The American College of Surgeons

Clarification Document

Resources for Optimal Care of the Injured Patient

By the Verification Review Committee

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www.facs.org/quality-programs/trauma/vrc/resources

Contents

Chapter 23
Only those criteria that have a clarification will be noted in this document.
Disclaimer: • **The term Midlevel Providers throughout the Resources manual is the same as Advanced Practice Providers, Nurse Practitioners, Physician Assistants, and Physician Extenders.** • **P/k/a – Previously known as.** • **PTC – Pediatric Trauma Center.** • **ATCTIC – Adult Trauma Center Treating Injured Children.**

Chapter	Level	Criterion by Chapter and Level	Type	Clarification (p/k/a Frequently Asked Questions - FAQ)
Chapter 1: Trauma Systems				
Chapter 2: Description of Trauma Centers and Their Roles in a Trauma System				
2	I, II	Qualified attending surgeons must participate in major therapeutic decisions, be present in the emergency department for major resuscitations, be present at operative procedures, and be actively involved in the critical care of all seriously injured patients (CD 2–6).	TYPE I	An ED physician can start the resuscitation if the trauma team is not present. It does NOT negate the presence of the surgeon or any other in-house requirements.
2	I, II	A resident in postgraduate year 4 or 5 or an attending emergency physician who is part of the trauma team may be approved to begin resuscitation while awaiting the arrival of the attending surgeon but cannot independently fulfill the responsibilities of, or substitute for, the attending surgeon (CD 2–6).	TYPE I	An ED physician can start the resuscitation if the trauma team is not present. It does NOT negate the presence of the surgeon or any other in-house requirements.
2	I, II	The presence of such a resident or attending emergency physician may allow the attending surgeon to take call from outside the hospital. In this case, local criteria and a PIPS program must be established to define conditions requiring the attending surgeon's immediate hospital presence (CD 2–7).	TYPE II	The ED physician may initially evaluate a limited-tier trauma patient but there must be a clearly defined response expectation for the trauma surgical evaluation of those patients requiring admission. (rv 9/4/15)
2	I, II	The trauma surgeon on call must be dedicated to a single trauma center while on duty (CD 2–10)	TYPE II	The TMD cannot be a Locum or itinerant. (3/9/16)
2	IV	These providers must maintain current Advanced Trauma Life Support® certification as part of their competencies in trauma (CD 2–16).	TYPE II	Refer to CD 7-14 and 7-15. Rv 8/5/16
2	I, II, III, IV	For Level I, II, III and IV trauma centers a trauma medical director and trauma program manager knowledgeable and involved in trauma care must work together with guidance from the trauma peer review committee to identify events, develop corrective action plans, and ensure methods of monitoring, reevaluation, and benchmarking. (CD 2-17).	TYPE II	Level IV facility the TMD may be an ED physician. rv 10/6/15
Chapter 3: Prehospital Trauma Care				
Chapter 4: Interhospital Transfer				
4	I, II, III, IV	A very important aspect of interhospital transfer is an effective PIPS program that includes evaluating transport activities (CD 4–3).	TYPE II	Perform a PIPS of all transfers out during the acute phase of hospitalization.
4	I, II, III,	Perform a PIPS review of all transfers (CD 4–3).	TYPE II	What is the responsibility of the accepting

	IV			institution to transferring institution? • It is the responsibility of the transferring institution to request the information • Any issues identified by the accepting institution should be relayed • If no issues identified, a discharge summary may suffice
Chapter 5: Hospital Organization and the Trauma Program				
5	I, II	The TMD must maintain an appropriate level of trauma-related extramural continuing medical education (16 hours annually, or 48 hours in 3 years). (CD 5–7) Type II	TYPE II	The CME requirement has changed to 36 hours/12 annually from 48 hours/16 annually. (4/13/18) In Level I and II trauma centers, the trauma medical director (TMD) must fulfill this requirement by obtaining and demonstrating a minimum of 36 hours of verifiable external trauma-related continuing medical education (CME) over a 3 year period. In Level I and II pediatric trauma centers, the pediatric TMD must fulfill the same requirement, of which 9 hours must be pediatric trauma specific. CD 5-7/CD 10-39 Type II (4/13/18) Will accept 33 hours from board certification or recertification to count as trauma or critical care external CME for all specialties: trauma surgeons, orthopaedic surgeons, neurosurgeons, emergency medicine and ICU. (rv 11/9/16) For new centers seeking consultation or verification, the TMD must have one year (12 hours) minimum of CME. (rv 11/9/16, 4/13/18)

5	I, II	Membership and active participation in regional or national trauma organizations are essential for the trauma director in Level I and II trauma centers and are desirable for TMDs in Level III and IV facilities (CD 5–8).	TYPE II	The Pediatric Trauma Society is an acceptable National organization.
5	I, II, III	In addition, the TMD must 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	The Trauma component of the orientation should be overseen by the TMD; however, the performance/practice assessment should be overseen by the liaison from each of the specialty groups and reported at trauma committee annually (rv 9/4/15)
5	I, II, III	The emergency physician may initially evaluate the limited-tier trauma patient, but the center must have a clearly defined response expectation for the trauma surgical evaluation of those patients requiring admission (CD 5-16).	TYPE II	This does not negate the presence of the trauma surgeon for the highest level of activations. Each institution should develop expectations evaluation by the trauma surgeon for limited tier activations that result in admission. Times may vary, for instance, by level of activation, by criteria for these activations or by level of care required upon admission (floor vs ICU).
5	I, II, III	Programs that admit more than 10% of injured patients to non-surgical services must review all non-surgical admissions through the trauma PIPS process (CD 5–18).	TYPE II	Centers admitting < 10% should still review patients with ISS>15 admitted to non-surgical services. Same level falls/isolated hip fractures - If these patients meet the NTDS Trauma Inclusion criteria, they should be captured in your trauma registry, and if the center includes them in the volume admission numbers (on the PRQ), then you must follow all the rules of any other trauma admission ((like reviewing nonsurgical admissions, PI, etc. CD 5-18). This may differ from your state inclusion criteria. Therefore, you may have to capture 2 sets of data points. 7/1/2016
Chapter 6: Clinical Functions: General Surgery				

6	I, II, III	Board certification or eligible for certification by the American Board of Surgery according to current requirements or the alternate pathway is essential for general surgeons who take trauma call in Level I, II, and III trauma centers (CD 6–2).	TYPE II	The alternate pathway is only for surgeons who did **not** train in the U.S. or Canada.
6	I,II, III	If a physician has not been certified within the time frame by the certifying board after successful completion of an ACGME or Canadian residency, the surgeon is not eligible for inclusion on the trauma team. Such as surgeon may be included when given recognition by a major professional organization (for example, the American College of Surgeons. (CD 6-3)	Type II	U.S. trained surgeons or physician who are not board certified or eligible, they cannot be on the trauma team. Surgeons trained outside of the U.S. may participate if a Fellow of the American College of Surgeons (FACS) or if approved by the Alternate Pathway Criteria (APC), www.facs.org/quality-programs/trauma/vrc/resources. Effective January 1, 2017 (rv 1/22/16) Though not part of the alternate pathway process, in the past, U.S. or Canadian trained surgeons who were granted FACS status by the ACS did not have to meet the criteria for the alternate pathway (APC). Beginning January 1, 2017, all U.S. or Canadian trained surgeons will be required to follow the APC process regardless of FACS status. All U.S. or Canadian trained surgeons who were FACS prior to January 1, 2017 are not required to meet the APC process and, therefore, will not be required to have an onsite review. **Effective April 15, 2018** For surgeons who have been approved by the alternate pathway at their current institution, an onsite visit will NOT be required; however, the

