academy of Pediatrics, the AANS/CNS Section of Pediatric Neurological Surgery, and the International Society for Pediatric Neurosurgery. All of the above is acceptable or an existing criteria that demonstrates that they have a pre-existing special interest in pediatric neurosurgery. However, it must be beyond having a letter from the trauma director.	5/22/07 9/15/08

10	PTC I	10.13	Pediatric Level I, there must be 1 additional board-certified or board-eligible orthopaedic surgeon identified with demonstrated interests and skills in pediatric trauma care.	Either a trauma fellowship trained orthopaedic surgeon or a pediatric fellowship trained orthopaedic surgeon for a Pediatric Level I/II center.	4/25/11
10	PTC I	10.14	Pediatric Level I, there must be 1 additional board-certified or board-eligible neurosurgeon identified with demonstrated interests and skills in pediatric trauma care.	The surgeons with **special skills and interest** in pediatric neurotrauma must demonstrate the following: A. Be board certified in pediatric neurosurgery -or- B. Have completed an approved pediatric neurosurgical fellowship, -or- C. Have some pre-visit demonstration of pediatric interest which could include: pediatric-oriented publications and/or research efforts, performing ½ or more of the pediatric neurosurgical operations at that institution, perform more than 25 operations per year on children less than 12, -or- D. Active membership in a pediatric neurosurgical organization which include the American Society of Pediatric Neurosurgeons, the American Academy of Pediatrics, the International Society for Pediatric Neurosurgery, and the Joint Section of Neurotrauma and attends the pediatric component of the AANS/CNS every 3 years. All of the above is acceptable or an existing criteria that demonstrates that they have a pre-existing special interest in pediatric neurosurgery. However, it must be beyond having a letter from the trauma director.	9/18/08
10	PTC I	10.15	A Level I pediatric trauma center does not have at least 2 physicians who are board certified or board eligible in pediatric critical care medicine (pediatric or surgical).	These physicians may be certified in pediatric medical or surgical critical care. Boards in cardiology, pulmonary medicine, and/or anesthesia are not acceptable as alternatives to board certified/eligible in pediatric critical care.	5/22/07 10/13/08

10	PTC I	10.16	A Level I pediatric trauma center does not have 2 physicians who are board-certified or board-eligible in pediatric emergency medicine.	Alternate method of satisfying the criteria of being board certified in pediatric emergency medicine - **if a physician is board certified in both emergency medicine or pediatrics –satisfies the requirement for one of the board certified/eligible pediatric emergency medicine physicians.**	10/13/08
10	PTC II	10.19	A Level II pediatric trauma center does not have at least 1 surgeon who is board certified or board-eligible in pediatric surgery.	Alternate Criteria for Non-Pediatric-Fellowship-Trained Surgeons in a Level II pediatric trauma center must be demonstrated by the following eight criteria: 1. A letter from the chief of the medical staff indicating this critical need in the trauma program because of limited physician resources in pediatric surgery within the hospital medical staff. 2. Credentialed by the hospital to provide pediatric injury care. 3. Evidence that the alternate pediatric surgeon is currently board eligible or board certified in general surgery. 4. Documentation of current status as a provider or instructor in the Pediatric Advanced Life Support program. 5. Documentation that the surgeon participates in the pediatric trauma performance improvement program. 6. Documentation of membership or attendance at local, regional, and national trauma meetings during the past 3 years. 7. A list of at least 75 patients < 15 years of age treated by the surgeon during the past 3 years with accompanying Injury Severity Score and outcome data. Note: There must be an ON-SITE review by an ACS pediatric surgery surveyor to document compliance.	10/8/07
10	PTC I,II	10.22	The pediatric trauma medical director is not board certified or board eligible in general surgery.	The pediatric trauma medical director is board eligible or board certified by the American Board of Surgery in General Surgery, and has a "certificate of Special Qualifications in Pediatric Surgery" From the American Board of Surgery.	12/17/09

10	PTC I,II	10.24	There are non–pediatric-trained surgeons serving on the pediatric panel without proper qualifications: 1. Not credentialed by the hospital to provide pediatric trauma care, 2. Not members of the adult trauma panel, 3. The pediatric trauma medical director has not agreed to their having sufficient training and experience in pediatric trauma care, 4. Their performance has not been reviewed by the pediatric PIPS program.	Credentialing is to be determined by the hospital. Suggestions/possibilities of credentialing qualifications could be (but are not limited to) the following: 1. Completion of pediatric fellowship, 2. Pediatric Advanced Life Support completion, or 3. Involvement in the care of a significant number (ie 90) of injured children over the last three years.	10/8/07
10	PTC I,II	10.25	Trauma Surgeon attendance in the emergency department for the highest level of activations is not document to be greater than 80% of the time.	The response times are for compliance with the hospital's criteria for the highest level of activation for pediatric trauma patients, which must include the COT's minimum requirements for the highest level of actions. Refer to CD 6.70 for the COT's highest level of activations.	5/22/07
10	PTC I,II	10.27	The program does not offer specialty-specific pediatric education for the specialists.	ACS Reviewers will review documentations of lectures or educational offerings.	5/22/07

