Chapter DHS 118

APPENDIX A

	Level	Criterion	Type
1.		Trauma Care Systems	
(a)	III, IV	TCFs and their health care providers must be active and engaged participants in the trauma care system and promote standardization, integration, and PIPS throughout the region and state. TCFs must be involved in state and regional trauma care system planning, development and operation and actively participate in regional and statewide trauma care system meetings and committees that provide oversight. The TPM, TMD or trauma registrar must attend at least 50% of the TCF's RTAC meetings annually. The TPM, TMD or trauma registrar may not represent more than three TCFs at any one RTAC meeting.	2
2.		Description of Trauma Care Facilities and Their Roles in a Trauma Care System	
(a)	III, IV	The TCF must have an integrated, concurrent trauma PIPS program.	1
(b)	III	The TCF must have surgical commitment. Surgical commitment may be demonstrated in a number of ways, including: (1) Having a surgeon who is the full−time director of the trauma program. (2) Having surgeons who take an active role in all aspects of caring for injured patients. (3) Having surgical participation in the trauma PIPS program. (4) Having surgeons who assume an advocacy role for injured patients. (5) Having surgical leadership promoting the trauma program to the community, hospital and other colleagues.	1
(c)	III, IV	The TCF must be able to provide the necessary human and physical resources including the physical plant and equipment as well as policies and procedures to properly administer acute care for all ages, consistent with their level of classification.	2
(d)	III, IV	To care for adult patients, the TCF must have emergency department policies, procedures, protocols, or guidelines for: (1) Sedation and analgesia. (2) Medical imaging. (3) Injury imaging. (4) Dosing for intubation medications, code drugs and neurologic drugs.	2
(e)	III, IV	The TCF must have the following medications and equipment readily available for emergency care: (1) Airway control and ventilation. (2) Pulse oximetry. (3) End tidal carbon dioxide determination. (4) Suction. (5) Electrocardiogram monitoring or defibrillation. (6) Fluid administration such as standard intravenous therapy or large−bor administration devices and catheters. (7) Cricothyrotomy, thorascostomy, vascular access and chest decompression. (8) Gastric decompression. (9) Conventional radiology. (10) Two−way radio communication with ambulance crew or rescue. (11) Skeletal and cervical immobilization. (12) Thermal control for patients and resuscitation fluids. (13) Rapid fluid infusion.	2

(f)	III	It is expected that the surgeon will be in the emergency department on patient arrival with adequate notification from the field. The maximum acceptable surgeon response time, with notification from the field and tracked from patient arrival, is 30 minutes for the highest level activation. The surgeon must be activated for all highest level activations regardless of impending transfer or other scenario. The TCF must demonstrate, through documentation in the medical record, that a surgeon is present within 30 minutes at least 80% of the time for all highest level activations. All activations and response times must be reviewed in the trauma PIPS program. For TCFs with less than six highest level activations annually, surgeon response time may be tracked over three years.	1
(g)	IV	It is expected that a physician, if available or APP/midlevel provider will be in the emergency department on patient arrival with adequate notification from the field. The maximum acceptable response time for a physician or APP/midlevel provider, with notification from the field and tracked from patient arrival, is 30 minutes for the highest level activation. The TCF must demonstrate, through documentation in the medical record, that a physician or APP/midlevel provider is present within 30 minutes at least 80% of the time for all highest level activations. All activations and response times must be reviewed in the trauma PIPS program. For TCFs with less than six highest level activations annually, physician and APP/midlevel provider response time may be tracked over three years.	1
(h)	III	The TCF must have continuous general surgical coverage. The TCF must have a back–up plan in place for when a surgeon is not available. The back–up plan may include activation of a back–up surgeon or transfer of the patient. A surgeon may be on–call at more than one TCF but each TCF must have a back–up plan. The TCF must monitor all the times that a surgeon is unable to respond through the trauma PIPS program.	2
(i)	III, IV	The TCF must have transfer plans that include a plan for expeditious critical care transport, follow–up and performance monitoring.	2
(j)	IV	The TCF must have collaborative treatment and transfer guidelines reflecting the TCF's capabilities. These treatment and transfer guidelines must be developed and regularly reviewed with input from higher–level TCFs in the region.	2
(k)	IV	The TCF must have 24–hour emergency coverage by a physician or APP/midlevel provider.	2
(l)	IV	The TCF's emergency department must: (1) Be continuously available for resuscitation. (2) Have continuous coverage by a registered nurse. (3) Have continuous coverage by a physician or APP/midlevel provider. (4) Have a physician as its medical director.	2
(m)	IV	Physicians licensed to practice medicine who treat trauma patients in the ED must be current in ATLS unless the physician is board–certified in emergency medicine. APPs/midlevel providers who participate in the initial evaluation of trauma patients must be current in ATLS. This may be fulfilled by the Comprehensive Advanced Life Support program if the program includes the mobile trauma module skills station and the provider is re–verified every four years. The Rural Trauma Team Development Course does not fulfill this requirement.	2
(n)	III, IV	A TMD and TPM knowledgeable and involved in trauma care must work together with guidance from the trauma multidisciplinary peer review committee to identify events, develop corrective action plans and ensure methods of monitoring, reevaluating and benchmarking.	2

(o)	III, IV	The trauma multidisciplinary peer review committee must: (1) Meet at least quarterly to ensure cases are being reviewed in a timely fashion. (2) Review systemic and care provider issues and propose improvements to the care of the injured patient. (3) Include the TPM, TMD and other key staff and departments involved with care of the trauma patient as members of the committee. (4) Have representation from general surgery, including all general surgeons taking trauma call. (5) Have liaisons from emergency medicine, orthopedics, anesthesiology, critical care and the ICU. (6) Have liaisons from all the specialty care services, such as neurosurgery and radiology, provided by the TCF. (7) Require 50% attendance of its continuous members and document attendance. (8) Systematically review mortalities, significant complications and process variances associated with unanticipated outcomes and determine opportunities for improvement, as evidenced by documented meeting minutes. (9) Review selected cases involving multiple specialties, mortality data, adverse events and problem trends. If a designated liaison is unable to attend, another representative from the same service team may participate in their place. The TCF may determine which members of the trauma multidisciplinary peer review committee are continuous versus ad–hoc.	2
(p)	III, IV	The TCF's trauma PIPS program must have audit filters to review and improve pediatric and adult patient care.	2
(q)	III, IV	If an adult TCF annually admits 100 or more injured patients younger than 15 years old, the TCF must: (1) Have trauma surgeons credentialed for pediatric trauma care by the facility's credentialing body. (2) Have a pediatric emergency department area. (3) Have a pediatric intensive care area. (4) Have appropriate resuscitation equipment. (5) Have a pediatric–specific trauma PIPS program.	2
(r)	III, IV	If an adult TCF annually admits fewer than 100 injured patients younger than 15 years old, the TCF must review the care of injured children as part of the trauma PIPS program. This review must include pediatric admissions and transfers.	2
3.	Prehospital Trauma Care		
(a)	III, IV	The TCF must participate in the training of prehospital care providers, the development and improvement of prehospital care protocols and the prehospital PIPS program. The TCF must review care and provide feedback to prehospital care providers. The TCF can participate in the training of prehospital care providers in a variety of ways including being involved in programs such as Prehospital Trauma Life Support (PHTLS), grand rounds, trauma conferences, and case reviews.	2
(b)	III, IV	The trauma health care team, including surgeons, emergency medicine physicians, medical directors for EMS agencies and basic and advanced prehospital personnel must actively participate in the development of protocols that guide prehospital care.	2
(c)	III	TCFs must evaluate over and under triage rates on a quarterly basis and perform rigorous multidisciplinary performance improvement to attain a goal of less than five percent under triage. If a TCF is not meeting this goal, the TCF must explain the variance and demonstrate that they are doing performance improvement work to reach this goal.	2
(d)	III, IV	A TCF must have a diversion protocol for trauma related occurrences, which includes a system to notify dispatch and EMS agencies.	2
(e)	III	The TMD must be involved in the development of the TCF's diversion protocol for trauma related occurrences.	2