				following criteria will be required at the time of the subsequent visit: 3. A list 36 hours of verifiable external trauma-related CME over a 3 year period or by participating in an equivalent number of hours in the trauma center's internal education process (IEP) or a combination of CME and IEP. 7. Performance improvement assessment by the Trauma Medical Director (TMD) to ensure that patient outcomes compare favorably to other members of the trauma call panel. Criteria 1, 2, 4-6, 8 and 9 were met by the initial approval process. (5/5/2016, 4/15/18)
6	I, II, III	In Level I, II, and III trauma centers, there must be a multidisciplinary trauma peer review committee chaired by the trauma medical director (CD 5-25) and representatives from general surgery (CD 6-8), and liaisons from orthopedic surgery (CD 9-16), emergency medicine (CD 7-11), ICU (CD 11-62), and anesthesia (CD 11-13) – and for Level I and II trauma centers, neurosurgery (CD 8-13) and radiology (CD 11-39). Level III trauma centers that have neurosurgery capabilities and retain those patients are required to comply with CD 8-13.	TYPE II	Liaison or representative (one pre-determined alternate) will be acceptable to attend the peer review in place of the liaison. (rv 3/9/16)
6	I, II, III	Each member of the group of general surgeons must attend at least 50 percent of the multidisciplinary trauma peer review committee meetings (CD 6–8).	TYPE II	All general surgeons who participate in trauma care (core surgeons no longer exists). As of July 1, 2015 any surgeon previously designated as non-core must begin attending at least 50% of multidisciplinary conferences to meet the attendance requirement. (rv 9/4/15)

				Attendance may be met through teleconferencing or videoconferencing participation. Audio conferencing should be limited. Peer review meeting attendance may be waived for deployment, medical leave and missionary work. The center must provide documentation to support the absence. (rv 11/9/16)
6	I, II	In Level I and II adult and pediatric trauma centers, trauma surgeons, pediatric surgeons and the specialty panel members (emergency medicine, orthopaedic surgery, neurosurgery and ICUs) participating on the trauma call panel must demonstrate evidence of ongoing trauma related education. CD 6-10 Type II	TYPE II	For the trauma surgeons, pediatric surgeons and specialty panel members (emergency medicine, neurosurgery, orthopaedic surgery and ICUs) participating on the trauma call panel, staying current with their board certification satisfy the CME requirement. CDs 5-24, 7-12, 7-13, 8-14, 8-15, 9-18, 9-19, 10-39, 10-40, 11-63, and 11-64 Type II (4/26/18) Physicians/surgeons who are currently board-eligible (recent graduates) and those who have life-time (grandfathered) board certification, meet the CME requirement.(4/18/18) Trauma surgeons and specialty panel members (emergency medicine, neurosurgery, and orthopaedic surgery) who have been previously approved by way of the Alternate Pathway Criteria, must meet this requirement by obtaining and demonstrating a minimum of 36 hours of verifiable external trauma-related CME over a 3 year period or by participating in an equivalent number of hours in the trauma center's internal education process (IEP) or a combination of CME and IEP. The trauma

				program is expected to have a copy of its provider's CMEs or IEP documentation at the time of the visit. (4/18/18) The PRQ will be updated to reflect the above changes. Pending these changes, the trauma program will select 'Yes' to the CME questions and leave the CME section blank in the appendices. For centers that have a provider(s) that is either seeking or has previously been approved by way of the Alternate Pathway Criteria, document the number of CMEs hours on the appendices. (4/18/18)
Chapter 7: Clinical Functions: Emergency Medicine				
7	I, II	An emergency physician must be present in the department at all times in a Level I and Level II trauma centers (CD 7–2).	TYPE I	For Level II centers, It is no longer acceptable for the ED physician to leave the emergency room uncovered to address in-house emergencies.
7	I, II, III	Basic to qualifications for trauma care for any physician is current board certification by the American Board of Medical Specialties, the American Osteopathic Association, or the Royal College of Physicians and Surgeons of Canada. Board certification or eligibility for certification by the appropriate emergency medicine board according to current requirements or the alternate pathway is essential for physicians staffing the emergency department and caring for trauma patients in Level I, II, and III trauma centers (CD 7–6).	TYPE II	If the board is not recognized under the authority of the ABMS (American Board of Medical Specialties), the American Osteopathic Association, or the Canadian Royal College of Physicians and Surgeons, it is not acceptable by the American College of Surgeons. The American Board of Physician Specialists (ABPS) is NOT recognized by the ACS. Physicians boarded in other specialties such as internal medicine, family practice, etc., through an approved accredited program may be included on the trauma team in the ED; however, they must be current in ATLS (refer to CD 7-15).

				For Level I and II trauma centers, physicians who completed primary training in 2016 and beyond must be board certified or board eligible by the appropriate emergency medicine /pediatric emergency medicine board according to the current requirements. Physicians who completed primary training in 2016 and beyond who are **not** board certified or board eligible by the appropriate emergency medicine /pediatric emergency medicine board may provide care in the emergency room but cannot participate in trauma care.
7	I, II, III	Alternate Criteria (CD 6-3) for Non–Board-Certified Emergency Medicine Physicians in Level I, II, and III Trauma Centers	TYPE II	Pertains only to EM physicians trained outside of the U.S. or Canada.
7	I,II,III	If a physician has not been certified within the time frame by the certifying board after successful completion of an ACGME or Canadian residency, the physician is not eligible for inclusion in the trauma team. Such as physician may be included when given recognition as a fellow by a major professional organization (for example, the American College of Emergency Physicians). (CD 6-3)	TYPE II	The only acceptably alternative is a *Fellow* of the American College of Emergency Physicians (FACEP). Refer to Clarification Document, Chapter 6, CD 6-3
7	I, II, III	The emergency medicine liaison on the multidisciplinary trauma peer review committee must attend a minimum of 50 percent of the committee meetings (CD 7–11).	TYPE II	The liaison or representative (one pre-determined alternate) is acceptable to attend the multidisciplinary peer review committee a minimum of 50% of these meetings -No longer must be the designated liaison (rv 10/6/15) Attendance may be met through teleconferencing or videoconferencing participation. Audio conferencing should be limited.

