Don't Be MED RECkless

A Team-Based Approach to Timely and Accurate Medication Reconciliation

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INTRODUCTION

Unintended medication errors are frequent during hospital admission and discharge, and are dependent on outlining intrinsic clinical parameters, standardizing, and teaching the practice of medication reconciliation (Med rec) [1]. The MARQUIS study concluded that clearly defining clinician roles, training dedicated staff, and establishing protocols led to a decrease in harmful drug-related errors [2]. By implementing some of the above interventions at OSUMC, including training dedicated pharmacy staff, and educating providers on the process of med rec we hope to show an increase in med rec completion at 24 hours after admission and a decrease in medication errors.

BACKGROUND

- Medication history: creating or editing a patient's home medication list and indicating time of last dose on admission
- MED REC: "medication reconciliation" by choosing to continue or discontinue home medications while in the hospital
- This project is a continuation of our project "DODGING A MED-WRECK" presented in 2023
- 2022-2023 interventions included defining roles, the pharmacy department training and implementing medication history technicians, and creating EPIC columns for MED REC completions imbedded in the patient list.

AIM STATEMENTS

1. **TIMELY**: Increase the percentage of med recs completed within 24 hours of admission to 85% within 1 year
2. **ACCURATE**: Reduce the number of errors in the admission medication history by 75% within 1 year

METHODS

- This year's interventions started in June 2023 and were collected through January 2024
- To assess timeliness, the endpoint was generated through a monthly electronic medical record report created within EPIC. The report took a snapshot at 24 hours of completed MED RECs.
- OSUMC pharmacy department assessed nursing accuracy of gathering a medication history by performing a history with pharmacy staff after being completed by nursing.
- After the hiring of medication history technicians, a sample of 20 patients was followed in october/november of 2023 and medication errors were corrected and documented.

TIMELY ⟷ RESULTS ⟷ ACCURATE

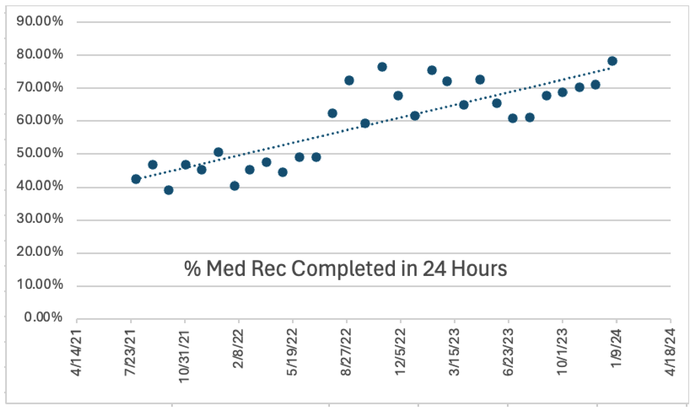


Figure #1

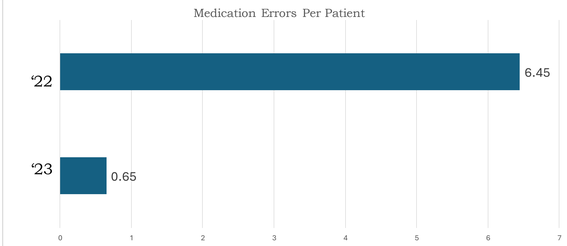
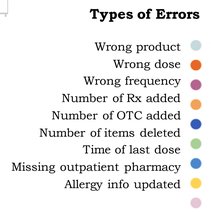


Figure #2



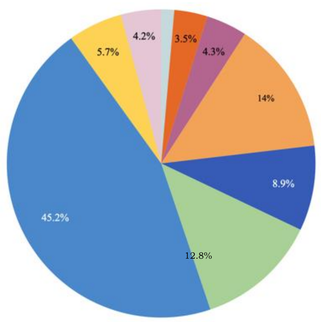


Figure #3

INTERVENTIONS

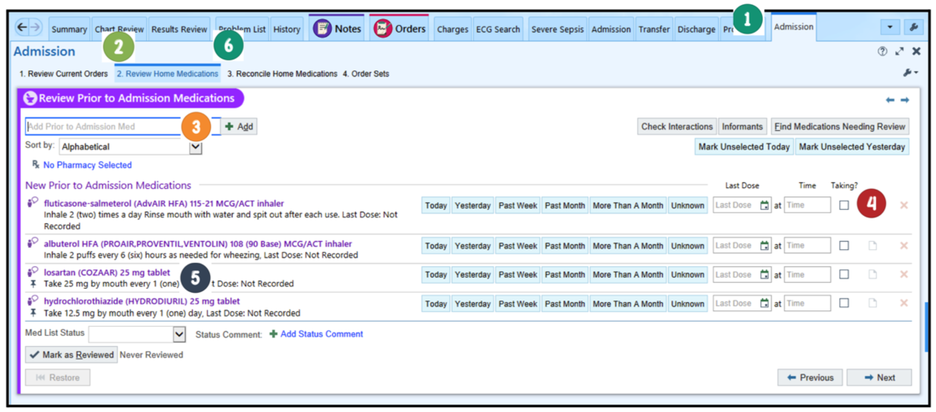


Figure #4 shows our easy-to-follow flow-sheet, which was provided in the main doctors' dictation areas

1. Admission
2. Review Home Medications
3. Add Medications
4. Delete medications
5. Change dose or frequency

INTERVENTIONS cont.

- Prepared a flow sheet showing step-by-step instructions to reconcile medications on admission. (Figure #4)
- Presented the project at Internal Medicine and Family Medicine didactics
- Helped residents add the 'Medication Reconciliation' and 'Reviewed By' columns to their Epic, allowing for daily assessment
- Provided reminders with each inpatient team
- Monitored MED REC columns and prompted the teams to reconcile

CONCLUSION

Our focus on "timely" and "accurate" MED REC will ensure improved continuity of care while transitioning from outpatient to inpatient settings. Our timely endpoint continues to increase with our interventions as we were able to show an 30% increase in MED REC completion at 24 hours, from 60% to 78%. Our goal is to reach 85% by the end of June 2024. Our accuracy end point showed that pharmacists found a lot fewer medication history errors when auditing those done by the med history technicians vs those done by nursing. Limitations to reaching our timeliness endpoint include resident buy in, variability and inconsistency in teams, and information overload of interns. Our accuracy endpoint was met with a 90% reduction in medication errors in just 6 months with the addition of medication history technicians.

NEXT STEPS

Next year we hope to continue our current endpoints while utilizing what we recognized to be our limitations by introducing the topic to interns sooner and being more consistent with reminders to the primary teams.

REFERENCES

1. Breuker C, et al. Medication Errors at Hospital Admission and Discharge: Risk Factors and Impact of Medication Reconciliation Process to Improve Healthcare. J Patient Saf. 2021 Oct 1;17(7):e645-e652

2. Mixon AS, Kripalani S, Stein J, et al. An On-Treatment Analysis of the MARQUIS Study: Interventions to Improve Inpatient Medication Reconciliation. J Hosp Med. 2019;14(10):614-617. doi:10.12788/jhm.3308

Scan here to watch video

The research team has no disclosures to present. This study was determined to be IRB exempt.