1. **PURPOSE**

The purpose of this document is to provide possible criteria for trauma program coordinators as indicators for performance improvement in the care of their injured patients in the Emergency Department.

1. **SCOPE**

This document applies to hospital sites which participate in Southeast Regional Trauma Advisory Council (SERTAC) to improve all Emergency Department injured patient care in Southeastern Wisconsin. This is not required for sites who have trauma recognition through either the American College of Surgeons (ACS) or through Wisconsin Department of Health Services (DHS) 118, rather an option to adopt this guideline.

1. **DEFINITIONS/ABBREVIATIONS**

American College of Surgeons (ACS): accreditation obtained through this organizations for trauma center level I and II throughout the state of Wisconsin. Recommendations on trauma care and performance improvement are through their book, *Resources for Optimal Care of the Injured Patient* (2022) as practice and administrative guidelines.

Emergency Department: abbreviation is ED

Performance Improvement (PI): concept of monitoring, evaluating, and improving the performance of a trauma program (ACS, 2022)

Southeast Regional Trauma Advisory Council: abbreviation is SERTAC

1. **GUIDELINE**

* 1. Evaluation of care across the continuum of the injured patient for PI opportunities is a requirement of the trauma program by ACS and DHS 118. This is usually done through the trauma program coordinator (manager) or appropriate as established at each individual hospital site. Much focus has been in the care of the patient in the resuscitation phase, usually in the emergency department (ED), but post-resuscitation care also needs to be evaluated for PI opportunities.
     1. When a need is identified for PI, the trauma program develops an action plan for improvement in the measure that is timely and measurable.

1. **PROCEDURE**
   1. The following are ED PI indicators that may be, but not limited to, monitored by the trauma program through the injured patient’s ED stay:
      1. Pre-hospital activation/Activation after arrival\*
      2. Appropriate activation level/ Upgrade Trauma Activation\*
      3. Time of Trauma Alert Page\*
      4. Arrival time to Trauma Room/ED
      5. Pre-hospital care from EMS (airway, 20 min. scene time, vitals, medications, procedures, C-collar, splints, interventions) \*
      6. Full set of vitals (temp, heart rate, respiratory rate, blood pressure, and SpO2 (EtCO2 optional) \*

performed within 30 min of arrival

* + 1. Height and weight\*
    2. GCS assessment at minimum within 30 min of arrival and with any changes in mental status\*
    3. Surgeon arrival time for highest activation\*
    4. Airway management, complications, seeking additional resources\*
    5. Mechanism of Injury (MOI): Describe injury; include as much detail as possible (time and date if injury, height of fall speed, safety devices (seat belt, helmet, and harnesses), etc.) \*
    6. Primary assessment: (ABCDE) within 30 min of arrival
    7. Secondary assessment: (Head to Toe)
    8. Trauma interventions: Interventions to treat patient (e.g., C-collar, splints, warming measures, pelvic binder application, etc.) \*
    9. Radiology times: Patient to complete X-ray (chest and pelvis) and CT (head, C-spine, chest/abd/pelvis) within your facility’s guideline. Preliminary to final reading delays\*
    10. FAST Exam discrepancies
    11. Intake and output: Intake (IV, blood, PO) and Output (Foley catheter, chest tubes, OG/NG, drains, etc.)
    12. Antibiotic administration times for open fracture (1 hour from arrival time to administration) \*
    13. Labs (including Drug screen and Alcohol level)
    14. Universal alcohol screening on all injured patients over the age of 12 years\*
    15. Pain management
    16. Splint application for fractures
    17. Cross matched blood vs MTP
    18. Door to Operating Room time (delays >30 mins. from call time)
    19. Consult/Tertiary/Transport Documentation: Document calls to consults, TAP, EMS, specialty groups, response times, transporting agencies, arrival of EMS to ED
    20. Transfer time: Recommended transfer time < 3 hours to a tertiary center with ISS >15 (document reasons for delays) \*
    21. Appropriateness of transfers\*
    22. Diversion of trauma patient\*
    23. Mortality/DOA\*
    24. Over/under Triage\*
    25. Compliance with facility’s guidelines\*
    26. Trauma trained (TNCC, ATCN, TCRN or equivalent) RN assigned to patient or overseeing patient care
    27. Equipment failure (rapid infuser)
    28. Any adverse event during ED stay\*
  1. Pediatric specific PI indicators\*
     1. Pediatric specific activation criteria (vital signs, fall height, etc.)
     2. Following pediatric imaging guidelines to avoid radiation
     3. Completed pediatric abuse screenings
     4. Following site specific pediatric guidelines related to trauma
     5. Availability of appropriately sized equipment for pediatrics
     6. Fluid management appropriateness
     7. Airway management for pediatrics, complications, seeking additional resources
     8. Sedation and pain management

\*Indicates required PI to be performed

1. **RESOURCES AND REFERENCES**

ACS. (2022). *Resources for Optimal Care of the Injured Patient*. Chicago: American College of Surgeons

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