

## Hospital Commitment

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 5-1	Documentation of administrative commitment is required from the governing body and the medical staff.	I
IV	ACS, CD 5-1	Because the trauma PI 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 the injured patients.	I
IV	ACS, CD 5-1	There must be adequate administrative support to ensure evaluation of all aspects of trauma care.	I

## Trauma Systems

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 1-3	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.	II
IV	ACS, CD 1-1	The individual trauma facilities and their health care providers are essential system resources that must be active and engaged participants.	II
IV	ACS, CD 1-2	They must function in a way that pushes trauma facility-based standardization, integration, and PI out to the region while engaging in inclusive trauma system planning and development.	II
IV	ACS, CD 11-87	The trauma program must also demonstrate appropriate orientation, credentialing processes, and skill maintenance for advanced practitioners, as witnessed by an annual review by the trauma medical director.	II
IV	ACS, CD 16-10	Sufficient mechanisms must be available to identify events for review by the trauma PI program. 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.	II
IV	ACS, CD 16-11	Once an event is identified, the trauma PI program must be able to verify and validate that event.	II
IV	ACS, CD 1-1	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.	II
IV	ACS, CD 15-1	The foundation for evaluation of a trauma system is the establishment and maintenance of a trauma registry. Trauma registry data must be collected and analyzed by every trauma center. Must be able to identify that all trauma patients can be identified for review.	II

## The Role of a Trauma Facility in a Trauma System

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 2-1	This trauma center must have an integrated, concurrent performance improvement (PI) program to ensure optimal care and continuous improvement in care.	I
IV	ACS, CD 2-3	The trauma facility 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.	II
IV	ACS, CD 2-18	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.	II
IV	ACS, CD 2-19	A PI program must have audit filters to review and improve pediatric and adult patient care.	II
IV	ACS, CD 2-20	Because of the greater need for collaboration with receiving trauma facilities, the level IV facility must also actively participate in regional and statewide trauma system meetings and committees that provide oversight.	II

# Level IV Criteria Quick Reference Guide

## Pre-Hospital Care

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 3-1	The trauma program must participate in the training of prehospital personnel, the development and improvement of prehospital care protocols, and performance improvement programs.	II
IV	ACS, CD 3-2	The protocols that guide pre-hospital trauma care must be established by the trauma health care team, including surgeons, emergency physicians, medical directors for EMS agencies and basic and advanced pre-hospital personnel.	II
IV	ACS, CD 2-21	The level IV facility must also be the local trauma authority and assume the responsibility for providing training for pre-hospital and hospital based providers.	II
IV	ACS, CD 3-7	When a trauma facility is required to go on bypass or to divert, the facility must have a system to notify dispatch and EMS agencies. The facility must do the following: <ol style="list-style-type: none"> <li>1. Prearrange alternative destinations with transfer agreements in place.</li> <li>2. Notify other facilities of divert or advisory status.</li> <li>3. Maintain a divert log.</li> <li>4. Subject all divers and advisories to performance improvement procedures</li> </ol>	II

## Inter-Hospital Transfers

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 2-13	Well defined transfer plans are essential. Collaborative treatment and transfer guidelines reflecting the facilities' capabilities must be developed and regularly reviewed, with input from higher-level trauma centers in the region. Transfer guidelines and agreements between facilities are crucial and must be developed after evaluating the capabilities of rural hospitals and medical transport agencies.	II
IV	ACS, CD 4-1	Direct physician to physician contact is essential. Direct contact of the physician or midlevel provider with a physician at the receiving hospital is essential.	II
IV	ACS, CD 4-3	All transfers must be evaluated as part of the receiving trauma facility's performance improvement (PI) process and feedback should be provided to the transferring facility.	II

## Trauma Program Manager (TPM)/Coordinator

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 2-17	TPM is knowledgeable and involved in trauma care, working with TMD with guidance from trauma peer review committee to identify events, develop corrective action plans, and ensure methods of monitoring, reevaluation, and benchmarking.	II

