UC San Diego Health

Rec it up! Improving safety through better understanding of the medication reconciliation best practice alert

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Abstract

Best practice alerts (BPAs) are integrated into the electronic health record (EHR) to implement evidence-based practices, but studies have shown that not all alerts result in true best practice changes and can contribute to EHR fatigue. This project focuses on optimizing the medication reconciliation alert which is the most common alert UCSD Internal Medicine residents are faced with. The alert is triggered when a medication reconciliation is not completed within 24 hours of admission and requires completion of the reconciliation to clear the alert.

In this study, tutorials were created and shared with residents on how to complete a medication reconciliation at the time of admission and how to process the alert >24 hours after admission. Medication reconciliation completion rates amongst residents were compared pre and post education and demonstrated a statistically significant improvement post intervention. Survey information was also collected regarding understanding of how to process the alert and showed statistically significant improvement as well.

Introduction

- Admission medication reconciliation (AMR) = vital for patient safety
- UCSDH performance goal: >90% within 24 hours
- A best practice advisory (BPA) was created to highlight when meds not reconciled
- This BPA is the most common interruptive alert that Internal Medicine residents face
- Project goals:
 - analyze BPA to improve impact on reconciliation rates
 - improve the provider experience by reducing resident alert fatigue

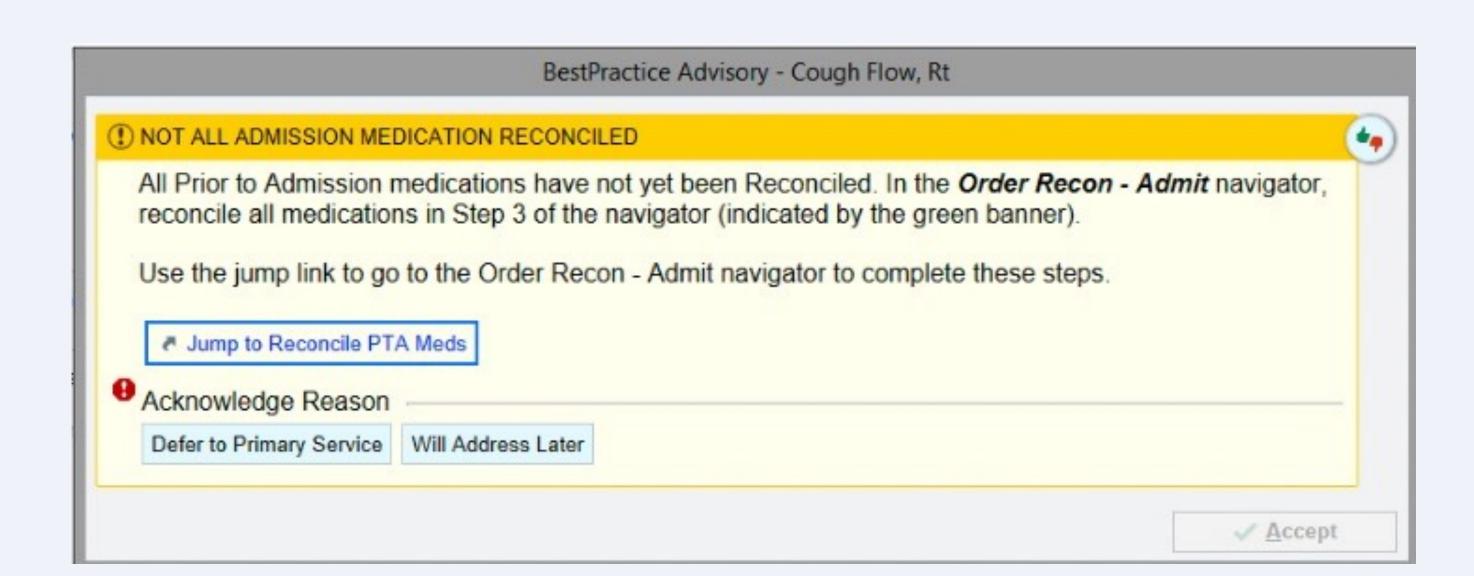
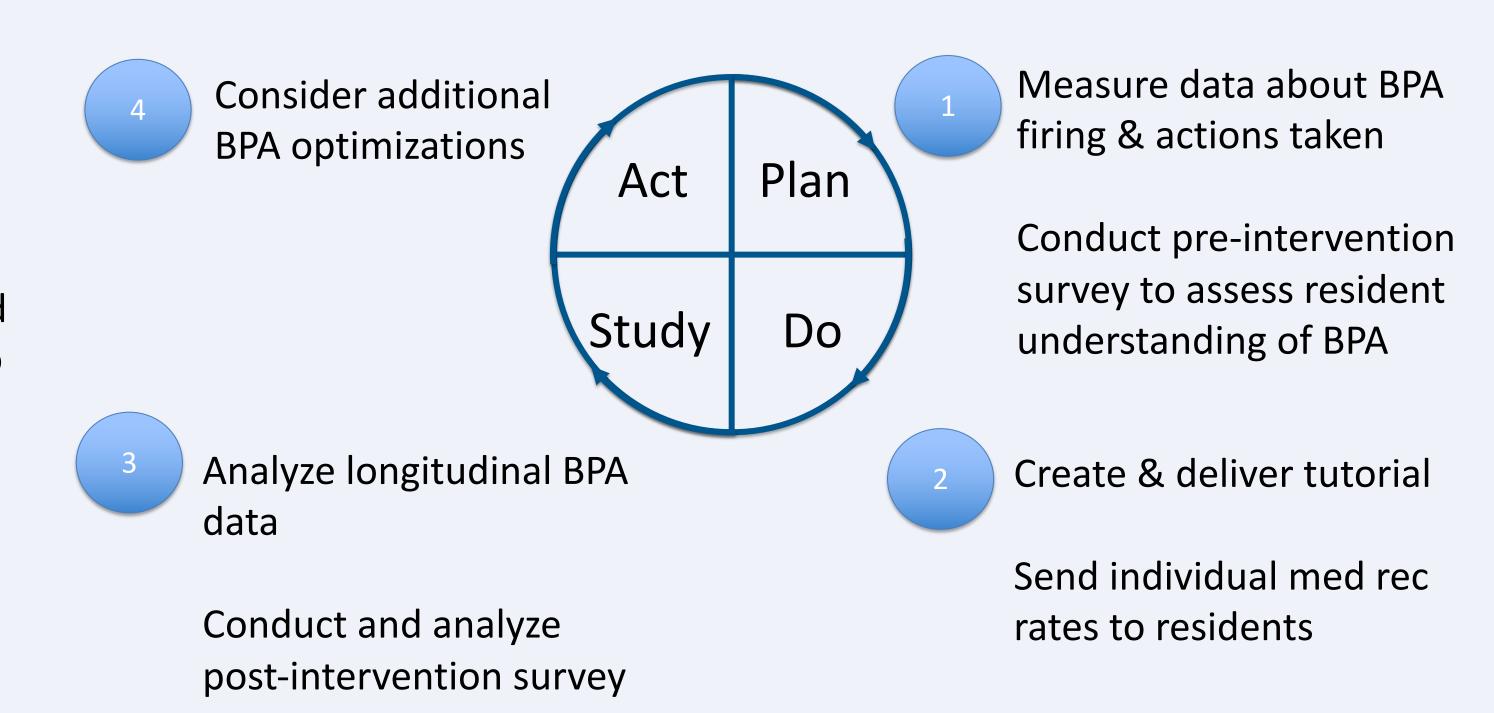