				Peer review meeting attendance may be waived for deployment, medical leave and missionary work. The center must provide documentation to support the absence. (rv 11/9/16)
7	I, II	In Level I and II trauma centers, the liaison from emergency medicine must accrue an average of 16 hours annually or 48 hours in 3 years of verifiable external trauma-related CME (CD 7–12).	TYPE II	Refer to Clarification Document, Chapter 6, CD 6-10
7	I, II	Other emergency physicians who participate on the trauma team also must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average **or** by demonstrating participation in an internal educational process (IEP) conducted by the trauma program based on the principles of practice-based learning and the PIPS program (CD 7–13).	TYPE II	Refer to Clarification Document, Chapter 6, CD 6-10
7	I, II, III	Physicians who are certified by boards other than emergency medicine who treat trauma patients in the emergency department are required to have current ATLS status (CD 7–15).	TYPE II	Refer to CD 7-6
Chapter 8: Clinical Functions:				
8	I, II	Neurotrauma care must be continuously available for all TBI and spinal cord injury patients and must be present and respond within 30 minutes based on institutional-specific criteria (CD 8–2).	TYPE I	The intent is that neurosurgical care is promptly available for the acute care of the brain injured and spinal cord injured patient to include an in-person evaluation within 30 minutes. The time should start when the request is made to the neurosurgeon (time of page or call). The specific types of patients or clinical scenarios should be developed by each institution and agreed upon and documented by the PIPS process.
8	I, II	The trauma center must provide a reliable, published neurotrauma call schedule with formally arranged contingency plans in case the capability of the neurosurgeon, hospital, or system to care for neurotrauma patients is overwhelmed (CD 8–3).	TYPE I	A published back up call schedule is the best method to meet this requirement. Clarification to Table 1 noted on page 55: Neurosurgical evaluation may be done by a

				neurosurgery resident at any level or neurosurgery mid- level provider as long as the patient was initially evaluated by an EM physician, trauma surgeon, or senior neurosurgery resident. There must communication and documentation with the attending neurosurgeon. Refer to the table at the end of this document for ICU coverage of Neuro patients.
8	I, II	The center must have a predefined and thoroughly developed neurotrauma diversion plan that is implemented when the neurosurgeon on call becomes encumbered (CD 8–4). A predefined, thoroughly developed neurotrauma diversion plan must include the following: • Emergency medical services notification of neurosurgery advisory status/diversion. • A thorough review of each instance by the performance improvement and patient safety (PIPS) program. • Monitoring of the efficacy of the process by the PIPS program.	TYPE II	When NS primary and backup are encumbered, need contingency plan.
8	I, II, III	A formal, published contingency plan must be in place for times in which a neurosurgeon is encumbered upon the arrival of a neurotrauma case (CD 8–5). The contingency plan must include the following: • A credentialing process to allow the trauma surgeon to provide initial evaluation and stabilization of the neurotrauma patient. • Transfer agreements with a similar or higher-level verified trauma center. • Direct contact with the accepting facility to arrange for expeditious transfer or ongoing monitoring support. • Monitoring of the efficacy of the process by the PIPS program.	TYPE II	Every case in which the neurosurgeon is encumbered and entails transfer of the patient must be reviewed by PIPS.
8	I, II, III	If one neurosurgeon covers two centers within the same limited geographic area, there must be a published backup schedule (CD 8-6.)	TYPE II	The published backup call schedule must list a specific individual and their contact information.

8	III	A Level III trauma center must have a plan approved by the trauma medical director that determines which types of neurosurgical injuries may remain and which should be transferred (CD 8–7).	TYPE II	Centers with a neurosurgeon may elect to retain a patient with a less severe TBI. The neurosurgeon may also determine it necessary to emergently evacuate an epidural hematoma with impending herniation prior to transferring the patient to a higher-level trauma center.
8	III	Transfer agreements must exist with appropriate Level I and Level II trauma centers (CD 8–8).	TYPE II	Patients requiring intracranial pressure monitoring and patients with more significant traumatic brain injuries should be transferred to a higher-level trauma center.
8	III	In all cases, whether patients are admitted or transferred, the care must be timely, appropriate, and monitored by the PIPS program (CD 8–9).	TYPE I	For all cases
8	I, II, III	If a neurosurgeon has not been certified within the time frame by the certifying board after successful completion of an ACGME or Canadian residency, the surgeon is not eligible for inclusion on the trauma team. Such as surgeon may be included when given recognition by a major professional organization (for example, the American College of Surgeons. (CD 6-3)	TYPE II	Refer to Clarification Document, Chapter 6, CD 6-3
8	I, II	The neurosurgery liaison on the multidisciplinary trauma peer review committee must attend a minimum of 50 percent of the committee's meetings (CD 8–13).	TYPE II	Refer to Clarification Document, Chapter 7, CD 7-11
8	III	Level III centers with any emergent neurosurgical cases must also have the participation of neurosurgery on the multidisciplinary trauma peer review committee (CD 8–13).	Type II	A neurosurgeon who participates in the care of injured patients must participate in the multidisciplinary trauma peer review meeting a minimum of 50%. 7/1/2016 Refer to Clarification Document, Chapter 7, CD 7-11
8	I, II	The liaison representative from neurosurgery must accrue an average of 16 hours annually or 48 hours in 3 years of verifiable external trauma-related CME (CD 8–14)	TYPE II	Refer to Clarification Document, Chapter 6, CD 6-10

8	I, II	This requirement may be documented by the acquisition of 16 hours of trauma CME per year on average **or** through an internal educational process (IEP)conducted by the trauma program and the neurosurgical liaison based on the principles of practice-based learning and the PIPS program (CD 8–15).	TYPE II	Refer to Clarification Document, Chapter 6, CD 6-10
Chapter 9: Clinical Functions: Orthopaedic Surgery				
9	I, II	Because of their skills and training in the management of the acute and rehabilitation phases of musculoskeletal trauma, physical and occupational therapists and rehabilitation specialists are essential at Level I and II trauma centers (CD 9–1).	TYPE II	This requirement is best met by having physical therapists and occupational therapists available to the trauma patient seven days a week.
9	I, II	In Level I and II trauma centers, a system must be organized so that musculoskeletal trauma cases can be scheduled without undue delay and not at inappropriate hours that might conflict with more urgent surgery or other elective procedures (CD 9–3).	TYPE II	This requirement is best met by maintaining a dedicated trauma orthopaedic room.
9	I	In a Level I trauma center the orthopaedic care must be overseen by an individual who has completed a fellowship in orthopaedic traumatology approved by the Orthopaedic Trauma Association (OTA) (CD 9-5). *http://spec.ota.org/education/fellowshipcenter/fellowship_dir/dir_search.cfm	TYPE I	The form can be downloaded from the VRC webpage at: https://www.facs.org/quality-programs/trauma/vrc/site-packet. The form must be submitted with the site visit application. (rv 1/21/16, 7/1/16)
9	PTC I	In Pediatric Level I trauma centers this requirement may be met by having formal transfer agreements that specify which cases will be transferred for high level orthopaedic oversight and assuring that all such transfers (or potential transfers) are reviewed as part of the performance improvement process (CD 9-5).	TYPE I	For PTC I, the above requirement may be met by having a formal transfer agreements that specify which cases will be transferred for high level orthopaedic oversight and assuring that all such transfers (or potential transfers) are reviewed as part of the performance improvement process (CD 9-5 Type I) For combined centers, the adult OTA surgeon may be used to meet this requirement. (rv 1/21/16)
9	I, II	Orthopaedic team members must have dedicated call at their institution **or** have an effective backup call system (CD 9–6).	TYPE II	If there is dedicated OS coverage, a backup schedule is not required; however, if

