

## Level III Trauma Designation Work Plan

Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Hospital Commitment	<p>Documentation of administrative commitment is required from the governing body and the medical staff. <b>CD 5-1</b></p> <p>Trauma facilities 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. <b>CD 2-3</b></p> <p>This support must be reaffirmed continually (every 3 years) and must be current at the time of verification. <b>CD 5-2, CD 5-3</b></p> <p>The trauma program must involve multiple disciplines and transcend normal departmental hierarchies. <b>CD 5-4</b></p>	<p><b>CD 5-1</b> The governing board provides a written letter of resolution, indicating the facility's commitment to the hospital's trauma program and desire to provide the resources necessary to become and sustain a level III trauma hospital designation.</p> <p><b>CD 5-1</b> The medical staff board provides a written letter of resolution, indicating the medical staffs' commitment to the hospital's trauma program and desire to participate as necessary to become and sustain a level III trauma hospital designation.</p> <p><b>CD 5-4</b> Hospital organizational chart must include the Trauma Service/Department. Team members must include appropriate representative from all disciplines that provide care to the trauma patient.</p>			
Trauma System	<p>Meaningful involvement in state and regional trauma system planning development, and operation is essential for all designated trauma facilities and participating acute care facilities within a region. <b>CD 1-3</b></p> <p>The individual trauma facilities and their health care providers are essential system resources that must be active and engaged participants. 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. <b>CD 1-1</b></p> <p>They must function in a way that pushes trauma facility-based standardization, integration, and PI program out to the region while engaging in inclusive trauma system planning and development. <b>CD 1-2</b></p>	<p><b>CD 1-3</b> The trauma facility staff must demonstrate participation in regional and/or state trauma organizations. Examples are state advisory committees, MCOT, state registry committees, and state EMS committees. Examples of regional committees would be injury prevention, trauma advisory, and EMS committees.</p> <p><b>CD 1-1, CD 1-2</b> The trauma facility must demonstrate engagement in communication with other facilities within their region, and outside of their region. This can be achieved through feedback letters to sending hospitals on patient transfers, feedback to EMS agencies on patient transports, and engaging in conversations with receiving hospitals on patient outcomes. Being a resource for other healthcare providers in your region, providing educational events to all stakeholders in your region.</p>			

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Trauma System (continued)	<p>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. <b>CD 16-10</b></p> <p>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 facility. <b>CD 15-1</b></p> <p>There must be a method to identify the injured patients, monitor the provision of health care service, make periodic rounds, and hold formal and informal discussions with individual practitioners. <b>CD 5-21</b></p> <p>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. This surgeon must be board certified or eligible for certification by the current standard requirements. <b>CD 11-53, CD 11-54</b></p> <p>Physician coverage of the ICU must be available within 30 minutes, with a formal plan in place for emergency coverage. <b>CD 11-56</b></p> <p>The surgeon must retain responsibility for the patient and coordinate all therapeutic decisions. <b>CD 11-58</b></p> <p>Internal medicine specialists must be available on medical staff. <b>CD 11-74</b></p>	<p><b>CD 16-10</b> Develop a process that will identify events to be reviewed through PI. All patients that meet these three criteria should be reviewed every month with PI program. Comprehensive audit filters (all of ACS and State of Michigan audit filters) should capture any patient's that fall into these three categories.</p> <p><b>CD 15-1</b> Must have registrar and registry system. Data is entered on all trauma patients that meet criteria. Quarterly data submission is required. This data will support PI program and injury prevention program.</p> <p><b>CD 5-21</b> Maintain documentation of rounding, and methods used to identify trauma patients in your facility.</p> <p><b>CD 11-53, CD 11-54</b> Maintain documentation of ICU meeting attendance, and minutes. Minutes of meetings must reflect the surgeon's active participation. Maintain documentation of surgeon's board certification.</p> <p><b>CD 11-56</b> Have a written policy for ICU physician coverage, along with a written backup plan.</p> <p><b>CD 11-58</b> Documentation in the patient's medical record should demonstrate the surgeon's role in coordinating all therapeutic decisions, and events.</p> <p><b>CD 11-74</b> Have published on call schedule.</p>			

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Trauma System (continued)	<p>Many of the daily care requirements can be collaboratively managed by a dedicated ICU team, but the trauma surgeon must be kept informed and concur with major therapeutic and management decisions made by the ICU team. <b>CD 11-59</b></p> <p>The PI program must document that timely and appropriate ICU care and coverage are being provided. <b>CD 11-60</b></p> <p>The timely response of credentialed providers to the ICU must be continuously monitored as part of the PI program. <b>CD 11-60</b></p> <p>The PI program must review all ICU admissions and transfers of ICU patients to ensure that appropriate patients are being selected to remain at the Level III facility vs. being transferred to a higher level of care facility. <b>CD 11-57</b></p> <p>Qualified critical care nurses must be available 24 hours per day to provide care for patients during the ICU phase. <b>CD 11-65</b></p> <p>The patient to nurse ratio in the ICU must not exceed two to one. <b>CD 11-66</b></p> <p>There must be an ICU liaison to the trauma service. This liaison must attend 50 percent of the multidisciplinary peer review meetings, with documentation by the PI program. <b>CD 11-61, CD 11-62</b></p> <p>The ICU must have the necessary equipment to monitor and resuscitate patients. Intracranial pressure monitoring equipment must be available with neurosurgical coverage that admits neurotrauma patients. <b>CD 11-67, CD 11-68</b></p> <p>Physical therapy and social services must be provided. <b>CD 12-3, CD 12-4</b></p>	<p><b>CD 11-57</b> All ICU admits and transfers are included in audit filters and reviewed monthly at multidisciplinary peer review meeting.</p> <p><b>CD 11-65</b> Have published schedule demonstrating 24 hour care.</p> <p><b>CD 11-66</b> Have staffing plan demonstrating nurse to patient ration of 2:1.</p> <p><b>CD 11-61</b> Documentation of minutes, attendance record should support this.</p> <p><b>CD 12-3, CD 12-4</b> Must have a published schedule or staffing plan.</p>			