10	A/PTC I,II	10.29	All hospitals seeking verification as an adult and pediatric trauma center do not meet the criteria for the verification level sought in each type of center.	The ACS no longer verifies centers as "Adult with Pediatric Commitment" or "Adult and Pediatric." The categories of trauma centers include: Trauma Center (formerly "Adult") Level I, II, or III, and Pediatric Trauma Center Level I or II. For institutions that wish to be verified as an adult trauma center and a pediatric trauma center, they must meet the criteria listed for both adult centers and for pediatric centers. The centers will be reviewed independently (including a pediatric surgeon reviewer) and two separate plaques distributed. For Trauma Center Level I, II, or III verification combined with a Pediatric Level II verification there will only be one PRQ to complete by the hospital. The visit will occur at the same time and one report written by the reviewers. For Trauma Center Level I, II, or III verification combined with Pediatric Level I verification, two separate PRQs must be completed by the hospital, and two reports will be written by the reviewers. The visits may occur at the same time. A hospital seeking both verification for their trauma center and pediatric trauma center will have the ability to choose different levels for each trauma center. For instance, a trauma center may wish to seek Level I verification, but also apply for verification as a Pediatric Level II Trauma Center. Volume from the pediatric trauma center may be counted in the total volume of the trauma center if the adult center is involved in the care of pediatric patients. If the trauma surgeons are not able to treat pediatric patients, then the number of pediatric patients may not be counted as part of the volume.	6/28/07
10	ATCTIC I,II,III	10.30	Trauma surgeons in adult trauma centers that admit 100 or more injured children annually are not credentialed for pediatric trauma care by the hospital's credentialing body.	Age limits for patient transfer/triage should be defined by local community standards (written EMS system policy). However, the VRC will use < 15 years of age for the definition of a child solely for the volume/performance criteria during the visit, if there is no community standard.	5/22/07
10	ATCTIC I,II,III	10.32	The adult trauma center that admits fewer than 100 injured children annually does not review the care of injured children through the PIPS program.	If the hospital admits any injured children they must review their pediatric admits in the PI process.	5/22/07

10	PTC I,II	10.33	There is no multidisciplinary peer-review committee with participation by the trauma medical director or designee and representatives from pediatric/general surgery, orthopaedic surgery, neurosurgery, emergency medicine, critical care medicine, and anesthesia that reviews selected deaths, complications, and sentinel events to identify issues and appropriate responses.	Note that there must be a pediatric critical care liaison (or designee) attending the multidisciplinary pediatric trauma peer review committee.	5/22/07
10	PTC I,II	10.34	Attendance by the required representatives to at least 50 % of the multidisciplinary peer review meetings is not documented.	Besides the TMD or designee, representatives must include: pediatric and general surgery, orthopaedic surgery, neurosurgery, emergency medicine, critical care medicine, and anesthesia. In a combined adult trauma center and pediatric trauma center, it is acceptable for the adult representative (for example someone from Orthopedics) to attend the pediatric PI meeting as the substitute for the pediatric liaison. In other words, the attendees at the pediatric PI meeting do not have to be the pediatric specialists.	5/22/07 9/15/08
10	PTC I, II	10.35	The pediatric trauma medical director and the liaisons from neurosurgery, orthopaedic surgery, emergency medicine, and critical care medicine must have adequate pediatric trauma CME.	Each of these five individuals must have evidence of at least 12 hours of pediatric trauma-related CME over a three-year period.	11/10/09
11	I,II,III	11.3	There is no anesthesiologist liaison designated to the trauma program.	A liaison needs to be appointed that can provide the anesthesiologists' perspective on trauma patients going to the OR and to take back to anesthesia the surgeons' perspective; this is also important for airway issues. There are no CME requirements for the anesthesia liaison. The attendance to the PIPS could be met by a designee; however, ideally, the liaison would fulfill this.	5/22/07
11	II	11.7	The anesthesia services in a Level II trauma center must be available 24 hours a day.	In a Level II trauma center, Anesthesia does not need to be in-house. Certified registered nurse anesthetist (CRNA) can be utilized, however, the Anesthesiologists must respond to Level I activations in a timely fashion and documented in the PI process.	