(f)	III	A trauma surgeon must be involved in the decision each time the TCF goes on diversion for trauma related occurrences.	2
(g)	III	A TCF must not be on diversion for trauma related occurrences more than five percent of the time.	2
(h)	III, IV	When a TCF is required to divert for trauma related occurrences it must: (1) Notify other TCFs of divert or advisory status. (2) Maintain a divert log. (3) Review all diverts and advisories to the trauma PIPS program.	2
(i)	III, IV	The TCF must routinely document, report and monitor their diversion hours. This documentation must include the reason for initiating the diversion policy.	2
4.	Inter−hospital Transfer		
(a)	III, IV	When transferring a patient direct provider to provider contact is required.	2
(b)	III, IV	The TCF's 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.	2
(c)	III, IV	When a patient is being transferred out, the TCF must have a contingency plan that includes: (1) A credentialing process to allow the trauma surgeon or other physician to provide initial evaluation and stabilization of the patient. (2) A requirement for direct contact with the accepting facility to arrange for expeditious transfer or ongoing monitoring support. (3) A review process through the trauma PIPS program to monitor the efficacy of the transfer process.	2
(d)	III, IV	The TCF must review all trauma patients who are transferred out during the acute care phase and all trauma patients transferred to a higher level of care within or outside of the TCF to review the rationale for transfer, appropriateness of care, adverse outcomes and opportunities for improvement. This case review should include evaluation of transport activities and follow−up from the TCF to which the patient was transferred.	2
5.	Hospital Organization and the Trauma Program		
(a)	III, IV	The decision of a hospital to become a TCF requires the commitment of the institutional governing body and the medical staff, and this administrative commitment must be documented. The TCF must have resolutions from both the institutional governing body and the medical staff acknowledging this commitment, and these resolutions must empower the trauma PIPS program to address events that involve multiple disciplines and to evaluate all aspects of trauma care.	1
(b)	III, IV	The TCF's administrative support must be current at the time of the site visit and must be reaffirmed every three years. The administrative support must be from the Board of Directors, Chief Executive Officer or Chief Administrator and the medical staff or medical executive committee.	2
(c)	III, IV	The trauma program must involve multiple disciplines and transcend normal department hierarchies by having appropriate specialty representation from all phases of care.	2

(d)	III, IV	The TMD must meet one of the following set of standards: (1) Be a current board–certified general surgeon, neurosurgeon or orthopedic surgeon and be actively involved in the care of trauma patients. (2) Be eligible for board certification in general surgery, neurosurgery or orthopedic surgery and be actively involved in the care of trauma patients. (3) Be approved to take trauma call through the alternate pathway requirements for general surgeons, neurosurgeons or orthopedic surgeons and be actively involved in the care of trauma patients. (4) Be a current board certified emergency medicine physician and staff the emergency department. (5) Be eligible for board certification as an emergency medicine physician and staff the emergency department. (6) Be approved to take trauma call through the alternate pathway for emergency medicine physicians and staff the emergency department.	1
(e)	III, IV	The TMD must be current in ATLS.	2
(f)	III, IV	The TMD must have the authority to manage all aspects of trauma care.	2
(g)	III	The TMD may not direct more than two trauma centers.	2
(h)	III, IV	The TMD must actively participate in the trauma multidisciplinary PIPS review committee.	2
(i)	III	The TMD, in collaboration with the TPM, must have the responsibility and authority to report any deficiencies in trauma care and any trauma team members who do not meet specified trauma call criteria to the appropriate person(s).	2
(j)	III	The TMD must conduct, and have the authority to conduct, an annual assessment of the trauma panel providers in the form of Ongoing Professional Practice Evaluation and Focused Professional Practice Evaluation when indicated by findings of the trauma PIPS process. The TMD must have the authority to recommend changes for the trauma panel based on performance review.	2
(k)	III, IV	The TMD and TPM must be granted authority by the hospital governing body to lead the trauma PIPS program. This authority must be evidenced in written job descriptions for both the TMD and TPM.	1
(l)	III, IV	The criteria for a graded activation must be clearly defined by the TCF. TCFs must have the highest level of activation. The highest level activation criteria must include the following criteria: (1) Confirmed blood pressure less than 90 millimeters of mercury at any time in adults and delineated by age range hypotension in children. (2) Gunshot wounds to the neck, chest, or abdomen or extremities proximal to the elbow/knee. (3) Glasgow coma scale score less than nine with mechanism attributed to trauma. (4) Transfer patients from other hospitals receiving blood to maintain vital signs. (5) Intubated patients transferred from the scene or patients who have respiratory compromise or are in need of an emergency airway. This includes intubated patients who are transferred from another facility with ongoing respiratory compromise. (6) Emergency medicine physician's discretion.	2
(m)	III, IV	The trauma team, as defined by the TCF, must be fully assembled within 30 minutes of trauma activation.	2
(n)	III, IV	The TCF's trauma PIPS program must evaluate on an ongoing basis the potential criteria for the various levels of trauma team activation to determine which patients require the resources of the full trauma team. Variances in trauma team activation must be documented and reviewed for reasons for delay, opportunities for improvement and corrective actions.	2

(o)	III required, IV if the TCF provides surgical services for trauma patients	An emergency medicine physician may initially evaluate the limited−tier trauma patient, but the TCF must have a clearly defined response expectation for the trauma surgical evaluation of those patients requiring admission.	2
(p)	III	The TCF may admit injured patients to individual surgeons, but the structure of the trauma program must allow the TMD to have oversight authority for the care of these patients. The TCF must have a process for the TMD and TPM to review inpatient cases through the trauma PIPS program.	2
(q)	III required, IV if the TCF provides surgical services for trauma patients	For TCFs that admit injured patients to individual surgeons or nonsurgical services, the TCF must have a method to identify injured patients, monitor the provision of health care services, make periodic rounds and hold discussions with individual practitioners. These activities may be carried out by the TPM in conjunction with the TMD at a frequency commensurate with the volume of trauma admissions.	1
(r)	III required, IV if the TCF provides surgical services for trauma patients	A TCF must have written guidelines for the care of non−surgically admitted patients. TCFs that admit more than 10% of injured patients to non−surgical services must review all non−surgical admissions through the trauma PIPS program. Care must be reviewed for appropriateness of admission, patient care, complications and outcomes. If a trauma patient is admitted by an internal medicine physician for medical comorbidities or medical management, a surgical consultation is required.	2
(s)	III, IV	The TPM must show evidence of educational preparation, relevant clinical experience in the care of injured patients and administrative ability. The TCF may determine who meets these requirements. Evidence that a TPM meets these requirements may include a copy of the trauma coordinator job description. The TPM may be a nurse, but does not have to be.	2
6.	Clinical Functions: General Surgery		
(a)	III	The TCF must have continuous general surgery capability.	1
(b)	III required, IV if the TCF provides general surgical services for trauma patients	General surgeons must meet one of the following set of standards in order to take trauma call: (1) Be board certified by the American Board of Surgery. (2) Be eligible for board certification by the American Board of Surgery according to current criteria. (3) Meet the general surgery alternate pathway requirements in 6.(c); or (4) Have completed an Accreditation Council for Graduate Medical Education or Canadian residency and be recognized by a major professional organization. *Note: An example of recognition by a major professional organization is being a fellow of the ACS.*	2