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The Role of a Trauma Facility in a Trauma System	The trauma facility must have an integrated, concurrent performance improvement (PI) program to ensure optimal care and continuous improvement in care. <b>CD 2-1</b>	<b>CD 2-1</b> Hospital must have the capabilities to treat trauma patients through equipment, human and physical resources and well defined transfer plans. This is demonstrated through the documentation of the care of the patient, policies, and protocols, as well as through a strong PI program.			
	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. <b>CD 2-3</b>	<b>CD 2-3</b> Multidisciplinary peer review committee and operational committee should demonstrate through the meeting minutes that issues regarding infrastructure are being addressed with loop closure			
	Any adult trauma facility that annually admits 100 or more injured children younger than 14 years must fulfill the following additional criteria demonstrating their capability to care for injured children: Trauma surgeons must be credentialed for pediatric trauma care by the hospital's credentialing body. <b>CD 2-23</b>	<b>CD 2-23</b> Data and documentation along with evidence of credentials must be maintained.			
	There must be a pediatric emergency department area, a pediatric intensive care area, appropriate resuscitation equipment, and a pediatric-specific trauma PI program. <b>CD 2-24</b>	<b>CD 2-24</b> This criteria is required only if CD 2-23 has been met.			
	For adult trauma facilities annually admitting fewer than 100 injured children younger than 14 years, these resources are desirable. These hospitals, however, must review the care of their injured children through the PI program. <b>CD 2-25</b>	<b>CD 2-25</b> All pediatric trauma activations, pediatric trauma admits, and pediatric trauma transfers must be reviewed by the peer review committee.			
	It is expected that the surgeon 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's arrival. The PI program must demonstrate that the surgeon's presence is in compliance at least 80 percent of the time. <b>CD 2-8</b>	<b>CD 2-8</b> Surgeon response times must be an audit filter in order to monitor for compliance.			

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The Role of a Trauma Facility in a Trauma System (continued)	<p>Must have continuous general surgical coverage <b>CD 2-12</b></p> <p>Well defined transfer plans are essential. Transfer guidelines and agreements between facilities are crucial and must be developed after evaluating the capabilities of rural hospitals and medical transport agencies. <b>CD 2-13</b></p> <p>The facility must participate in regional disaster management plans and exercises. <b>CD 2-22</b></p> <p>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. <b>CD 2-18</b></p> <p>A PI program must have audit filters to review and improve pediatric and adult patient care. <b>CD 2-19</b></p>	<p><b>CD 2-12</b> Must show published call schedule.</p> <p><b>CD 2-18, CD 2-19</b> Trauma service must set regular multidisciplinary peer review meetings, with a set agenda, in order to review resuscitations, trauma systems issues, provider issues, and recommendations for improvement. All audit filters are review and evaluated at this meeting.</p>			
Pre-hospital Trauma Care	<p>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. <b>CD 3-2</b></p> <p>When a trauma facility is required to go on bypass or to divert, the center must have a system to notify dispatch and EMS agencies. The facility must do the following.</p> <ul style="list-style-type: none"> <li>• Prearrange alternative destinations with transfer agreements in place</li> <li>• Notify other facilities of divert or advisory status</li> <li>• Maintain a divert log</li> <li>• Subject all diverts and advisories to performance improvement procedures.</li> </ul> <p><b>CD 3-7</b></p>	<p><b>CD 3-2</b> The protocols that guide pre-hospital care for trauma patients must be collaboratively developed by all stakeholders.</p> <p><b>CD 3-7</b> Documentation must show all of the required information in CD 3-7. The PI program must discuss, and show in the minutes, every occurrence of the hospital going on bypass or diversion along with any and all affected trauma patients.</p>			

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Pre-hospital Trauma Care (continued)	<p>The trauma director must be involved in the development of the trauma facility's bypass (diversion) protocol. <b>CD 3-4</b></p> <p>The trauma surgeon must be involved in the decision regarding bypass (diversion) each time the center goes on bypass. <b>CD 3-5</b></p> <p>The trauma program must participate in the training of pre-hospital personnel, the development, and improvement of pre-hospital care protocols, and performance improvement and patient safety programs. <b>CD 3-1</b></p> <p>The trauma center must not be on bypass (diversion) more than 5 percent of the time. <b>CD 3-6</b></p> <p>Rigorous multidisciplinary performance improvement is essential to evaluate over triage and under triage rates to attain the optimal goal of less than 5 percent under triage. <b>CD 3-3</b></p>	<p><b>CD 3-4</b> Bypass and diversion policy must have Trauma Medical Director's approval and signature.</p> <p><b>CD 3-5</b> Bypass and diversion policy must state that the trauma surgeon on call is notified of a trauma diversion. The surgeon will make the decision to divert the patient or not. Only the trauma surgeon can make this decision.</p> <p><b>CD 3-1</b> Documentation must demonstrate any type of participation in pre-hospital care protocols, PI, etc.</p> <p><b>CD 3-6</b> Maintain bypass and diversion log.</p> <p><b>CD 3-3</b> Over triage and under triage should be an audit filter.</p>			
Inter-hospital Transfers	<p>Direct physician to physician contact is essential. <b>CD 4-1</b></p> <p>All transfers must be evaluated as part of the receiving trauma facility's performance improvement and patient safety (PI) process and feedback should be provided to the transferring center <b>CD 4-3</b></p>	<p><b>CD 4-1</b> Transfer protocols must be developed that required physician to physician communication.</p> <p><b>CD 4-3</b> Establish a transfer protocol that is approved by the TMD and monitored by PI program which includes:</p> <ul style="list-style-type: none"> <li>Anatomical and physiological characteristics identifying a patient in need of transfer</li> <li>List of transfer services w/ contact information</li> <li>List of supplies/equipment that will accompany patient</li> <li>List of records/documentation that will accompany patient</li> <li>Personnel needed to accompany patient</li> </ul> <p>All transfers are to be reviewed through PI program. Develop a process to provide feedback to transferring facilities and a process to disseminate feedback from receiving facilities to staff, physicians, EMS, etc.</p>			

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Inter-hospital Transfers (continued)	<p>Decision to transfer an injured patient to a specialty care facility in an acute situation must be based solely on the needs of the patient and not on the requirements of the patient's specific provider network or the patient's ability to pay. <b>CD 4-2</b></p> <p>Trauma patients must not be admitted or transferred by a primary care physician without the knowledge and consent of the trauma service and PI must monitor this to show adherence to guideline. <b>CD 11-69</b></p> <p>In trauma facilities that do not have dialysis capabilities must have a transfer agreement in place. <b>CD 11-78</b></p> <p>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 similar or higher-qualified verified trauma center should be in place.</p> <p>If this approach is used, a clear plan for expeditious critical care transport, follow up, and performance monitoring is required. If complex cases are being transferred out, a contingency plan should be in place and must include the following:</p> <ul style="list-style-type: none"> <li>• A credentialing process to allow the trauma surgeon to provide initial evaluation and stabilization of the patient</li> <li>• Transfer agreements with similar or higher-verified trauma centers</li> <li>• Direct contact with the accepting facility to arrange for expeditious transfer or ongoing monitoring support</li> <li>• Monitoring of the efficacy of the process by the PIPS program.</li> </ul> <p><b>CD 8-5</b></p>	<p><b>CD 4-2</b> Documentation in patient's medical record indicates the reason for transfer.</p> <p><b>CD 11-78</b> Have transfer agreements for dialysis patients.</p> <p><b>CD 8-5</b></p> <ol style="list-style-type: none"> <li>1. Write specific exclusion criteria for your facility. Write the specific injuries in a protocol that your facility will have to transfer out to a level of higher care.</li> <li>2. Develop transfer guidelines and agreements to higher level of care facilities. These guidelines and agreements are placed in the exclusion criteria protocol.</li> <li>3. All of these cases are reviewed at the multidisciplinary peer review committee.</li> </ol>			