				orthopaedic surgeon on call is encumbered, there must be a contingency plan (CD 9-10).
9	I, II	They must be available in the trauma resuscitation area within 30 minutes after consultation has been requested by the surgical trauma team leader for multiply injured patients (CD 9-7) based on institution-specific criteria.	TYPE II	The hospital must develop its own criterion for time-sensitive consults and monitor through PIPS. Documentation must be available at the time of the visit. Orthopaedic evaluation may be done by an Orthopaedic resident at any level or Orthopaedic mid- level provider as long as the patient was initially evaluated by an EM physician, trauma surgeon, or senior Orthopaedic resident. There must communication and documentation with the attending Orthopaedic. (rv 6/8/15)
9	I, II	If the on-call orthopaedic surgeon is unable to respond promptly, a backup consultant on-call surgeon must be available (CD 9-9).	TYPE II	If utilizing a published backup call schedule, the specific individual(s) and their contact information must be listed. Clarification to page 61 first paragraph, "An orthopaedic resident at PGY 4 or 5 or an orthopaedic trauma fellow may act as a temporary consultant, as long as this participation is acceptable to the trauma team leader." An orthopaedic resident of <u>any level</u> may act as a temporary consultant as long as there is communication and documentation with the orthopaedic surgeon.
9	III	Level III facilities vary significantly in the staff and resources that they can commit to musculoskeletal trauma care, but they must have an orthopaedic surgeon on call and promptly available 24 hours a day (CD 9-11).	TYPE II	The orthopaedic surgeon on call must meet the criteria outlined in the orange book for board certification in orthopaedic surgery or meet the criteria for the alternate pathway in orthopaedics.

9	I, II, III	The orthopaedic liaison to the trauma PIPS program must attend a minimum of 50 percent of the multidisciplinary trauma peer review committee meetings (CD 9–16).	TYPE II	Refer to Clarification Document, Chapter 7, CD 7-11
9	I, II, III	Board certification or eligibility for certification by an appropriate orthopaedic board according to the current requirements, or the alternate pathway is essential for orthopaedic surgeons who take trauma call in Level I, II, and III trauma centers (CD 9–17).	TYPE II	The alternate pathway applies only to individuals who trained outside of the U.S. or Canada.
9	I, II, III	If an orthopaedic surgeon has not been certified within the time frame by the certifying board after successful completion of an ACGME or Canadian residency, the surgeon is not eligible for inclusion on the trauma team. Such as surgeon may be included when given recognition by a major professional organization (for example, the American College of Surgeons. (CD 6-3)	TYPE II	Refer to Clarification Document, Chapter 6, CD 6-3
9	I, II	The orthopaedic surgical liaison to the trauma program at Level I and II centers must accrue an average of 16 hours annually or 48 hours in 3 years of verifiable external trauma-related continuing medical education (CME) (CD 9–18).	TYPE II	Refer to Clarification Document, Chapter 6, CD 6-10
9	I, II	This requirement may be documented by the acquisition of 16 hours of trauma CME per year on average **or** through an internal educational process (IEP) conducted by the trauma program and the orthopaedic liaison based on the principles of practice-based learning and the PIPS program (CD 9–19).	TYPE II	Refer to Clarification Document, Chapter 6, CD 6-10
				Clarification to page 61 first paragraph, "An orthopaedic resident at PGY 4 or 5 or an orthopaedic trauma fellow may act as a temporary consultant, as long as this participation is acceptable to the trauma team leader." An orthopaedic resident of any level may act as a temporary consultant as long as there is communication and documentation with the orthopaedic surgeon.
Chapter 10: Pediatric Trauma Care				

10	PTC I, II	Hospitals that pursue verification as pediatric trauma centers must meet the same resource requirements as adult trauma centers, in addition to pediatric resource requirements (CD 2–3) (Table 1)	TYPE II	For adult trauma centers that have a separate pediatric hospital: • These hospitals are considered on a separate campus and therefore separate facilities, and/or, • If the transfer of a child from the adult ED for admission to the institutions children's' hospital requires transfer by ambulance.
10	PTC I	Level I pediatric trauma centers must have identifiable pediatric trauma research (CD 10–9).	TYPE II	Refer to the VRC research statement at the end of the document
10	PTC I	The pediatric Level I center's research requirement is equivalent to that of adult Level I trauma centers (CD 10–10).	TYPE II	Refer to the VRC research statement at the end of the document
10	PTC I	In combined Level I adult and pediatric centers, half of the research requirement must be pediatric research (CD 10–11).	TYPE II	Refer to the VRC research statement at the end of the document
10	PTC I	A Level I pediatric trauma center must have at least two surgeons who are board certified or eligible for certification by the American Board of Surgery according to current requirements in pediatric surgery (CD 10–12).	TYPE I	Combined/Concurrent Adult – Pediatric Centers with physically separate EDs: The adult trauma surgeon can respond to the highest level of activation for a child if the adult ED and pediatric EDs are physically connected (via walkway, tunnel, etc and a reasonable distance) and there is a provision in place for backup in the event multiple activations (adult and peds) are called at the same time.
10	PTC I	There must be two physicians who are board certified or eligible for certification in pediatric critical care medicine, according to current requirements in pediatric critical care medicine; or in pediatric surgery and surgical critical care by the American Board of Surgery (CD 10–17).	TYPE I	There must be two physicians who are board certified or eligible for certification in critical care by the American Board of Surgery according to current requirements, or one surgeon who is board eligible/certified in critical care by the ABS and one physician who is board eligible or certified by the American Board of Pediatrics in pediatric critical care

				according to current requirements.
10	PTC I	There must be two physicians who are board certified or eligible for certification by an appropriate emergency medicine board according to current requirements in pediatric emergency medicine (CD 10–18).	TYPE II	There must be two physicians who are board certified or eligible for certification by an appropriate emergency medicine board according to current requirements in pediatric emergency medicine or board certified or eligible for certification by the appropriate pediatrics board according to current requirements in pediatric emergency medicine.
10	PTC I, II	The pediatric section of the emergency department must be staffed by individuals credentialed by the hospital to provide pediatric trauma care in their respective areas (CD 10-20).	TYPE II	For physicians completing primary training after June 2016, board certification or eligibility for certification by an appropriate emergency medicine board or board certification or eligibility for certification by the appropriate pediatrics board according to current requirements in pediatric emergency medicine is required. Physicians not meeting this requirement may provide care in the emergency room but cannot participate in trauma care. (Refer to CD 7-6).
10	PTC II	In a Level II pediatric trauma center, there must be at least one pediatric surgeon who is board-certified or eligible for certification by the American Board of Surgery according to current requirements in pediatric surgeon (CD 10–21).	TYPE I	This physician must actively participate in the PIPS process, protocol development, and care of the injured child.
10	PTC I	In a Level I pediatric trauma center, the pediatric trauma medical director ~~must~~ should be board certified or eligible for certification by the American Board of Surgery according to current requirements for pediatric surgery or alternatively, a pediatric surgeon who is a Fellow of the American College of Surgeons with a special interest in pediatric trauma care, and must participate in trauma call (CD 10–24).	TYPE I	When the pediatric TMD is not a board certified/eligible pediatric surgeon, then this individual must be a board-certified general surgeon or general surgeon eligible for certification by the American Board of Surgery according to current requirements, and must: 1. Be privileged by the hospital to provide pediatric trauma care,