(c)	III required, IV if the TCF provides general surgical services for trauma patients	The alternate pathway requirements for general surgeons are: (1) Completion of a residency training program in general surgery, with the time period consistent with years of training in the United States. The completion of a residency training program must be evidenced by a certified letter from the program director. (2) Current certification as a provider or instructor of the ATLS program. (3) Completion of 36 hours of trauma continuing medical education within the last three years. (4) Attendance at educational meetings and at least 50% of all trauma PIPS meetings in the past three years. (5) Membership or attendance at local and regional or national meetings during the past three years. (6) Provision of a list of patients treated in the last three years with accompanying Injury Severity Score and outcome data. (7) Completion of a performance improvement assessment by the TMD demonstrating that the morbidity and mortality results for patients treated by the surgeon compare favorably with comparable patients treated by other members of the call panel. (8) License to practice medicine and approval for full and unrestricted surgical privileges by the facility's credentialing committee.	2
(d)	III required, IV if the TCF provides general surgical services for trauma patients	Trauma surgeons in a TCF must have privileges in general surgery.	2
(e)	III required, IV if the TCF provides general surgical services for trauma patients	The attending surgeon must be present in the operating room for all operations and the TCF must document the presence of the attending surgeon.	2
(f)	III required, IV if the TCF provides general surgical services for trauma patients	All general surgeons on the trauma team must have successfully completed the ATLS course at least once.	2
7.	Clinical Functions: Emergency Medicine		
(a)	III	The TCF's emergency department must have a designated emergency physician director supported by an appropriate number of additional physicians to ensure immediate care for injured patients.	1
(b)	III	When it is necessary for the physician to leave the emergency department for short periods to address in–house emergencies, these cases and their frequency must be reviewed by the trauma PIPS program for timeliness of response and appropriateness of care and to ensure that this practice does not adversely affect the care of patients in the emergency department.	2
(c)	III, IV	For TCFs with an emergency medicine residency training program, supervision must be provided by in–house attending emergency physicians 24 hours per day.	2

(d)	III, IV	Emergency medicine physicians must meet one of the following set of standards in order to take trauma call: (1) Be board certified in emergency medicine. (2) Be eligible for board certification by the appropriate emergency medicine board according to current criteria. (3) Be board certified in a specialty other than emergency medicine recognized by the American Board of Medical Specialties, the American Osteopathic Association, or the Royal College of Physicians and Surgeons of Canada. (4) Meet the emergency medicine alternate pathway requirements; or (5) Have completed an Accreditation Council for Graduate Medical Education or Canadian residency and be recognized by a major professional organization. *Note: An example of recognition by a major professional organization is being a fellow of the ACS.*	2
(e)	III, IV	The alternate pathway requirements for emergency medicine physicians are: (1) Completion of a residency training program in emergency medicine, with the time period consistent with years of training in the United States. The completion of a residency training program must be evidenced by a certified letter from the program director. (2) Current certification as a provider or instructor of the ATLS program. (3) Completion of 36 hours of trauma continuing medical education within the last three years. (4) Attendance at educational meetings and at least 50% of all trauma PIPS meetings in the past three years. (5) Membership or attendance at local and regional or national meetings during the past three years. (6) Provision of a list of patients treated in the last three years with accompanying Injury Severity Score and outcome data. (7) Completion of a performance improvement assessment by the TMD demonstrating that the morbidity and mortality results for patients treated by the emergency medicine physician compare favorably with comparable patients treated by other members of the call panel. (8) License to practice medicine and approval for full and unrestricted emergency medicine privileges by the facility's credentialing committee.	2
(f)	III, IV	Emergency medicine physicians on the emergency department schedule must be regularly involved in the care of injured patients.	2
(g)	III, IV	A representative from the emergency department must participate in the prehospital PIPS program.	2
(h)	III, IV	If the TMD is not an emergency medicine physician, there must be a designated emergency medicine physician liaison available to the TMD for trauma PIPS issues that occur in the emergency department. As part of the trauma PIPS program, the designated emergency medicine physician liaison must be responsible for all emergency department audits, critiques and mortality review of patients treated in the emergency department.	2
(i)	III	Emergency medicine physicians must participate actively in the overall trauma PIPS program and the multidisciplinary trauma peer review committee.	2
(j)	III, IV	Physicians who are licensed to practice medicine who treat trauma patients in the emergency department must be current in ATLS unless the physician is board–certified in emergency medicine. APPs/midlevel providers who participate in the initial evaluation of trauma patients must be current in ATLS. For Level IV TCFs, this may be fulfilled by the Comprehensive Advanced Life Support program if the program includes the mobile trauma module skills station and the provider is re–verified every four years. The Rural Trauma Team Development Course does not fulfill this requirement.	2
(k)	III, IV	All board–certified emergency medicine physicians or those eligible for certification by an appropriate emergency medicine board according to current requirements must have successfully completed the ATLS course at least once.	2

8.	Clinical Functions: Neurosurgery		
(a)	III if the TCF provides neurosurgery for trauma patients, IV if the TCF provides neurosurgery for trauma patients	The TCF must have a formal and published contingency plan for times in which a neurosurgeon is encumbered upon the arrival of a neuro–trauma case. The contingency plan must include: (1) A credentialing process to allow the trauma surgeon to provide initial evaluation and stabilization of a neuro–trauma patient. (2) A requirement for direct contact with the accepting facility to arrange for expeditious transfer or ongoing monitoring support. (3) A review process through the trauma PIPS program to monitor the efficacy of the plan and process. The TCF, in conjunction with a higher level classification TCF, may define the non–survivable injury patient who can be kept at the facility and transmitted to palliative care.	2
(b)	III if the TCF provides neurosurgery for trauma patients, IV if the TCF provides neurosurgery for trauma patients	If one neurosurgeon covers more than one TCF, each TCF must have a published back–up schedule. The back–up schedule may include calling a back–up neurosurgeon, guidelines for transfer or both. The trauma PIPS program must demonstrate that appropriate and timely care is provided when the back–up schedule must be used.	2
(c)	III, IV	The TCF must have a written policy or guideline approved by the TMD that defines which types of patients require a response by neurosurgery and which type of neurosurgical injuries may remain at the TCF and which should be transferred.	2
(d)	III, IV	If a TCF does not have neurosurgical coverage, all patients requiring ICP monitoring and patients with significant traumatic brain injuries should be transferred to a higher level TCF. If the TCF does not transfer the patient with a traumatic brain injury, the scope of practice and care of the patient must be outlined in a written guideline or policy.	2
(e)	III, IV	For all neurosurgical cases, whether patients are admitted or transferred, care must be timely and appropriate.	1
(f)	III, IV	If a TCF provides neurosurgical services, neurosurgery must be part of the trauma PIPS program.	1
(g)	III if the TCF provides neurosurgery for trauma patients, IV if the TCF provides neurosurgery for trauma patients	For neurosurgical cases, the trauma PIPS program must: (1) Monitor all patients admitted or transferred. (2) Review all cases requiring backup to be called in or the patient to be diverted or transferred because of the unavailability of the neurosurgeon on call. (3) Monitor the 30 minute response time for the neurosurgeon once consulted.	1
(h)	III if the TCF provides neurosurgery for trauma patients, IV if the TCF provides neurosurgery for trauma patients	Neurosurgeons must meet one of the following set of standards in order to take trauma call: (1) Be board certified by an appropriate neurosurgical board. (2) Be eligible for board certification by an appropriate neurosurgical board. (3) Meet the neurosurgery alternate pathway requirements; or (4) Have completed an Accreditation Council for Graduate Medical Education or Canadian residency and be recognized by a major professional organization. *Note: An example of recognition by a major professional organization is being a fellow of the ACS.*	2

