Improving Safety of Transitions for Hospitalized Patients on Warfarin

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Background

- Warfarin is estimated to be responsible for 33% of ER visits leading to hospitalizations as compared to 6% from Beer’s list medications\(^1\)
- Patients on warfarin are at risk of adverse drug events, particularly during transitions of care

  - Dosing errors, medication non-adherence, insufficient monitoring
  - Incomplete or poorly communicated follow up plan\(^2\)

Identification of the Problem at UMHC

- Poor inpatient provider to post-hospital provider communication about warfarin management
- Discharge planning varies depending on post-hospital setting and service providing care

AIM Statement

By August 2014, we will improve inpatient provider to post-hospital provider communication about warfarin management by increasing the percentage of time the discharge paperwork includes key elements: indication for anticoagulation, target INR range, expected duration of therapy, next scheduled INR, and post-hospital provider assuming anticoagulation management from 43% to over 75% by implementing an order in the EMR which was developed by a multidisciplinary team

Intervention

- Implemented September 2, 2013
- Electronic order with fields prompting inclusion of key elements to be completed at the time of hospital discharge

  - elements transfer through EMR to the patient’s discharge paperwork
  - information is available for post-hospital provider and additional caregivers in the EMR

- Provider education in the form of a handout distributed in emails sent by CMIO and posted on residency management site

Pre-intervention Data

- Chart review of 633 inpatients on warfarin from January 1, 2012 to June 30, 2012 at MU Health Care
- 43% of patients had all 5 key elements included in discharge paperwork

Timeline

- August 31, 2012 Pulled POA manuals to determine actual name of the order
- November 2012 Electronic order taken from Office of Clinical Effectiveness
- September 2012 Provider education in the form of a handout distributed in emails sent by CMIO and posted on residency management site
- December 2012 Post-intervention data was analyzed and presented to CMIO

Future Plans

- Collect and analyze post-intervention data
- Collect feedback from users and continue to improve the intervention
- Evaluation of patient-oriented safety outcomes such as reduction in adverse drug events from warfarin or decreased ER utilization or hospital admission rates

References