## Trauma Medical Director (TMD)

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 2-17	The TMD and the TPM knowledgeable and involved in trauma care must work together with guidance from trauma peer review committee to identify events, develop corrective action plans, and ensure methods of monitoring, reevaluation, and benchmarking.	II
IV	ACS, CD 5-1	The trauma medical director and the trauma program manager must have the authority and be empowered by the hospital governing body to lead the program.	II
IV	ACS, CD 11-87	The trauma program must also demonstrate appropriate orientation, and credentialing processes, and skill maintenance for advanced practitioners, as witnessed by an annual review by the trauma medical director.	II

## General Surgery

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 2-8	The maximum acceptable response time is 30 minutes for the highest-level activation tracked from patient arrival. The minimum criteria for full trauma team activation are provided in Table 2 in Chapter 5. The program must demonstrate that the surgeon's presence is in compliance at least 80 percent of the time. <b>Note: This CD refers to trauma facilities that have trauma surgeons on their trauma team 24/7.</b>	I

## Emergency Medicine

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 2-14	Must have 24 hour physician coverage by a physician or midlevel provider.	II
IV	ACS, CD 2-15	Emergency department must be continuously available for resuscitation with coverage by a registered nurse and physician or midlevel provider, and it must have a physician director.	II
IV	ACS, CD 2-16	The emergency department providers must maintain current ATLS certification as part of their competencies if the provider is not Board Certified in Emergency Medicine.	II
IV	ACS, CD 17-5	If the emergency department provider is Board Certified in emergency medicine then the provider must take ATLS at least once.	II
IV	ACS, CD 11-86	Advanced practitioners who participate in the initial evaluation of the trauma patients must demonstrate current verification in ATLS.	II
IV	ACS, CD 2-8	It is expected that the physician 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 level of activation, tracked from patient arrival. The PI program must demonstrate that the physician's presence is in compliance at least 80 percent of the time.	I

## Radiology

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 11-29	Conventional radiography must be available in all trauma facilities 24/7.	I

## Lab and Blood Bank

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 11-80 ACS, CD 11-81	24-hour availability of a laboratory capable of: <ul style="list-style-type: none"> <li>Standard analysis of blood, urine and other body fluids, including micro sampling</li> <li>Blood typing and cross matching</li> </ul>	I
IV	ACS, CD 11-84	Must have a massive transfusion protocol developed collaboratively between the trauma service/program and the blood bank.	I

## Burn Patients

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 14-1	Trauma facilities that refer burn patients to a burn center must have a written transfer agreement with the referral burn center.	II

## Trauma Team Activation

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 5-13	The criteria for a graded activation must be clearly defined by the trauma facility, with the highest level of activation including the six required criteria listed in Chapter 5; Table 2 of the ACS' "Resources for the Optimal Care of the Injured Patient, 2014." Trauma facilities shall have a trauma team activation protocol/policy to include: <ul style="list-style-type: none"> <li>Lists of all team members</li> <li>Response requirements for all team members when a trauma patient is enroute or has arrived</li> <li>The criteria for a graded activation must be clearly defined by the trauma center, with the highest level of activation including the six identified, required criteria (Table 2)</li> <li>The person(s) authorized to activate the trauma team.</li> <li>Protocols that guide pre-hospital trauma care</li> </ul>	II
IV	ACS, CD 5-16	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 PI process to determine their positive predictive value in identifying patients who require the resources of the full trauma team.	II
IV	ACS, CD 5-15	The trauma team must be fully assembled within 30 minutes. All trauma team activations must be categorized by the level of response and quantified by number and percentage, as shown in Chapter 5; Table 2 of the ACS' "Resources for the Optimal Care of the Injured Patient, 2014".	II