11	I	11.15	The operating room is not adequately staffed and immediately available.	There must be a full operating room team in house 24/7, 365 days-a-year. The following are examples to demonstrate immediately availability of an operating room 1. Designated trauma room. 2. Staggered start in the morning. 3. Demonstrate there are enough operating rooms during various times of the day so that an emergency patient will have access to bump a case and that there are policies and procedures in place to bump a start case when necessary.	5/22/07
11	II,III	11.18	The operating room is not adequately staffed and readily available.	The hospital may call people in during off hours; ideally arrival should be within 30 minutes. The hospital must demonstrate that volume is low, and that there is a call-in procedure which is public and known to the surgeons on call. An effective and common mechanism for a call-in procedure is to notify the call-in team when a level I activation occurs. The PI data must show no delays in obtaining an operating room, and chart reviews at the time of site survey need to support that assertion.	5/22/07
11	I	11.23	The trauma center does not have cardiopulmonary bypass and an operating microscope available 24 hours per day.	Must have cardio thoracic surgery capability, if no CPB pump, then contingency plan with transfer agreement and PI the process.	10/3/2010
11	I,II	11.37	There is no in-house radiographer at Level I and II trauma centers.	An in-house radiographer position can be fulfilled by an x-ray technician.	5/22/07
11	II,III	11.39	When the CT technologist responds from outside the hospital, the PIPS program does not document the response time.	Response time is the time that they arrive at the hospital.	5/22/07
11	I	11.42	The PIPS program does not document the appropriate timeliness of the arrival of the MRI technologist.	In a Level I trauma center it is essential to have MRI 24/7. There does not have to be an in-house technician; however, one must be available and the PIPS program must document and review appropriate timeliness of their arrival. This can be accomplished by maintaining a log that shows when the tech was needed, called (off hours), and arrival time. This time should not exceed two hours. There is a growing trend in developing acute spine management programs, in which case urgently available MRIs will be required and a two-hour response time may be insufficient.	5/22/07

11	I	11.44	The surgical director or co-director of the ICU does not have appropriate training and experience for the role.	The surgical director must be trained/credentialed as an ICU director, or must be a trauma surgeon with six weeks per year of trauma care, or a trauma fellowship.	5/22/07
11	I	11.51	The surgical director of the ICU does not have added qualifications in surgical critical care from the American Board of Surgery and does not meet the Alternate Pathway for critical care.	Alternate pathway for board certification includes successfully completing a trauma fellowship or documentation of active participation during the preceding 12 months in 25 trauma patients' ICU care, ICU administration, 8 hours critical care related CME, and active participation in the PIPS program. Surgeons who have qualified through the alternate pathway are not required to repeat the process unless they move to another trauma center. The surgeon must maintain the eight requirements of the Level II alternate pathway criteria at the time of the visit, and the hospital must internally PI this process. **Pediatric Alternate pathway for board certification** includes successfully completing a pediatric trauma fellowship or documentation of active participation during the preceding 12 months in pediatric trauma patients' ICU care, pediatric ICU administration, and pediatric critical care related CME. Surgeons who have qualified through the alternate pathway are not required to repeat the process unless they move to another trauma center. The surgeon must maintain the eight requirements of the Level II alternate pathway criteria at the time of the visit, and the hospital must internally PI this process.	5/22/07 3/19/09 9/2/08 3/19/09

11	I	11.55	The patients in Level I facilities do not have in-house physician coverage for ICU at all times.	A hospital must demonstrate no untoward events. In a Level I trauma center, we expect the physician for trauma services to be available all the time--can be a resident or in-house attending. In a busy Level II, there will be an in-house physician--trauma surgeon, hospitalist, anesthesiologist or pulmonologist--for immediate response.	5/22/07
11	II,III	11.56	Coverage of emergencies in the ICU leaves the emergency department without appropriate physician coverage.	A hospital must demonstrate no untoward events. In a Level I trauma center, we expect the physician for trauma services to be available all the time--can be a resident or in-house attending. In a busy Level II, there will be an in-house physician--trauma surgeon, hospitalist, anesthesiologist or pulmonologist--for immediate response.	5/22/07
11	I,II,III	11.58	A qualified nurse is not available 24 hours per day to provide care during the ICU phase.	A qualified nurse is a registered nurse who meets the hospital's criteria to work in the ICU.	5/22/07
	I, II	11.63, 11.64	The Level I facility does not have available a full spectrum of specialists. The Level II center lacks the required surgical specialists.	Oral maxillofacial surgeons are appropriate to participate in the care of facial and mandible fractures either alone or as members of the trauma team.	9/10/08
11	II	11.68	Specialty consultations for problems related to internal, medicine, pulmonary medicine, cardiology, gastroenterology, and infectious disease are not available.	The consultants can be from another hospital.	5/22/07
11	I,II,III	11.76	The blood bank is not capable of blood typing and cross-matching.	Platelets should be available in less than one hour at Level I and II trauma centers.	5/22/07
11	I,II	11.78	Plate Coagulation studies, blood gases, and microbiology must be available 24 hours per day.	Platelets should be available within one hour for Level I and II trauma centers.	5/22/07
13	II	13.2	The PIPS process does not demonstrate the appropriate care or response by providers.	Examples: ER coverage or the ICU, CT tech availability, surgeon response to the ICU, surgeon response to Level I activations	5/22/07

