

IX. APPENDIX A: DESIGNATION REQUIREMENTS

Level I Trauma Center

Designation Criteria for Level I Trauma Center

Criteria for designation are in place to verify the services and systems to ensure optimal care of the trauma patient. The following elements must be met for designation as a Level I Trauma Center in Idaho.

Type I criteria must be in place at the time of the verification site visit to achieve designation. Type II criteria are also required but are less critical. If three or fewer Type II deficiencies are present at the time of the site visit and no Type I criteria are cited, a 1-year certificate of designation is issued. During the following 12 months, if the trauma center successfully corrects the deficiencies, the period of designation will be extended to 3 years from the date of the initial verification visit. If any Type I deficiency or more than three Type II deficiencies are present at the time of the initial verification site visit, the hospital may not be designated.

1. Trauma System	
Time Sensitive Emergencies (TSE)	
1.1 The center's trauma program staff has sufficient involvement in national, state, and regional trauma system planning, development, and/or operation.	II
Center Mission	
1.2 There is a current resolution supporting the trauma center from the medical staff (See Trauma Toolkit).	II
1.3 There is a current resolution supporting the trauma center from the hospital board (See Trauma Toolkit).	II
1.4 There is sufficient infrastructure, staff equipment, and support to the trauma program to provide adequate care.	I
1.5 The trauma program has adequate administrative support and defined lines of authority that ensure comprehensive evaluation of all aspects of trauma care.	II
2. Description of Trauma Center	
Description of the Trauma Center	
2.1 All trauma facilities are on the same campus.	II
2.2 The trauma program is empowered to address issues that involve all applicable disciplines.	I
2.3 The center provides initial resuscitation of the trauma patient and immediate intervention to control hemorrhage and to assure maximum stabilization prior to referral to an appropriate higher level of care or admission.	II
2.4 The center meets volume performance requirements 1,200 trauma patients admissions yearly or 240 admissions with an Injury Severity Score (ISS) of more than 15.	I

2.5 The adult trauma center that admits more than 100 injured children annually has a pediatric Emergency Department (ED) area, a pediatric intensive care area, appropriate resuscitation equipment, and a pediatric-specific trauma Performance Improvement and Patient Safety (PIPS) program.	II
2.6 The center provides some means of referral and access to trauma center resources.	II
2.7 The center provides a continuous rotation in trauma surgery for senior residents that is part of an Accreditation Council for Graduate Medical Education, accredited program in any of the following disciplines: General surgery, Orthopedic surgery, or Neurosurgery; and supports an acute care surgery fellowship consistent with the educational requirements of the American Association for the Surgery of Trauma.	I
2.8 In teaching facilities, the requirements of the Residency Review Committee are met.	II
Trauma Leadership	
Trauma Medical Director	
2.9 The trauma program has a Trauma Medical Director with the authority and administrative support to lead the program.	I
2.10 The Trauma Medical Director is a board-certified surgeon or an American College of Surgeons (ACS) Fellow.	I
2.11 The Trauma Medical Director is current in Advanced Trauma Life Support (ATLS).	II
2.12 The Trauma Medical Director has accrued 36 hours in 3 years of trauma-related Continuing Medical Education (CME).	II
2.13 The Trauma Medical Director participates in trauma call.	I
2.14 The Trauma Medical Director is a member of and participates in regional or national trauma organizations.	II
2.15 The Trauma Medical Director has sufficient authority to set specified criteria for the trauma panel members.	II
2.16 The roles of emergency physicians and trauma surgeons are defined, agreed on, and approved by the Trauma Medical Director.	II
2.17 The Trauma Medical Director has the authority to correct deficiencies in trauma care and to exclude from trauma call the trauma team members who do not meet specified criteria.	II
2.18 The Trauma Medical Director has the authority to recommend changes for the trauma team based on performance review.	II
2.19 The Trauma Medical Director has the responsibility and authority to determine each general surgeon's ability to participate on the Trauma Team through the PIPS program and hospital policy.	II
2.20 The structure of the trauma program allows the Trauma Medical Director to have oversight authority for care of injured patients who may be admitted to individual surgeons.	II
2.21 The Trauma Medical Director has the responsibility and authority to ensure compliance with designation requirements.	II