				2. Be a member of the adult trauma panel 3. Participate in trauma call 4. Accrue an average of 12 hours annually or 36 hours in 3 years of verifiable external CME, of which at least 9 hours must be related to clinical pediatric trauma care (4/13/18) 5. Be current in PALS or have taken the Society of Critical Care Medicine Fundamentals of Pediatric Critical Care course. 6. Formal relationship with a pediatric TMD at another verified level I PTC.
10	PTC II	In a Level II pediatric trauma center, the pediatric trauma medical director should be a board-certified pediatric surgeon or a surgeon eligible for certification by the American Board of Surgery according to current requirements for pediatric surgeons. This individual must be a board-certified general surgeon or a general surgeon eligible for certification by the American Board of Surgery according to current requirements qualified to serve on the pediatric trauma team as defined in the following paragraph (CD 10–25).	TYPE I	Refer to Clarification Document, Chapter 10, CD 5-24
10	PTC I	At a minimum, a Level I pediatric trauma center must have continuous rotations in trauma surgery for senior residents (Clinical PGY 3–5) who are part of an Accreditation Council for Graduate Medical Education–accredited program (CD 10–27).	TYPE I	This <u>should</u> include residency programs in all of the following specialties: general surgery, orthopaedic surgery, neurosurgery and emergency medicine.
10	PTC I	At a minimum, these rotations should include residency programs in all of the following specialties: general surgery, orthopaedic surgery, emergency medicine, and neurosurgery. They may also include support of a pediatric surgical fellowship (CD 10–28).		The program must have a general surgery residency and should include rotations in the other specialties. CD 10-28 is not a requirement.
10	PTC I, II	The surgical director of the pediatric intensive care unit must participate actively in the administration of the unit, as evidenced by the development of pathways and protocols for care of surgical patients in the intensive care unit and in unit-based performance improvement and should be board-certified in surgical critical care (CD 10–33).	TYPE I	The surgical director of the pediatric intensive care unit must participate actively in the administration of the unit, as evidenced by the development of pathways and protocols for care of surgical patients in the intensive care

				unit and in unit-based performance improvement and should be board certified in surgical critical care. (CD 10–33, Type I)
10	PTC I, II	There must be a trauma peer review committee chaired by the pediatric trauma medical director with participation by the pediatric /general surgeons and liaisons from pediatric/general surgery, orthopaedic surgery, neurosurgery, emergency medicine, pediatric critical care medicine, anesthesia, and radiology to improve trauma care by reviewing selected deaths, complications, and sentinel events with the objectives of identification of issues and appropriate responses (CD 10–36).	TYPE I	Refer to Clarification Document, Chapter 7, CD 7-11 **Peer review attendance for Combined Programs** -there must be a representative (TMD or designee) from the adult program or from the pediatric program, attend the other program's meeting, and ensure dissemination of communication is sent to the other panel members. (rv 11/9/16)
10	PTC I, II	The aforementioned representatives must attend at least 50% of the trauma peer review meetings, and their attendance must be documented (CD 10–37)	TYPE II	Refer to Clarification Document, Chapter 7, CD 7-11
10	PTC I, II	All pediatric and general surgeons on the pediatric trauma panel treating children must attend at least 50% of the trauma peer review meetings (CD 10–38).	TYPE II	Refer to Clarification Document, Chapter 7, CD 7-11 **Peer review attendance for Combined Programs** -there must be a representative (TMD or designee) from the adult program or from the pediatric program, attend the other program's meeting, and ensure dissemination of communication is sent to the other panel members. (rv 11/9/16)
10	PTC I, II	In Level I and II pediatric trauma centers, the pediatric trauma medical director and the liaisons from neurosurgery, orthopaedic surgery, emergency medicine, and critical care medicine must each accrue an average of 16 hours annually or 48 hours in 3 years of verifiable external CME, of which at least 12 hours (in 3 years) must be related to clinical pediatric trauma care (CD 10–39)	TYPE II	Refer to Clarification Document: Chapter 5, CD 5-7 Chapter 6, CD 6-10

10	PTC I, II	The other general surgeons, orthopaedic surgeons, neurosurgeons, emergency medicine physicians, and critical medicine care physicians who take trauma call in Level I and II pediatric trauma centers also must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of CME per year on average **or** by demonstrating participation in an internal educational process (IEP) conducted by the trauma program based on the principles of practice-based learning and the PIPS program (CD 10–40).	TYPE II	Refer to Clarification Document, Chapter 6, CD 6-10
Chapter 11 Collaborative Clinical Services				
11	I, II	When anesthesiology senior residents or CRNAs are used to fulfill availability requirements, the attending anesthesiologist on call must be advised, available within 30 minutes at all times, and present for all operations (CD 11–5).	TYPE I	Anesthesia requirements may be fulfilled by senior residents or CRNAs or Certified Anesthesiologist's Assistants (C-AA). Utilizing in-house CRNAs for OB are acceptable.
11	III	In Level III hospitals, in-house anesthesia services are not required, but anesthesiologists or CRNAs must be available within 30 minutes (CD 11–7).	TYPE I	Anesthesia requirements may be fulfilled by CRNAs or Certified Anesthesiologist's Assistants (C-AA).
11	III	In Level III trauma centers without in-house anesthesia services, protocols must be in place to ensure the timely arrival at the bedside by the anesthesia provider within 30 minutes of notification and request. (CD 11–8).	TYPE I	In Level III facilities, operative anesthesia may be provided by a CRNA under on-site physician supervision. The specialty of the supervising physician should follow state and local/institutional practices. In states where CRNAs are licensed to practice independently, CRNAs should follow local or institutional practices and may not require physician supervision.
11	I, II	In Level I and II trauma centers, anesthesiologists taking call must be currently board certified or eligible for certification by an appropriate anesthesia board according to current requirements in anesthesiology (CD 11–11).	TYPE II	The anesthesiologist liaison must be currently board certified. In Level III, where CRNAs are licensed to practice independently may function as the anesthesia liaison. In level I and IIs, at least one anesthesiologist

				must put forth effort and commitment to education in trauma-related anesthesia and educate other anesthesiologists and the entire trauma team. Changed from a Type I criterion deficiency to a Type II (rv 6/1/16).
11	I, II, III	Alternate Criteria (CD 6-3) for Non–Board–Certified Anesthesiologist in Level I and II Trauma Centers.		An anesthesiologist who is not currently board certified in the U.S. or Canada may be eligible to serve as the anesthesiology liaison if they meet the criteria for the Alternate Pathway Process. rv 9/30/16
11	I, II	Board certification or eligibility for certification is essential for anesthesiologists who take trauma call in Level I and II trauma centers (CD 11–11).	TYPE II	No CME requirement, Changed from a Type I CD to a Type II (5/5/16)
11	I, II, III	The anesthesiology liaison to the trauma program must attend at least 50 percent of the multidisciplinary peer review meetings, with documentation by the trauma PIPS program (see Chapter 16, Performance Improvement and Patient Safety) (CD 11–13).	TYPE II	Refer to Clarification Document, Chapter 7, CD 7-11
11	I, II	In Level I and II trauma centers qualified radiologists must be available within 30 minutes to perform complex imaging studies, or interventional procedures (CD 11-33).	TYPE II	Qualified radiologists = Interventional Radiologist for interventional procedures or Vascular Surgeons are acceptable. (rv 10/26/16) Clock starts when the call is made requesting the service.
11	I, II, III	Changes in interpretation between preliminary and final reports, as well as missed injuries, must be monitored through the PIPS program (CD 11–37).	TYPE II	Rates calculated and reviewed with radiology Changes categorized by RADPEER or other similar criteria.
11	I, II	In Level I and II facilities, a radiologist must be appointed as liaison to the trauma program (CD 11–38).	TYPE II	No CME requirement
11	I, II	The radiologist liaison must attend at least 50 percent of peer review meetings and should educate and guide the entire trauma team in the appropriate use of radiologic services (CD 11–39).	TYPE II	Refer to Clarification Document, Chapter 7, CD 7-11

