A Handoff Protocol For Pediatric Trauma Patients at a Rural Level
One Trauma Center Reduces Length of Stay

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A Handoff Protocol For Pediatric Trauma Patients at a Rural Level One Trauma Center Reduces Length of Stay

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Financial Disclosure

• I have no financial interests or relationships to disclose.
Importance of Pediatric Hand offs

- Trauma: Leading cause of death in pediatric population
- Mixed evidence regarding who should manage the pediatric patient in the immediate period vs. post-ED disposition period
- Defined areas of success for pediatric surgeon managed trauma victims in splenic salvage rates
Purpose

Our study aimed to critically evaluate the handoff from the adult specialty trauma surgeon to the pediatric surgeon within a 24-hour window after initial evaluation and resuscitation within our rural Level 1 trauma center by analyzing length of stay in all post-emergency department (ED) disposition populations, including those transferred to higher levels of care.

Hypothesis

A post-resuscititative handoff protocol will decrease length of stay among pediatric trauma patients.
Methods

- Prospective data collected and retrospectively reviewed on 1,267 injured pediatric patients over 4 year period (2 years pre- and post-intervention).
- Data variables: Age, ISS, GCS, LOS, and MOI
Results

Trauma Activation Level

- Protocol: 14
- Response: 39.8%
- Consult: 14.7
- No Activation: 31.4%

LOS Pre- and Post-intervention

- Pre: 2.16 Days
- Post: 1.78 Days
Results

Length of Stay (LOS) pre- and post-intervention by ED disposition

Figure 1. Estimated mean LOS by intervention period and post-ED disposition
## Results

Table 3. Multivariable linear regression models of intervention period and demographic or patient characteristic variables predicting mean LOS

<table>
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Conclusion

• Handoff at 24 hours from adult specialty trauma surgeon to pediatric surgeon significantly reduced length of stay by 0.38 days during our post-intervention period.