(i)	III if the TCF provides neurosurgery for trauma patients, IV if the TCF provides neurosurgery for trauma patients	The alternate pathway requirements for neurosurgeons are: (1) Completion of a residency training program in neurosurgery, with the time period consistent with years of training in the United States. The completion of a residency training program must be evidenced by a certified letter from the program director. (2) Current certification as a provider or instructor of the ATLS program. (3) Completion of 36 hours of trauma continuing medical education within the last three years. (4) Attendance at educational meetings and at least 50% of all trauma PIPS meetings in the past three years. (5) Membership or attendance at local and regional or national meetings during the past three years. (6) Provision of a list of patients treated in the last three years with accompanying Injury Severity Score and outcome data. (7) Completion of a performance improvement assessment by the TMD demonstrating that the morbidity and mortality results for patients treated by the surgeon compare favorably with comparable patients treated by other members of the call panel. (8) License to practice medicine and approval for full and unrestricted surgical privileges by the facility's credentialing committee.	2
9.	Clinical Functions: Orthopedic Surgery		
(a)	III	The TCF must have orthopedic surgery capability.	1
(b)	III required, IV if the TCF provides orthopedic surgery for trauma patients	An operating room must be adequately staffed, with at least an operating room nurse and operating room technician, and available within 30 minutes of operating room team request for emergency operations on musculoskeletal injuries.	1
(c)	III required, IV if the TCF provides orthopedic surgery for trauma patients	The TCF must have an orthopedic surgeon who is identified as the liaison to the trauma program.	1
(d)	III	TCFs must have an orthopedic surgeon on call and promptly available 24 hours a day.	2
(e)	III required, IV if the TCF provides orthopedic surgery for trauma patients	A TCF must include orthopedic surgery as part of the trauma PIPS program.	1
(f)	III required, IV if the TCF provides orthopedic surgery for trauma patients	If the orthopedic surgeon is not dedicated to a single facility or is unavailable while on call, the TCF must have a published back–up schedule. The back–up schedule may include calling a back–up orthopedic surgeon or guidelines for transfer or both. For Level IV TCFs that provide orthopedic surgery for trauma patients, an orthopedic surgeon is not required to be on call and promptly available 24 hours a day. However, when the Level IV TCF does have an orthopedic surgeon on call, the TCF must have a published back–up schedule.	2

(g)	III required, IV if the TCF provides orthopedic surgery for trauma patients	As part of the trauma PIPS program, the TCF must review all major orthopedic trauma cases for appropriateness of the decision to transfer or admit. The TCF must define the scope of practice and indicators for patients that will be admitted.	2
(h)	III required, IV if the TCF provides orthopedic surgery for trauma patients	Orthopedic surgeons must meet one of the following set of standards in order to take trauma call: (1) Be board certified in orthopedic surgery. (2) Be eligible for board certification by the appropriate orthopedic specialty board according to current criteria. (3) Meet the orthopedic surgery alternate pathway requirements; or (4) Have completed an Accreditation Council for Graduate Medical Education or Canadian residency and be recognized by a major professional organization. *Note: An example of recognition by a major professional organization is being a fellow of the ACS.*	2
(i)	III required, IV if the TCF provides orthopedic surgery for trauma patients	The alternate pathway requirements for orthopedic surgeons are: (1) Completion of a residency training program in orthopedic surgery, with the time period consistent with years of training in the United States. The completion of a residency training program must be evidenced by a certified letter from the program director. (2) Current certification as a provider or instructor of the ATLS program. (3) Completion of 36 hours of trauma continuing medical education within the last three years. (4) Attendance at educational meetings and at least 50% of all trauma PIPS meetings in the past three years. (5) Membership or attendance at local and regional or national meetings during the past three years. (6) Provision of a list of patients treated in the last three years with accompanying Injury Severity Score and outcome data. (7) Completion of a performance improvement assessment by the TMD demonstrating that the morbidity and mortality results for patients treated by the surgeon compare favorably with comparable patients treated by other members of the call panel. (8) License to practice medicine and approval for full and unrestricted surgical privileges by the facility's credentialing committee.	2
10.	Pediatric Trauma Care		
(a)	III, IV	A TCF that stabilizes pediatric trauma patients in the emergency department must have guidelines to assure appropriate and safe care of children. A TCF's pediatric trauma guidelines must include: (1) Child maltreatment assessment, treatment or transfer and reporting protocols including a list of indicators of possible physical abuse. (2) Imaging guidelines, including age and weight–based criteria based on as low as reasonably achievable guidelines. (3) A system to assure appropriate sizing and dosing of resuscitation equipment and medications. (4) Dosing guidelines for intubation, code and neurologic drugs. (5) Guidelines for administration of sedation.	2

(b)	III, IV	A TCF that stabilizes pediatric trauma patients in the emergency department must have the following medications and equipment: (1) Mannitol or 3% saline. (2) Intubation, code and neurologic medications. (3) Catheter–over–the–needle device; 22 and 24 gauge. (4) Pediatric intraosseous needles or device. (5) Intravenous solutions including the following: normal saline and dextrose 5% normal saline. (6) Infant and child c–collars. (7) Cuffed endotracheal tubes: 3.5, 4.5, 5.5, and 6.5 millimeters. (8) Laryngoscope: Straight: 1, Straight: 2, and Curved: 2. (9) Infant and child nasopharyngeal airways. (10) Oropharyngeal airways, sizes 0, 1, 2, 3 and 4. (11) Pediatric stylets for endotracheal tubes. (12) Infant and child suction catheters. (13) Bag–mask device, self–inflating: infant: 450 milliliters. (14) Masks to fit bag–mask device adaptor for infants and children. (15) Clear oxygen masks: partial non–breather infant and partial non–breather child. (16) Infant and child nasal cannulas. (17) Nasogastric tubes: Infant: 8 French size and child: 10 French size. (18) Laryngeal mask airway: sizes 1.5, 2, 2.5, and 3. (19) Chest tubes: Infant: 10 or 12 French size and child: one in the 16–24 French size range.	2
11.	Collaborative Clinical Services		
(a)	III	The TCF must have an ICU. An ICU, regardless of whether an area of the facility is actually so designated, is a department or area of a TCF that provides intensive treatment medicine, focuses on patients with severe and life–threatening illness or injuries which require constant and close monitoring and support and is staffed by highly trained doctors and nurses who specialize in caring for critically ill patients.	1
(b)	III required, IV if the TCF provides anesthesiology services for trauma patients	Anesthesiology services, including anesthesiologists or certified registered nurse anesthetists, must be available within 30 minutes of notification and request for emergency operations, for managing airway problems, and as needed for patient care.	1
(c)	III required, IV if the TCF provides anesthesiology services for trauma patients	A qualified and dedicated physician anesthesiologist or certified registered nurse anesthetist or a certified anesthesia assistant must be designated as a liaison to the trauma program.	1
(d)	III required, IV if the TCF provides anesthesiology services for trauma patients	The anesthesia liaison must participate in the trauma PIPS program.	2

(e)	III required, IV if the TCF provides anesthesiology services for trauma patients	The TCF must document the availability of anesthesia services and delays in airway control or operations in the trauma PIPS program.	2
(f)	III required, IV if the TCF provides anesthesiology services for trauma patients	When the anesthesiologist or designee is responding from outside the TCF, during the time between notification of the anesthesia provider and their arrival, a provider must be available for emergency airway management. The presence of a provider skilled in emergency airway management must be documented.	1
(g)	III required, IV if the TCF provides surgical services for trauma patients	An operating room must be adequately staffed, with at least an operating room nurse and operating room technician, and available within 30 minutes of operating room team request.	1
(h)	III required, IV if the TCF provides surgical services for trauma patients	The TCF must monitor the timeliness of starting operations and the instances when operating room personnel including anesthesia support services, post anesthesia care unit personnel are not available for greater than 30 minutes. The TCF must monitor and document through the trauma PIPS program the response times of these personnel. The TCF must identify and review operating room delays involving trauma patients or adverse outcomes for reasons for delay and opportunities for improvement.	2
(i)	III required, IV if the TCF provides surgical services for trauma patients	The TCF must have the ability to perform services involving rapid infusers, thermal control equipment and resuscitation fluids, intraoperative radiologic capabilities and equipment for fracture fixation/stabilization.	1
(j)	III, IV	If a TCF provides neurosurgical services, the TCF must have the necessary equipment to perform a craniotomy.	1
(k)	III required, IV if the TCF provides surgical services for trauma patients	Post anesthesia services, including qualified nurses, must be available 24 hours per day to provide care for the patient if needed during the recovery phase.	1
(km)	III required, IV if the TCF provides surgical services for trauma patients	In the delivery of post anesthesia care, providers must have the necessary equipment to monitor and resuscitate patients, consistent with the process of care designated by the facility.	1
(l)	III, IV	The TCF's trauma PIPS program must address the need for pulse oximetry, end–tidal carbon dioxide detection, arterial pressure monitoring, patient rewarming and intracranial pressure monitoring.	2
(lm)	III, IV	A TCF must have policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to, and while in, the radiology department.	2
(m)	III, IV	Conventional radiology must be available 24 hours per day. The radiology technician does not need to be in–house 24 hours per day but must respond within 30 minutes of notification.	1