11	I, II	At a minimum, radiologists must be involved in protocol development and trend analysis that relate to diagnostic imaging (CD 11–41).	TYPE II	The expectation is that solid organ injuries (spleen, liver, and kidney) should be provided by the radiologist (if CT scans obtained). (rv 9/4/15)
11	I, II	Level I and II facilities must have a mechanism in place to view radiographic imaging from referring hospitals within their catchment area (CD 11–42).	TYPE II	Ideally gateway or similar software but at a minimum the ability to view and store images from CDs
11	I, II	Board certification or eligibility for certification by an appropriate radiology board according to current requirements is essential for radiologists who take trauma call in Level I and II trauma centers (CD 11–43).	TYPE II	The radiologist liaison must be currently board certified.
11	I	A surgeon with current board certification in surgical critical care must be designated as the ICU director (CD 11–49).	TYPE II	If the TMD meets the CD 11-48 requirements then s/he may fulfill both roles. (rv 12/7/16)
11	II, III	In Level II and III trauma centers, a surgeon must serve as co-director or director of the ICU and be actively involved in, and responsible for, setting policies and administrative decisions related to trauma ICU patients (CD 11–53).	TYPE II	If the TMD meets these requirements then s/he may fulfill both roles.
11	II, III	In a Level II facility, the ICU director or co-director should be currently board certified or eligibility for certification in surgical critical care. In Level II and III facilities, the ICU director or co-director must be a Surgeon who is currently board certified or eligible for certification by the current standard requirements (CD 11–54).	TYPE II	Refer to the ICU Coverage Constellation by level table on page 81 of the Resources manual.
11	I, II, III	This [ICU] liaison must attend at least 50 percent of the multidisciplinary peer review meetings, with documentation by the trauma PIPS program (CD 11–62).	TYPE II	Refer to Clarification Document, Chapter 7, CD 7-11
11	I, II	The ICU liaison to the trauma program at Level I and II centers must accrue an average of 16 hours annually or 48 hours in 3 years of verifiable external trauma-related continuing medical education (CME) (CD 11–63).	TYPE II	Refer to Clarification Document, Chapter 6, CD 6-10

11	I, II	This requirement must be documented by the acquisition of 16 hours of trauma CME per year, on average, **or** through an internal educational process conducted by the trauma program and the ICU liaison based on the principles of practice-based learning and the PIPS program (CD 11–64).	TYPE II	Refer to Clarification Document, Chapter 6, CD 6-10 If the **intensivists** are the primary physician responsible for the care of the patients while in the ICU (patients care is transferred to them), they are required to maintain current board certification to satisfy the CME requirement. (4/26/18
11	I, II, III	For all patients being transferred for specialty care, such as burn care, microvascular 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. If this approach is used, a clear plan for expeditious critical care transport, follow-up, and performance monitoring is required (CD 8–5). If complex cases are being transferred out, a contingency plan should be in place and must include the following: • A credentialing process to allow the trauma surgeon to provide initial evaluation and stabilization of the patient. • Transfer agreements with similar or higher-verified trauma centers. • Direct contact with the accepting facility to arrange for expeditious transfer or ongoing monitoring support. • Monitoring of the efficacy of the process by the PIPS programs.	TYPE II	The expectation is that Level I and II trauma centers will have the listed specialties other than burns and replantation.
11	I, II, III, IV	Advanced practitioners who participate in the initial evaluation of trauma patients must demonstrate current verification as an Advanced Trauma Life Support® provider (CD 11–86).	TYPE II	Trauma and/or Emergency Department Advanced Practice Providers (APPs) that function as a member of the team caring for trauma activation patients via assessment or interventions must be current in ATLS. If the Trauma and/or ED APPs only role is as a scribe or entering orders they would not need to meet the ATLS requirement. This does not include

				the consult tier or Fast-Track. (rv 4/14/16) ATCN cannot be used to meet the requirement. (4/5/16) Advanced Practice Providers (APP) who is responsible for the evaluation of trauma patients in the ED that meet activation criteria must be current in ATLS. This would therefore include ED and trauma APPs. It does not include orthopaedic and neurosurgery practitioners who are consulting. (rv 6/8/15)
Chapter 12: Rehabilitation				
Chapter 13: Rural Trauma Care				
Chapter 14: Guidelines for the Operation of Burn Centers				
Chapter 15: Trauma Registry				
15	I, II, III	Finally, these data must be collected in compliance with the National Trauma Data Standard (NTDS) and 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).	TYPE II	For ACS verified trauma centers, and new centers seeking verification and/or a consultation visit, the NTDB fee is included in the annual Trauma Quality Program fee or the fee for the consultation visit.
15	I, II, III	All trauma centers must use a risk adjusted benchmarking system to measure performance and outcomes (CD 15-5).	TYPE II	NTDB is not risk-adjusted benchmarking program.
15	I, II, III	[Registrar] They must attend or have previously attended two courses within 12 months of being hired: (1) the American Trauma Society's Trauma Registrar Course or equivalent provided by a state trauma program; and (2) the Association of the Advancement of Automotive Medicine's Injury Scaling Course (CD 15–7).	TYPE II	The objectives for the ATS Trauma Registrar Course may be found at: http://www.amtrauma.org/courses/trauma-registrar-council/trauma-register-courses/trauma-register-course-live/index.aspx. Equivalent programs would be based upon the ATS objectives, the administration or learning

				sequence and format, e.g. 1 day versus multiple shorter time frames, is flexible. (rv 6/8/15) Hires after July 1, 2014, must have attended or previously attended a training course at the time of the site visit. New registrars must have the training within one year of hire.
Chapter 16: Performance Improvement and Patient Safety				
16	I, II, III	In Level I, II, and III trauma centers, representation from general surgery (CD 6-8), and liaisons to the trauma program from emergency medicine (CD 7–11), orthopaedics (CD 9–16), and anesthesiology (CD 11–13), critical care (CD 11-62)—and for Level I and II centers, neurosurgery (CD 8–13), and radiology (CD 11–39)—must be identified and participate actively in the trauma PIPS program with at least 50 percent attendance at multidisciplinary trauma peer review committee.	TYPE II	Refer to Clarification Document, Chapter 7, CD 7-11
16	I, II	In Level I and II trauma centers, the trauma medical director (CD 5–7), trauma program manager (CD 5–24), and liaisons to the trauma program in emergency medicine (CD 7–12), orthopaedics (CD 9–18), critical care (CD 11–63), and neurosurgery (CD 8–14) must obtain 16 hours annually or 48 hours in 3 years of verifiable, external, trauma-related education (continuing medical education [CME] or CE, as appropriate to the discipline).	Type II	Refer to Clarification Document: Chapter 5, CD 5-7 Chapter 6, CD 6-10
16	I, II, III	In Level I, II, and III trauma centers, the trauma registry must submit the required data elements to the NTDB (CD 15–2).	TYPE II	For ACS verified trauma centers, and new centers seeking verification and/or a consultation visit, the NTDB fee is included in the annual Trauma Quality Program fee or the fee for the consultation visit.
16	I, II, III	All trauma centers must use a risk adjusted benchmarking system to measure performance and outcomes (CD 15-5).	TYPE II	NTDB is not risk-adjusted benchmarking program.

