Southeast Regional Trauma Advisory Council (SERTAC)		
Title: Trauma Program Emergency Department (ED) Process Improvement (PI) Indicators		**Document Number:**
Document Type: ☐ Policy ☐ Procedure ☒ Guideline ☐ Other		**Last Review/Revision Date: 5/18/2021**
Content Applies to Patient Care: (Select all that apply) **☒ Adults** **☒ Pediatrics (Under 18)**	**Content Applies to: (Select One)** **☐ Clinical** **☒ Administrative**	**Next Review Date:** **Effective Date: 6/1/2021**
Scope: ☐ Site Only (Location Name): **☐ Department Only (Department Name):**		

I. 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.

II. 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.

III. 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* (2014) 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, 2014, p.114)

Southeast Regional Trauma Advisory Council: abbreviation is SERTAC

IV. GUIDELINE

A. 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.

V. PROCEDURE

A. 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 *
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. Appropriate triage (ESI) level and documented
7. Full set of vitals (temp, heart rate, respiratory rate, blood pressure, and SpO2 (EtCO2 optional)*
    - Must include within 30 min of arrival
    - Stable patients: q 15 x 2, then q 30 min
    - Unstable patients: q 5 min, until stable, then q 30 min
8. Height and weight*
9. GCS assessment at minimum within 30 min of arrival and with any changes in mental status*
10. Primary assessment: Include all sections of Trauma Narrator (ABCDE) within 30 min of arrival*
11. 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)*
12. Secondary assessment: Include all sections of Trauma Narrator (Head/Neck/Face, Eyes, Chest/ Respiratory/Cardiac, Abdomen/Pelvis, Upper/Lower Extremities, Posterior)*
13. Trauma interventions: Interventions to treat patient (e.g. C-collar, splints, tetanus, warming measures, etc.)*
14. Surgeon arrival time*
15. Radiology times: Patient to complete X-ray (chest and pelvis) and CT (head, C-spine, chest/abd/pelvis) within your facility's guideline.*
16. Intake and output: Intake (IV, blood, PO) and Output (Foley catheter, chest tubes, OG/NG, drains, etc.)

17. Consult Documentation: Document calls to consults, TAP, EMS, specialty groups, transporting agencies, arrival of EMS to ED
18. Trauma Outcome*
19. Departure condition*
20. Vital signs (heart rate, respiratory rate, blood pressure, and SpO2 (EtCO2 optional)*
    Must include at time of discharge from ED
21. GCS assessment at time of discharge.*
22. Trauma End (time patient departs from Trauma Room)*
23. Transfer time: Recommended transfer time < 3 hours to a tertiary center (document reasons for delays)*
24. EMR reflects accurate date/timing of care
25. Trauma charges
26. Mortality/DOA*
27. Antibiotic administration times for open fracture (1 hour from arrival time to administration)*
28. ED Length of stay from door to disposition time (less than 3 hours)
29. Labs (Drug screen and Alcohol level)
30. Universal alcohol screening on all injured patients over the age of 12 years that are admitted or discharged from the ED*
31. Cross matched blood vs MTP
32. Missed intubations or esophageal intubations (EMS and ED)
33. Upgrade Trauma Activation*
34. Over/under Triage
35. Diversion of trauma patient*
36. Compliance with facility's guidelines*
37. Door to Operating Room time (delays)
38. FAST Exam discrepancies
39. Trauma trained (TNCC, ATCN, TCRN or equivalent) RN assigned to patient or overseeing patient care
40. Pelvic Binder not applied properly
41. Equipment failure (rapid infuser)
42. Any adverse event during ED stay*
43. Pain management
44. Splint application for fractures

*Indicates required PI to be performed

VI. RESOURCES AND REFERENCES

ACS. (2014). *Resources for Optimal Care of the Injured Patient*. Chicago: American College of Surgeons
Wisconsin Department of Health Services (DHS) 118