ACS 2014 Resources for Optimal Care of the Injured Patient – Trauma Center Criteria Specific to Level IV Trauma Centers

2014: Level IV Trauma Center Criteria Quick Reference Guide

	Level IV	Criterion by Chapter	Evidence Criteria is Met
Chapter 1: Trauma Systems			
1	IV	The individual trauma centers and their health care providers are essential system resources that must be active and engaged participants (CD 1–1).	There is documented evidence the TMD and TPM are participating in the regional advisory council committees specific to trauma and mass casualty disaster planning.
1	IV	They must function in a way that pushes trauma center–based standardization, integration, and PIPS out to the region while engaging in inclusive trauma system planning and development (CD 1–2)	The TMD and TPM provide requested data to the region and makes appropriate referrals to the regional system performance improvement process.
1	IV	Meaningful involvement in state and regional trauma system planning, development, and operation is essential for all designated trauma centers and participating acute care facilities within a region (CD 1–3)	There is documented evidence the TMD and TPM are participating in the regional advisory council committees specific to trauma and mass casualty disaster planning.
Chapter 2: Description of Trauma Centers and Their Roles in a Trauma System			
2	IV	This trauma center must have an integrated, concurrent performance improvement and patient safety (PIPS) program to ensure optimal care and continuous improvement in care (CD 2–1).	There is evidence of a written trauma performance improvement patient safety plan (TPIPS) that outlines the structure and process of the TPIPS with evidence the plan is followed and identified events are addressed through event resolution.
2	IV	Trauma centers must be able to provide the necessary human and physical resources (physical plant and equipment) to properly administer acute care consistent with their level of verification (CD 2–3).	The physical plant and equipment in the trauma resuscitation area support the trauma team activation process and the defined facility's trauma resuscitation guidelines.
2	IV	For Level IV trauma centers, it is expected that the physician (if available) or midlevel provider will be in the emergency department on patient arrival, with adequate notification from the field. The maximum acceptable response time is 30 minutes for the highest	There is documented evidence that the physician is responding to the highest level of trauma team activation within 30 minutes of the patient's arrival. This is validated through the

		level of activation, tracked from patient arrival. The PIPS program must demonstrate that the physician's (if available) or midlevel provider's presence is complying at least 80 percent of the time (CD 2–8).	medical record reviews. The continual monitoring of the physician's response within 30 minutes is at a minimum 80%.
2	IV	Well-defined transfer plans are essential (CD 2–13).	Documented transfer guidelines are in place. Patients who meet trauma team activation criteria with acute injuries that require transfer for definitive care from the emergency department or inpatient setting within 24 hours of admission, with a projected ISS greater than 9 must be transferred to a higher level of trauma center.
2	IV	Collaborative treatment and transfer guidelines reflecting the Level IV facilities' capabilities must be developed and regularly reviewed, with input from higher-level trauma centers in the region (CD 2–13).	Trauma treatment and transfer guidelines must be documented, specific to the facility, and follow the national standards of care and monitored for compliance through the TPIPS process.
2	IV	A Level IV facility must have 24-hour emergency coverage by a physician or midlevel provider (CD 2–14).	Schedules will be reviewed during the site survey process. Level IV facilities in counties with a population of 30,000 or less may utilize the telemedicine process but must have the defined coverage by an advanced practice provider.
2	IV	The emergency department at Level IV centers must be continuously available for resuscitation with coverage by a registered nurse and physician or midlevel provider, and it must have a physician director (CD 2–15).	This is evaluated during the site survey process and documented schedules. Diversion times will be reviewed as well.
2	IV	These providers must maintain current Advanced Trauma Life Support® certification as part of their competencies in trauma (CD 2–16).	Emergency Medicine Physicians who are board-certified or board eligible must have documented evidence of ATLS at one time. If the physician is not board-certified or board eligible in emergency medicine,
2	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-	The peer review process is outlined in the TPIPS plan. The TPIPS plan consistently demonstrates event resolution. This is reviewed during the site survey process and the medical record reviews.

