Abstract Title:
Trauma Triage Geometry: Full Circle to Out of the Box

Authors:
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Background & Purpose:
Background/Significance/Purpose: Trauma patients are a unique patient population that pose difficult and time sensitive decisions. Historically, Emergency Medicine Physicians were responsible for all trauma levels when pre-hospital report was called, leading to inconsistency in practice. Under triaging of this high risk population was a common occurrence which could jeopardize patient safety and outcomes. This led to increased length of stays and delay in surgeon arrival times. Development of a Trauma Report Nurse (TRN), shows patient under triaging rates have decreased and surgeon arrival times have improved.

Study/Project Design:
Data collection of the patients was done retrospectively, as results were entered into the trauma registry.

Setting:
Setting: Rural teaching, Level 1 adult and pediatric trauma center

Sample:
Sample: Our demographics consisted of adult and pediatric trauma patients of all ages with major and minor trauma.

Procedures:
Methods: In collaboration with the Mayo Clinic Trauma Center, Emergency Medicine Physicians, and a core group of nurses dedicated to improve trauma care, the TRN role was developed. Pre-hospital personnel would call a report into the Emergency Communication Center, which would then call the TRN on a dedicated phone. The TRN takes report directly from the pre-hospital providers and would make the appropriate trauma level according to trauma team activation criteria. Each patient was assigned a trauma level from level 1, high potential for life threatening injuries, to level 3, less potential of nonlife threatening injuries. This data is entered into the trauma registry with over-under triage and Injury severity scores to help determine patient outcomes.

Findings/Results:
Results: It was found that the average under triage rates decreased significantly from an average of 14.1% to average of 6.6%, during the 3 month data collection prior to the TRN development, to 3 months after the role was implemented. Length of stays for level 1 and 2 patients have decreased with the goal of leaving the Emergency Department a one way door. The goal is to be out of the trauma bay within 20 minutes to the Operating Room, to Computerized Tomography (CT scan) or to the Intensive Care Unit, to help improve patient outcomes. The TRN role helped to improve trauma care, communication between the disciplines, and safety of critically injured patients of all ages. With patient safety as a nationwide health care initiative with the goal of having the right patient with the right provider at the right time, is critical for successful patient outcomes.

Discussion/Conclusions/Implications:
Discussion/Conclusions/Implications: Surgeon arrival times improved, as well as lengths of stays were decreased. Nursing and Physicians are satisfied with this role along with the patient throughput process. The TRN provides another avenue for advanced professional nursing knowledge, and assisting with collaboration between the Trauma Center and the Emergency Department. Overwhelming support was given by Nursing Leadership for role enhancement. A policy was written specifically for TRN assigning the trauma activation levels. This role is covered 24/7, and will continue to add more nurses to the role as needed.