2.22 The Trauma Medical Director is involved in the development of the center's bypass protocol.	II
2.23 The Trauma Medical Director ensures dissemination of information to the committees that comprise the PIPS program.	II
2.24 In circumstances when attendance is not mandated, the Trauma Medical Director ensures dissemination of information from the PIPS program.	II
2.25 The Trauma Medical Director is accountable for all trauma care and exercises administrative authority for the trauma program.	I
2.26 The Trauma Medical Director participates in the Performance Improvement and Patient Safety (PIPS) program by attending at least 60% of meetings.	II
2.27 The Trauma Medical Director will approve the design of any sub-specialty backup call system.	II
2.28 The Trauma Medical Director will approve all sub-specialty liaisons for the program.	II
2.29 The PIPS program, comprised of at minimum the Trauma PI and Trauma Operations Committees, is chaired by the Trauma Medical Director or their designee. In the Trauma Medical Director's absence, a designee must be identified.	II
Trauma Program Manager	
2.30 The Trauma Program Manager must have 1.0 full-time equivalent (FTE) commitment to the trauma program.	II
2.31 The Trauma Program Manager has accrued 36 hours in 3 years of trauma-related continuing education.	II
2.32 The Trauma Program Manager is responsible for the use of trauma registry data for quality improvement and trauma education.	II
2.33 The Trauma Program Manager works with the Trauma Medical Director to address the multidisciplinary needs of the trauma program.	I
2.34 The Trauma Program Manager serves as a liaison to local Emergency Medical Services (EMS) agencies and referring/accepting centers.	II
3. Clinical Functions	
3.1 The criteria for graded activation must be clearly defined by the center and reviewed annually, with the highest level of activation including the seven required criteria listed in Table 1.	II
3.2 The center is staffed to ensure immediate and appropriate care of trauma patients during hours of operation.	I
3.3 The trauma service retains responsibility for its patients and coordinates all therapeutic decisions.	I
3.4 The center must be able to provide the necessary human and physical resources to properly administer acute care consistent with ATLS.	II
3.5 The center has written protocols to determine which types of patients are admitted and which are transferred.	II

3.6 The trauma surgeon is kept informed of and concurs with major therapeutic and management decisions made by the Intensive Care Unit (ICU) team.	I
3.7 There is a method to identify injured patients, monitor the provision of health care services, make periodic rounds, and hold formal and informal discussions with individual practitioners.	I
3.8 The center must be the local trauma authority and assume the responsibility for providing training for prehospital and hospital-based providers.	II
3.9 The center has established protocols to ensure immediate and appropriate care of the adult and pediatric trauma patient.	II
Trauma Team	
3.10 The team response to all trauma priority levels must be defined and reviewed annually.	II
3.11 All trauma/general surgeons, emergency physicians, and advanced practice providers who participate as a member of the Trauma Team have completed ATLS at least once.	II
3.12 Trauma Team members participate in both the Trauma PI and Trauma Operations Committees.	II
3.13 Trauma Team physicians and advanced practice providers are credentialed by the medical staff and governing board.	II
Emergency Department (ED)	
3.14 The ED has a designated Emergency Physician Director supported by an appropriate number of additional physicians to ensure immediate care of injured patients.	I
3.15 An emergency physician is present in the ED at all times.	I
3.16 All emergency physicians are board-certified, board-eligible, or meet the Alternate Pathway criteria* (Table 3).	II
3.17 Emergency physicians on the call panel are regularly involved in the care of injured patients.	II
3.18 The emergency medicine PIPS liaison or designee has accrued an average of 12 hours annually or 36 hours in 3 years of external** trauma-related CME, or participate in maintenance of certification.	II
3.19 The emergency medicine PIPS liaison or designee participates in both the Trauma PI and Trauma Operations Committees, and attends a minimum of 50% of these meetings.	II
3.20 In institutions where there are emergency medicine residency programs, supervision is provided by an in-house attending emergency physician 24 hour per day.	II
3.21 The ED must evaluate its pediatric readiness and have a plan to address any deficiencies.	II
General Surgery	
3.22 All trauma surgeons must have privileges in general surgery.	II
3.23 The trauma surgeons respond promptly to activations and participate in PIPS activities.	II