15	I,II,III	15.2	The data are not submitted to the National Trauma Data Bank.	The Resources for Optimal Care of the Injured Patient: 2006 includes a requirement with regard to participation in the National Trauma Data Bank. In order to meet this standard at the time of a verification or reverification, the center must provided data in the most recent NTDB call for data. For assistance, contact the NTDB Office (312)202-5538.	10/13/08
16	I,II,III	16.19	There is no trauma multidisciplinary peer review committee with participation by the trauma medical director or designee and representatives from general surgery, orthopaedic surgery, neurosurgery, emergency medicine, and anesthesia.	This can be accomplished by multiple meetings that encompass all the disciplines.	5/22/07
16	I, II, III	16.25	Deaths must be systematically categorized as preventable, nonpreventable, or potentially preventable.	**New nomenclature (Effective January 2012)** • **Unanticipated mortality with opportunity for improvement** • **Anticipated mortality with opportunity for improvement** • **Mortality without opportunity for improvement**	10/3/2010
16	I, II, III	16.27	The PI program is not functional.	This is a new Type I deficiency.	11/11/09
17	I	17.4	The Level I trauma center neither provides nor participates in an ATLS® course at least annually.	A hospital can participate in ATLS through another institution.	5/22/07
17	I	17.5	The Level I trauma center neither provides a continuous rotation in trauma surgery for senior residents that is part of an Accreditation Council for Graduate Medical Education–accredited program in any of the following disciplines: general surgery, orthopaedic surgery, or neurosurgery; nor supports an acute care surgery fellowship consistent with the educational requirements of the American Association for the Surgery of Trauma.	Senior level resident: equivalent to a house officer IV or above. Senior level resident (above) amended to the following: ▪ Senior residents are considered PGY 3, 4 or 5 related to this requirement. ▪ Continuous rotation in trauma surgery must be 12 month rotation and must fill two of the three years prior to the site visit, in order to successfully satisfy this requirement.	5/22/07 10/13/08 6/25/08

				▪ Fellowships that satisfy requirement are trauma, neurosurgery, orthopaedic, or critical care – must be approved by a national professional society of ACGME (i.e. AAST) ▪ Applies to Level I pediatric trauma centers only	10/13/08 10/13/08
17	I,II	17.8	The trauma director and the liaison representatives from neurosurgery, orthopaedic surgery and emergency medicine have not accrued an average of 16 hours annually or 48 hours in three years of external trauma-related CME.	Examples of external CME include: 1. External meetings (includes Burn) 2. External lectures or external lecturers who visit the facility 3. Web seminars and etc. 4. If completed all of SESAP, then six hours count toward trauma-related CME.	5/22/07
18	I, II	18.2	The trauma center must have a prevention coordinator with a demonstrated job description and salary support.	In a Level II center, the duties of the injury prevention coordinator may be done by the TPM, but only if this does not negatively impact the work product of the TPM.	11/10/09
18	I	18.3	The trauma center does not demonstrate the presence of prevention activities that center on priorities based on local data.	There is a misprint in the CD list in the Resources 2006 document on page 160, CD18.3, this only applies to a Level I Trauma Center.	5/22/07
18	I	18.6	The trauma center does not have the capability to provide intervention or referral for patients identified as problem drinkers.	The hospital will need to show a mechanism to identify their problem drinkers and have a plan, i.e. registry, check alcohol reading	5/22/07
19	I	19.4	Of the 20 articles, there is not at least one that includes authorship or co authorship by members of the general surgery trauma team and at least one each from three of six disciplines; neurosurgery, emergency medicine, orthopaedics, radiology, anesthesia, and rehabilitation.	Papers should be in Index Medicus journals or Medline. However, if an article is not in the Index Medicus or Medline, the article can be included if the trauma program can prove that it was from a peer reviewed journal. A Level I trauma surgeon's research cannot be counted at another center. This requirement may not be pro-rated.	10/7/07 10/12/09