16	I, II, III	Mortality Review (CD 16–6). All trauma-related mortalities must be systematically reviewed and those mortalities with opportunities for improvement identified for peer review. 1. Total trauma-related mortality rates. Outcome measures for total, pediatric (younger than 15 years), and geriatric (older than 64 years) trauma encounters should be categorized as follows: a. DOA (pronounced dead on arrival with no additional resuscitation efforts initiated in the emergency department). b. DIED (died in the emergency department despite resuscitation efforts) c. In-hospital (including operating room). 2. Mortality rates by Injury Severity Scale (ISS) subgroups using Table 1.	TYPE II	Patients transferred to hospice care <u>should</u> be reviewed as deaths. Categories as noted in the PRQ and Review Agenda (rv 10/6/15): – Mortality with opportunity for improvement – Mortality without opportunity for improvement – Unanticipated Mortality with opportunity for improvement (rv 7/1/16, 9/2/16)
16	I, II, III	Response parameters for consultants addressing time-critical injuries (for example, epidural hematoma, open fractures, and hemodynamically unstable pelvic fractures) must be determined and monitored (CD 5–16).	TYPE II	The types of time-critical injuries requiring prompt care by consultants should be defined and monitored. Consultation may be met by residents or APs if there is documentation of communication with the attending.
16	I, II, III	Rates of undertriage and overtriage must be monitored and reviewed quarterly (CD 16–7).	TYPE II	Suggestion for how to determine undertriage which should include pts with ISS > 15 for which the highest level of TTA was not activated.
16	I, II, III, IV	Acute transfers out (CD 9–14). All trauma patients who are diverted (CD 3–4) or transferred (CD 4–3) during the acute phase of hospitalization to another trauma center, acute care hospital, or specialty hospital (for example, burn center, ~~reimplantation~~ center, or pediatric trauma center) or patients requiring cardiopulmonary bypass or when specialty personnel are unavailable must be subjected to individual case review to determine the rationale for transfer, appropriateness of care, and opportunities for improvement. Follow-up from the center to which the patient was transferred should be obtained as part of the case review.	TYPE II	Patients being transferred out for specialty care, such as burn or replantation, a four step contingency plan must be in place. (CD 8-5 Type II).

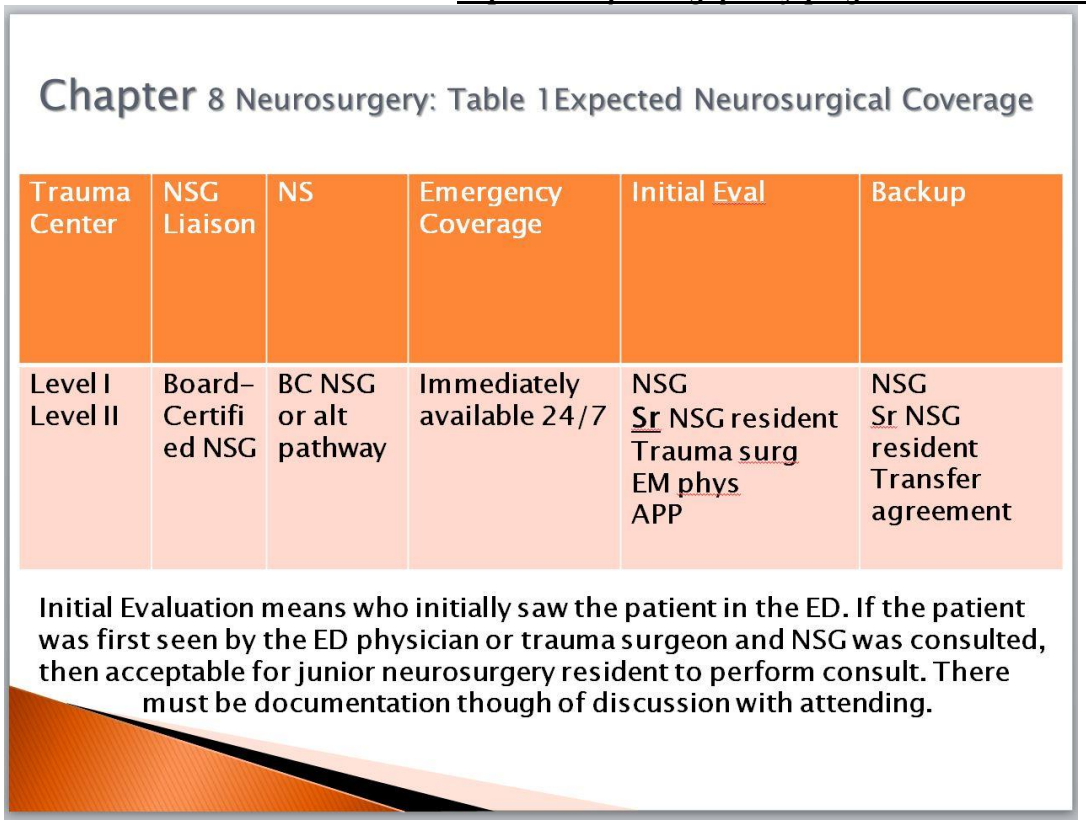
16	I, II, III	Multidisciplinary trauma peer review committee attendance. (Level I, II and III, CD 5-10, CD 6-8, CD 7-11, CD 9-16, CD 11-13, CD 11-62 –and for Level I and II CD 8-13 and CD 11-39)	TYPE II	Refer to respective sections throughout the Clarification Documentation (rv 10/6/15)
16	I, II, III	This effort may be accomplished in a variety of formats but must involve the participation and leadership of the trauma medical director (CD 5–10); the group of general surgeons on the call panel; and the liaisons from emergency medicine, orthopaedics, neurosurgery, anesthesia, critical care, and radiology (Level I, II and III, CD 6-8, CD 7-11, CD 9-16, CD 11-13, CD 11-62 - Level I and II centers, CD 8-13 CD 11-39).	TYPE II	Refer to Clarification Document, Chapter 7, CD 7-11 For combined adult and pediatric trauma centers, the peer review meetings may be held on the same day; however, there must be clear start and end times for each meeting, and have separate minutes. 7/1/2016 **Peer review attendance for Combined Programs** -there must be a representative (TMD or designee) from the adult program or from the pediatric program, attend the other program's meeting, and ensure dissemination of communication is sent to the other panel members. (rv 11/9/16).
16	I, II, III	Each member of the committee must attend at least 50 percent of all multidisciplinary trauma peer review committee meetings (CD 16–15).	TYPE II	Refer to respective sections throughout the Clarification Documentation (rv 10/6/15)
Chapter 17: Outreach and Education				
17	I	At a minimum, a Level I trauma center must have continuous rotations in trauma surgery for senior residents (Clinical PGY 4–5) that are part of an Accreditation Council for Graduate Medical Education–accredited program (CD 17–3). For pediatric Level I centers, the continuous rotation for surgical residents is extended to include clinical PGY 3 (CD 10-27).	TYPE I	It is a resident who has completed their PGY-3 year and is in their 4th year of surgical training. Lab residents, as long as clinically active during the lab year (take call regularly & participate in the round, didactic and peer review) are acceptable.
17	I, II, III, IV	The successful completion of the ATLS® course, at least once, is required in all levels of trauma centers for all general surgeons (CD 6-9), emergency medicine physicians (CD 7-14) and midlevel providers (CD 11-86) on the trauma team.	TYPE II	Trauma and/or Emergency Department Advanced Practice Providers (APPs) that function as a member of the team caring for trauma activation patients via assessment or interventions must be current in ATLS. If the

