## **Trauma Designation Performance Improvement Report**

Facility:
Location:
Date:
Reviewers:

The review team does their best to capture the essence of your trauma care program in an unbiased and factual manner. This report is based on the information in the PRQ, the interviews with participants during the site review, and the reviewer's professional expertise. Although the team does their best to be conclusive and comprehensive during the exit debriefing onsite, they do warrant the ability to modify the findings prior to submission to State Trauma Care Committee (STCC). The STCC Designation Subcommittee makes the final recommendation to Dept. of Public Health and Human Services, EMS & Trauma Systems, who ultimately issue the definitive designation status.







# Below is the Performance Improvement Rating & Requirements Framework used to evaluate your facility's ability to comply with the Facility Designation Criteria requirements.

| 4 | Strong/Excellent<br>(Strengths)                               | High level of capability with sustained and consistently high levels of performance     Organizational learning and external benchmarking used to continuously evaluate and improve performance     Systems in place to monitor and build capability to meet future demands  |
|---|---|--|
| 3 | Effective/Good  | Capable     Delivering expectations with examples of high levels of performance     Comprehensive and consistently good organizational practices and systems in place to support effective program     Evidence of attention given to assessing future demands and capability needs  |
| 2 | Needs<br>Development<br>(Opportunities<br>For<br>Improvement) | Developing     Adequate current performance-concerns about future performance     Beginning to focus on system processes, consistency, dependability, evaluation and improvement     Areas of underperformance or lack of capability are recognized by the agency     Strategies or action plans to lift performance or capability or remedy deficiencies are in place and being implemented |
| 1 | Weak (Criterion<br>Deficiency)                                | Unaware or limited capability  • Significant area(s) of critical weakness or concern in terms of delivery and/or capability  • Agency has limited or no awareness of critical weaknesses or concerns  • Strategies or plans to respond to areas of weakness are either not in place or not likely to have sufficient impact  |
| 0 | Not Rated/Not<br>Applicable                                   | There is either:  No evidence upon which a judgement can be made; or The criteria is not applicable  |

#### **REQUIREMENT**

- **E Essential Criteria for designation of this level of trauma center**
- D Desired Criteria are not required for designation but considered advantageous

| Introducti | ion:  |   |
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| nospitai C | Overview:   |   |
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| Trauma P   | rogram Organization & Governance:   |   |
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|            | TRAUMA FACILITY CRITERIA  |   |
|            | INSTITUTIONAL & ADMINISTRATIVE COMMITMENT   |   |
|            | Facility  |   |
|            | Demonstrated continuous institutional commitment/resolution by the hospital Board of Directors and    | Е |
|            | Medical Staff within the last three years to maintain the human and physical resources to optimize    | E |
|            | trauma patient care provided at the facility.   |   |
|            | The trauma program has adequate administrative support and defined lines of authority that ensure     | Е |
|            | comprehensive evaluation of all aspects of trauma care.   | L |
|            | Hospital administration must demonstrate support for the research program (i.e., research equipment,  | Е |
|            | biostatistical support, salary support, etc.)   | L |
|            | PROGRAM ORGANIZATION & GOVERNANCE   |   |
|            |   |   |
|            | Trauma Service  | Б |
|            | A clinical service recognized in the medical staff structure that has the responsibility for the      | E |
|            | oversight of the care of the trauma patient.  |   |
|            | Specific delineation or credentialing of privileges for the medical staff on the Trauma Service must  |   |
|            | OCCUIT.   | E |
|            | Must care for at least 1,200 trauma patients annually who meet National Trauma Data Standard          | E |
|            | (NTDS) inclusion criteria or 240 NTDS patients with an Injury Severity Score (ISS) greater than 15    |   |
|            | per year.   |   |
|            | Trauma Program  | Г |
|            | There is an identifiable trauma program that has adequate administrative support and defined lines of | E |
|            | authority that ensure comprehensive evaluation of all aspects of trauma care.                         |   |
|            | Trauma Team   |   |
|            | A team of care providers to provide initial evaluation, resuscitation and treatment for all injured   | E |
|            | patients meeting trauma system triage criteria. The members of the team must be identified and have   |   |
|            | written roles and responsibilities.   |   |
|            | The trauma team is organized and directed by a general surgeon with demonstrated competence in        | Е |

trauma care who assumes responsibility for coordination of overall care of the trauma patient.

There are clearly written criteria for trauma team activation that are continuously evaluated by the

Criteria for tiered activations must be clearly defined. Highest level of activation must include:

multidisciplinary trauma committee.