3.24 Trauma surgeons in adult trauma centers that admit more than 100 injured children annually are credentialed for pediatric trauma care by the center's credentialing body.	II
3.25 The center has general surgical coverage 24/7.	II
3.26 The trauma surgeon on-call is dedicated to the trauma center while on duty.	I
3.27 A published backup call schedule for trauma surgery is available.	II
3.28 Seriously injured patients are admitted to and/or evaluated by the trauma service.	II
3.29 The trauma surgeon is present in the ED within 15 minutes of patient arrival for highest level of activation 24/7 with an 80% achievement rate as monitored by the PIPS program.	I
3.30 The trauma surgeon on-call is involved in decisions regarding diversion.	II
3.31 All trauma surgeons must participate in both the Trauma PI and Trauma Operations Committees, and attend a minimum of 50% of these meetings.	II
3.32 A general surgeon or appropriate substitute is available for major resuscitations in-house 24/7.	I
3.33 A general surgeon covering trauma call is board-certified, board-eligible, meet the Alternate Pathway criteria* (Table 3), or an ACS Fellow.	II
Orthopedic Surgery	
3.34 The center has orthopedic surgery available 24/7.	II
3.35 An orthopedic surgeon is present in the ED within 30 minutes of request with an 80% achievement rate.	II
3.36 The orthopedic surgeon has privileges in general orthopedic surgery.	II
3.37 Orthopedic surgeons who care for injured patients are board-certified, board-eligible, or meet the Alternate Pathway criteria* (Table 3).	II
3.38 Orthopedic team members have dedicated call at their institution and a backup call system.	II
3.39 Orthopedic surgeon's liaison have documented 12 hours annually or 36 hours in 3 years of external** trauma-related CME or participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program. Staying current with their board certification satisfies the CME requirement.	II
3.40 The orthopedic surgery PIPS liaison or designee participates in both the Trauma PI and Trauma Operations Committees, and attends a minimum of 50% of these meetings.	II
Neurosurgery	
3.41 The center has neurosurgery available 24/7.	II
3.42 The neurosurgeon has privileges in general neurosurgery.	II
3.43 A neurosurgeon is present in the ED within 30 minutes of request with an 80% achievement rate.	II
3.44 Neurosurgeons who care for injured patients are board-certified, board-eligible, or meet the Alternate Pathway criteria* (Table 3).	II

3.45 Neurotrauma care is promptly and continuously available for severe traumatic brain injury and spinal cord injury and for less severe head and spine injuries when necessary.	I
3.46 The center provides an on-call neurosurgical backup schedule or a formally arranged contingency plans in case the capability of the neurosurgeon, hospital, or system to care for neurotrauma patients is overwhelmed.	I
3.47 A neurosurgeon PIPS liaison or designee participates in both the Trauma PI and Trauma Operations Committees, and attends a minimum of 50% of these meetings.	II
3.48 Neurosurgeons who take trauma call have documented 12 hours annually or 36 hours in 3 years of external** trauma-related CME or participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program. Staying current with their board certification satisfies the CME requirement.	=
Collaborative Clinical Services	
Anesthesia	
3.49 Anesthesia services are on-site within 15 minutes of notification for emergency operations and airway problems 24/7.	I
3.50 An anesthesiologist PIPS liaison or designee participates in both the Trauma PI and Trauma Operations Committees, and attends a minimum of 50% of these meetings.	II
3.51 The PIPS program reviews the availability of anesthesia services in patient care areas and any delays in care due to lack of anesthesia resources.	II
Operating Room (OR)	
3.52 The Operating Room (OR) is adequately staffed and available within 15 minutes.	I
3.53 Operating rooms are adequately staffed and available within 30 minutes of surgeon decision for emergency operative intervention for musculoskeletal injuries.	I
3.54 There is a mechanism for providing additional staff for a second operating room when the first operating room is occupied.	II
3.55 The OR has all of the following essential equipment:	I
a. rapid infusers;	
b. thermal control equipment and resuscitation fluids;	
c. intraoperative radiologic capabilities;	
d. equipment for fracture fixation;	
e. equipment for endoscopic evaluation (bronchoscopy and gastrointestinal endoscopy);	
f. equipment necessary for craniotomy;	
g. cardiopulmonary bypass available 24/7; and	
h. an operating microscope available 24/7.	
3.56 A mechanism is in place to ensure OR availability without undue delay for patients with semi-urgent orthopedic injuries.	II