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2	IV	Level I, II, III and IV trauma centers, the multidisciplinary trauma peer review committee must meet regularly, with required attendance of medical staff active in trauma resuscitation, to review systemic and care provider issues, as well as propose improvements to the care of the injured (CD 2–18).	The trauma peer review committee define the meeting based on the trauma activation volume of the facility but must meet a minimum of quarterly. If the facility utilizes an outside agency for its trauma peer review process, there must be
2	IV	Level I, II, III and IV trauma centers, a PIPS program must have audit filters to review and improve pediatric and adult patient care (CD 2–19).	The TPIPS plan includes the national recommendations for pediatric event reviews and has documented evidence of completing the annual EMSC pediatric readiness survey and has a defined action plan that is followed through to resolutions, and evidence that a multidisciplinary pediatric resuscitation simulation drill is completed each quarter with a critique evaluation. Opportunities for improvement identified through the pediatric simulation have defined action plans that are completed through to resolution.
2	IV	Because of the greater need for collaboration with receiving trauma centers, the Level IV trauma center must also actively participate in regional and statewide trauma system meetings and committees that provide oversight (CD 2–20).	There is documented evidence the TMD and TPM are participating in the regional advisory council committees specific to trauma and mass casualty disaster planning.
2	IV	The Level IV trauma center must also be the local trauma authority and assume the responsibility for providing training for prehospital and hospital-based providers (CD 2–21).	Th level IV trauma facility must have evidence of participating in EMS education which can be clinical education and the can assist in these endeavors through the regional activities.
2	IV	Level I, II, III and IV trauma centers, the facility must participate in regional disaster management plans and exercises (CD 2–22).	The TMD and TPM must participate in the regional planning mass casualty response and attend the hospital's disaster planning committee.
Chapter 3: Prehospital Trauma Care			

3	IV	The trauma program must participate in the training of prehospital personnel, the development and improvement of prehospital care protocols, and performance improvement and patient safety programs (CD 3–1).	The level IV trauma center must participate in training of prehospital personnel at the local level and participate in regional activities to address these criteria.
3	IV	The protocols that guide prehospital trauma care must be established by the trauma health care team, including surgeons, emergency physicians, medical directors for EMS agencies, and basic and advanced prehospital personnel (CD 3–2).	There must be evidence of collaboration between the prehospital provider's Medical Director and Trauma Medical Director regarding trauma protocols. This can occur at the local level as we as the regional level.

3	IV	When a trauma center is required to go on bypass or to divert, the center must have a system to notify dispatch and EMS agencies (CD 3– 7). The center must do the following: • Prearrange alternative destinations with transfer agreements in place • Notify other centers of divert or advisory status • Maintain a divert log • Subject all diverts and advisories to performance improvement procedures	There must be a documented bypass and diversion protocol. The elements listed must be document if diversion occurs, and this must be documented and reviewed through the TPIPS process and reported through the trauma operations committee.
Chapter 4: Interhospital Transfer			
4	IV	Direct physician-to-physician contact is essential (CD 4–1).	There must be documented evidence this occurs.
4	IV	A very important aspect of interhospital transfer is an effective PIPS program that includes evaluating transport activities (CD 4–3).	All trauma transfers must be reviewed through the TPIPS process to ensure the timeliness of transfer and that all acutely injured patients who meet trauma activation criteria who are transferred out of the emergency department or inpatient with 24 hours of arrival, with a projected ISS score of 9 or higher are transferred to a higher level of care. Note: same level fall isolated hip fractures are not included in this criterion.
4	IV	Perform a PIPS review of all transfers (CD 4–3).	All trauma transfers must be reviewed through the TPIPS processes.
Chapter 5: Hospital Organization and the Trauma Program			