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Trauma Program Coordinator/Manager (TPM)	<p>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. <b>CD 2-17</b></p> <p>The TPM must have administrative abilities, show evidence of educational preparation, and clinical experience in the care of the injured patients. <b>CD 5-22</b></p>	<p><b>CD 2-17</b> This person shall be a RN with clinical experience in trauma care. Alternatively, other qualified allied health personnel with clinical experience in trauma care may be appropriate. It is expected that the Coordinator/Manager has allocated time for the trauma program. The TPM does not have to be dedicated full time to the trauma program.</p> <p><b>CD 5-22</b> Job description should contain these requirements. Requirements can be more specific in job description as prescribed by your facility.</p>			
Trauma Program Medical Director (TMD)	<p>A TMD and TPM 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. <b>CD 2-17</b></p> <p>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. <b>CD 11-87</b></p> <p>Trauma program medical director must be a current board-certified (or a general surgeon eligible for certification by the American Board of Surgery according to current requirements) or a general surgeon who is an American College of Surgeons Fellow with a special interest in trauma care and must participate in trauma call. <b>CD 5-5</b></p> <p>The trauma hospital medical director shall be current in ATLS. <b>CD 5-6</b></p> <p>The TMD must have authority to manage all aspects trauma care. <b>CD 5-9</b></p>	<p><b>CD 2-17</b> Trauma Medical Director must work closely with Trauma Program Manager. This is evidenced through minutes, memos, documentation containing loop closure.</p> <p><b>CD 11-87</b> Develop an organized, comprehensive orientation program that includes specific trauma training for mid-level practitioners. All mid-levels that care for trauma patients must have this orientation as well as a documented annual review of these skills.</p> <p><b>CD 5-5, CD 5-6</b> Maintained documentation of board certifications, and ATLS completion.</p>			



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Trauma Program Medical Director (TMD) (continued)	<p>The TMD, in collaboration with the TPM, must have authority to correct deficiencies in trauma care and exclude from trauma call the trauma team members who do not meet specified criteria. <b>CD 5-11</b></p> <p>The TMD must chair and attend a minimum of 50% of the multidisciplinary trauma peer review committee meetings. <b>CD 5-10</b></p> <p>The TMD must perform an annual assessment of the trauma panel providers in the form of OPPE, and FPPE when indicated by the findings of the PI process. <b>CD 5-11</b></p> <p>The TMD must have the responsibility and authority to ensure compliance with the above requirements and cannot direct more than one trauma facility. <b>CD 5-12</b></p> <p>Injured patients may be admitted to individual surgeons, but the structure of the program must allow the trauma director to have oversight authority for the care of these patients. <b>CD 5-17</b></p>	<p><b>CD 5-11</b> This will be demonstrated through meeting minutes, as well as loop closure. Any issues, problems, or recommendations should be documented in the minutes with a follow up or loop closure.</p> <p><b>CD 5-11</b> Maintain this documentation.</p> <p><b>CD 5-17</b> Staff must be educated on the role of the trauma director. Documentation in the patient's record will demonstrate when the trauma director is overseeing the care, issue, questions, etc.</p>			
General Surgery	<p>The successful completion of the ATLS® course, at least once, is required in all levels of trauma centers for all general surgeons, on the trauma team. <b>CD 17-5</b></p> <p>General surgeons caring for trauma patients must meet certain criteria. Criteria may be considered in four categories: current board certification, clinical involvement, performance improvement and patient safety, and education. Trauma surgeon must have privileges in general surgery. <b>CD 6-1, CD 6-4</b></p> <p>Board certified or eligible for certification by the American Board of Surgery according to current requirements or the alternative pathway is essential for general surgeons who take trauma call. <b>CD 6-2, CD 6-3</b></p>	<p><b>CD 17-5</b> Maintain documentation of each general surgeon and the date of ATLS completion.</p> <p><b>CD 6-1, CD 6-4, CD 6-2, CD 6-3</b> Maintain this documentation.</p>			

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General Surgery (continued)	<p>The attending surgeon is expected to be present in the operating room for all operations. A mechanism for documenting this presence is essential. <b>CD 6-7</b></p> <p>All general surgeons on the trauma team must have successfully completed the ATLS course at least once. <b>CD 6-9</b></p> <p>Through the trauma PI program and hospital policy, the trauma director must have responsibility and authority for determining each general surgeon's ability to participate on the trauma panel based on an annual review. <b>CD 2-5</b></p> <p>Each member of the general surgeon group must attend at least 50 percent of the multidisciplinary trauma peer review meetings. <b>CD 6-8</b></p>	<p><b>CD 6-9</b> Maintain documentation of this.</p> <p><b>CD 2-5</b> Maintain documentation of this.</p>			
Emergency Medicine	<p>If the emergency department provider is Board Certified in emergency medicine then the provider must take ATLS at least once. <b>CD 17-5</b></p> <p>Rates of under triage and over triage can be calculated after the potential cases identified have been reviewed and validated. These rates must be monitored and reviewed quarterly. <b>CD 16-7</b></p> <p>Advanced practitioners who participate in the initial evaluation of the trauma patients must demonstrate current verification in ATLS. <b>CD 11-86</b></p>	<p><b>CD 17-5</b> Maintain documentation for ATLS certification, or Board certification.</p> <p><b>CD 11-86</b> Must maintain documentation for ATLS certification for these advanced practitioners.</p>			