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| <ul> <li>Confirmed BP less than 90 mm Hg at any time in adults, and age-specific hypotension in children;</li> <li>Gunshot wounds to the neck, chest, or abdomen</li> <li>GCS less than 9 (with mechanism of trauma);</li> <li>Receipt of transfer patients from another hospital who require ongoing blood transfusion;</li> <li>Patients intubated in the field and directly transported to the trauma center;</li> <li>Patients who have respiratory compromise or need an emergent airway; and</li> <li>Receipt of transfer patients from another hospital with ongoing respiratory compromise (excludes patients intubated at another facility who are now stable from a respiratory standpoint).</li> </ul>  |                |
|--|----------------|
| The general surgeon is expected to be present in the ED upon patient arrival for all patients meeting hospital specific criteria for the highest level of trauma team activation, given sufficient advance notification or within 15 minutes of notification 80% of the time.  | Е              |
| Trauma Medical Director  |                |
| Board-certified or board eligible surgeon, credentialed to provide trauma care, and participates on trauma call panel. Serve as the director of a single trauma program. Holds current ATLS certification. The trauma director has the authority to affect all aspects of trauma care including oversight of clinical trauma patient care, recommending trauma service privileges, development of clinical care guidelines, coordinating performance improvement, correcting deficiencies in trauma care, and verification of continuing trauma education.   | Е              |
| TMD is an ATLS instructor or course director.  | Е              |
| The trauma medical director must provide evidence of 36 hours in 3 years of verifiable external trauma-related CME and maintain successful completion of most recent edition of ATLS course.  TMD must attend 60% of all multidisciplinary trauma committee meetings. This obligation cannot be delegated.   | E <sup>2</sup> |
| TMD must hold active membership in at least one regional, state, or national trauma organization and have attended at least one meeting during the last 3 years.   | Е              |
| TMD must attend at least one state trauma meeting during the last 3 years (examples include Trauma Systems Conference, Rocky Mountain Rural Trauma Symposium, Rimrock Trauma Conference, Spring Fever Conference etc.)   | E              |
| Trauma Coordinator/Trauma Program Manager  |                |
| A 1.0 full-time dedicated Registered Nurse or Advanced Practice Clinician working in concert with the trauma director, with responsibility for organization of services and systems necessary for a multidisciplinary approach to care for the injured. Assumes day-to-day responsibility for process and PI activities for any nursing and ancillary personnel involved in the care of trauma patients. Activities include completion of the on-line trauma coordinator course, clinical oversight, with periodic rounding on admitted trauma patients, provision of clinical trauma education and prevention, performance improvement, provision of feedback to referring facility trauma programs, supervision of the trauma registry, and development of policies. Must be involved in local, regional and the state trauma system activities. Reporting structure must include the TMD to ensure an opportunity to provide leadership and partnership for the benefit of the program. | E              |
| Must provide evidence of 36 hours of trauma related continuing education during the last 3 years.  | Е              |
| Hold current membership in a national or regional trauma organization.   | Е              |
| Trauma Registrar/Registry  |                |
| Designated trauma registrar working in concert with the trauma coordinator, with responsibility for data abstraction, entry into the trauma registry and ability to produce a variety of reports routinely and upon request. At least 0.5 FTE dedicated to the trauma registry per 200-300 annual patient entries. (Entries are defined as all patients that meet NTDS and state-specific inclusion criteria. There must be sufficient dedicated hours for this position to complete a minimum of 80% of patient records within 60 days of the patient discharge date.   | Е              |
| All staff members who have a registry role in data abstraction and entry, injury coding, ISS calculation, data reporting or data validation for the registry must: (1) complete the most recent version of the AAAM's Abbreviated Injury Scale (AIS) course within 12 months of hire; and (2) participate in a trauma registry course and ICD-10 course or refresher course every 5 years.  Trauma Registrar (at least one) must currently be a Certified Abbreviated Injury Scale Specialist  | E              |
| (CAISS)  |                |