5	IV	A decision by a hospital to become a trauma center requires the commitment of the institutional governing body and the medical staff (CD 5–1).	There must be a documented Board Resolution and a documented Medical Staff Resolution that supports the commitment of resources and expertise to complete and maintain trauma facility designation.
5	IV	Documentation of administrative commitment is required from the governing body and the medical staff (CD 5–1)	There must be a documented Board Resolution and a documented Medical Staff Resolution that supports the commitment of resources and expertise to complete and maintain trauma facility designation that is updated a minimum of every three years.
		in 3 years) (CD 5–7)	
5	IV	The criteria for a graded activation must be clearly defined by the trauma center, with the highest level of activation including the six required criteria listed in the ACS 2022 VRC standards.	There must be documented trauma activation criteria that is monitored for compliance through the TPIPS process.
5	IV	In Level III and IV trauma centers the team must be fully assembled within 30 minutes (CD 5-15).	There must be documented evidence of compliance to the trauma team activation criteria with trauma standards of care implemented and followed through the evaluation and resuscitation. The physician must response within 30 minutes. If the facility is in a rural county of 30,000 people or less, they may use telemedicine. The advanced practice provide must be available and the physician must be able to respond within 30 if requested.
5	IV	Other potential criteria for trauma team activation that have been determined by the trauma program to be included in the various levels of trauma activation must be evaluated on an ongoing basis in the PIPS process (CD 5-16) to determine their positive predictive value in identifying patients who require the resources of the full trauma team.	All trauma team activations are reviewed for appropriateness, timeliness of response, to include the delayed activations, missed activations, and wrong level of activations.
Chapter 6: Clinical Functions: General Surgery			

6	IV	Level IV trauma centers, the maximum acceptable response time is 30 minutes. Response time will be tracked from patient arrival rather than from notification or activation. An 80 percent attendance threshold must be met for the highest-level activations (CD 2–8).	If level IV facilities do not have general surgeons participating in the trauma program, the emergency medicine physicians covering the emergency department will assume this role and are responsible the response times to the trauma activations.
Chapter 7: Clinical Functions: Emergency Medicine			
Chapter 8: Clinical Functions: Neurosurgery			
Chapter 9: Clinical Functions: Orthopaedic Surgery			
Chapter 11 Collaborative Clinical Services			
Chapter 13: Rural Trauma Care			
13	IV	Direct contact of the physician or midlevel provider with a physician at the receiving hospital is essential (CD 4–1).	The physician must be able to respond within 30 minutes of the activations. This must be monitored through the TPIPS process.
13	IV	Transfer guidelines and agreements between facilities are crucial and must be developed after evaluating the capabilities of rural hospitals and medical transport agencies (CD 2–13).	All trauma transfers must be reviewed through the TPIPS process to ensure the timeliness of transfer and that all acutely injured patients who meet trauma activation criteria who are transferred out of the emergency department or inpatient with 24 hours of arrival, with a projected ISS score of 9 or higher are transferred to a higher level of care. Note: same level fall isolated hip fractures are not included in this criterion.
13	IV	All transfers must be evaluated as part of the receiving trauma center's performance improvement and patient safety (PIPS) process (CD 4–3), and feedback should be provided to the transferring center.	Feedback regarding transfers is provided within 30 days.
13	IV	The foundation for evaluation of a trauma system is the establishment and maintenance of a trauma registry (CD 15–1).	The facility maintains a trauma registry with data abstraction and complete trauma registry data entry being completed within 60 days of the patient's discharge. For all trauma registry entries 80% of the records must be competed within 60 days of discharge.