# Level IV Criteria Quick Reference Guide

## Trauma Registry

Level	Criteria and Source	Description of Criteria	Type
IV	MI, CD 1-1	All healthcare facilities with an emergency center shall participate in data submission. Submit data on patients who meet trauma inclusion criteria as defined in the most current version of the ACS National Trauma Data Bank, "National Trauma Data Standard: Data Dictionary."	I
IV	MI, CD 1-2	All data which meets inclusion criteria, as defined in the most current version of "National Trauma Data Standard: Data Dictionary", is submitted electronically into the State Trauma Registry (ImageTrend). Twelve months of data must be submitted into the State Trauma Registry prior to applying for designation as a Michigan trauma facility for the first time.	I
IV	MI, CD 1-3	To maintain designation as a Michigan trauma facility, data is to be submitted electronically into the State Trauma Registry quarterly.	I
IV	MI, CD 1-4	Each healthcare facility is required to designate a person responsible for trauma registry activities. This person should have minimal training necessary to maintain the registry. This need not be a dedicated position.	I
IV	ACS, CD 15-1	The trauma facility must demonstrate that all trauma patients can be identified for review. Registry data must be collected and analyzed.	II
IV	ACS, CD 15-3	The trauma registry is essential to the performance improvement (PI) program and must be used to support the PI process.	II
IV	ACS, CD 15-6	Trauma registries should be concurrent. At a minimum, 80 percent of cases must be entered within 60 days of discharge.	II
IV	ACS, CD 15-8	The trauma program must ensure that appropriate measures are in place to meet the confidentiality requirements of the data.	II
IV	ACS, CD 15-10	Strategies for monitoring data validity are essential.	II
IV	ACS, CD 16-5	All process and outcome measures must be documented within the trauma PI program's written plan and reviewed and updated at least annually.	II

## Disaster Plan

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 20-4	All hospitals must have a hospital disaster plan described in the hospital's policy and procedure manual or equivalent.	II
IV	ACS, CD 20-1	Trauma facilities must meet the disaster-related requirements of the Joint Commission.	II
IV	ACS, CD 20-3	Hospital drills that test the individual hospital's disaster plan must be conducted at least twice a year, including actual plan activations that can substitute for drills.	II
IV	ACS, CD 2-22	The facility must participate in regional disaster management plans and exercises.	II

## Performance Improvement

Level	Criteria and Source	Description of Criteria	Type
IV	MI, CD 2-3	<p>Have a written performance improvement plan, which addresses the following:</p> <ol style="list-style-type: none"> <li>1. Have a process of event identification and levels of review which result in the development of corrective action plans, and methods of monitoring, re-evaluation, risk stratified benchmarking must be present and this process must be reviewed and updated annually.</li> <li>2. Problem resolution, outcome improvements and assurance of safety (loop closure) must be readily identifiable through methods of monitoring, re-evaluation, benchmarking and documentation.</li> <li>3. All criteria for trauma team activation have been determined by the trauma program and evaluated on an ongoing basis in the PI process.</li> <li>4. The PI program identifies and reviews documents, findings, and corrective action on the following five (5) audit filters: <ul style="list-style-type: none"> <li>• Any system and process issue</li> <li>• Trauma deaths in house or in emergency department</li> <li>• Any clinical care issues, including identifying and treatment of immediate life threatening injuries</li> <li>• Any issues regarding transfer decision</li> <li>• Trauma team activation times to trauma activation</li> </ul> </li> </ol> <p>In addition, have a policy in place to review issues that 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.</p>	I