3.57 A mechanism is in place for documenting the attending surgeon's presence in the OR for all trauma operations.	II
3.58 The PIPS program evaluates OR availability and delays.	II
Post-Anesthesia Care Unit (PACU)	
3.59 The PACU has the necessary equipment to monitor and resuscitate patients.	I
3.60 The PACU has qualified nurses available 24/7 as needed during the patient's post-anesthesia recovery phase.	I
3.61 If the PACU is covered by a call team from home, there is documentation by the PIPS program that nurses are available and delays are not occurring.	II
Radiology	
3.62 Conventional radiography and CT services are available in-house 24/7.	I
3.63 MRI capability is available in-house 24/7 or on-call within 60 minutes. There is documentation by the PIPS program that technicians are available and delays are not occurring.	I
3.64 Conventional catheter angiography and sonography services are available in-house 24/7.	I
3.65 The center has staff available on-site or via telemedicine within 30 minutes of notification for the interpretation of radiographs and performance of complex imaging studies 24/7 with an 80% achievement rate. The center has staff available on-site within 60 minutes of request for the performance of interventional procedures 24/7.	I
3.66 The center has an in-house radiographer.	I
3.67 Critical information is verbally communicated to the Trauma Team.	II
3.68 Diagnostic information is communicated in a written form and in a timely manner.	II
3.69 Changes in interpretation are monitored by the PIPS program.	II
3.70 Final reports accurately reflect communications, including changes between preliminary and final interpretations.	II
3.71 The center has 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.	II
3.72 A radiologist PIPS liaison or designee participates in both the Trauma PI and Trauma Operations Committees, and attends a minimum of 50% of these meetings.	II
Intensive Care Unit (ICU)	
3.73 The ICU has the necessary equipment to monitor and resuscitate patients.	I
3.74 Intracranial pressure monitoring equipment is available.	I
3.75 A qualified nurse is available 24/7 to provide care during the ICU phase.	I
3.76 The patient/nurse ratio does not exceed 2:1 for critically ill patients in the ICU.	II
3.77 The center has in-house physician coverage for ICU at all times.	II
3.78 Physician coverage of critically ill trauma patients is available 24/7.	I

3.79 Physicians covering critically ill trauma patients respond rapidly to urgent problems as they arise.	II
3.80 The trauma surgeon remains in charge of patient in the ICU.	I
3.81 The trauma surgeon is kept informed of and concurs with major therapeutic and management decisions made by the ICU team.	II
3.82 The surgical director or co-director of the ICU has appropriate training and experience for the role.	I
3.83 The surgical director of the ICU has obtained critical care training during residency or fellowship and has expertise in perioperative and post-injury care of injured patients.	II
3.84 The surgical director of the ICU has added qualifications in surgical critical care from the American Board of Surgery or meets the Alternate Pathway criteria* (Table 3) for critical care.	II
Other Surgical Specialists	
3.85 The center has a list of specialists who are promptly available from inside and outside of the center.	II
3.86 The center has the following surgical specialists:	I
a. Orthopedic surgery;	
b. Neurosurgery;	
c. Cardiac surgery;	
d. Thoracic surgery;	
e. Hand surgery;	
f. Plastic surgery;	
g. Obstetric and Gynecological surgery;	
h. Ophthalmology;	
i. Otolaryngology;	
j. Urology; and	
f. Microvascular surgery.	
Medical Consultants	
3.87 The center has a list of specialists who are promptly available from inside and outside of the center.	II
3.88 The center has the following medical consultants and their respective support teams:	II
a. Cardiology;	
b. Infectious disease;	
c. Pulmonary medicine;	
d. Gastroenterology; and	
e. Nephrology.	
Respiratory Therapy	
3.89 A respiratory therapist is available in-house 24/7 to care for trauma patients.	I