13	IV	The trauma performance improvement patient safety plan is essential. Issues that must be reviewed will revolve predominately around (1) system and process issues such as documentation and communication; (2) clinical care, including identification and treatment of immediate life- threatening injuries (ATLS®); and (3) transfer decisions (CD 16-10).	The facility must have a documented TPIPS plan that defines the structure and processes for event review, routine event screening, levels of harm, levels of review, corrective action plans through to event resolutions.
13	IV	The best possible care for patients must be achieved with a cooperative and inclusive program that clearly defines the role of each facility within the system (CD 1–1).	The TMD and TPM must participate in the regional advisory council. There must be documented evidence of annual participation.
Chapter 14: Guidelines for the Operation of Burn Centers			
14	IV	Trauma centers that refer burn patients to a designated burn center must have in place written transfer agreements with the referral burn center (CD 14–1)	Management guidelines for burn are document with evidence of staff education. This includes burn transfers.
Chapter 15: Trauma Registry			
15	IV	Trauma registry data must be collected and analyzed by every trauma center (CD 15–1).	There must be documented evidence of quarterly submissions to the state registry with evidence of data validation.
15	IV	The trauma registry is essential to the performance improvement and patient safety (PIPS) program and must be used to support the PIPS process (CD 15–3).	Registry entries must be completed within 60 days of the patient's discharge. The program staff, TPM or registrar must be knowledgeable of measures to produce registry reports to support the committees and TPIPS process.
15	IV	Furthermore, these findings must be used to identify injury prevention priorities that are appropriate for local implementation (CD 15–4).	Registry data is used to define injury prevention targeted programs. This may be done through collaboration and participation at regional advisory council.
15	IV	Trauma registries should be concurrent. At a minimum, 80 percent of cases must be entered within 60 days of discharge (CD 15–6)	Registry entries must be completed within 60 days of the patient's discharge. The program staff, TPM or registrar must be knowledgeable of measures to produce registry reports to support the committees and TPIPS process. The facility must demonstrate 80% compliance to this criterion.
15	IV	The trauma program must ensure that appropriate measures are in place to meet the confidentiality	Guidelines to ensure HIPAA compliance must be documented.

		requirements of the data (CD 15–8).	
15	IV	Strategies for monitoring data validity are essential (CD 15–10).	The facility must adhere to quarterly registry submission and there must be documented evidence of data validation for these submissions and evidence that the issues identified were corrected.
Chapter 16: Performance Improvement and Patient Safety			
16	IV	The PIPS program must be supported by a reliable method of data collection that consistently obtains the information necessary to identify opportunities for improvement (CD 15–1).	There must be a current, documented TPIPS plan. This plan must be approved by the Trauma Operations Committee and supported by the CNO and hospital Quality Program. This plan must be continual and with out significant gaps, referring to days without performance improvement activities. The TPIPS plan is supported in the Board Resolution and Medical Staff Resolution.
. 16	IV	The processes of event identification and levels of review must result in the development of corrective action plans, and methods of monitoring, reevaluation, and benchmarking must be present (CD 2–17).	This is defined in the TPIPS plan.
16	IV	Peer review must occur at regular intervals to ensure that the volume of cases is reviewed in a timely fashion (CD 2–18).	This is defined in the TPIPS plan.
16	IV	Because the trauma PIPS program crosses many specialty lines, it must be empowered to address events that involve multiple disciplines and be endorsed by the hospital governing body as part of its commitment to optimal care of injured patients (CD 5–1).	The TPIPS plan integrates all disciplines who provide care to the trauma activation patients.
16	IV	There must be adequate administrative support to ensure evaluation of all aspects of trauma care (CD 5–1).	The TMD and TPM must have the authority and oversight for all trauma care from admission to the patient's discharge. This includes the authority to make recommendations to improve processes or standards of care.
16	IV	The trauma medical director and trauma program manager must have the authority and be empowered by the hospital governing body to lead the program (CD 5–1).	This must be documented in the job descriptions, TPIPS plan, Operational Plan, Board Resolution, and the Medical Staff Resolution.

16	IV	The trauma center must demonstrate that all trauma patients can be identified for review (CD 15–1).	All patients who meet trauma activation criteria can be identified and tracked by the trauma program.
16	IV	The trauma PIPS program must be supported by a registry and a reliable method of concurrent data collection that consistently obtains information necessary to identify opportunities for improvement (CD 15–3).	The trauma registry must report to the TPM to align the performance improvement and registry activities.
16	IV	All process and outcome measures must be documented within the trauma PIPS program's written plan and reviewed and updated at least annually (CD 16–5).	The documented TPIPS plan is reviewed during the site survey process.
16	IV	Trauma surgeon response to the emergency department (CD 2–9). See previous detail.	Response times must be continually monitored by the trauma program. This is evaluated during the site survey process.
16	IV	Trauma team activation (TTA) criteria (CD 5–13). See previous detail.	Trauma activation criteria compliance is continuously monitored. This is evaluated during the site survey process.
16	IV	All Trauma Team Activations must be categorized by the level of response and quantified by number and percentage, as shown in Table 2 (CD 5–14, CD 5–15).	Trauma activation criteria compliance is continuously monitored. This is evaluated during the site survey process.
16	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.	This must be reviewed through the TPIPS plan. This is evaluated during the site survey process.
16	IV	Transfers to a higher level of care within the institution (CD 16–8).	This is monitored and reviewed through the TPIPS plan. This is evaluated during the site survey process.
16	IV	Trauma registry (CD 15–6). See previous detail.	Trauma registry inclusion criteria, guidelines, and meeting the 80% requirement for the completion of records within 60 days of the patient's discharge are evaluated during the site