(mm)	III	CT must be available 24 hours per day. The CT technologist does not need to be in–house 24 hours per day but must respond within 30 minutes of notification.	1
(n)	III required, IV if the TCF provides CT services for trauma patients	If a CT technologist takes a call from outside the facility, the TCF's trauma PIPS program must document the CT technologist's time of arrival at the facility.	2
(nm)	III, IV	For TCFs with MRI capabilities, the MRI technologist may respond from outside the hospital. The trauma PIPS program must document and review arrival of the MRI technologist within one hour of being called.	2
(o)	III	Qualified radiologists must be available within 30 minutes of notification, in person or by tele–radiology, to interpret radiographs.	1
(om)	III	Radiological diagnostic information must be communicated in a timely manner in either written or electronic form.	2
(p)	III	Critical radiology information deemed to immediately affect patient care must be verbally communicated to the trauma team in a timely manner.	2
(pm)	III required, IV if the TCF provides radiological services for trauma patients	The final radiology report must accurately reflect the chronology and context of communications with the trauma team, including changes between the preliminary and final interpretations. The TCF must have a written over–read process that defines how changes in interpretation are documented and communicated.	2
(q)	III required, IV if the TCF provides radiological services for trauma patients	The TCF must monitor changes in interpretation between the preliminary and final radiology reports, as well as missed injuries, through the trauma PIPS program.	2
(qm)	III required, IV if the TCF provides surgical and ICU services for trauma patients	A surgeon on the trauma call panel must be actively involved in and responsible for setting policies and making administrative decisions related to trauma ICU patients. This may be a TMD who is a surgeon.	2
(r)	III	The TCF must have physician coverage of the ICU available within 30 minutes and have a formal plan in place for emergency coverage. A TCF must track physician response time as part of the trauma PIPS program. Physician coverage of the ICU does not replace the primary surgeon but instead ensures that the patient's immediate needs are met while the primary surgeon is being contacted.	1
(rm)	III	The TCF's trauma PIPS program must review all ICU trauma admissions and transfers of ICU patients to ensure that appropriate patients are being selected to remain at the TCF versus being transferred to a higher level of care. The TCF must have a written guideline that defines which types of ICU patients they will admit and which they will transfer to a higher level of care.	2
(s)	III	In a TCF, the trauma surgeon must retain responsibility for and coordinate all therapeutic decisions of trauma ICU patients. 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.	1

(sm)	III, IV	The TCF's trauma PIPS program must document that timely and appropriate ICU care and coverage are being provided for trauma ICU patients. The TCF must continuously monitor the timely response of credentialed providers to the ICU as part of the trauma PIPS program. The TCF's trauma PIPS program must include quality indicators for the ICU including review of complications. Review of complications includes but is not limited to review of orthopedic and neurosurgical complications if the TCF provides these services.	2
(t)	III	The TCF must have a designated ICU liaison to the trauma service. The liaison must be designated based on the service that provides the majority of the care in the ICU.	2
(tm)	III	In the TCF, qualified critical care nurses must be available 24 hours per day to provide care for trauma patients during the ICU phase. The TCF may define who is a qualified critical care nurse based on education and competency standards.	1
(u)	III	For trauma patients in the ICU, the TCF must have adequate numbers of licensed registered nurses, licensed practical nurses and other personnel to provide nursing care to all trauma patients in the ICU.	2
(um)	III	The TCF must have the necessary equipment for the ICU to monitor and resuscitate patients. Each TCF shall determine the equipment necessary based on the types of patients admitted and treated.	1
(v)	III, IV	If a TCF has neurosurgical coverage and admits neuro–trauma patients, intracranial pressure monitoring equipment must be available.	1
(vm)	III, IV	Trauma patients, as defined by the Wisconsin trauma registry inclusion criteria, must not be admitted or transferred by a primary care physician without the knowledge and consent of the trauma service. The TCF's trauma PIPS program must monitor adherence to this guideline. *Note: The Wisconsin trauma registry inclusion criteria are contained within the Wisconsin Trauma Data Dictionary, which is published on the Department's Trauma webpage:* https://www.dhs.wisconsin.gov/publications/p01117.pdf.	2
(w)	III	The TCF must have a respiratory therapist in–house or on call 24 hours a day.	1
(wm)	III, IV	The TCF must have laboratory services available 24 hours per day for the standard analysis of blood, urine and other body fluids, including micro–sampling when appropriate.	1
(x)	III, IV	The TCF's blood bank must be capable of blood typing and cross–matching.	1
(xm)	III	The TCF's blood bank must have an adequate supply of packed red blood cells and fresh frozen plasma available within 15 minutes.	1
(y)	III, IV	TCFs must have a massive transfusion protocol that is developed collaboratively with the trauma service and blood bank.	1
(ym)	III	The TCF must have coagulation studies, blood gas analysis and microbiology studies available 24 hours per day.	1
(z)	III, IV	APPs who participate in the initial evaluation of trauma patients must be current in ATLS, except if the APP is accepting a trauma patient as a direct admission. For Level IV TCFs, this may be fulfilled by the Comprehensive Advanced Life Support program if the program includes the mobile trauma module skills station and the provider is re–verified every four years. The Rural Trauma Team Development Course does not fulfill this requirement.	2
(zm)	III, IV	A TCF must have appropriate orientation, credentialing processes and skill maintenance for APPs, as witnessed by an annual review by the TMD.	2
12.	Rehabilitation		
(a)	III	Physical therapy services must be provided in the TCF.	1
(b)	III	Social services must be provided in the TCF.	2
13.	Guidelines for the Operation of Burn Centers		
(a)	III, IV	A TCF must have written guidelines, including transfer plans, for the care of burn patients.	2

14.	Trauma Registry		
(a)	III, IV	A TCF must collect and analyze trauma registry data and must submit this data to the department per s. DHS 118.09 (3) (a) & (b).	2
(b)	III, IV	The TCF must submit the required data elements, defined by the Wisconsin Trauma Data Dictionary to the Wisconsin trauma registry. *Note: The Wisconsin Trauma Data Dictionary is prepared, maintained and updated by the Wisconsin Department of Health Services and is published on the Department's Trauma webpage:* *https://www.dhs.wisconsin.gov/publications/p01117.pdf*	2
(c)	III, IV	A TCF must use trauma registry data to support their trauma PIPS program.	2
(d)	III, IV	A TCF must use trauma registry data to identify injury prevention priorities that are appropriate for local implementation.	2
(e)	III, IV	A TCF's trauma registry must be concurrent. At a minimum, the TCF must enter 80% of cases within 60 days of patient discharge.	2
(f)	III	At least one staff trauma registrar at each TCF must either have previously attended the following two courses or attend the following two courses within 12 months of being hired: (1) The American Trauma Society's two–day, in person trauma registry course or equivalent provided by a state trauma program. (2) The Association of the Advancement of Automotive Medicine's Abbreviated Injury Scale and Injury Scoring: Uses and Techniques course. This requirement will take effect on January 1, 2022. *Note: More information, including registration information, regarding the American Trauma Society's trauma registry course can be found on the American Trauma Society's webpage:* https://www.amtrauma.org/page/TRC. *More information, including registration information, regarding the Association of Advancement of Automotive Medicine's Abbreviated Injury Scale) and Injury Scoring: Uses and Techniques course can be found on the Association of Advancement of Automotive Medicine's webpage:* https://www.aaam.org/abbreviated–injury–scale–ais/training–courses/.	2
(g)	III, IV	The TCF must ensure that appropriate measures are in place to meet the confidentiality requirements of the trauma registry data. The TCF must protect against threats, hazards and unauthorized uses or disclosures of trauma program data as required by the Health Insurance Portability and Accountability Act and other state and federal laws. Protocols to protect confidentiality, including providing information only to staff members who have a demonstrated need to know, must be integrated in the administration of the TCF's trauma program.	2
(h)	III, IV	The TCF must demonstrate that appropriate staff resources are dedicated to the trauma registry.	2
(i)	III, IV	The TCF must have a strategy for monitoring the validity of the data entered into the trauma registry.	2
(j)	III, IV	The TCF must demonstrate that all trauma patients can be identified for review.	2
(k)	III, IV	The TCF's trauma PIPS program must be supported by a reliable method of data collection that consistently obtains the information necessary to identify opportunities for improvement.	2
15.	Performance Improvement and Patient Safety		
(a)	III, IV	The TCF must have a trauma PIPS 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.	2