|              | Active and timely participation in the State Trauma Registry (cases should be current per ARM                           | Е |
|--------------|---|---|
|              | 37.104.3014, which is 60 days following close of the quarter).  |   |
|              | Trauma Registry data must be collected in compliance with the NTDS inclusion criteria and Montana                       | E |
|              | Trauma Registry specific criteria.  |   |
|              | Registry data must have been submitted to the TQP Data Center (if ACS verified) and Montana                             | E |
|              | Trauma Registry in the most recent call for data.   | _ |
|              | Must have a written data quality plan that details a process for measuring, monitoring, identifying and                 | E |
|              | correcting data quality issues and ensures data is fit for use. Requires at least a quarterly review of                 |   |
|              | data quality.   |   |
|              | Trauma Registrar must accrue at least 24 hours of trauma-related continuing education (CE) during the previous 3 years. | E |
|              | Trauma Committees   |   |
|              |   | Г |
|              | Multidisciplinary Trauma Committee functions with a multidisciplinary committee which includes                          | E |
|              | representation from all trauma related services to assess and correct global trauma program process                     |   |
|              | issues. This committee is chaired by the TMD with the major focus on PI activities, policy                              |   |
|              | development, communication among all team members, development of standards of care, education,                         |   |
|              | outreach programs, and injury prevention. The committee oversees the implementation of the process                      |   |
|              | which includes all program related services, meets regularly, takes attendance, maintains minutes,                      |   |
|              | and works to correct overall program deficiencies to optimize patient care.   |   |
|              | Multidisciplinary Trauma Peer Review requires attendance of medical staff active in trauma                              | E |
|              | resuscitation, including the trauma coordinator, to review systemic issues and/or provider issues, as                   |   |
|              | well as proposed improvements to the care and safety of the injured. Must meet regularly and                            |   |
|              | document comprehensive minutes that capture the essence of the discussion and consensus of the                          |   |
|              | participants and documenting loop closure. Must systematically review mortalities, significant                          |   |
|              | complications, and process variances associated with unanticipated outcomes and determine                               |   |
|              | opportunities for improvement.  |   |
|              | The trauma medical director ensures dissemination of information and findings from the trauma peer                      | E |
|              | review meetings to the medical providers not attending the meeting.   |   |
|              | Must adopt/utilize evidence-based clinical practice guidelines/protocols/algorithms that are reviewed                   | Е |
|              | at least every three years.   |   |
|              | Trauma System Participation   |   |
|              | There is active involvement by the hospital trauma program staff in state/regional trauma system                        | E |
|              | planning, development, and operation.   |   |
|              | Participation in the statewide trauma system including participation in at least 50% of Regional                        | E |
|              | Trauma Advisory Committees; support of regional and state performance improvement programs;                             |   |
|              | and submission of data to the Montana State Trauma Registry.  |   |
| Emergenc     | y Medical Services/Prehospital:   |   |
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| Personnel    | & Service Resources:  |   |
| 1 CI SUITICI | & Service Resources.  |   |
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| physician/provider from the ED or trauma program must participate in the prehospital Performance   |       |
| Improvement (PI) process, including assisting EMS agency medical directors in the development and  |       |
| adoption of prehospital care protocols relevant to care of the trauma patient.   |       |
| The trauma program reviews pre-hospital protocols and policies related to care of the injured specialty                                    | Е     |
| patient: Pediatrics, Geriatrics, Obstetrical   |       |
|  | Е     |
| and timely trauma team activation.   |       |
| EMS has representation on the multidisciplinary trauma committee or documentation of involvement where                                     | Е     |
| perspective and issues are presented and addressed.  |       |
|  | Е     |
| EMS is provided feedback through the trauma performance improvement program, which includes accuracy                                       | Е     |
| of triage and provision of care, outcomes of their patients and any potential opportunities for improvement in                             |       |
| initial care.  |       |
|  | Е     |
| PERSONNEL & SERVICE RESOURCES  |       |
| General / Trauma Surgeon   |       |
|  | Е     |
| Board-certified or board eligible  | $E^1$ |
|  |       |
|  | Е     |
| v 1  | Е     |
|  | E     |
| meetings.  |       |
|  | E     |
| an accredited ACGME program.   |       |
|  | E     |
| process in place to demonstrate prompt general surgeon availability.   |       |
|  | E     |
| time frame for trauma patient resuscitation. The trauma performance improvement process will monitor each                                  |       |
| surgeon's notification and response times.   |       |
|  | E     |
| which they are responsible and must be immediately available throughout the entire procedure.  |       |
|  | E     |
| approved by the TMD.   |       |
| Emergency Medicine   |       |
| Physicians must be board-certified or board eligible in emergency medicine.  | $E^1$ |
| Emergency Department physician medical director must be board-certified or board eligible.   | $E^1$ |
| Emergency Department covered by medical providers qualified to care for patients with traumatic injuries                                   | Е     |
| who can initiate resuscitative measures.   |       |
|  | Е     |
| Must remain current with board certification to satisfy CME requirements. If functioning as an ED provider                                 | Е     |
| or providing care in the ED for patients outside of current board-certified specialty and/or are an Advanced                               |       |
| Practice Practitioner, current ATLS is required.   |       |
|  |       |
|  | Е     |
| Attendance of an emergency physician representative at a minimum of 50% of the trauma peer review  | $E^2$ |
| committee meetings.  |       |
| Anesthesia – MD or CRNA  |       |
| Board certified or board eligible anesthesiologist trauma liaison.   | Е     |
|  | Е     |
|  | Е     |
|  | E     |
| management must be identified and reviewed to determine reasons for delay, adverse outcomes and  | -     |
|  |       |
|  | E     |
| opportunities for improvement.  Anesthesia services must be available within 15 minutes of request, and attending anesthesiologist must be | Е     |

