Evidence-Based Practice (EBP) - E172

Poster

Abstract Title:

Efficiencies Gained from the Trauma EMR

Authors:

C.J. D'Huyvetter MSN, A.M. Lang MSN, D.M. Heimer RN, N.Y. Patel MD, T.H. Cogbill, MD

Background & Purpose:

The electronic medical record was identified as a weakness post reverification in October 2010 due to incomplete documentation and difficulty of data abstraction. The conversion to the EPIC Trauma Navigator occurred six months pre reverification by the ACS (American College of Surgeons). We were employing the paper record audit tool to review the electronic trauma record and found that the tool was unreliable, reflecting high percentage of completion but when abstracting for the registry and performance improvement many crucial elements were missing or difficult to find due to the ability for nursing to document in multiple fields.

Study/Project Design:

Timeframe September 2010 - August 2012. Pre implementation documentation completion 82%; post implementation 96%.

Setting:

ACS verified rural tertiary Level II Academic Trauma Center in Wisconsin

Sample:

Collaborative team of Trauma Service, ED, ICU, PICU administrative and frontline staff, IS programmer and report writer defined current state and completed problem analysis.

Procedures:

IDENTIFIED ISSUES Inconsistent documentation practices Time constraints for completing documentation; Lack of defined nursing roles, staff accountability, and defined compliance requirements; Lack of reports to facilitate data abstraction. RESOLUTION Data dictionary developed; ED RN identified as documenter; Weighted documentation grid (0-100) developed requiring 90% completion of trauma record or further education through department educator and greater than 5 records per year basis not meeting requirements result in 'Inconsistently Met' for annual performance review. A collection of reports built to abstract the 'trauma story' Trauma Overview, History and Prehospital Info, Vitals, Observations & primary Survey, Lines & Drains, Airways, Med & Pain, Wounds, I&O, GCS & Pupils, LMR, ADT events, Results, PI Timeline. Education of affected staff regarding protocol content and 4 hour EMR trauma navigation practice

Findings/Results:

Average monthly completion of from 82% in September 2010, improving to median monthly score of 89% by January 2011, and now a sustained median score of 96.5% for the past 603 activations completed on the Trauma Electronic medical record. Unable to directly quantify direct time saved from converting to the trauma navigator. We have a combined .7 FTE for trauma Performance Improvement review and 1.2 FTE for the trauma registry for 720+ admissions annually of which 17% have an ISS > 15. The ability to review data concurrently and comprehensively has increased response time to PI issues and decreased utilization of resources allowing the same 1.9 FTE to currently track additional indicators, complete TQIP requirements, and provide feedback to all referring facilities, an additional .1FTE time requirement, with the same FTE's despite an 11% increase in patient volume over past year.

Discussion/Conclusions/Implications:

1. Develop a broad committee: Get the buy-in at all levels a. Include IS, EMR builders & report writers , trauma service, frontline staff, and your administrative & clinical champions 2. Require accountability with daily review and feedback though the Weighted documentation grid a. Documentation completion was directly linked to annual performance evaluation and associated salary increase. Although clinical champions were very

apprehensive, no staff suffered adverse sequelae. 3. Develop a data dictionary to eliminate ability of documentation in multiple fields and enable abstraction of data through reports.