# Level IV Criteria Quick Reference Guide

Level	Criteria and Source	Description of Criteria	Type
IV	MI, CD 2-1	Demonstrate participation in the regional trauma network performance improvement as described in the Regional Trauma Network work plan. Minimally, this includes demonstrating that the healthcare facility is participating in regional data collection, analysis and sharing. A brief description of planned or ongoing participation in the Regional Trauma Network performance improvement initiatives must be submitted with the designation application.	I
IV	ACS, CD 15-1	The PI program must be supported by a reliable method of data collection that consistently obtains the information necessary to identify opportunities for improvement.	II
IV	ACS, CD 11-60	For all levels of trauma care, the PI program must document that timely and appropriate ICU care and coverage are being provided.	II
IV	ACS, CD 2-8	Trauma surgeon response to the emergency department. Trauma surgeon on-call response for the highest level of activation must be continuously monitored and variances documented and reviewed for reason for delay, opportunities for improvement and corrective actions. The minimum threshold is within 30 minutes. Response times will be tracked from patient arrival. An 80 percent attendance threshold must be met for the highest level activations. <b>Note: This CD refers to trauma facilities that have trauma surgeons on their trauma team (24/7).</b>	I
IV	ACS, CD 2-17	The process 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.	II
IV	ACS, CD 2-18	Peer review must occur at regular intervals to ensure that the volume of cases is reviewed in a timely fashion.	II
IV	ACS, CD 5-16	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 PI program process to determine their positive predictive value in identifying patients who require the resources of the full trauma team.	II
IV	ACS, CD 5-15	In Level III and IV trauma facilities, the team must be fully assembled within 30 minutes.	II
IV	ACS, CD 5-13	Trauma team activation criteria. Criteria for all levels of TTA must be defined and reviewed annually. Minimal acceptable criteria for the highest level of activation include the following (additional institutional criteria may also be included): <ol style="list-style-type: none"> <li>1. Confirmed systolic blood pressure less than 90 mmHG at any time in adults and age-specific hypotension in children.</li> <li>2. Gunshot wounds to the neck, chest, or abdomen.</li> <li>3. Glasgow Coma Scale Score less than 8, with mechanism attributed to trauma.</li> <li>4. Transfer patients receiving blood to maintain vital signs.</li> <li>5. Intubated patients transferred from the scene or patients with respiratory compromise or obstruction, including intubated patients who are transferred from another facility with ongoing respiratory compromise (does not include patients who are intubated at another facility and are now stable from a respiratory standpoint)</li> <li>6. Emergency physician's discretion</li> </ol>	II
IV	ACS, CD 21-3	It is essential that each trauma facility have written protocols defining the clinical criteria and confirmatory tests for the diagnosis of brain death.	II
IV	ACS, CD 16-8	Transfers to a higher level of care within the institution. These transfers must be routinely monitored, and cases identified must be reviewed to determine the rationale or transfer, adverse outcomes, and opportunities for improvement.	II
IV	ACS, CD 9-14 ACS, CD 3-4 ACS, CD 4-3	Acute transfers out. All trauma patients who are diverted or transferred during the acute phase of hospitalization to another trauma center, acute care hospital, or specialty hospital (for example, burn center, re-implantation center, 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.	II
IV	ACS, CD 16-11	Once an event is identified, the PI program must be able to verify and validate that event.	II
IV	ACS, CD 2-18	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.	II
IV	ACS, CD 15-3	The trauma PI 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.	II
IV	ACS, CD 15-4	Furthermore, these findings must be used to identify injury prevention priorities that are appropriate for local implementation.	II

## Outreach and Education

Level	Criteria and Source	Description of Criteria	Type
IV	ACS, CD 17-1	The trauma facility must engage in public and professional education.	II
IV	ACS, CD 18-2	There must be someone in a leadership position that has injury prevention as part of his or her job description.	II
IV	ACS, CD 18-1	Must have an organized and effective approach to injury prevention and must prioritize those efforts based on local trauma registry and epidemiologic data.	II
IV	MI, CD 3-1	Participate in coordinating and implementing Regional Trauma Network injury prevention work plans and initiatives.	I
IV	ACS, CD 18-3	Universal screening for alcohol use must be performed for all injured patients and must be documented.	II
IV	ACS, CD 6-9 ACS, CD 7-14 ACS, CD 11-86	The successful completion of ATLS course, at least once, is required for all general surgeons, emergency medicine physicians, and midlevel providers on the trauma team.	II