			survey process.
16	IV	Sufficient mechanisms must be available to identify events for review by the trauma PIPS program (CD 16–10).	The TPIPS plan is reviewed and evaluated during the site survey process.
16	IV	Once an event is identified, the trauma PIPS program must be able to verify and validate that event (CD 16–11).	The TPIPS plan is reviewed and evaluated during the site survey process.
Chapter 17: Outreach and Education			
17	IV	All verified trauma centers, however, must engage in public and professional education (CD 17–1).	There must be documented evidence of trauma-related public and professional education. This is evaluated during the site survey process. Participation in regional activities meet this criterion.
17	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.	This is evaluated during the site survey process. If the physician is not board certified or board eligible, then a current ATLS is required in addition to CME. All advanced practice providers participating in trauma resuscitations are required to maintain a current ATLS certification.
Chapter 18: Prevention			
18	IV	Trauma centers must have an organized and effective approach to injury prevention and must prioritize those efforts based on local trauma registry and epidemiologic data (CD 18–1).	There must be evidence of injury prevention activities. These job functions are typically integrated into the TPM job description in Level IV facilities. This can be in collaboration with systems facilities or regional advisory council.
18	IV	Each trauma center must have someone in a leadership position that has injury prevention as part of his or her job description (CD 18-2)	This is typically included in the TPM job description.
Chapter 19: Trauma Research and Scholarship			
Chapter 20: Disaster Planning and Management			
20	IV	Trauma centers must meet the disaster-related requirements of the Joint Commission (CD 20–1).	The TMD and TPM must participate in the regional activities specific to mass casualty preparedness and planning. The TMD and TPM must participate in their hospital's disaster planning and response committee.

20	IV	Hospital drills that test the individual hospital's disaster plan must be conducted at least twice a year, including actual plan activations that can	The TMD, TPM, in collaboration with the Medical Director of the emergency department will conduct annual training and educational updates specific to mass casualty response to include associated roles of triage, job functions, job action sheets, to ensure staff are knowledgeable of their role and how to facilitate patient flow and patient outflow during a mass casualty event. The must be documentation of this training and education. This will be evaluated during the site review process.
		substitute for drills (CD 20–3)	
20	IV	All trauma centers must have a hospital disaster plan described in the hospital's policy and procedure manual or equivalent (CD 20–4).	There must be a document disaster plan. Trauma and the emergency department must have documented job action sheet to define the key job functions during a mass casualty response. This must align with the overall hospital disaster response plan.
Chapter 21: Solid Organ Procurement Activities			
21	IV	It is essential that each trauma center have written protocols defining the clinical criteria and confirmatory tests for the diagnosis of brain death (CD 21–3).	There must be a hospital specific guideline for confirming brain death. There must be defined guidelines with criteria for contacting the organ procurement organization.
Note: Level IV facilities that admit patients that meet trauma activation criteria with projected ISS scores of 9 or greater to the operating suite, or intensive care unit, must also meet the ACS 2022 VRC Standards, Level III standards for the laboratory, blood bank, radiology, operating suite, intensive care unit, and rehabilitation (excluding same level falls with isolated hip fractures).			
Note: Level IV facilities with neurosurgery coverage that admit patients that meet trauma activation criteria with a projected ISS score of 9 or higher that include patients with neurotrauma to the operating suite or intensive care unit must meet the ACS 2022 VRC standards for Level III trauma centers for the laboratory, blood bank, radiology, operating suite, intensive care unit, and rehabilitation, to include the Level III-N standards.			
All reference documents will be available at: *https://www.facs.org/quality-programs/trauma/vrc/resources*			