

## **Improving Pain Management in Pediatric Patients Admitted for Traumatic Injuries**

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Hennepin Healthcare Emergency Department serves as a Level 1 Trauma Center for both Pediatric and Adult patients, who come to our emergency department from throughout the state of Minnesota. Pain management in patients with traumatic injuries is critical both in the acute period after the traumatic event and for long-term sequelae such as post-traumatic stress disorder. This is especially important for pediatric patients, who have less life experience to make sense of both the traumatic event and emergency department care. Pediatric patients, particularly infants and nonverbal children of any age, can express pain differently than adults. This, alongside varying degrees of discomfort with pediatric management, can lead to insufficient pain management of pediatric patients, even with known traumatic injuries. Upon review of pediatric patients admitted for traumatic injuries from the Hennepin Emergency Department, only 58% received some form of analgesia. The pediatric patients who did not receive pain management included children with skull fractures (GCS 14-15), traumatic mechanism resulting in intracranial bleeding (GCS 14-15), multiple spinal fractures, small bowel injury, facial dog bite, among others. Many children received only fentanyl, which has a short duration of action, or sedation without analgesia. In total, we as emergency department clinicians must improve upon our clinical practice for pediatric patients in our care for traumatic injuries. Interventions for improvement will include education targeted at physicians and nursing staff, posted information in the ED, and an Epic orderset to improve ease of ordering pain management. Data will be continuously collected and analyzed from the year prior to intervention and the year afterwards. This time interval was chosen to account for variations in admissions for traumatic injuries as well as management over the course of the academic year.