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Emergency Medicine (continued)	<p>It is expected that the physician or mid-level 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. <b>CD 2-8</b></p> <p>Alternate criteria for non-board-certified emergency medicine physicians must be followed if the emergency physician is not board certified. <b>CD 6-3</b></p> <p>Have a designated emergency physician director supported by an appropriate number of additional physicians to ensure immediate care of injured patients. <b>CD 7-1</b></p> <p>Occasionally the emergency physician leaves the emergency department for in house emergencies. These occurrences must be reviewed by the PI program. <b>CD 7-3</b></p> <p>In institutions in which there are emergency medicine residency training programs, supervision must be provided by an in-house attending emergency physician 24 hour/day. The roles and responsibilities must be defined, agreed on, and approved by the director of the trauma service. <b>CD 7-4, CD 7-5</b></p> <p>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 the trauma patients, and must have completed ATLS at least once. <b>CD 7-6, CD 6-3, CD 7-14</b></p>	<p><b>CD 2-8</b> This (response times of ED provider) must be an audit filter in the PI to be reviewed by PI program.</p> <p><b>CD 7-1</b> Must have a published work schedule, with a backup call schedule/protocol.</p> <p><b>CD 7-3</b> Maintain a log of when the ED physician leaves the department to care for in house patients. This log must be reviewed at multidisciplinary peer review committee.</p> <p><b>CD 7-4, CD 7-5</b> Have residents training program, roles, and responsibilities written in a protocol, or policy. Develop specific roles and responsibilities for residents that care for the trauma patient.</p> <p><b>CD 7-6, CD 6-3, CD 7-14</b> Maintain documentation for all ED providers.</p>			

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Emergency Medicine (continued)	<p>A representative for the emergency department must participate in the PI program. <b>CD 7-8</b></p> <p>A designated emergency physician liaison must be available to the trauma director for PI issues that occur in the emergency department. <b>CD 7-9</b></p> <p>Emergency physicians must participate actively in the overall trauma PI program and the multidisciplinary trauma peer review committee. The liaison on the multidisciplinary peer review committee must attend a minimum of 50 percent of the committee meetings. <b>CD 7-10, CD 7-11</b></p>				
Anesthesia	<p>If anesthesia is not in-house, protocols must be in place to ensure the timely arrival at the bedside by the anesthesia provider within 30 minutes of notification and request. <b>CD 11-8</b></p> <p>If anesthesia is not in-house, the presence of a physician skilled in emergency airway management must be documented. <b>CD 11-9</b></p> <p>In-house anesthesia services are not required, but anesthesiologists or CRNAs must be available within 30 minutes for emergency operations, and managing airway problems. <b>CD 11-1, CD 11-2, CD 11-7</b></p> <p>The availability of anesthesia services and delays in airway control or operations must be documented by the PI process. <b>CD 11-6</b></p> <p>A qualified and dedicated physician anesthesiologist must be designated as the liaison to the trauma program. The anesthesia liaison's participation in the trauma PI is essential. <b>CD 11-12</b></p>	<p><b>CD 11-8</b> Must have written protocols requiring this response from anesthesia.</p> <p><b>CD 11-9</b> Physicians not trained in emergency airway management must have documentation of obtaining training for these skills. Such as "an emergency airway course."</p> <p><b>CD 11-1, CD 11-2, CD 11-7</b> Must have written protocols requiring this response from anesthesia.</p> <p><b>CD 11-6</b> These cases must be reviewed at the multidisciplinary peer review meetings.</p> <p><b>CD 11-12</b> Anesthesiologist must be a member of the multidisciplinary peer review committee.</p>			

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Anesthesia (continued)	The anesthesiology representative to the trauma program must attend at least 50 percent of the multidisciplinary peer review meetings, with documentation by the trauma PI program. <b>CD 11-13</b>	<b>CD 11-13</b> This is documented in the meeting attendance records.			
Orthopedic	<p>Level III facilities must have an orthopaedic surgeon on call and promptly available 24 hours a day. <b>CD 11-72, CD 9-11</b></p> <p>If the orthopaedic surgeon is not dedicated to a single facility while on call, then a published backup schedule is required. <b>CD 9-12</b></p> <p>Board certification or eligibility for certification by an appropriate orthopaedic board according to current standard requirements, or the alternate pathway is essential for orthopaedic surgeons who take trauma call. <b>CD 9-17, CD 6-3</b></p> <p>Operating rooms must be promptly available to allow for emergency operations on musculoskeletal injuries. <b>CD 9-2</b></p> <p>Must have an orthopaedic surgeon who is identified as the liaison to the trauma program. <b>CD 9-4</b></p> <p>The orthopaedic service must actively participate with the overall trauma PI program and the multidisciplinary trauma peer review committee. The liaison to the multidisciplinary peer review committee must attend a minimum of 50 percent of the meetings. <b>CD 9-15, CD 9-16</b></p> <p>The PI program must review the appropriateness of the decision to transfer or retain major orthopaedic trauma cases. <b>CD 9-13</b></p>	<p><b>CD 11-72, CD 9-11</b> Must have published call schedule.</p> <p><b>CD 9-12</b> Must have a published back up schedule.</p> <p><b>CD 9-17, CD 6-3</b> Must have documentation of board certifications.</p> <p><b>CD 9-2</b> Develop an internal process that expedites the OR room, and OR team. This process must be written in a protocol, or policy.</p> <p><b>CD 9-4</b> Must have orthopedic surgeon as a member of the multidisciplinary peer review committee.</p> <p><b>CD 9-15, CD 9-16</b> This must be documented in the meeting's attendance record.</p> <p><b>CD 9-13</b> Major orthopedic cases should be reviewed at multidisciplinary peer review meetings.</p>			

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Neurosurgery	<p>Board certification or eligibility for certification by an appropriate neurosurgical board according to the current standard requirements or the alternate pathway is essential for neurosurgeons who take trauma call. Or alternate criteria for non-board certified neurosurgeons. <b>CD 8-10, CD 6-3</b></p> <p>If one neurosurgeon covers two facilities within the same limited geographic area, there must be a published backup schedule. The performance improvement process must demonstrate that appropriate and timely care is provided. <b>CD 8-6</b></p> <p>Must have a plan approved by the trauma medical director that determines which types of neurosurgical injuries may remain and which should be transferred. <b>CD 8-7</b></p> <p>In all cases, for admitted or transferred injured patients, the care must be timely, appropriate, and monitored by the PI program. <b>CD 8-9</b></p> <p>Transfer agreements must exist with appropriate level I and level II trauma facilities. <b>CD 8-8</b></p> <p>A formal, and published, contingency plan must be in place for times in which a neurosurgeon is encumbered upon the arrival of a neurotrauma case. The plan must include the following:</p> <ul style="list-style-type: none"> <li>• A credentialing process to allow the trauma surgeon to provide initial evaluation and stabilization of the neurotrauma patient</li> <li>• Transfer agreements with a similar or higher-level verified trauma facility</li> <li>• Direct contact with the accepting facility to arrange for expeditious transfer or ongoing support</li> <li>• Monitoring of the efficacy of the process by the PI program</li> </ul> <p><b>CD 8-5</b></p>	<p><b>CD 8-10, CD 6-3</b> Maintain documentation of board certifications.</p> <p><b>CD 8-6</b> Must be able to show a published back up schedule.</p> <p><b>CD 8-7</b> Have a written plan or protocol that specifically addresses an exclusion and inclusion list of injuries.</p>			

