

Research - R209

Poster

Abstract Title:

Pediatric Trauma Transfers within State Trauma System

Authors:

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Background & Purpose:

Understanding the pediatric demographic within an emerging trauma system is crucial to determine where issues and educational opportunities exist. Pediatric trauma patients often require care for low severity injuries that exceed the local facilities capability or capacity and need to be transferred to a tertiary care center. These transfers place a huge burden on the system in transport resources, create an additional ED visit at the tertiary care center, and cause additional burden on hospital resources and families to get back home if they were quickly discharged after evaluation.

Study/Project Design:

retrospective review

Setting:

State Trauma System

Sample:

800 pediatric patients

Procedures:

A retrospective review of pediatric trauma transfer data from the State's trauma registry was performed for 2012. Patients <15 years old were included for evaluation and had the following data points abstracted from their charts: method in which they were transported to a tertiary care center, injury severity score (ISS), and ED disposition. To identify where the outliers are within the state trauma system, this data was compared to the National Trauma Data Bank (NTDB).

Findings/Results:

There were 800 pediatric trauma transfers within the Trauma System in 2012. Patients transferred to level 1 facilities comprised 97% of patient transfers, while 0.8% were transferred to a level 2, 1.8% were transferred to a level 3 facility, and 0.3% were transferred to a level 4 facility. Of those transferred; ground transfers comprised 68% and air transfers comprised 22%. The number transported by either fixed wing or helicopter was 178 (22%). This state is at a rate 1.5 times higher for LOS of <1 day than the NTDB for pediatric transfers (8.4% vs 3.2%) (p=0.001). Of all the transfers, 28% were discharged from the ED after evaluation and treatment where the NTDB the rate was 11%. The ISS breakdown vs. NTDB consisted of ISS 1-8 63% versus 58% (p=0.01), ISS 9-15 28% versus 27%, ISS 16-24 4% versus 7.5%, and ISS score >25 were both 3%.

Discussion/Conclusions/Implications:

Pediatric patients within this State's trauma system who have low injury severity scores are transferred from rural hospitals to tertiary care centers at a rate that is above the national average. This practice is due to local practitioners not having the education, capability, or capacity to provide care for the pediatric patients. As the system matures, further education is necessary to all providers on the appropriateness of pediatric trauma transfers and ways to improve local capability and capacity need to be explored and created.