19	I	19.5	The trauma center does not meet the alternative criteria for research: 10 peer-reviewed articles published in journals included in Index Medicus resulting from work in the trauma center with at least one authored or coauthored by members of the general surgery trauma team and at least one each from three of six disciplines (neurosurgery, emergency medicine, orthopaedics, radiology, anesthesia, and rehabilitation) AND four of seven scholarly activities as stated in Chapter 19, Trauma Research and Scholarship.	Papers should be in Index Medicus journals or Medline. However, if an article is not in the Index Medicus or Medline, the article can be included if the trauma program can prove that it was from a peer reviewed journal. Leadership includes membership in trauma committees or other national organizations, such as serving as an officer, on the board of directors, serving as a chair of a subcommittee ATA, AAST, WST, etc. Residents' papers competition papers that are not published can be counted as scholarly activity, not research.	10/7/07
22	I,II,III	**NEW**	Verification dates for successful reverification and verification visits.	Institutions that have a successful completion of a verification or reverification site visit, a certificate will be provided to the hospital. Institutions that have successfully completed an (adult) trauma center and a pediatric trauma center verification or reverification, two certifications will be provided. As of January 1, 2010 – Trauma centers that have completed a successful **reverification** site visit, the certificate will maintain its current expiration date for all future visits. The verification period is still valid for three years. **Example:** ABC Trauma Center just completed a visit on February 1, 2010. Their current expiration date is April 15, 2010, therefore all future expiration dates will be as follows: April 15, 2013; April 15, 2016; and so on.	5/22/07 1/13/2010
22	I,II,III		Appeal process	If the hospital does not agree with the review process, the reviewers' findings, or the final report, the hospital may appeal in writing to the Verification Review Committee (VRC). Appeals must be signed by the appropriate hospital administrator and trauma medical director, and sent direct to the VRC office in Chicago. The VRC may require additional documentation (can not include patient identifiers). The outcome can result in having a new review team sent for another review, or the issue may be referred to the ACS-COT Executive Committee.	5/22/07

			Transfer Agreements	Hospitals are not required to have actual transfer agreements (legal document) at the time of the site visit; however, must have written transfer plans.	03/19/09
			The trauma medical director (TMD) must be dedicated to one trauma center.	The TMD cannot administer two trauma centers.	COT 10/08/07
			Peer Review attendance	Peer review attendance can be accomplished with the use of web conferencing tracked by electronic sign in sheets in limited cases where attendance may not otherwise be possible.	10/13/08
		6.2, 7.6, 8.9, and 9.14	**Board certification**	**New Alternate Pathway Requirement – supersedes what is in published in the <u>Resources for Optimal Care of the Injured Patient 2006</u>** **A copy of the surgeon/physician's CV must be sent to the VRC office for approval.** **Upon approval, numbers 1 through 8 must be submitted to the VRC office at least one month in advance of the onsite visit. Number 9, requires an onsite review by a surgeon/physician from that specialty** (additional cost will apply)**.** 1. Evidence that the non-US or non-Canadian trained surgeon/physician successfully completed a residency training program in general surgery, neurosurgery, orthopaedic surgery or emergency medicine, with the time period being consistent with the years of training in the United States. This completion must be certified by a letter from the program director. 2. Documentation of current status as a provider or instructor in the Advanced Trauma Life Support (ATLS) program. 3. A list of the 48 hours of trauma related continuing medical education (CME) during the past 3 years.	10/3/2010

				4. Documentation that the surgeon/physician is present for educational and at least 50% of the trauma performance improvement meetings. 5. Documentation of membership or attendance at local and regional or national trauma meetings during the past 3 years. 6. A list of patients treated during the past year with accompanying Injury Severity Score and outcome data. 7. Performance improvement assessment by the trauma medical director demonstrating that the morbidity and mortality results for patients treated by the surgeon/physician compare favorably with the morbidity and mortality results for comparable patients treated by other members of the trauma call panel. 8. Licensed to practice medicine and approved for full and unrestricted surgical privileges by the hospital's credentialing committee. Surgeons that have qualified through the alternate pathway are not required to repeat the process unless they move to another trauma center. The surgeon must maintain the eight requirements of the Level II alternate pathway criteria at the time of the visit, and the hospital must internally PI this process.	

COT – Committee on Trauma

PIPS – Performance Improvement and Patient Safety program

IEP – Internal Education Process