| nrecent u | ithin 30 minutes of request of all operations.   |   |
|-----------|--|---|
|           | <b>Prosurgery</b> E*: Applies only to Area Trauma Hospitals with neurotrauma capabilities.               |   |
| Neu       | <b>Tosaigery</b> L <sup>*</sup> . Applies only to Area Trauma Hospitals with neurotrauma capabilities.   |   |
| Board-ce  | rtified or board-eligible neurosurgeons continuously available for care of the neurotrauma patient.      | I |
|           | urse completion.   | I |
|           | ain current in board-certification to satisfy CME requirements.  | I |
|           | rtified or board eligible neurosurgical trauma liaison.  | I |
|           | ce of a neurosurgery representative at a minimum of 50% multidisciplinary peer review committee          | E |
| meetings  |  | 1 |
| D         | gical evaluation must occur within 30 minutes for any patient with severe TBI (GCS <9), moderate         | I |
|           | S 9-12) with evidence of intracranial mass lesion, neurologic deficit from spinal cord injury, or at the | 1 |
|           | of the trauma surgeon.   |   |
|           | e a neurotrauma contingency plan for when neurosurgery capabilities are encumbered or                    | I |
| overwhel  |  |   |
|           | edic Surgery E*: Applies only with orthopedic capabilities   |   |
|           | tified or board eligible orthopedic surgeons continuously available for the care of trauma patients      | I |
|           | have a contingency plan for when orthopedic trauma capabilities become burdened or                       |   |
| overwhel  |  |   |
|           | urse completion.   | Ι |
|           | ain current in board-certification to satisfy CME requirements.  | I |
|           | rtified or board eligible orthopedic trauma liaison.   | I |
|           | ic trauma liaison must have completed an orthopedic traumatology fellowship approved by the              | I |
|           | dic Trauma Association.  |   |
| Attendan  | ce of an orthopedic surgery representative at a minimum of 50% of the trauma peer review                 | I |
|           | e meetings.  |   |
| Orthoped  | ic surgeon must be at bedside within 30 minutes of request for any patient that is hemodynamically       | I |
| unstable  | due to pelvic fracture, has suspected compartment syndrome, fractures/dislocations at risk for           |   |
| avascular | necrosis or vascular compromise, or at the discretion of the trauma surgeon.                             | L |
|           | e treatment guidelines in place for orthopedic injuries, including pelvic ring fractures, long bone      | I |
|           | open extremity fractures, and hip fractures in geriatric patients.                                       | L |
| Radiolo   | ogist  |   |
|           | tified or board eligible.  |   |
|           | rtified or board eligible radiologist trauma liaison.  | I |
| Attendan  | ce of a radiologist representative at a minimum of 50% of the trauma peer review committee               | Ι |
| meetings  |  | L |
|           | gist must have access to patient images and be available for imaging interpretation, in person or by     | I |
|           | thin 30 minutes of request.  | L |
|           | ntional Radiology  | L |
|           | human and physical resources continuously available to provide endovascular or interventional            | I |
|           | procedure for hemorrhage control within 60 minutes of request and arterial puncture.                     | L |
|           | Care Physician   |   |
|           | rtified or board-eligible critical care physician.   | I |
|           | are surgical director board-certified or board-eligible in surgical critical care and actively           | I |
|           | es in Critical Care administration. May be the TMD.  |   |
|           | ce of a critical care physician representative at a minimum of 50% of the trauma peer review             | 1 |
|           | e meetings.  | L |
|           | ed Practitioners   |   |
|           | d practitioners who participate in the initial evaluation of trauma patients must demonstrate currency   | I |
| AT        | LS provider.   |   |