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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Operating Room	<p>An operating room must be adequately staffed and available within 30 minutes. <b>CD 11-17</b></p> <p>If an on-call team is used, the availability of operating room personnel and the timeliness of starting operations must be continuously evaluated by the trauma PI process and measures must be implemented to ensure optimal care. <b>CD 11-18</b></p> <p>Must have necessary operating room equipment for the patient populations they serve. All trauma centers must have rapid fluid infusers, patient thermal control equipment, resuscitation fluids, intraoperative radiologic capabilities, equipment for fracture fixation, and equipment for bronchoscopy and GI endoscopy. <b>CD 11-19</b></p> <p>If neurosurgical services are provided, the facility must have necessary equipment to perform craniotomy. <b>CD 11-20</b></p>	<p><b>CD 11-17</b> Protocols and policy includes OR staff required response times.</p> <p><b>CD 11-18</b> This could be included as an audit filter in order to monitor timeliness of OR on call team.</p>			
Post Anesthesia Recovery	<p>A PACU with qualified nurses must be available 24 hours a day to provide care for the patient if needed during the recovery phase. <b>CD 11-24</b></p> <p>If this availability requirement is met with a team on call from outside the hospital, the availability of the PACU nurses, and compliance with this requirement must be documented by the PI program. <b>CD 11-25</b></p> <p>The PACU must have necessary equipment to monitor and resuscitate patients. <b>CD 11-26</b></p> <p>The PI program, at a minimum, must address the need for pulse oximetry, end-tidal CO detection, arterial pressure monitoring, pulmonary artery catheterization, patient rewarming, intracranial pressure monitoring. <b>CD 11-27</b></p>	<p><b>CD 11-24</b> Published schedule and staffing plan must demonstrate 24 hour coverage.</p> <p><b>CD 11-25</b> Can include this as an audit filter in order to monitor compliance</p>			



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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Radiology	<p>Conventional radiography must be available in all trauma facilities 24/7 <b>CD 11-29</b></p> <p>Qualified radiologists must be available within 30 minutes in person or by teleradiology for the interpretation or radiographs. <b>CD 11-32</b></p> <p>Diagnostic information must be communicated in a written or electronic form and in a timely manner. <b>CD 11-34</b></p> <p>Critical information deemed to immediately affect patient care must be verbally communicated to the trauma team in a timely manner. <b>CD 11-35</b></p> <p>The final report must accurately reflect the chronology and content of communications with the trauma team, including changes between the preliminary and final interpretations. <b>CD 11-36</b></p> <p>Changes in interpretation between preliminary and final reports, as well as missed injuries, must be monitored through the PI program. <b>CD 11-37</b></p> <p>Must have policies that ensure the trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to, and while in the radiology department. <b>CD 11-28</b></p> <p>Computed tomography must be available 24/7. If the CT technologist takes call outside the hospital, the PI program must document the technologist's time of arrival at the hospital. <b>CD 11-30, CD 11-47</b></p>	<p><b>CD 11-29</b> Published schedule must show that conventional radiology is available 24/7.</p> <p><b>CD 11-34</b> Internal process must demonstrate this as well as the patient's medical record.</p> <p><b>CD 11-28</b> Policy must demonstrate that trained providers are transporting patients to radiology. The policy can specify what trauma injuries require a trained staff member to transport.</p> <p><b>CD 11-30</b> This can be an audit filter in order to monitor compliance.</p>			

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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Lab and Blood Bank	<p>24-hour availability of a laboratory capable of:</p> <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> <p><b>CD 11-80, CD 11-81</b></p> <p>Coagulation studies, blood gas analysis, and microbiology studies must be available 24 hours per day. <b>CD 11-85</b></p> <p>Must have a massive transfusion protocol developed collaboratively between the trauma service/program and the blood bank. <b>CD 11-84</b></p> <p>Blood Bank must have adequate supply of packed red blood cells and fresh frozen plasma available within 15 minutes. <b>CD 11-83</b></p>	<p><b>CD 11-80, CD 11-81</b> Ensure lab has these capabilities, along with policy and procedures.</p> <p><b>CD 11-84</b> Inventory number of O negative units in-house. Ensure access to a blood bank. Written policy and protocol on obtaining blood from blood bank for emergent use on trauma patient. Develop a policy that notifies lab of trauma patient arrivals (for trauma activations). This policy should state the process of running blood to patient within 15 minutes. Develop a policy specific to Massive Transfusion for trauma patients. The implementation of the Massive Transfusion policy must also be an audit filter to review through PI program.</p>			
Respiratory Therapy	<p>There must be a respiratory therapist on call 24 hours per day. <b>CD 11-76</b></p>				
Burn Patients	<p>Trauma facilities that refer burn patients to a designated burn center must have a written transfer agreement with the referral burn center. <b>CD 14-1</b></p>	<p><b>CD 14-1</b> Have written transfer agreement with a specific burn center.</p>			
Trauma Team Activation	<p>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". <b>CD 5-13</b></p> <p>Trauma health care team, including surgeons, emergency physicians, and medical directors for EMS agencies develop trauma activation protocols. EMS agencies and hospital personnel must then be educated on these protocols. <b>CD 3-1, CD 3-2</b></p>	<p><b>CD 5-13</b> If your trauma activation policy contains additional criteria, beyond the six state required criteria, then these specific, additional, criteria must be included in the monthly performance improvement data. This will ensure the validity of these criteria. For example, additional criteria for your institution may be to initiate a trauma activation for all ground level falls in patients the age of &gt; 70 years old. These patients must be reviewed in the monthly performance improvement.</p> <p><b>CD 3-1, CD 3-2</b> Develop the trauma activation protocols in collaboration with physicians, medical director for EMS agencies. Provide education to all surgeons, emergency physicians, and EMS personnel on these protocols.</p> <p>Ensure trauma activation billing codes are implemented, following current MCR rates and guidelines. (Medicare)</p>			