(b)	III, IV	The TCF's loop closure including problem resolution, outcome improvements and assurance of safety must be readily identifiable through methods of monitoring, re–evaluation, benchmarking and documentation.	2
(c)	III, IV	The TCF's trauma PIPS program must integrate with the facility quality and patient safety efforts and have a clearly defined reporting structure and method for the integration of feedback.	2
(d)	III, IV	The TCF must use clinical practice guidelines, protocols and algorithms derived from evidence–based validated resources to help reduce unnecessary variation in the care they provide.	2
(e)	III, IV	The TCF must document, in the trauma PIPS program written plan, all process and outcome measures. At least annually, the TCF must review and update all process and outcome measures.	2
(f)	III, IV	The TCF must systematically review all trauma–related mortalities from point of injury to death and identify mortalities with opportunities for improvement for the multidisciplinary trauma peer review committee.	2
(g)	III, IV	The TCF must have sufficient mechanisms available to identify events for review by the trauma PIPS program. Once an event is identified, the trauma PIPS program must be able to verify and validate that event.	2
(h)	III, IV	The TCF must have a process to address trauma program operational events including system process related events and, when appropriate, the analysis and proposed corrective action. The TCF must have documentation that reflects the review of operational events, and when appropriate, the analysis and proposed corrective action.	2
(i)	III, IV	When the TCF identifies an opportunity for improvement, appropriate corrective actions to mitigate or prevent similar future adverse events must be developed, implemented and clearly documented by the trauma PIPS program.	2
(j)	III required, IV if the TCF provides surgical services for trauma patients	When a general surgeon cannot attend the trauma multidisciplinary peer review meeting, the TMD must ensure that the general surgeon receives and acknowledges receipt of critical information generated at the meeting.	2
16.	Outreach and Education		
(a)	III, IV	The TCF must engage in public and professional education, including participation in prehospital education.	2
(b)	III, IV	The TCF must provide trauma–related education for nurses involved in trauma care.	2
17.	Prevention		
(a)	III, IV	The TCF must have an organized and effective approach to injury prevention and must prioritize these efforts based on local trauma registry and epidemiologic data.	2
(b)	III, IV	The TCF must have someone in a leadership position that has injury prevention as part of his or her job description.	2
(c)	III, IV	Universal screening for alcohol use must be performed and documented for all injured patients over 12 years of age. This screening must be done on patients admitted or discharged from the emergency department, but not those transferred to a higher level of care.	2
18.	Disaster Planning and Management		
(a)	III, IV	The TCF must meet the disaster–related requirements of the Joint Commission or other accrediting bodies.	2
(b)	III	A liaison from the trauma program must be a member of the TCF's disaster committee.	2
(c)	III, IV	The TCF must participate in regional disaster management plans and exercises.	2

Note: Appendix A is shown as repealed and recreated eff. 10–1–21 by CR 19–086. Prior to 10–1–21 it reads:

Key: **E = Essential**
D = Desirable

Level III & IV Hospital Assessment and Classification Criteria

	III	IV	YES	NO	COMMENTS
GENERAL STANDARDS					
1. Trauma Care Facility (TCF) Commitment	E[1]	E[1]			
2. Acceptance of Patients	E[2]	E[2]			
3. Membership and participation in Regional Trauma Advisory Council(s)	E	E			
A. HOSPITAL OR EMERGENCY CARE FACILITY ORGANIZATION					
1. Trauma Service	E[3,5,6]	D[4,5] or E[6]			
2. Trauma Service Director	E[7]	E[8]			
3. Trauma Multidisciplinary Committee	E	D[9]			
4. Hospital Departments, Divisions or Sections					
a. General Surgery	E	——			
b. Orthopedic Surgery	D	——			
c. Emergency	E	E			
d. Anesthesia	E	——			
B. CLINICAL CAPABILITIES – Specialty Availability					
1. On Call & Promptly Available[10]					
a. General Surgery	E[11]	——			
b. Orthopedic Surgery	D[12]	——			
c. Emergency Medicine	E[13]	E[13]			
d. Anesthesiology	E[14]	——			
e. Internal Medicine	D	——			
f. Obstetric or Gynecologic Surgery	D	——			
g. Pediatrics	D	——			
h. Radiology	D[16]				
i. Neurosurgery	——	——			
C. FACILITIES OR RESOURCES OR CAPABILITIES					
1. Emergency Department					
a. Personnel					
1. Designated Physician Director	E[17]	D[17]			
2. Physician capable of initial resuscitation who is on call & promptly available to the ED upon arrival of the trauma patient.	E[13]	E[13]			
3. Nursing personnel assigned to the ED with special capability in trauma care who provide continual monitoring of the trauma patient from hospital arrival to disposition in ICU, OR, patient care unit, or until transfer.	E[18]	D			
4. Nursing personnel in–house 24 hours a day responsible for and capable of responding to the ED and initiating the assessment or care of the trauma patient prior to the arrival of the physician in the ED and who can provide continual monitoring of the trauma patient from hospital arrival until transfer.	——	E[18]			
b. Equipment for resuscitation of patients of *all* ages shall include but not be limited to:					
1. Airway control & ventilation equipment, including laryngoscopes and endotracheal tubes of all sizes, bag–mask resuscitator, pocket masks, and oxygen.	E	E			
2. Pulse oximetry	E	E			
3. End Tidal $C0_2$ determination	E	E			
4. Suction devices	E	E			
5. ECG monitor or defibrillator	E	E			
6. CVP monitoring apparatus	E	D			

Level III & IV Hospital Assessment and Classification Criteria

	III	IV	YES	NO	COMMENTS
7. Standard intravenous fluids & large bore administration devices & catheters	E	E			
8. Sterile surgical sets for:					
a. Airway or Cricothyrotomy	E	E			
b. Thoracostomy	E	D			
c. Vascular access	E	E			
d. Chest decompression	E	E			
9. Gastric decompression	E	E			
10. Drugs necessary for emergency care	E	E			
11. 24 hour x–ray availability	E[19]	D[19]			
12. Two–way radio communication with ambulance or rescue	E[20]	E[20]			
13. Skeletal & cervical immobilization devices	E	E			
14. Arterial catheters	E	D			
15. Thermal Control Equipment					
a. For patient	E	E			
b. For blood & fluids	E	E			
16. Capability for rapid infusion of fluids	E	E			