| Geriatric Provider  |   |
|---|---|
| A geriatric provider trauma liaison (may be a geriatrician, physician with expertise and a focus in geriatrics, | Е |
| or an advanced practice provider with certification and expertise in geriatrics).                               |   |
| Additional Medical Specialists  |   |
| Pain Management (with expertise to perform regional nerve blocks)   | Е |
| • Physiatry   | E |
| Psychiatry  | E |
| Institutionally defined, response parameters for consultants addressing time-critical injuries should be        | Е |
| determined and monitored. Variances should be documented and reviewed regarding reason for delay,               |   |
| opportunities for improvement and corrective actions.   |   |
| *Must have continuous availability of the following surgical specialties:                                       |   |
| *Cardiothoracic surgery   | E |
| Craniofacial expertise  | E |
| *Hand surgery   | Е |
| *Obstetric/Gynecologic surgery  | E |
| *Ophthalmic surgery   | Е |
| *Otolaryngology   | Е |
| *Plastic surgery  | Е |
| *Replantation Services (if not continuously available must have a triage and transfer process with a replant    | E |
| center).  |   |
| Soft tissue coverage including microvascular for free flap coverage.  | Е |
| *Urologic surgery   | Е |
| *Vascular surgery   | E |
| *Must have continuous coverage of the following medical specialists:  |   |
| * Cardiology  | Е |
| *Gastroenterology   | Е |
| *Internal medicine or pediatrics  | Е |
| *Infectious Disease   | Е |
| *Nephrology   | Е |
| *Pulmonary Medicine   | Е |

| mergency Dept: |  |
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| R/PACU:        |  |
| WIACU.         |  |
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| FACILITIES/RESOURCES/CAPABILITIES  |                |
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| Emergency Department   |                |
| A board-certified or board-eligible emergency physician must be present in the emergency department at all times.  | E <sup>1</sup> |
| Emergency Department staffing shall ensure nursing coverage for immediate care of the trauma patient.  | Е              |
| Trauma nursing education: Maintenance of TNCC/ATCN or equivalent.  | Е              |
| Trauma nursing education: 6 hours of verifiable trauma-related education annually or trauma-related skill competency through internal or external educational process. | Е              |
| Nursing personnel to provide continual monitoring of the trauma patient from hospital arrival to disposition to ICU, OR, floor or transfer to another facility.        | Е              |
| Equipment for resuscitation for patients of ALL AGES   |                |
| Airway control and ventilation equipment including laryngoscope and endotracheal tubes, bag-mask resuscitator and oxygen source  | Е              |
| Rescue airway devices  | Е              |
| Pulse oximetry   | Е              |
| Suction devices  | Е              |
| End-tidal CO <sup>2</sup> detector   | Е              |
| Cardiac monitor and defibrillator  | Е              |
| Internal paddles   | Е              |
| Waveform capnography   | Е              |
| Standard IV fluids and administration sets   | Е              |
| Large bore intravenous catheters   | Е              |

| Sterile surgical sets for:   |        |
|--|--------|
| Airway control/cricothyrotomy  | Е      |
| Thoracostomy (chest tube insertion)  | Е      |
| Central line insertion   | Е      |
| Thoracotomy  | Е      |
| Peritoneal lavage or ability to do FAST ultrasound exams   | E      |
| Arterial pressure monitoring   | E      |
| Ultrasound availability  | E      |
| Drugs necessary for emergency care   | E      |
| Cervical stabilization collars   | E      |
| Pelvic stabilization method  | E      |
|  | E      |
| Pediatric equipment appropriately organized.   |        |
| Current pediatric length-based resuscitation tape  | E<br>E |
| Intraosseous Insertion Device  | E      |
| Thermal control equipment:   | -      |
| Blood and fluids   | E      |
| Patient  | E      |
| Resuscitation room   | E      |
| Rapid fluid infuser system   | Е      |
| Communication with EMS vehicles  | Е      |
| Operating Room (OR)  |        |
| Adequately staffed and available in a timely fashion 24 hours/day.                                     | Е      |
| OR booking policy that defines target for timeliness to the OR based on level of urgency and trauma    | Е      |
| priorities.  |        |
| OR must be adequately staffed and available within 15 minutes. If the first OR is occupied, an         | Е      |
| additional OR must be staffed and available.   |        |
| Dedicated OR for fracture care of non-emergent orthopedic trauma.                                      | Е      |
| Anesthesia services must be available in-house 24 hours/day.   | Е      |
| Trauma performance improvement will monitor OR availability and on-call surgical staff response        | Е      |
| times. Any case which exceeds the institutionally agreed upon response time must be reviewed to        | _      |
| identify reasons for the delay and opportunities for improvement.                                      |        |
| Trauma-specific training opportunities, applicable to the specialty, are available for all RNs working | D      |
| in the OR.   |        |
| Age-specific Equipment   |        |
| Equipment for monitoring and resuscitative   | Е      |
| Thermal control equipment:   | L      |
| Blood and fluids   | Е      |
| Patient  | E      |
| Operating room   | E      |
| X-ray capability   | E      |
| Endoscopes, bronchoscopes  | E      |
|  | E      |
| Craniotomy instruments   |        |
| Equipment for long bone and pelvic fixation  | Е      |
| Rapid fluid infuser system   | Е      |
| Post-Anesthetic Recovery Room (PACU) (ICU is acceptable)   |        |
| Registered nurses available 24 hours/day   | E      |
| Trauma-specific training opportunities, applicable to the specialty, are available for all RNs working | E      |
| in the PACU.   |        |
| Age-specific Equipment   |        |
| Equipment for monitoring and resuscitation   | Е      |
| Intracranial pressure monitoring equipment   | E      |
| Pulse oximetry   | Е      |
| Thermal control equipment:   |        |
| Blood and fluids   | E      |
| Patient  | E      |
| <br>   |        |