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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Trauma Team Activation (continued)	<p>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. <b>CD 5-16</b></p> <p>Trauma surgeon response time to other levels of TTA, and for back-up call response, should be determined and monitored. Variances should be documented and reviewed for reason for delay, opportunities for improvement, and corrective actions. <b>CD 5-16</b></p> <p>Response parameters for consultants addressing time-critical injuries (for example, epidural hematoma, open fractures, and hemodynamically unstable pelvic fractures) must be determined and monitored. <b>CD 5-16</b></p> <p>The trauma team must be fully assembled within 30 minutes <b>CD 5-15</b></p> <p>The emergency physician may initially evaluate the limited-tier trauma patient, but the facility must have a clearly defined response expectation for the trauma surgical evaluation of those patients requiring admission. <b>CD 5-16</b></p>	<p><b>CD 5-16</b> If your trauma activation policy contains additional criteria, beyond the six state required criteria, then these specific, additional, criteria must be included in the monthly performance improvement data. This will ensure the validity of these criteria. For example, additional criteria for your institution may be to initiate a trauma activation for all ground level falls in patients the age of &gt; 70 years old. These patients must be reviewed in the monthly performance improvement data Multi-tiered activation system could consist of three levels of trauma activation.</p> <ul style="list-style-type: none"> <li>Level I activation would indicate emergent care required. All hospital resources are needed to resuscitate the patient. This patient would be the most critical trauma patient.</li> <li>Level II activation would indicate urgent care required. Most of the hospital resources are necessary to resuscitate the patient. Not all of the hospital resources are utilized for this patient.</li> <li>Level III activation would indicate a trauma that is easily treated with the resources offered within the emergency department.</li> </ul> <p><b>CD 5-15</b> Hospital must develop an activation system that pages out all members of the trauma team for trauma activations. Trauma team arrival times must be monitored in monthly PI. For example, the surgeon arrival time within 30 minutes for all trauma activations would be included in monthly PI data.</p>			
Trauma Registry	<p>All healthcare facilities with an emergency center shall participate in data submission. <b>MI-CD 1-1</b></p> <p>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 ImageTrend prior to applying for designation as a Michigan trauma facility for the first time. <b>MI-CD 1-2</b></p>	<p><b>MI-CD 1-1</b> Must submit data into state trauma registry system/data bank.</p> <p><b>MI-CD 1-2</b> Must follow the inclusion criteria as defined in the Data Dictionary. This data is entered electronically into the State Trauma Registry. Twelve months of data must be entered before applying for designation.</p>			

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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Trauma Registry (continued)	<p>To maintain designation as a Michigan Trauma facility, data is to be submitted electronically into the state trauma registry quarterly. <b>MI-CD 1-3</b></p> <p>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. <b>MI-CD 1-4</b></p> <p>The trauma facility must demonstrate that all trauma patients can be identified for review. Registry data must be collected and analyzed. <b>CD 15-1</b></p> <p>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. <b>CD 15-3</b></p> <p>These findings must be used to identify injury prevention priorities that are appropriate for local implementation. <b>CD 15-4</b></p> <p>All trauma facilities must use a risk stratified benchmarking system to measure performance and outcomes. <b>CD 15-5</b></p> <p>To achieve this goal, a trauma program must use clinical practice guidelines, protocols, and algorithms derived from evidenced-based validated resources. <b>CD 16-4</b></p> <p>All process and outcome measures must be documented within the trauma PI program's written plan and reviewed and updated at least annually. <b>CD 16-5</b></p>	<p><b>MI-CD 1-3</b> Data must be submitted electronically into ImageTrend quarterly.</p> <p><b>MI-CD 1-4</b> Must have a person with the responsibilities of entering data into the state trauma registry.</p> <p><b>CD 15-1, CD 15-3</b> Identify a trauma data registrar and implement a trauma registry. Obtain access to ImageTrend or other trauma data registry system used in-house. Data must be directly entered or uploaded from another registry system into the state trauma registry as required. PI program is supported by this trauma registry data.</p> <p><b>CD 15-5</b> Must use a risk stratified benchmarking system to measure performance and outcomes.</p> <p><b>CD 16-4, CD 16-5, CD 16-11</b> Must use a risk stratified benchmarking system to measure performance and outcomes. To achieve this, the trauma program must use clinical practice guideline, protocols and algorithms from evidenced based resources. All processes and outcome measures must be included in the PI written plan and reviewed annually. All events must be identified, verified, and validated by the PI program and documented.</p>			

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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Trauma Registry (continued)	<p>Once an event is identified, the trauma PI program must be able to verify and validate that event. <b>CD 16-11</b></p> <p>Strategies for monitoring data validity are essential. <b>CD 15-10</b></p> <p>The trauma registry should be concurrent. At a minimum, 80 percent of cases must be entered within 60 days of discharge. <b>CD 15-6</b></p> <p>Registrars 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 Course. <b>CD 15-7</b></p> <p>The trauma program must ensure that appropriate measures are in place to meet the confidentiality requirements of the data. <b>CD 15-8</b></p> <p>One full time equivalent employee dedicated to the registry must be available to process the data capturing the NTDS data set for each 500-750 admitted patients annually. <b>CD 15-9</b></p>	Data submission to National Trauma Data Bank (NTDB) is not required for Michigan verification and designation, however submission to NTDB is recommended to benchmark your facility.			

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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Performance Improvement	<p>Develop a performance improvement plan based on standards that are incorporated by reference to Administrative Rule 325.135 and the American College of Surgeons on Trauma "Resources for the Optimal Care of the Injured Patient 2014". The six Michigan criteria are listed below.</p> <p>1. Have a written performance improvement plan which addresses the following:</p> <ul style="list-style-type: none"> <li>a. 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>b. 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>c. 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>d. Identifies and reviews documents, findings and corrective actions on the Audit filters shown on column to the right. This includes Michigan and ACS audit filters.</li> </ul>	<p>Develop PI plan which is supported by facility's data that has been entered in the state trauma registry. The plan must demonstrate levels of review (i.e. trauma coordinator, trauma medical director, peer review, administration). Documentation must demonstrate resolution and loop closure. The plan must include the five specific State of Michigan criteria. The plan must include Michigan audit filters as well as the ACS audit filters.</p> <p><b>Michigan Audit Filters:</b></p> <ol style="list-style-type: none"> <li>1. Any system and process issues</li> <li>2. Trauma deaths in house or in the emergency department</li> <li>3. Any clinical care issues, including identifying and treatment of immediate life threatening injuries</li> <li>4. Any issues regarding transfer decision</li> <li>5. Trauma team activation times to trauma activation</li> </ol> <p><b>ACS Audit Filters:</b></p> <ol style="list-style-type: none"> <li>1. General surgeon response times to trauma activation</li> <li>2. If the CT technologist takes a call from outside the hospital, the technologist's arrival to the hospital is documented</li> <li>3. Anesthesiology services availability (within 30 minutes) after notification for <b>emergency operations</b></li> <li>4. Anesthesiology services availability (within 30 minutes) after notification for <b>managing airway problems</b></li> <li>5. Radiologists availability (within 30 minutes), in person or by teleradiology, when requested for the interpretation of radiographs.</li> <li>6. Changes in interpretation between preliminary and final reports, as well as missed injuries are monitored</li> <li>7. Operating room adequately staffed and available within 30 minutes of a call</li> <li>8. If an on-call team is used, the availability of operating room personnel and the timeliness of starting operations are continuously evaluated and measures implemented to ensure optimal care</li> <li>9. Over triage and under triage rates must be monitored and reviewed quarterly</li> <li>10. Trauma patients admitted or transferred by a primary care physician without the knowledge and consent of the trauma service are monitored</li> <li>11. Appropriateness of the decision to transfer or retain major orthopedic trauma cases</li> </ol>			

