

Research - R132

Poster

Abstract Title:

Use of Alias in Patient Records: A Corporate-wide and Trauma Services Process Improvement Initiative

Authors:

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Background & Purpose:

Use of aliases in the registration of unidentified patients; trauma and non-trauma, is a common practice, but can be problematic. The registration process associates an episode of care with an individual's permanent record. Occasionally, the association between an episode of care and a permanent record is not correct resulting in errors. Trauma Center personnel along with a corporate management team implemented a process improvement (PI) initiative. The goal was to reduce risks and improve patient safety during registration of unidentified patients and subsequent electronic data linkage.

Study/Project Design:

Review of historical linkage problems; staff education, and monthly feedback.

Setting:

A non-profit system of 21 hospitals; trauma centers and non-trauma centers in the Western US.

Sample:

Alias usage: 1 Adult Level One: 1928, 1 Pediatric Level One: 685, 2 Level Two: 419, 2 Level Three: 206, 2 Level Four: 102, 7 Urban: 167, 6 Rural: 77.

Procedures:

Alias reconciliation process errors were electronically tracked pre-intervention (December 2009) and post intervention (January 2010-June 2011). A corporate team investigated multiple instances of registration errors involving the use of alias names and electronic linkage with the medical record. The findings resulted in the development of a new system for electronic linkage which included: defined times when a patient record could be updated and changed permanently, process of creating the alias record and monthly feedback of errors. Education was provided to all clinical and registration staff. We examined error rates and types by facility type and further examined rates between trauma and non-trauma patients at the Adult Level 1 center.

Findings/Results:

At 21 corporate facilities in December 2009, the pre-intervention error rate was 57% (31/54). Post-intervention, 3,583 alias names were issued with an 11.3% error rate (405/3583). Errors continued to decline from 16.6% in the first 3 months to 6.9% in the last 3 months. Error rates were higher in facilities with less frequent usage of aliases. In comparison of all trauma center levels, the adult trauma one center had the highest usage rate of aliases (1928) with the lowest error rate (7%). Rates were also found to be lower in the trauma patient population 2.4% than in non-trauma 18.6%. Errors included: duplicate records (4%), discarded records (4%), alias record "linked" to the wrong patient (Inaccurate link) (2%), alias records not updated or partially updated (3%). The inaccurate link occurred less frequently (2%), but was the most dangerous error type taking many man hours to correct.

Discussion/Conclusions/Implications:

Errors in patient registration and subsequent linkage of electronic records is an important patient safety concern. With the advent of electronic health records, it is critical that errors be avoided. Creating a standardized process where unidentified patient records can be safely linked, is of the utmost importance. The error rates in this study decreased dramatically with process changes, staff education and monthly feedback. Error rates continued to decrease with experience. Errors can always occur; therefore, close monitoring with immediate feedback and re-education is essential.