| Intensive Care Unit (if available)   Director must be board certified in surgical critical care.   I Trauma surgeon remains in charge of the multisystem trauma patient in the ICU.   I ICU physicians immediately available within 15 minutes of request.   I Nurse-to-patient ratio in the ICU must be 1:1 or 1:2 depending on patient acuity.   Registered nurses with 6 hours trauma education annually.   I Registered nurses with 6 hours trauma education annually.   I Trauma patients requiring ICU admission must be admitted to, or be evaluated by, a surgical service pursuant to hospital policy.   Equipment for monitoring and resuscitation of trauma patient.   I Cerebral monitoring equipment.   I Cardiopulmonary bypass equipment must be immediately available when required or a contingency plan must exist to provide emergency cardiac surgical care.   Pulmonary artery monitoring equipment   I Blood and fluids  | E E E E E E E E E E E E E E E E E E E |
|--|---------------------------------------|
| Trauma surgeon remains in charge of the multisystem trauma patient in the ICU.  ICU physicians immediately available within 15 minutes of request.  Nurse-to-patient ratio in the ICU must be 1:1 or 1:2 depending on patient acuity.  Registered nurses with 6 hours trauma education annually.  Trauma patients requiring ICU admission must be admitted to, or be evaluated by, a surgical service pursuant to hospital policy.  Equipment for monitoring and resuscitation of trauma patient.  Cerebral monitoring equipment.  Cardiopulmonary bypass equipment must be immediately available when required or a contingency plan must exist to provide emergency cardiac surgical care.  Pulmonary artery monitoring equipment  Thermal control equipment:  Blood and fluids  Patient  Pediatric Services  Adult centers that care for 100 or more injured children under age 15 years of age who meet trauma registry inclusion requirements must have the following:  Pediatric emergency department area  Pediatric intensive care area  Appropriate resuscitation equipment to care for all ages of pediatric patients  Must have a process in place to assess children for non-accidental trauma  Emergency Department must evaluate their pediatric readiness and have a plan to address any deficiencies. Pediatric readiness refers to the infrastructure, administration and coordination of care, personnel, pediatric-specific policies, and equipment to ensure the center is prepared to provide care to an injured child.  Respiratory Therapy Services  In-house respiratory therapist continuously available (24/7/365)  Renal Replacement Therapy Services  Renal replacement therapy available to support patients with acute renal therapy.  Radiological Services  Availablity of the following services 24 hours/day within time frame specified:  Conventional radiography (15 minutes)   | E E E E E E E E E E E E E E E E E E E |
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| Conventional radiography (15 minutes)  |                                       |
|  | 5                                     |
| Computed Tomography (CT) (15 minutes)  |                                       |
|  |                                       |
| Point of Care Ultrasound (15 minutes)  |                                       |
| Interventional radiologic procedures (1 hour)  |                                       |
| MRI (2 hours)  |                                       |
| In-house radiology technologist.   |                                       |
| Must have a mechanism to remotely view radiographic images from referring hospitals within   | 3                                     |
| their regional catchment area.   |                                       |
| Radiologist diagnostic information is communicated in a written form in a timely manner and E  | 3                                     |
| includes evidence that critical findings were communicated to the trauma team.   |                                       |
| Final radiology reports accurately reflect communications, including changes between   | 3                                     |
| preliminary and final interpretations.   |                                       |
| Documentation of the final interpretation of CT scans must occur no later than 12 hours after  | 3                                     |
| completion of the scan.  |                                       |
| Angiography  |                                       |
| Ultrasound   | Ξ                                     |
| Computed Tomography E  | E<br>E                                |
| In-house CT technologist E   | E<br>E                                |
| CT technologist available in-house or on-call 24 hours/day   | E<br>E                                |
| CT has pediatric dose reduction protocols/policies   | E<br>E<br>E                           |
| Magnetic Resonance Imaging E   |                                       |