Image 1. Medication Reconciliation Best Practice Alert

Materials and Methods



Results

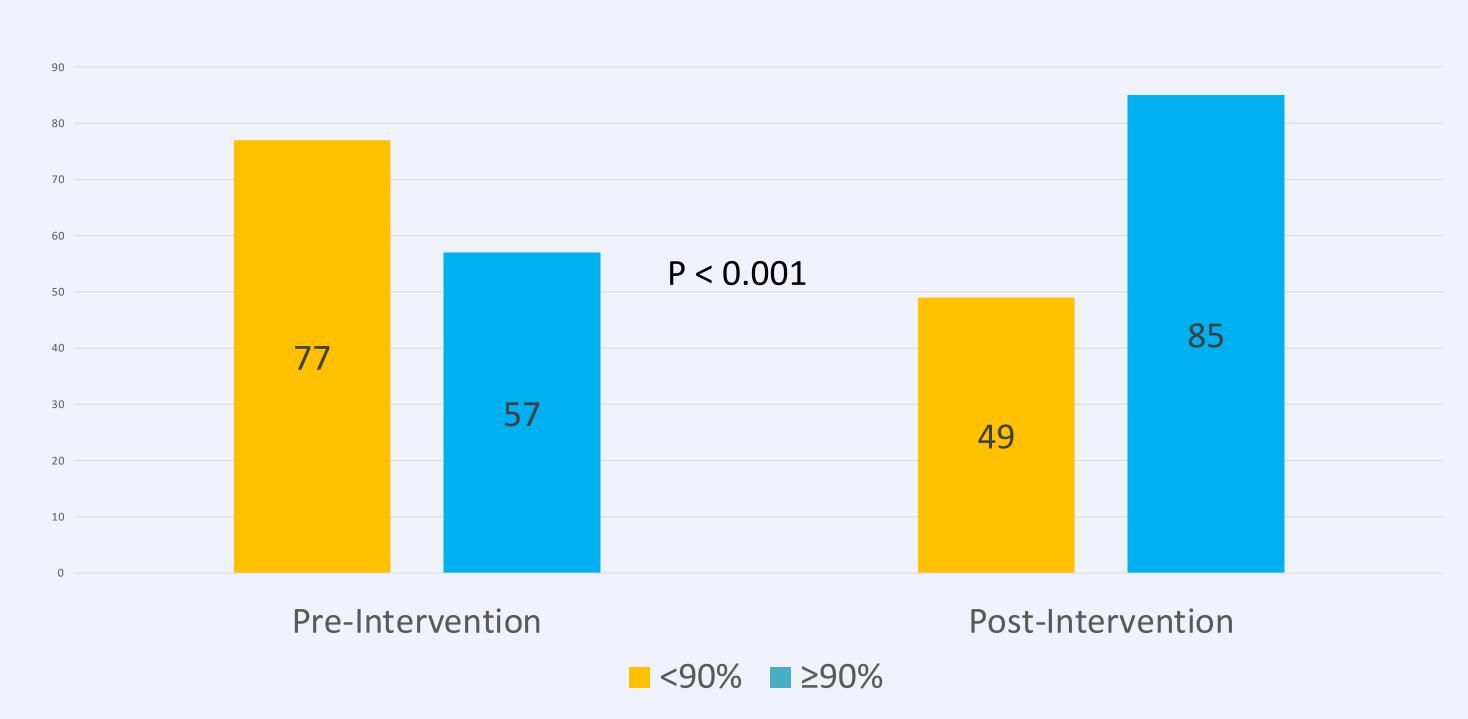


Figure 1. IM resident medication reconciliation rates pre and post tutorial



Figure 2. Survey responses regarding understanding the AMR alert pre and post tutorial

