Improving Transitions of Care: Medication Reconciliation in the Emergency Department

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Setting and Team Members

- VUMC Adult Emergency Department
- Capstone Coach: Rebecca Lofton, PharmD

Background

- 67% admitted patients have at least one error in their prescription medication history
- Medication discrepancies can contribute to adverse drug events (ADEs) in hospitalized patients
- The Joint Commission made inpatient medication reconciliation a National Patient Safety Goal in 2005
- Quality measure to improve: amount of medication reconciliations completed on admitted patients
- Goal: improve medication safety at transitions in care through accurate medication reconciliation on admitted patients

Aims

- We aim to complete 20 medication reconciliations on admitted patients in the ED, on Wednesday afternoons between 1300-1430, and record the number of medication discrepancies found.

Interventions and Measures

- Patients were prioritized based on high risk home medications.
- Baseline data: total number of admitted patients to VUMC from the ED on Wednesdays at 1300

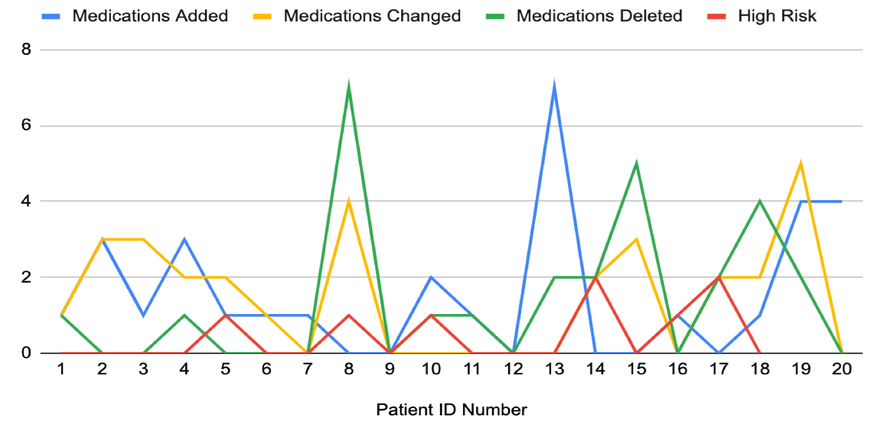
Prioritization for Medication Reconciliation

Insulin	Anticoagulants	Long-acting Narcotics	Benzodiazepines
Immunosuppressants	Oral Chemotherapy	Antiretroviral Agents	Antibiotics
Antiseizure medications	Digoxin	NSAIDs	

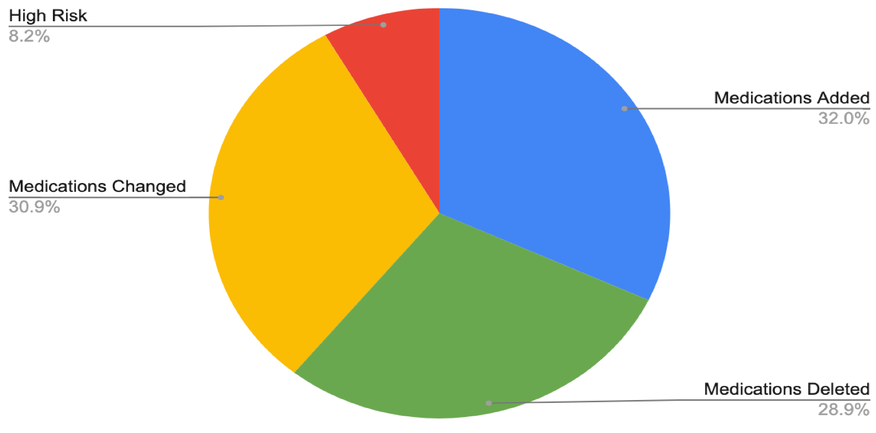
Results

Average amount of time required for each medication reconciliation	45 minutes
Average amount of discrepancies per patient	4.45
Average admitted patients on Wednesdays between 13:00-14:30	43.4
Estimated undocumented medication discrepancies on Wednesdays between 13:00-14:30	193

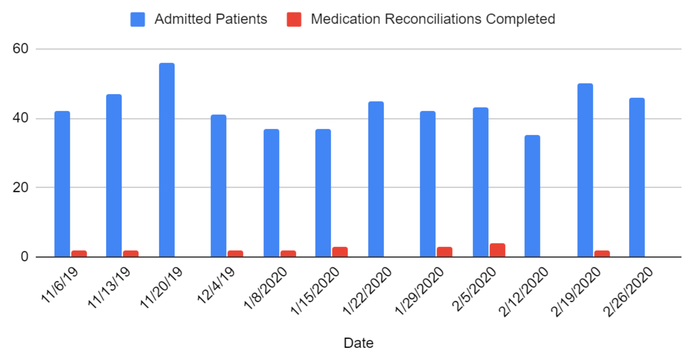
Categorized Medication Discrepancies Per Patient



Medication Discrepancy Type Distribution



Admitted Patients and Medication Reconciliations Completed



Conclusions

- Due to the high number of medication discrepancies detected per patient, our results indicate the need for medication reconciliations to be completed by staff in the ED prior to patient transition of care

Lessons Learned

- Medication reconciliations are time consuming
- Most reliable source is the patient's pharmacy; only they can give objective information
- Challenges: political nature of the ED, difficulty obtaining staff buy-in, time constraints, limited relationship with ED staff

Future Work

- We recommend allocation of medication reconciliation for ED patients, to a trained and established staff member, with a designated protocol including prioritization of patients.

References

- Pippins, J.R., Gandhi, T.K., Hamann, C., Ndumele, C.D., Labonville, S.A., Diedrichsen, E.K. … & Schnipper, J.L. (2008). Classifying and predicting errors of inpatient medication reconciliation. *Journal of General Internal Medicine, 23*(6), 1414-1422. DOI: 10.1007/s11606-008-0687-9