Laboratory	
3.90 Laboratory services are available 24/7 for the standard analysis of blood, urine, and other body fluids, including microsampling when appropriate. The blood bank is capable of blood typing and cross-matching.	I
3.91 The center has the capability for coagulation studies, blood gases, and microbiology.	I
3.92 The blood bank has an adequate amount of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, or appropriate coagulation factors to meet the needs of injured patients.	I
3.93 The center must have a transfusion protocol developed collaboratively between the trauma service and the blood bank.	I
3.94 The center must have a rapid reversal protocol in place for patients on anticoagulants.	II
Nutrition	
3.95 Nutrition support services are available.	II
Social Services	
3.96 The center has social services.	II
3.97 The center must screen all admitted trauma patients for alcohol misuse and provide a brief intervention if appropriate.	II
3.98 The center must have a protocol to screen patients at high risk for psychological sequelae with subsequent referral to a mental health provider when required.	II
3.99 The center must have a process in place to assess pediatrics for nonaccidental trauma (NAT).	II
Dialysis	
3.100 Acute hemodialysis is available.	II
Rehabilitation	
3.101 Rehabilitation consulting services, occupational therapy, speech therapy, and physical therapy are available during the acute phase of care.	I
3.102 The center has either rehabilitation services within its facility or a transfer agreement to a freestanding rehabilitation hospital.	II
4. Prehospital Trauma Care	
4.1 The center collaborates with EMS agencies and provides feedback on patient care.	II
5. Interhospital Transfer	
5.1 The decision to transfer an injured patient to a specialty care facility in an acute situation is based solely on the needs of the patient.	II
5.2 There are transfer agreements in place with specialty referral centers.	II
5.3 A mechanism for direct physician-to-physician contact is present for arranging patient transfer.	II
5.4 The center must have guidelines addressing which patients should be transferred and the safe transport of those patients.	II

6. Process Improvement and Patient Safety (PIPS)

6.1 The trauma PIPS program has a clearly defined relationship with the hospital's Performance Improvement/Quality Improvement Department.	II
6.2 The center must have a written and clearly defined PIPS plan that is updated annually. The program must ensure optimal care through continuous clinical review as well as operational procedures and must:	II
a. outline the organizational structure of the PIPS process;	
b. specify the processes of event identification;	
c. include audit filters;	
d. define levels of review; and	
e. specify the members of the PIPS Committee.	
6.3 The PIPS program is supported by a reliable method of internal data collection.	II
6.4 The PIPS program is, at minimum, comprised of two committees: Trauma Performance Improvement (PI) and Trauma Operations.	II
6.5 The Trauma PI Committee is a multidisciplinary committee that meets regularly to:	II
a. address patient care processes and outcomes;	
b. identify patient care opportunities for improvement; and	
c. reduce variability in care.	
6.6 The Trauma Operations Committee is a multidisciplinary committee that meets regularly to:	II
a. correct program deficiencies and optimize patient care;	
b. addresses system and processes issues; and	
c. includes all program-related services.	
6.7 The process of multidisciplinary review and analysis occurs at regular intervals to meet the needs of the program, takes attendance, and records minutes. All major disciplines within the center that are caring for trauma patients must be represented in the process.	II
6.8 The process demonstrates effective use of audit filters, problem identification, analysis, proposed corrective actions, resolution, and loop closure.	II
6.9 All trauma team activations must be categorized by priority of response and reported by number and percentage of total trauma patients.	II
6.10 The center must use a risk adjusted national benchmarking system to measure performance and outcomes against peers.	II
6.11 The PIPS program must use evidence-based clinical practice guidelines and protocols.	II
6.12 Deaths are categorized as mortality with opportunity for improvement or mortality without opportunity for improvement.	II
6.13 The PIPS program reviews the organ donation process and rate.	II
6.14 The center must work with sending and receiving facilities to provide and obtain feedback on transferred patients.	II