Level III & IV Hospital Assessment and Classification Criteria

	III	IV	YES	NO	COMMENTS
2. Operating Suite					
a. Personnel & Operating Room					
1. Immediately available to patient on arrival in the OR or when requested by the surgeon	E[21]	——			
b. Equipment for *all* ages shall include but not be limited to:					
1. Thermal Control Equipment					
a. For patient	E	——			
b. For blood & fluids	E	——			
2. X–Ray capability available 24 hours per day	E	——			
a. C–arm intensifier	D	——			
3. Endoscopes or Bronchoscope	D	——			
4. Equipment appropriate for fixation of long–bone and pelvic fractures	D	——			
5. Rapid infusion or rapid fluid recovery capability	E	——			
3. Post–Anesthetic Recovery Room (Surgical ICU Acceptable)					
a. RNs and other essential personnel in–house or on call promptly available when patient arrives in recovery or ICU	E	——			
b. Equipment for the continuous monitoring of temperature, hemodynamics and gas exchange.	E	——			
c. Pulse oximetry	E	——			
d. End–Tidal $C0_2$ monitoring	E	——			
e. Thermal control	E	——			
4. Intensive Care Unit (ICU) for Trauma Patients					
a. Personnel					
1. Designated Physician Director for Trauma Patients	D[22]	——			
2. Physician with TCF privileges in critical care and approved by the trauma director, on call and immediately available to the hospital.	D	——			
b. Appropriate monitoring or resuscitation equipment	E	——			
c. Support Services					
1. Immediate access to clinical diagnostic services	E[23]	——			
5. Acute Hemodialysis Capability or Transfer Agreement	E	——			
6. Organized Burn Care	E	E			
a. Physician–directed burn center staffed and equipped to care for extensively burned patients OR	—	—			
b. Facilitate Transfer	E	E			
7. Acute Spinal Cord or Head Injury Management	E	E			
a. If a designated spinal cord rehabilitation center exists in region, early transfer should be considered.	E	E			
b. If a head injury center exists in the region, early transfer should be considered.	E	E			
8. Radiological Capabilities available 24 hours per day	E[19]	D[19]			
a. Angiography	D or E[15]	——			
b. Sonography	D or E[15]	——			
c. Nuclear Scanning	D or E[15]	——			
d. Computed Tomography	D or E[15]	——			
9. Rehabilitation					
a. Rehabilitation service staffed by personnel trained in rehabilitation care and properly equipped for the acute care of the critically injured patient OR	D	——			
b. Facilitate Transfer	E	E			
10. Clinical Laboratory Service	E[24]	E[24]			
a. Blood Typing & Cross Matching	E	D			
b. Coagulation Studies	E	D			
c. Comprehensive blood bank or access to a community central blood bank and adequate storage facilities	E[25]	D			
d. Blood gas & pH determination capability	E	D			

Level III & IV Hospital Assessment and Classification Criteria

	III	IV	YES	NO	COMMENTS
e. Microbiology capability	E	D			
f. Alcohol screening capability	E	D			
g. Drug screening capability	D	D			
D. QUALITY IMPROVEMENT					
1. Quality Improvement Programs	E[26]	E[26]			
2. Trauma Registry	E[27]	E[27]			
3. Special audit for *all* trauma deaths	E[28]	E[28]			
4. Morbidity & Mortality Review	E[28]	E[28]			
5. Trauma review, multidisciplinary	E	D[29]			
6. Medical Nursing Audit, Utilization Review, Tissue Review	E[28]	E[28]			
7. Review of Out–of–Hospital Trauma Care	E[28]	E[28]			
8. Published on–call schedule shall be maintained for surgeons, anesthesiology, and other major specialists.	E	——			
9. Quality Improvement personnel specifically responsible for the trauma program.	E[26 or 33]	E[26 or 33]			
10. Times of and reasons for trauma–related bypass documented and reviewed by the QI Program	E	E			
E. OUTREACH PROGRAM					
1. Availability of telephone, computer network, or on–site consultations with physicians of higher level TCF	E	E			
F. PREVENTION					
1. Epidemiology research					
a. Conduct studies in injury control	——	——			
b. Collaborate with other institutions in research	D[30]	D[30]			
c. Consult with qualified researchers on evaluation measures	D[30]	D[30]			
2. Surveillance					
a. Special ED and field collection projects	——	——			
b. Expanded Trauma Registry data	D	——			
c. Minimal Trauma Registry data	E[27]	E[27]			
3. Prevention					
a. Designated prevention coordinator	D	D			
b. Outreach activities and program development	D	D			
c. Information resource	D	D			
d. Collaboration with existing national, regional (Midwest) and state programs	E	E			
G. CONTINUING EDUCATION					
1. Formal Programs in continuing education provided by the hospital for:					
a. Staff physicians	E[31]	E[31]			
b. Nurses	E[31]	E[31]			
c. Allied health personnel	E[31]	E[31]			
d. Community physicians	E[31]	——			
e. Out–of–hospital personnel	D[31]	——			
H. TRAUMA SERVICE SUPPORT PERSONNEL					
1. Trauma coordinator	E[32]	E[33]			
I. ORGAN PROCUREMENT ACTIVITIES					
1. Organ procurement activities	E	E			
J. TRANSFER AGREEMENTS					
1. As transferring facility	E	E			
2. As receiving facility	E[34]	——			

Footnotes

[1A] Trauma Care Facility (TCF), specifically its board of directors, administration, medical staff, and nursing staff, shall make a commitment to providing trauma care commensurate to the level at which they are classified. Written documentation of such by each of these groups shall include but not be limited to appropriate

dedicated financial, physical, and human resources and organizational structure necessary to provide optimal trauma care with outcome evaluation through a quality assessment and quality improvement process.

2A **TCF shall agree to accept all patients who present to their facility requiring trauma stabilization or care appropriate to their classified level regardless of race, sex, disability, creed, or ability to pay.**

3 **Trauma patients admitted to a Level III TCF are not required to be admitted to a separate trauma service but may be admitted to the service of the physician caring for the patient. However, the TCF shall have policies, protocols, and an organizational chart that 1) defines how trauma care is managed at the TCF, and 2) identifies trauma team members and their respective responsibilities in the care of the trauma patient.**

4 **The Level IV TCF is not required to have the same type of trauma service and team as the upper level facilities. However, the administration, physicians, nurses and support personnel, with aid of guidelines, protocols, and transfer agreements, make a commitment to assess, stabilize, and transfer patients to the appropriate level TCF. Any inpatients admitted to a Level IV TCF shall not have injuries requiring major surgical or surgical specialty care.**

5 **Level III and Level IV TCF physicians involved in the care of trauma patients shall take the Advanced Trauma Life Support (ATLS) Course and the refresher course every four years to meet CME requirements. If a physician currently is Emergency Medicine Board Certified, ATLS course only needs to be completed once.**

6 **Level III and Level IV TCFs shall have a Trauma Team Activation Protocol or Policy that 1) defines response requirements for all team members when a trauma patient is enroute or has arrived at the TCF, 2) establishes or identifies the criteria, based on patient severity of injury, for activation of the trauma team, and 3) identifies the person(s) authorized to activate the trauma team. The Trauma Protocol or Policy can be facility specific but team member roles should be clearly documented.**

7 **Level III TCFs shall have a physician on staff whose job description defines his or her role and responsibilities for trauma patient care, trauma team formation, supervision or leadership, and trauma training or continuing education. This physician acts as the medical staff liaison for trauma care with out–of–hospital medical directors, nursing staff, administration, and higher level TCFs.**

8 **Level IV TCFs shall have a physician on staff whose job description defines his or her role and responsibilities for trauma patient care, trauma team formation, supervision or leadership, and trauma training or continuing education. This physician acts as the medical staff liaison for trauma care with out–of–hospital medical directors, nursing staff, administration, and higher level TCFs.**

9 **The activities of the Trauma Multidisciplinary Committee in a Level IV TCF may be handled by an appropriate standing committee of that facility that directly deals with patient care issues pertaining to quality assessment and quality improvement.**

10 **Refer to each "essential" specialty footnote. Promptly shall be defined as, "without delay."**

11 **For all trauma patients requiring surgical care, upon notification the surgeon shall respond to the ED. Should the surgeon be unavailable for any reason, a back–up plan for surgical coverage shall be in effect, that is, a second call surgeon available or transfer policy activated. The appropriateness and timeliness of the surgeon's response shall be evaluated in the TCF's quality assessment and quality improvement process. A 24–hour–per–day call schedule for surgeons covering trauma shall be published monthly and posted in all areas of the TCF caring for trauma patients.**

