

Secondary Over Triage Among Rural and Urban Injured Children

Authors: Bashar S. Shihabuddin, MD, MS, *Nationwide Children's Hospital, Columbus, OH*; Katherine L. Grant, MD, *University of Oklahoma Health Sciences Center, Oklahoma City, OK*

Background:

- There has been a paucity of studies comparing secondary over-triage (OT) among pediatric rural and urban patients.
- Our primary objective was to determine the rate of secondary OT in pediatric patients evaluated at a rural trauma center.
- Our secondary objective was to determine the rate of secondary OT that occurred in rural and urban facilities and compare the facilities' characteristics.

Methods:

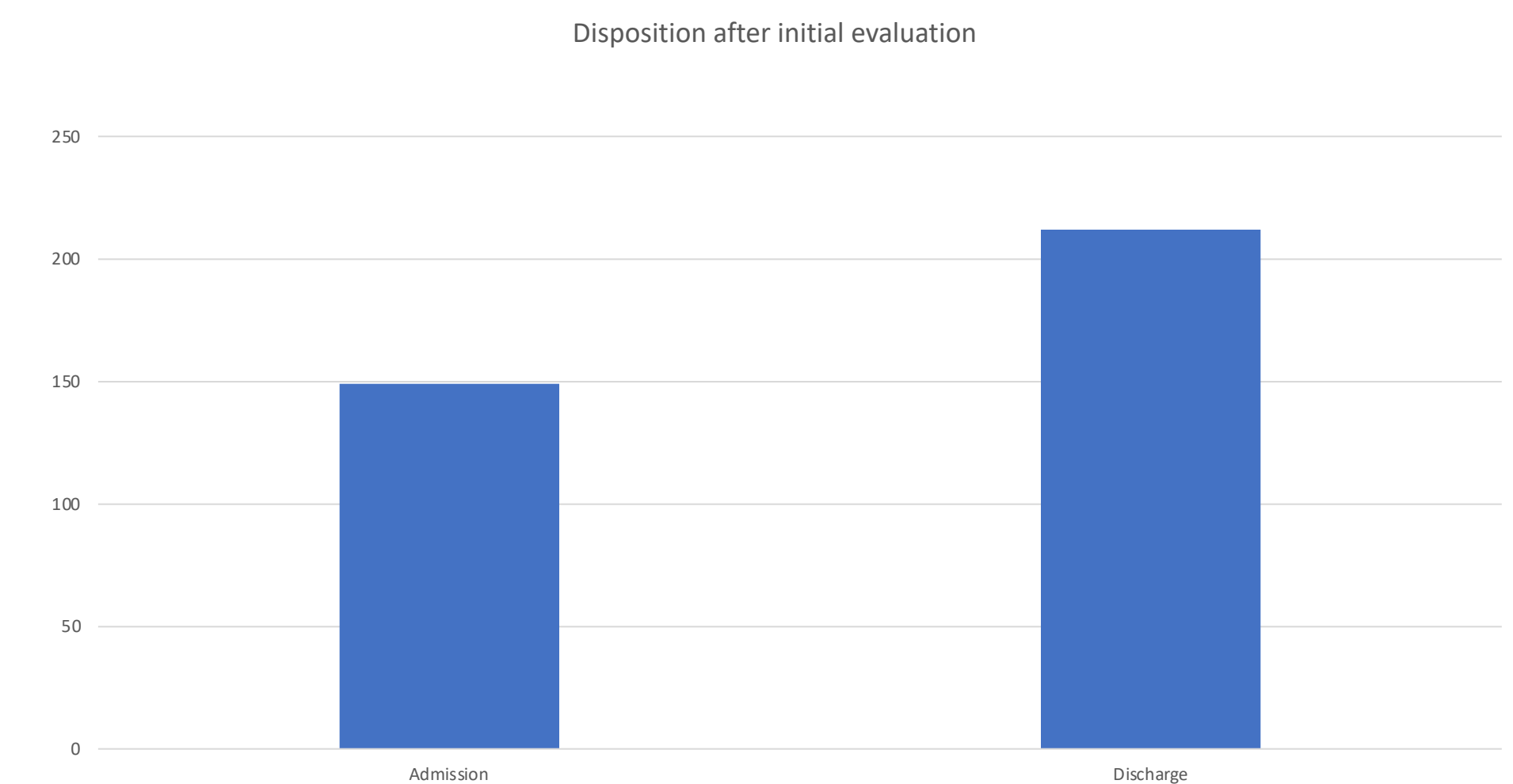
- This was a retrospective cohort study of trauma registry data of pediatric patients transferred between 1/1/2015 and 12/31/2015 to a combined level one adult and pediatric trauma center.
- Secondary OT was defined as patients <16 years of age who required no immediate surgical interventions nor admission to a critical care unit, had a length of hospitalization of 24 hours or less, and an Injury Severity Score (ISS) less than 9.
- Chi-square test for categorical variables and student t-test was used to compare continuous variables.

Conclusions: Secondary over-triage occurred commonly and equally in rural and urban settings and was not associated with any patient characteristics.

Interventions to decrease secondary over triage and unnecessary patient transfers should be aimed at provider and facility factors.

Results/Graphs:

- There was no significant difference in patient characteristics or mechanisms of injury
- The total rate of secondary OT was 54.8% (95%CI= [50.9-58.5]). The rate of secondary OT was similar between urban and rural facilities (56.1% and 53.3%, $p=0.23$).
- Most over-triaged transferred patients were discharged home after the initial evaluation.



Future Directions for Research:

Evaluating practitioner and facility factors leading to secondary OT and unnecessary patient transfers, for possible interventions.