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METHODS

OBJECTIVE

- Improve recognition and evaluation of injuries resulting from non-accidental trauma in the Emergency Department (ED)
- Adapt into EPIC a clinical decision support (CDS) tool originally developed in Cerner at the University of Pittsburgh
- Implement the CDS in the Pediatric ED within the BerbeeWalsh Emergency Department (UW Health/AFCH)

An Epic-based clinical decision support tool for screening and managing suspected child maltreatment is feasible in the pediatric Emergency Department.

RESULTS

- Child Abuse Screen Completion Rates
- Child Abuse Screen Trigger Rate (Out of Completed CAS)

- ~ 4,900 children younger than ten were screened between April, 2019 and January, 2020

Screening Rates:
- Significant increase noted in July, when the screen’s location was moved in Epic to be visually prioritized
- An 85% screening rate is comparable with other nursing screens

CAS Trigger Rates: steadily decreased from intake
- BPAs Fired: BPAs triggered for 3-5% of all ED visits throughout implementation
- Order-Set Use: average of 1.3 ordered per week

CONCLUSIONS

- Through careful consideration of workflows, rigorous usability testing, and pre- and post-implementation education, a child abuse CDS can be successfully implemented in the Emergency Department
- Close monitoring after implementation is necessary to determine success of CDS and optimize for clinical practice
- Additional education and small changes in the child abuse screen dramatically increased screening rates from implementation

Next Steps
- Future projects will focus on the impact of the CDS on Child Protective Services reporting and guideline-based evaluation of possible child abuse
- Future considerations include:
  - Ideal timing of additional education to maintain CDS usage
  - Refining triggers and ordersets

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  - Contact Information: For more information contact Thaddeus Schmitt (TSchmitt@uwhealth.org)

CDS Tool Design

The CDS tool has four independent triggers:
1. Nurse child abuse screen (children <10)
2. Chief complaint
3. Encounter diagnosis
4. Order of a skeletal survey outside of the CDS ordersets

Best Practice Alert (BPA)

- Fires when CDS triggers
- Informs provider of reason for trigger
- Provides access to ordersets for evaluation

Ordersets

- 8 ordersets provider can choose based on presentation (e.g. bruise, fracture, neglect)
- Individualized by patient’s age
- Includes key lab, radiology, and consult orders

Development and Education

- Multidisciplinary interviews to determine workflow
- Usability testing to adapt CDS to clinical practice
- Online and in-person training of nurses and providers

Post-Implementation Monitoring

- Biweekly data collection including:
  1. Child abuse screen completion
  2. BPA firing rate
  3. Order-set usage

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