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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Performance Improvement (continued)	<p>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. <b>MI-CD 2-1</b></p> <p>The timely response of credentialed providers to the ICU must be continuously monitored as part of the PI program. <b>CD 11-60</b></p> <p>An effective performance improvement program demonstrates through clear documentation that identified opportunities for improvement lead to specific interventions that result in an alteration in conditions such that similar adverse events are less likely to occur. <b>CD 16-19</b></p>	<p>12.All pediatric trauma admits, pediatric trauma activations 13.Timely response of credentialed providers to the ICU 14.If the trauma surgeon admits more than 10% of injured patients to non-surgical services, all non-surgical admissions are reviewed 15.Occasionally, it is necessary for the physician to leave the emergency department for short periods to address in-house emergencies. Such cases and their frequency are reviewed to ensure this practice does not adversely affect the care of patients in the emergency department 16.Bypass and diversion events 17.Organ donation rate reviewed annually 18.A process to address trauma program operational events 19.The multidisciplinary trauma peer review committee must systematically review mortalities, significant complications, and process variances associated with unanticipated outcomes and determine opportunities for improvement</p> <p><b>CD 11-60</b> All ICU admitted trauma patients must be included as an audit filter.</p>			



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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Performance Improvement (continued)	<p>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.</p> <p><b>CD 2-8</b></p> <p>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):</p> <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> <p><b>CD 5-13</b></p> <p>It is essential that each trauma facility have written protocols defining the clinical criteria and confirmatory tests for the diagnosis of brain death.</p> <p><b>CD 21-3</b></p>	<p><b>CD 2-8</b></p> <p>The response time for the trauma surgeon's arrival to the emergency department is an audit filter. Response times for all trauma activations are reviewed through PI program. The policy may be written with quicker response times for higher level trauma activations. All variances to trauma surgeons' response times to trauma activations are reviewed with corrective action, and loop closure.</p> <p><b>CD 5-13</b></p> <p>Develop a Trauma Team Activation (TTA) policy. This TTA is implemented to activate appropriate staff for incoming trauma patients. The highest level of TTA must, at a minimum, incorporate the six listed criteria.</p> <p>This policy is reviewed annually and documentation shows this annual review (committee meeting minutes).</p> <p><b>CD 21-3</b></p> <p>Written protocols that identify clinical criteria and confirmatory tests for the diagnosis of brain death.</p>			

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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Performance Improvement (continued)	<p>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. <b>CD 16-8</b></p> <p>Once an event is identified, the trauma PI program must be able to verify and validate that event. <b>CD 16-11</b></p> <p>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. <b>CD 2-18</b></p> <p>Facilities with any emergent neurosurgical cases must also have the participation of neurosurgery on the multidisciplinary peer review committee. <b>CD 8-13</b></p> <p>There must be a process to address trauma program operational events <b>CD 16-12</b></p> <p>The trauma PI program must integrate with hospital quality and patient safety effort and have a clearly defined reporting structure and method for provision feedback. <b>CD 16-3</b></p> <p>Must have a multidisciplinary trauma peer review committee chaired by the TMD and representatives from general surgery, and liaisons from orthopedic surgery, neurosurgery, emergency medicine, ICU, and anesthesia. These identified members must participate actively in the trauma PIPS program with at least 50 percent attendance at the multidisciplinary peer review meetings. <b>CD 5-25, CD 6-8, CD 6-9</b></p>	<p><b>CD 16-8</b> All transfers must be tracked, documented, and reviewed through PI.</p> <p><b>CD 16-11</b> All events must be identified, verified, and validated by the PI program and documented.</p> <p><b>CD 2-18</b> Trauma service must set regular multidisciplinary peer review meetings, with a set agenda, in order to review resuscitations, trauma systems issues, provider issues, and recommendations for improvement. All audit filters are reviewed and evaluated at this meeting.</p> <p><b>CD 6-9</b> The 50 percent attendance level is for the specific physician liaison and may not be met by the attendance of multiple different providers in a specialty. This is the actual attendance rate and does not include excused absences or other reasons for nonattendance.</p>			

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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Performance Improvement (continued)	<p>Must have a PI program that includes a comprehensive written plan outlining the configuration and identifying both adequate personnel to implement that plan and an operational data management system. <b>CD 16-1</b></p> <p>The PI program must be supported by a reliable method of data collection that consistently obtains the information necessary to identify opportunities for improvement. <b>CD 15-1</b></p> <p>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. <b>CD 2-17</b></p> <p>Problem resolution, outcome improvements, and assurance of safety (loop closure) must be readily identifiable through methods of monitoring, reevaluation, benchmarking, and documentation. <b>CD 16-2</b></p> <p>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. <b>CD 5-1</b></p> <p>The TMD's responsibility extends far beyond the technical skills of surgery. The TMD must have authority to manage all aspects of trauma care. <b>CD 5-9</b></p> <p>The TMD must have authority to recommend changes for the trauma panel based on performance review. <b>CD 5-12</b></p>	<p><b>CD 2-17</b> Levels of review could be 1-reviewed by TMP, 2-reviewed by TMD. 3-reviewed by peer review committee, 4-reviewed by administration</p> <p><b>CD 16-2</b> All outcome resolutions, loop closures must be documented in the meeting minutes.</p>			