|       | MRI technologist in-house or on-call 24 hours/day  | Е  |
|-------|--|----|
|       | Must routinely monitor on-call radiology, CT and MRI technologist institutionally agreed upon  | Е  |
|       | response time and review reasons for any delay and opportunities for improvement.  |    |
|       | Clinical Laboratory Service  |    |
|       | In-house laboratory technician   | Е  |
|       | Must routinely monitor on-call technician institutionally agreed upon response time and review for reasons for any delay and opportunities for improvement.              | Е  |
|       | Standard analysis of blood, urine, and other body fluids, including micro-sampling when appropriate  | Е  |
|       | Blood typing and cross-matching  | Е  |
|       | Coagulation Studies  | Е  |
|       | Massive or Rapid Transfusion Policy (clinical and laboratory) if blood is available at the facility  | Е  |
|       | The blood bank has an adequate supply of packed red blood cells, plasma, platelets, and cryoprecipitate or coagulation factors to meet the needs of the injured patient. | Е  |
|       | Process of care for rapid reversal of anticoagulation  | Е  |
|       | Blood gases and pH determinations  | E  |
|       | Microbiology   | E  |
|       | Operating microscope available 24 hours/day  | E  |
|       | Drug and alcohol screening   | E  |
|       | Allied Health-Services   | L. |
|       | Nutrition Support  | Е  |
|       | Physical Therapy (7 days/week)   | E  |
|       | Occupational Therapy (7 days/week)   | Е  |
|       | Social Services (7 days/week)  | Е  |
|       | Speech Therapy   | Е  |
| Perfo | mance Improvement:   | •  |

| Trauma | <b>Education:</b> |
|--------|-------------------|

### **Injury Prevention & Disaster Preparedness:**

| PERFORMANCE IMPROVEMENT  |   |
|--|---|
| There is a comprehensive, written performance improvement (PI) plan outlining the PI process, organizational structure, event identification, list of audit filters and defined levels of review. Needs to be reviewed annually. | Е |

