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MEDICINE**
Children's Health

Integrating Mental Health Screening in Pediatric Trauma Patients: A Quality Improvement Initiative

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Background

- Post traumatic stress disorder (PTSD) is a state of emotional and behavioral disorder that can result from witnessing or experiencing an event involving actual or possible death, serious injury, or physical violence
- Approximately 20-40 percent of injured trauma survivors experience PTSD symptoms in the year following injury
- Impacts can last beyond childhood and include learning difficulties, increased use of health and mental health services, increased involvement with welfare and juvenile justice systems, and long term health problems




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Objectives

- Develop a pathway for screening children for PTSD that could be easily integrated into the existing clinical workflow without requiring significant resources
- Meet requirements of mental health screening in the newest edition of the *Resources for the Optimal Care of the Injured Patient*



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Methods

- Retrospective chart review of all children discharged from our Level 1 Pediatric Trauma center ages 8-17 from July 2022 – April 2023
- Acute Stress Checklist (ASC-3) was administered by a social worker during their trauma admission
- Patients who scored three or more were referred for repeat screening in the pediatric trauma clinic
- Repeat screening was then obtained at 1 and/or 6 months post-injury using the Child Trauma Screening Questionnaire (CTSQ) and Child PTSD Symptom Scale self-report (CPSS-SR)
- In addition, polytrauma patients were also seen in our outpatient clinic and screened



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Methods

- Patients were seen at 1 and 6 months post injury via telehealth
- Sent QR code via mychart message prior to appointment
- Qualtrics survey that contained questions from CTSQ and CPSS-SR screening tools



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Part 1: Please indicate whether any of these things have happened to you since the accident

Do you have lots of thoughts or memories about the experience that you don't seem to forget?

Yes No

Do you have bad dreams about the accident?

Do you feel or act as if the accident is about to happen again?

Do you have bodily reactions (such as a fast-beating heart, stomach churning, sweating and feeling dizzy) when reminded of the accident?

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Results

- **109 children met criteria for inpatient screening**
 - 49 patients (44%) successfully completed the ASC-3 screening questions
 - 8 children (16%) scored positive and referred for repeat screening
- **30 patients were screened after discharge**
 - 8 children (26%) had either a positive CTSQ or CPSS-SR
 - 4 patients (50%) were referred for mental health services
 - 3 patients (38%) declined referral
 - 1 patient was already receiving behavioral health care



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Conclusion

- A combination of both inpatient and outpatient screening for acute stress disorder and post traumatic stress disorder is a feasible way of screening children after injury
- By having the patients complete the outpatient screenings prior to their appointment there was no significant increase in resources or personnel needed to complete the screenings
- Can be integrated effectively to identify patients that may benefit from early intervention
- Meets requirement of mental health screening in new grey book