6.15 The center must work with EMS agencies to provide and obtain feedback on transported patients.	II
6.16 The PIPS program monitors and confirms the requirement for 80% compliance of surgeon's presence in the ED within 30 minutes of patient's arrival.	II
6.17 The center must have a diversion policy that provides notification for dispatch centers and EMS agencies when on divert and must track the occurrence of diversions.	II
6.18 The PIPS program must review the following metrics to ensure appropriateness of care, rationale, adverse outcomes, and identify opportunities for improvement:	II
a. delay of timely access to care, equipment, or interventions in all care areas;	
b. admissions;	
c. transfers;	
d. non-surgical services (NSS) with a goal of <10%; and	
e. over/under triage.	
6.19 There must be at least 0.5 FTE dedicated Performance Improvement (PI) personnel when the volume of registry patient entries exceeds 500 patients. When annual volume exceeds 1,000 registry patient entries, the trauma center must have at least 1.0 FTE PI personnel.	II
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8. Time Sensitive Emergency (TSE) Registry	
8.1 Data is submitted to the Idaho TSE Registry per Idaho Code 46-920. At least 80% of cases are submitted within 180 days of hospital discharge.	I
8.2 There is a process in place to verify that TSE Registry data is accurate and valid.	II
8.3 The trauma program ensures that registry data confidentiality measures are in place.	II
8.4 There must be at least 0.5 FTE dedicated to the trauma registry per 200 to 300 annual patient entries.	II
8.5 Staff members who have a registry role in data abstraction and entry, injury coding, ISS calculation, data reporting, or data validation for the trauma registry must fulfill all of the following requirements:	II
a. participate in and pass the most recent version of the AAAM's Abbreviated Injury Scale (AIS) course;	
b. participate in a trauma registry course that includes all of the following content: abstraction, data management, reports/report analysis, data validation, and HIPPA; and	
c. participate in an ICD-10 course or an ICD-10 refresher course every five years.	
8.6 The Trauma Registrars must accrue at least 24 hours of trauma-related continuing education during the verification cycle.	II
9. Outreach & Education	
9.1 The center is engaged in trauma-related public outreach and education.	II

9.2 The center provides a mechanism for trauma-related education for clinical staff involved in trauma care.	II
9.3 The center provides an ATLS course at least annually.	II
10. Prevention	
10.1 The center participates in traumatic injury prevention and bases activities on local data. It is recommended to have a fall prevention program, but not required.	II
10.2 The center must have someone in a leadership position that has injury prevention as part of their job description.	II
10.3 The center demonstrates collaboration with or participation in national, regional, and/or state injury prevention programs.	II
11. Disaster Planning and Management	
11.1 The center has a disaster plan described in its Disaster Manual.	II
11.2 A surgeon from the trauma panel is a member of the center's disaster committee.	II
11.3 Drills that test the individual hospital's disaster plan are conducted at least every 6 months.	II
12. Organ Procurement	
12.1 The center has an established relationship with a recognized Organ Procurement Organization (OPO).	II
12.2 There are written policies for triggering notification of the OPO.	II
12.3 The center has written protocols for declaration of brain death.	II
13. Research	
13.1 The center meets the research requirements of one of the two options listed in Table 2.	II
13.2 The administration of the trauma center demonstrates support of the research program.	II

** External continuing education does not include in-house: in-service, case-based learning, grand rounds, internal trauma symposia, and/or publications disseminating information gained from a local conference.