| 1 | The Trauma PI program must be independent of the hospital or departmental PI program, but it must  | Е                          |
|---|--|----------------------------|
|   | report to the hospital or departmental PI program.  Must have documented evidence of event identification, effective use of audit filters, demonstrated  | Е                          |
|   | loop closure, and attempts at corrective actions and strategies for continued improvement over time.   |                            |
|   | There is a process to identify the trauma patient population for performance improvement review.   | Е                          |
|   | At least 0.5 FTE dedicated PI personnel (if annual volume exceeds 500 patient entries) and 1.0 FTE if volume >1000 patient entries that meet NTDB and State inclusion criteria   | Е                          |
|   | The results of issue analysis will define corrective action strategies or plans that are documented.   | Е                          |
|   | Use of telehealth for collaborative care of the trauma patient requires inclusion of the off-site service in the PI process.   | Е                          |
|   | All nonsurgical services admissions should be subject to individual case review to determine   | Е                          |
|   | rationale for admission onto a non-surgical service, adverse outcomes, and opportunities for improvement.  |                            |
|   | Neurotrauma care should be routinely evaluated for compliance with the Brain Trauma Foundation Guidelines.   | Е                          |
|   | All trauma deaths and transfers to hospice must be reviewed to identify opportunities for  | Е                          |
|   | improvement.   | L                          |
|   | Deaths must be categorized as either:  |                            |
|   | Mortality with opportunity for improvement; or   |                            |
|   | Mortality without opportunity for improvement.   |                            |
|   | Must have standardized treatment protocols for geriatric trauma management.  | Е                          |
|   | All transfers of trauma patients to a higher level of care both within the hospital and via interfacility  | Е                          |
|   | transfer must be routinely monitored, and identified cases reviewed to determine rationale for   |                            |
|   | transfer, adverse outcomes, and opportunities for improvement.   | <u></u>                    |
|   | Must have protocols and processes in place that determine the rehabilitation needs and services  | Е                          |
|   | required during the acute inpatient stay and to determine the level of care patients require after   |                            |
|   | discharge.   |                            |
|   | The trauma program participates in benchmarking with other facilities of the same designation level  | E                          |
|   | to identify how the trauma center performs compared to others.   |                            |
|   | PATIENT CARE EXPECTATIONS & PROTOCOLS  |                            |
|   | Diversion  |                            |
|   | A written policy and procedure to divert patients to another designated trauma care service when the   | Е                          |
|   |  |                            |
|   | Tacility's resources are temporarily unavailable for optimal trauma patient care. Must include a   |                            |
| 1 | facility's resources are temporarily unavailable for optimal trauma patient care. Must include a process for notification of affected EMS services and outlying facilities.  |                            |
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|   |  | Е                          |
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| acute care hospital or specialty center must be subjected to performance improvement case review.      |          |
| Signed and current inter-facility transfers agreements for transfer of special population trauma       | Е        |
| patients to a higher level of care.  |          |
| Burn Care – Organized  |          |
| In-house or transfer agreement with Burn Center  | Е        |
| Acute Spinal Cord Management   |          |
| In-house or transfer agreement with Comprehensive/Regional Trauma Center                               | Е        |
| Pediatrics   |          |
| In-house or transfer agreement with Comprehensive/Regional or Area Trauma Center with pediatric        | Е        |
| trauma care capability or a Pediatric Hospital.  | -        |
| CONTINUING EDUCATION / RESEARCH  |          |
|  |          |
| Clinical trauma education provided by hospital for:  | -2       |
| Physicians, physician assistants & nurse practitioners   | $E^2$    |
| Nurses   | $E^2$    |
| Allied health personnel  | $E^2$    |
| Prehospital personnel  | $E^2$    |
| Must provide trauma orientation to new nursing and provider staff caring for trauma patients.          | Е        |
| Research   |          |
| All residents on the trauma service must be from an Accreditation Council for Graduate Medicine        | Е        |
| Education (ACGME) accredited program.  | L        |
| Demonstrate commitment to postgraduate training by having residency rotations in trauma with a         | Е        |
|  | E        |
| defined trauma curriculum. Rotations in general surgery, orthopedic, neurosurgery and emergency        |          |
| medicine with sufficient volume to meet competency requirements set forth by ACGME.                    | _        |
| Research portfolio should be balanced to reflect the diverse aspects of trauma care and include peer-  | Е        |
| reviewed articles published in journals that results from work related to the trauma center or the     |          |
| trauma system in which the center participates.  |          |
| INJURY PREVENTION & DISASTER PRPAREDNESS   |          |
| Must provide public trauma/injury prevention education.  | Е        |
| The trauma center implements at least two activities over the course of the 3-year designation period  | Е        |
| with specific objectives and deliverables that address separate major causes of injury in the          |          |
| community.   |          |
| The trauma center has a designated injury prevention coordinator or spokesperson (can be the trauma    | Е        |
| coordinator/trauma program manager for ATH, CTH & TRF), with adequate hours to perform duties.         |          |
| Identified injury prevention professional must be someone other than the trauma program manager or     | Е        |
| PI personnel.  | L        |
|  | Е        |
| Injury prevention priorities are based on local/state data.  | Е        |
| Demonstrates evidence of partnerships with community organizations to support injury prevention        | E        |
| efforts.   | _        |
| Monitor progress / effect of prevention program  | Е        |
| Must screen at least 80% of all admitted patients over age 12 for alcohol misuse with a validated tool | Е        |
| or routine blood alcohol content testing.  | <u> </u> |
| At least 80% of patients who have screened positive for alcohol misuse must receive a brief            | Е        |
| intervention by trained staff and must be documented.  |          |
| There is a protocol to screen patients at high risk for psychological sequelae with referral to mental | Е        |
| health provider.   |          |
| Disaster Preparedness  |          |
| There is a written emergency operation plan that is updated and exercised routinely.                   | Е        |
| Ability to decontaminate single and multiple injured patients prior to entry to the facility.          | Е        |
| Participation in regional disaster/emergency management activities including Local Emergency           | E        |
| Planning Committee (LEPC), health care coalitions, and regional mass casualty exercises.               | -        |
| The trauma surgeon liaison to the disaster committee must complete the Disaster Management and         | Е        |
| Emergency Preparedness Course at least once.   | L        |
|  | E        |
| A trauma surgeon from the trauma panel must be included as a member of the hospital's disaster         | Е        |
| committee and be responsible for the development of a surgical response to a mass casualty event.      | -        |
| An orthopedic surgeon from the orthopedic trauma call panel serves as a member of the hospital's       | Е        |
| disaster committee.  |          |

| The trauma program must participate in two hospital drills or disaster plan activations per year that | Е |
|---|---|
| include a trauma response and are designed to refine the hospital's response to mass casualty events. |   |
| A facility that is involved in one or more real-world disaster events having a trauma component and   |   |
| requiring activation of the disaster plan is exempt from participating in drills.                     |   |

#### **EXECUTIVE SUMMARY**

| DEFICIENCES 1.   |
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| STRENGTHS 1.   |
| OPPORTUNITIES FOR IMPROVEMENT 1.   |
| RECOMMENDATIONS 1.   |
| DESIGNATION RECOMMENDATION The reviewers have determined the facility does /does not meet the Montana Trauma Facility Resource Criteria to become an Area Trauma Hospital at the current time. |
| We recommend that the facility <b>be / not be</b> designated as an Area Trauma Hospital.   |
| We advise the following:   |
| REVIEWERS:   |
|  |