				Trauma and/or ED APPs only role is as a scribe or entering orders they would not need to meet the ATLS requirement. This does not include the consult tier or Fast-Track. (rv 4/14/16) Advance Practice Providers (APP) who is responsible for the evaluation of trauma patients in the ED that meet activation criteria must be current in ATLS. This would therefore include ED and trauma APPs. It does not include orthopaedic and neurosurgery practitioners who are consulting. (rv 6/8/15) Level IV physicians working in the ED must be current in ATLS (refer to CD 2-16). (rv 6/8/15) ATCN cannot be used to meet the requirement. (4/5/16)
17	I, II	The trauma director (CD 5-7) and the liaison representatives from neurosurgery (CD 8-14), orthopaedic surgery (CD 9-18), emergency medicine (CD 7-12), and critical care (CD 11-63) must accrue an average of 16 hours annually, or 48 hours in 3 years, of external trauma-related CME.	TYPE II	See detail under respective CDs.
Chapter 18: Prevention				
18	I, II, III	Not a requirement.		Screening for Acute Stress Disorder maybe counted as Post Traumatic Stress Disorder.
18	I, II, III, IV	Universal screening for alcohol use must be performed for all injured patients and must be documented (CD 18–3)	TYPE II	It is applicable to eligible patients (alive and participatory), regardless of activated or non-activated, who meet inclusion criteria with a hospital stay of >24 hours who are admitted to the hospital and are entered into the registry, 80% of these patients must be screened. This includes orthopaedic and neurosurgery. (rv 11/30/17, 4/18/18)

				Any patient with an altered mental status (and deaths) should be excluded from the denominator as these can't get screened. (4/18/18)
18	I, II	At Level I and II trauma centers, all patients who have screened positive must receive an intervention by appropriately trained staff, and this intervention must be documented (CD 18–4)	TYPE II	Those 80% of patients that received an alcohol screening (CD 18-3), are expected to receive an intervention 100% of the time (CD 18-4). Those that are missed would subsequently be reviewed through the PIPS process. 'Appropriately trained staff" will be determined and credentialed by the institution. This may be an RN, Social Worker, etc.
18	I, II	Level I and II trauma centers must implement at least two programs that address one of the major causes of injury in the community (CD 18–5).	TYPE II	This may include two projects related to local issues, e.g. two projects on one issue or two projects on two issues. (9/1/2016) Stop the Bleed may be used as an outreach activity. (rv 11/9/16)
Chapter 19: Trauma Research and Scholarship (Refer to the VRC research statement at the end of the document)				
19	I	Additionally, at least one article each from three of the following disciplines is required: basic sciences, neurosurgery, emergency medicine, orthopaedics, radiology, anesthesia, vascular surgery, plastics/maxillofacial surgery, critical care, cardiothoracic surgery, rehabilitation, and nursing (CD 19–4).	TYPE II	….may include 1 article from Acute Care Surgery (rv 1/22/16)
Chapter 20: Disaster Planning and Management				
20	I, II, III, IV	Trauma centers must meet the disaster-related requirements of the Joint Commission (CD 20–1).	TYPE II	Equivalent program may be acceptable if it follows the Joint Commission structure.

20	I, II, III	A surgeon from the trauma panel must be a member of the hospital's disaster committee (CD 20–2).	TYPE II	The trauma surgeon is expected to be a member and attend the meetings.
Chapter 21: Solid Organ Procurement Activities				
Chapter 22: Verification, Review, & Consultation Program				
Chapter 23: Criteria Quick Reference Guide				

All reference documents will be available at: *https://www.facs.org/quality-programs/trauma/vrc/resources*



Chapter 8 Neurosurgery: Table 1Expected Neurosurgical Coverage

Trauma Center	NSG Liaison	NS	Emergency Coverage	Initial Eval	Backup
Level I Level II	Board–Certified NSG	BC NSG or alt pathway	Immediately available 24/7	NSG Sr NSG resident Trauma surg EM phys APP	NSG Sr NSG resident Transfer agreement

Initial Evaluation means who initially saw the patient in the ED. If the patient was first seen by the ED physician or trauma surgeon and NSG was consulted, then acceptable for junior neurosurgery resident to perform consult. There must be documentation though of discussion with attending.

VRC Statement on requirements for research in a Level I Trauma Center

The following is the language from the **Resources for Optimal Care of the Injured Patient** Guidelines.

> *Research and scholarly activity are some of the capabilities that distinguish a Level I trauma center from other trauma centers. Research, the process to advance knowledge, is essential to optimize the care of injured patients. The unique combination of a large volume of severely injured patients, a core of experienced trauma surgeons, and an academic infrastructure enables Level I trauma centers to be effective and productive in research and scholarly activity.*
>
> *The fact that most Level I trauma centers are housed in academic medical centers is not a coincidence. With the unique coexistence of expert trauma surgeons and committed basic and translational scientists, a structured research program can be accomplished.*
>
> *Perhaps the most important resource is a core of trauma surgeons with interest and dedicated training in research methodology. Specifically, the Level I trauma director should have established research productivity, with regular participation in academic trauma forums such as the American Association for the Surgery of Trauma (AAST) and the ACS Committee on Trauma (ACS-COT). One of the trauma surgeons who remains clinically active in trauma care should direct formal, regularly scheduled trauma research meetings, with documentation of the ongoing activities. Trauma program managers, residents, and trauma registrars are an integral part of the research team to ensure the collection of complete and accurate data and regularly provide clinical outcome reports. Basic or translational scientists should participate in the regularly scheduled trauma research meetings, but the majority of the attendees should be trauma surgeons, surgical residents, and research fellows.*

The surgical intensive care unit is an ideal environment to bridge the basic laboratory to injured patients, which underscores the imperative for a trauma surgeon to be director of the surgical intensive care unit. It is the ideal location in which to conduct comparative effectiveness research—designed to inform health care decisions by providing evidence on the effectiveness, benefits, and harms of different treatment options. The evidence is generated from research studies that compare drugs, medical devices, tests, surgeries, or ways to deliver health care.

Finally, the administration of a Level I trauma center must demonstrate support for the research program by, for example, providing basic laboratory space, sophisticated research equipment, advanced information systems, biostatiscal support, salary support for basic and translational scientists, or seed grants for less experienced faculty (CD 19–8).

The statement in the **Resources for Optimal Care of the Injured Patient** implies that the trauma surgeons are actively involved in the creation of new knowledge and the research process. It is also implied that the research is done on-site and not all sent out for performance by an outside group. It is also implied that the facility has provided support and resources other than simply paying for research output form an outside source.

Therefore, it does not meet the intent of these requirements to simply pay to outsource research to an independent third party not routinely, clinically, associated with facility.