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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Performance Improvement (continued)	<p>Mortality data, adverse events and problem trends, and selected cases involving multiple specialties must undergo multidisciplinary trauma peer review. This effort must include the participation and leadership of the trauma medical director (<b>CD 5-10</b>); the group on general surgeons on the call panel (chapter 5); the liaisons from emergency medicine, orthopaedics, neurosurgery, anesthesia, critical care, and radiology (<b>CD 6-8, CD 7-11, CD 9-16, CD 11-13, CD 11-61</b>). These liaisons must be identified and participate actively in the trauma PIPS program with at least 50 percent attendance at multidisciplinary trauma peer review committee.</p> <p><b>CD 16-14</b></p> <p>When general surgeons cannot attend the multidisciplinary trauma peer review meeting, the trauma medical director must ensure that they receive and acknowledge the receipt of critical information generated at the multidisciplinary peer review meeting to close the loop.</p> <p><b>CD 16-16</b></p> <p>Documentation (minutes) reflects the review of operational events, and when appropriate, the analysis and proposed corrective actions.</p> <p><b>CD 16-13</b></p> <p>Sufficient mechanisms must be available to identify events for review by the trauma PI program.</p> <p><b>CD 16-10</b></p> <p>PI 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.</p> <p><b>CD 5-1</b></p> <p>When an opportunity for improvement is identified, appropriate corrective actions to mitigate or prevent similar future adverse events must be developed, implemented, and clearly documented by the trauma PI program.</p> <p><b>CD 16-18</b></p>	<p><b>CD 16-14</b></p> <p>Meeting minutes must be sent to all committee members not in attendance.</p>			

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Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete √
Performance Improvement (continued)	<p>Mortality Review: all trauma-related mortalities must be systematically reviewed and those mortalities with opportunities for improvement identified for peer review.</p> <p>1.) Total trauma-related mortality rates. Outcome measures for total, pediatric (younger than 14 years), and geriatric (older than 64 years), trauma encounters should be categorized as follows:</p> <ul style="list-style-type: none"> <li>a. DOA (upon arrival with no additional resuscitation)</li> <li>b. Died (in ED with resuscitation)</li> <li>c. In-hospital (including the OR)</li> </ul> <p>2.) Mortality rates by Injury Severity Scale (ISS) subgroups using Table 1 in Chapter 16 of the ACS' "Resources for the Optimal Care of the Injured Patient, 2014."</p> <p><b>CD 16-6</b></p> <p>Acute Transfer 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 (examples are burn center, pediatric 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 opportunity for improvement. Follow up from the center to which the patient was transferred should be obtained as part of the case review.</p> <p><b>CD 4-3, CD 3-4</b></p> <p>Trauma center bypass hours must be routinely monitored, documented, and reported, including the reason for initiating the diversion and must not exceed 5 percent.</p> <p><b>CD 3-6</b></p>				

## Level III Trauma Designation Work Plan

Program Component	Criteria Description	Action Required	Responsible person(s)	Targeted Deadline	Complete ✓
Performance Improvement (continued)	<p>Availability of anesthesia service.</p> <ul style="list-style-type: none"> <li>• Protocols must be in place that require anesthesiologists and CRNAs be available within 30 minutes for emergency operations, and managing airway problems</li> <li>• Operating room delays involving trauma patients because of lack of anesthesia support services must be identified and reviewed to determine the reason for delay, adverse outcomes, and opportunities for improvement.</li> </ul> <p><b>CD 11-1, CD 11-2, CD 11-7, CD 11-8</b></p> <p>Response times for computed tomography technologist (30 minutes). Technologist/interventional radiology team (30 minutes) when responding from outside the trauma facility. These times must be routinely monitored and any case that exceeds the institutionally agreed upon response time or is associated with a significant delay or an adverse outcome must be reviewed for reason or delay and opportunities for improvement</p> <p>Diagnostic interpretation must be communicated in a written or electronic form and in a timely manner.</p> <p><b>CD 11-32, CD 11-34, CD 11-35, CD 11-36</b></p> <p>All trauma patients determined brain dead according to the institution's policy should be referred to the local/regional organ procurement agency.</p> <p><b>CD 21-1, CD 21-2, CD 21-3</b></p>				
Outreach and Education	<p>There must be someone in a leadership position that has injury prevention as part of his or her job description.</p> <p><b>CD 18-2</b></p> <p>Must have an organized and effective approach to injury prevention and must prioritize those efforts based on local trauma registry and epidemiologic data.</p> <p><b>CD 18-1</b></p>	<p><b>CD 18-2, CD 18-1</b></p> <p>Injury prevention needs to be written into a leadership position's job description. This person may be the trauma program manager, the ED manager, etc. This person must document all injury prevention activities, as well as an injury prevention plan based on local registry data.</p>			

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Outreach and Education (continued)	<p>Must engage in public and professional education. <b>CD 17-1</b></p> <p>The hospital must provide a mechanism to offer trauma-related education to nurses involved in trauma care. <b>CD 17-4</b></p> <p>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. <b>CD 6-9, CD 7-14, CD 11-86</b></p> <p>Participate in coordinating and implementing Regional Trauma Network injury prevention work plans and initiatives. <b>MI-CD 3-1</b></p> <p>Universal screening for alcohol use must be performed for all injured patients and must be documented. <b>CD 18-3</b></p>	<p><b>CD 17-1</b> Maintain records and documentation of any public and professional outreach/education. An example is bicycle helmet safety, children car seat education, participation in regional advisory education subcommittee events.</p> <p><b>MI-CD 3-1</b> The facility's injury prevention plan must incorporate the regional injury prevention plan. Each region's injury prevention plan is developed and written by the RTAC subcommittee.</p> <p><b>CD 18-3</b> Develop a universal screening of alcohol tool. This must be documented on all injured patients in the medical record.</p>			
Disaster Plan	<p>All hospitals must have a hospital disaster plan described in the hospital's policy and procedure manual or equivalent. <b>CD 20-4</b></p> <p>Trauma facility must meet disaster related requirements of the Joint Commission. <b>CD 20-1</b></p> <p>A surgeon from the trauma panel must be a member of the hospital's disaster committee. <b>CD 20-2</b></p> <p>Hospital drills that test the hospital's disaster plan must be conducted at least twice a year, including actual plan activations that can substitute for drills. <b>CD 20-3</b></p> <p>The facility must participate in regional disaster management plans and exercises. <b>CD 2-22</b></p>	<p><b>CD 20-4</b> Review the hospital disaster plan. TPM and risk management must review JACHO disaster plan and update in regard to trauma systems.</p> <p><b>CD 2-22</b> Document trauma service participation in regional disaster plans and exercises.</p>			