12 **Having an orthopedic surgeon on staff at a Level III TCF is desirable. However, if an orthopedic surgeon is not on staff, the general surgeon and physician covering the ED for trauma shall be capable of stabilizing and immobilizing fractures prior to transfer to a higher level TCF. A transfer agreement shall be in place.**

13 **Optimally, in a Level III and Level IV TCF the physician providing initial ED care for trauma patients should be in–house 24–hours–per–day. As an alternative for both Level III and Level IV TCFs, the physician may be on call and notified to meet the patient upon arrival at the TCF to assume immediate care responsibilities. The appropriateness and timeliness of the physician's response to the ED shall be evaluated in the TCF's quality assessment and quality improvement process. A 24–hour per day call schedule for the physicians providing initial ED trauma care shall be published monthly and posted in all areas of the TCF caring for trauma patients. Current Advanced Trauma Life Support (ATLS) is required of the ED physicians. The ED physicians will have three years, from the TCF's classification date or from the date of the ED physician joining the trauma team at the TCF to successfully complete this course. Physicians Board Certified in Emergency Medicine only need to complete ATLS course once.**

14 **Level III TCF anesthesia requirements can be filled by an anesthesiologist or by a certified registered nurse anesthetist capable of assessing emergent situations in trauma patients and initiating preoperative and operative anesthetic care. Local criteria shall be established to allow the anesthesia provider to take call from outside the hospital, but with clear commitment that an anesthesiologist or CRNA will be immediately available for airway or operative management. Ongoing anesthesia outcome studies shall be performed by the TCF as part of the quality assessment and quality improvement process. The availability of anesthesia services and the absence of delays in airway control or operative anesthesia shall be documented by the hospital's quality assessment and quality improvement process.**

15 **Essential if the institution's scope of practice includes definitive care of the organ system.**

16 **Teleradiology may be an option. If utilized, this process shall be a part of the TCF's quality assessment and quality improvement process.**

17 **In Level III and Level IV TCFs, one of the physicians who takes ED call, perhaps the chairperson of the ED committee (or similar committee responsible for the ED), shall be responsible for 1) physician staffing of the ED, 2) Out–of–Hospital medical direction, 3) acting as the physician liaison for other ED physicians with nursing staff and TCF administration, and 4) ensuring that physician quality assessment and quality improvement activities are in place and performed.**

18 **The nursing personnel staffing the ED should be physically present in the ED prior to the arrival of the trauma patient to ensure that the room and equipment are available and ready for use. These activities shall be assessed in the TCF's quality assessment and quality improvement process. In addition, they may act as physician designees and provide communication with the out–of–hospital personnel prior to the arrival of the physician. The nurses shall attend appropriate continuing education courses in trauma care. EXCEPTION: hospitals designated as critical access hospitals will meet nursing personnel availability standards per Medicare conditions of participation.**

19 **The Level III and Level IV TCF radiology technician shall be on call and promptly available to the ED. The technician is part of the trauma team and shall be notified as part of the trauma alert activation protocol. A call schedule shall be posted in all areas of the TCF caring for trauma patients. The technician's availability and response shall be monitored as part of the TCF's quality assessment and quality improvement process.**

20 **On–line medical direction (two–way communications) shall be available to all out–of–hospital services in the TCF area, with physicians or physician designees trained in receiving patient reports and giving pre–approved standing orders for patient treatment interventions or destination decisions.**

21 **The operating room staff shall be on–call and promptly available when notified to respond. The OR staff is part of the trauma team and shall be notified as part of the trauma alert activation protocol. A call schedule shall be posted in all areas of the TCF caring for trauma patients. The OR staff's availability and response times shall be part of the TCF's quality assessment and quality improvement process.**

22 **This function may be performed by a surgeon or the TCF's ICU, or otherwise appropriate Committee.**

23 **Clinical diagnostic services such as, but not limited to, radiology, laboratory, and respiratory care shall be available to the operating room, post anesthesia recovery, intensive care unit, and all other trauma patient care areas just as they are for the ED.**

24 **Level III and Level IV TCF laboratory personnel shall be on call and promptly available to the ED. They are part of the trauma team and shall be notified as part of the trauma alert activation protocol. A call schedule shall be posted in all areas of the TCF caring for trauma patients. Laboratory personnel availability and response times shall be part of the TCF's quality assessment and quality improvement process. There shall be a policy delineating the priority of a trauma patient in the collection and processing of blood and urine for evaluation.**

25 **Level III TCFs shall be capable of storing blood received from out–of–hospital blood banks and providing non–crossmatched blood on patient arrival to the ED. The TCF shall have a massive transfusion protocol with the ability to perform massive transfusions.**

[26] Level III and IV TCFs shall perform all quality assessment and quality improvement activities that are required of an acute care hospital as they relate to trauma. The trauma quality assessment and quality improvement process may be performed by the TCF's trauma care committee or by the TCF's standing quality assessment and quality improvement committee. This process may also be performed through agreements with higher level TCFs.

[27] Following trauma system implementation, data submission from Level III and Level IV TCFs will be phased in beginning with year two. Initial Level III and IV data submission will be either on paper or via electronic submission with data entry coordinated by the State Trauma Registrar. Level III and IV TCFs will submit data for all trauma patients meeting *any* of the following three criteria:

1. Persons who are admitted to the hospital or transferred to another facility for trauma care and have ICD–9 discharge diagnoses from 800.00 to 959.9, with the exception of any of the following:

a. 905–909 (late effects of injury).

b. 910–924 (blisters, contusions, abrasions, insect bites).

c. 930–939 (foreign bodies).

d. Drowning, unless it was a consequence of a motor vehicle crash.

e. Strangulation or asphyxiation.

f. Poisoning or a drug overdose.

g. Falls from the same level resulting in isolated closed distal extremity fracture or isolated hip fracture.

2. Persons transported to the hospital and who are dead on arrival.

3. Persons who have an injury–related death in the emergency department or after admission to the hospital.

4. Facility–specified trauma response has been activated.

[28] Level III and Level IV TCFs shall establish a procedure or process for a special audit on all trauma deaths, trauma morbidity and mortality, utilization, medical nursing audit, tissue, and out–of–hospital trauma care review as part of the TCF quality assessment and quality improvement process. This review may be performed by a TCF standing committee or through an agreement(s) with higher level TCFs.

[29] Level IV TCFs may be involved with Level I, Level II or Level III TCF multidisciplinary trauma review via, but not limited to, closed circuit TV, or computer network.

[30] Level III and Level IV TCFs shall cooperate with trauma researchers approved by the Institutional Review Board or Ethics Committee if the demands for data, time and money are not excessive.

[31] Continuing trauma education programs in Level III and Level IV TCFs may be provided by, but not limited to, the facility in–house, regular or closed circuit TV, computer networks, etc. Level III and Level IV TCFs at a minimum shall provide for educational offerings for nursing and allied health personnel. Arrangements can be made with a Level I or Level II TCF.

[32] The Trauma Care Coordinator for a Level III TCF should ideally be a RN with clinical experience in trauma care. As an alternative, other qualified allied health personnel with clinical experience in trauma care may be appropriate. A job description shall be clearly defined and available. Developing this job description should be a collaborative effort with the Level I or Level II TCF.

[33] Level IV TCFs shall have an individual who works in conjunction with the physician(s) responsible for trauma care helping to organize and coordinate the TCF's trauma care response. Ideally, this individual should be a staff or administrative RN with emergency or trauma care experience. As an alternative other allied health personnel with clinical experience in emergency or trauma care may fulfill this role. A job description shall be clearly defined and available. This position may be shared by individuals with different qualifications in clinical care, quality improvement, and data collection. These individuals shall hold the responsibility for the education of the facility trauma team in the varied aspects of trauma care within the facility. Development of this job description should be a collaborative effort with the Level I or Level II TCF.

[34] If a Level III TCF is receiving patients from a Level III or Level IV TCF, transfer protocols shall be in place.