Title:
Development of a Standardized Trauma Response Tool

Rachel B. Weber, MSN
College of Health Professions, Western Governors University, Salt Lake City, UT, USA

Session Title:
Rising Stars of Research and Scholarship Invited Student Posters

Keywords:
Rural Trauma, Trauma Algorithm and Trauma Level IV and V

References:
American College of Surgeons, (2012). Advanced trauma life support student course manual. (9th ed.).

Retrieved from https://www.facs.org/~/media/files/quality%20programs/
trauma/vrc%20resources/resources%20for%20optimal%20care.ashx


Abstract Summary:
The standardized trauma response tool is an evidence based Capstone developed for emergency departments or trauma centers of care. The tool, in the familiar form of an algorithm, will ensure optimal trauma patient care by providing the team with visual prompting of a systematic process flow.

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The learner will be able to accurately identify the patient injuries that require immediate trauma activation, trauma interventions and timelines to transfer.</td>
<td>1) Describe the process flow of the algorithm and how to determine trauma team activations depending upon severity of injury. 2) Explain the use of the trauma algorithm developed to have a standardized and well-coordinated response for trauma care to provide optimal patient outcomes. 3) Discuss application of the algorithm for a rural hospital with a Level IV or V designation that transfers patients within the trauma system of care.</td>
</tr>
<tr>
<td>The learner will be able to identify evidence based process steps of trauma care that prevent flow delays, missed injuries and coordinate transfer decisions.</td>
<td>1) Explain how this standardized trauma response tool in the familiar form of an algorithm provides a visual summary of complex steps that ensure optimal and timely patient care. 2) Explain the process steps and how they were coordinated with EMS and the Level III and I trauma centers in the region.</td>
</tr>
</tbody>
</table>

Abstract Text:
The standardized trauma response tool is an evidence based Capstone developed especially for rural hospital emergency departments or trauma Level IV or V centers of care. The tool, in the familiar form of an algorithm, will ensure optimal trauma patient care by providing the team with visual prompting of a systematic process flow. This tool is designed to be accessed electronically or to be kept on recording clipboards in each trauma bay or emergency room. Its purpose is to ensure adoption of evidence based trauma protocols, prevent delay of care, reduce variation, and prompt appropriate transfer of care within a coordinated trauma system. The trauma response tool is a solution for many small and rural hospitals that have a lower volume of patient care. This lower volume creates a staff that has less experience with trauma protocols which can lead to missed injuries, undertriage and poor outcomes. Trauma is complex and in need of a rapid systematic assessment, rapid intervention, and must be coordinated by a team utilizing best practice standards of care. The tool was created by incorporating Washington State Trauma System criteria for activation of a trauma team, as well as national evidence based guidelines for primary...
and secondary assessments and necessary interventions. Incorporated into the trauma response tool are the steps taken to coordinate with local EMS and airlift agencies to transfer care to Level III, II or I trauma centers depending upon the needs of the patient and severity of injury. The tool has a dedicated algorithm with criteria on how to choose air or ground transport for the rapid transfer of a badly injured patient needing immediate surgery. The tool also has prompting in the algorithm for transfer of care to a designated Pediatric trauma center, a Level I trauma center and criteria for transfer to the closest Level III trauma center. The tool will have phone numbers to call when activating the trauma team at the referring hospital. This trauma quality improvement tool should provide all that the team needs to solve potential problems with variation of care, coordination of care and utilization of the criteria for trauma team activation. Patient outcomes are at high risk with extremes of age, meaning the geriatric and pediatric patient populations. There is a higher incidence of missed injury and delay in trauma team activation noted with extremes of age. The trauma response tool addresses and incorporates prompting to reduce the potential of poor outcomes related to the patient population with extremes of age. The standardized trauma response tool can be easily adapted to any emergency department to meet the needs of individual organizations that provide trauma patient care. Implementation of the tool should be carried out by conducting training drills of trauma scenarios which increase staff experience with the well-coordinated process steps that prompt timely and medically necessary decisions and interventions. The ultimate goal with implementation is to ensure and contribute to positive patient outcomes.