

Title: Factors Affecting Adherence to Trauma Follow-up in Children and Adolescents

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Background: 1 in 4 children sustain an unintentional injury that needs medical attention annually. However, there is often a lack of follow-up adherence once the patient is discharged from the hospital. Other studies have cited lack of communication and resources as barriers to follow-up. However, further research needs to be done to assess the multitude of possible reasons that children and adolescents do not present for trauma follow-up. The objective of this study is to determine additional barriers to follow-up and assess their impact on adherence.

Methods: A retrospective review of prospectively collected follow up information was performed of children and adolescents 18 years and younger who presented to an American College of Surgeons verified level 2 trauma center from February 2023- December 2023. Patients were included if they met criteria for tier 1 or 2 trauma activation. All trauma activated patients received a phone call from the trauma social worker or manager 30 days after discharge and had scripted questions asked assessing any needs encountered after discharge. Factors affecting follow-up that were assessed include: demographics, differing measures of socioeconomic status, previous trauma, mechanism of trauma, law enforcement involvement, and administration of resources. Statistical analysis was performed.

Results: 326 patients were included, of which 60% were male, 35% identified as White, 49% as Black, and 9% Hispanic. 8.9% spoke a first language other than English. 49 patients were Tier 1 activations, and 277 were Tier 2. Trauma mechanisms included 35% motor vehicle crashes, 13% pedestrian or bicycle struck by vehicle, 10% firearm injury, 14% falls or drops, and 18% in all-terrain vehicle, motorized bicycle, or golf cart. 117 patients had law enforcement or child protective services involvement. 187 follow ups (57%) were completed at 30-days after discharge. Highest rates of follow ups were completed for patients who had DCFS/LE involvement (87%) and among those whose primary language is not English (86%). During the follow up call, 46 (25%) of patients requested further intervention including mental health needs, scheduling appointments/referrals, or assistance with transportation or Women/Infants/Children social services. These needs were highest among patients who attend public/charter schools (16 vs 0 for those attending private school) and those who sustained animal attacks (28%), falls/drops (26%), and GSW (24%).

Conclusions: Patients continue to have trauma-related needs after discharge. Follow up calls can help bridge gaps for patients and families after traumatic injury.

<https://publications.aap.org/pediatrics/article/138/2/e20161569/52465/Management-of-Pediatric-Trauma?autologincheck=redirected> (1)

- 1 in 4 children sustain an unintentional injury that needs medical attention yearly

https://journals.lww.com/headtraumarehab/abstract/2019/03000/attending_follow_up_appointments_after_pediatric.12.aspx (2)

- Looked at barriers to follow up for kids with TBIs
- Could not access the whole thing but found that providing resources and communication help adhere with follow ups

<https://pubmed.ncbi.nlm.nih.gov/31283748/> (3)

- One study found that there were disruptions in trauma follow up due to lack of coordination after hospital discharge