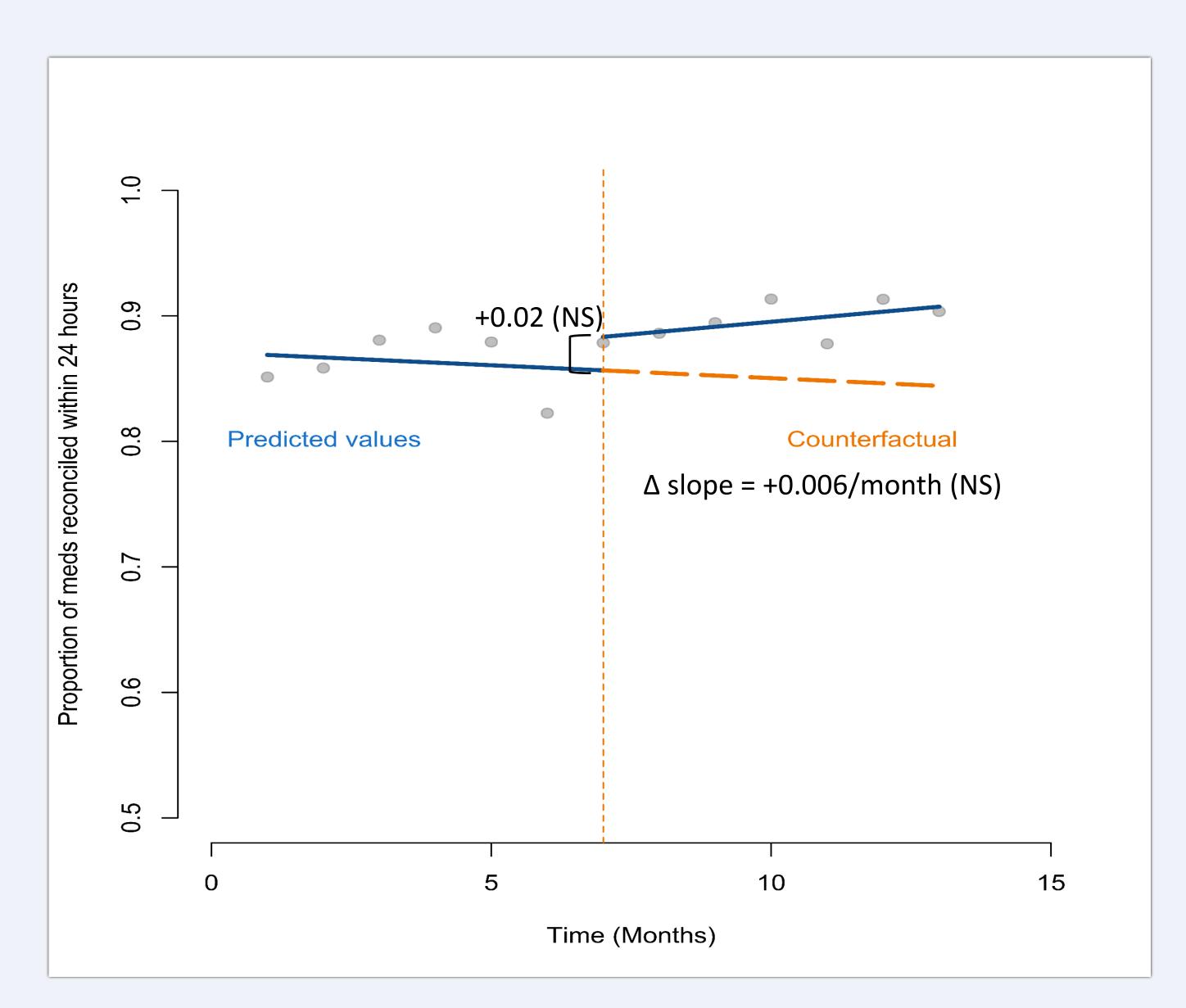


Figure 3. Interrupted time series analysis of medication reconciliation over time

Conclusion

- 1. Reliable admission medication reconciliation is important for patient safety
- 2. Evaluating BPAs to understand barriers to action is a key first step in optimizing them
- 3. An educational effort to improve action taken based on our AMR BPA has been effective

Future directions

- Further evaluation of the BPA to reduce frequency and maintain impact
 - Limiting time of day during which it fires
 - Targeting alert audience to 1st to call
 - Enabling direct link to reconciliation screen instead of med review screen
- Determine ideal frequency of performance data feedback and refresher AMR tutorials
- Extend this approach to other high-frequency interruptive alerts