Improving Medication Reconciliation Compliance in the In-Patient Setting

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Introduction

Medication reconciliation is the process of creating the most accurate list of medications to provide patients with their current medications within any setting of the health care system.[1-3] This process includes obtaining the best possible medication history of all current medications, including name, dosage, frequency, and route.[1,2] More than 50% of medication errors occur at transitions of care, with up to 67% of hospitalized patients having at least one medication discrepancy in their admission medication history.[3,5] These transitions of care are associated with increased medication discrepancies, errors, and adverse drug events.[1] Medication errors result in 7000 patient deaths per year.[1] They are common and can lead to prolonged hospital stays, increased emergency department visits, and hospital readmissions.[2]

The Joint Commission and World Health Organization recognize medication reconciliation as an essential safety issue and require the process to be completed at admission, during transfers, and at discharge for hospitalized patients.[2,4] This process is associated with improved patient safety and has been shown to successfully identify and resolve medication errors, decreasing the occurrence of adverse events.[1,3]

Background

- Less than 70% compliance with medication reconciliation
- Medication errors with potential effects on patient safety
- Low patient satisfaction and confusion with discharge medications
- The Plan-Do-Study-Act process was used to address these issues
- Project aimed to:
  - Create an ideal workflow
  - Address the institutional culture
  - Increase overall compliance
  - Decrease potential adverse drug events

PDSA Process

AIM STATEMENT

Increase admission medication reconciliation compliance to ≥90% within 6 months of project implementation.

PLAN

- **Stakeholder Assessment**: identifies the key individuals or groups that will be influence or affect the success of a quality improvement project
- **Members**: quality department, in-patient providers, nursing, and pharmacy
- **Committee Meetings**: weekly to identify the ideal workflow

STUDY

- **Educational Material**: created to explain the med rec process
- **Distribution Phase**: disseminate educational materials to each discipline while tracking all participation
- **Med Rec Culture**: providers were asked to take responsibility for the final review of the medication list

DO

- **Compliance Phase**: monitoring the med rec compliance and auditing the quality of the medication history taken
- **Key performance Indicator**: report generated by the EHR of overall med rec compliance within 24 hours of admission
- **Transparent Sharing**: Compliance data across specialties helped to promote accountability and drive improvement

ACT

- **Act phase**: EHR reports and chart audits to target education to the individual and department
- **Feedback**: non-compliant providers received 1:1 education and demonstration of the correct process
- **Further Education**: Departments with lower compliance rates would receive further education.

Project Timeline

Month	Project Phase	Goal
1	Stakeholder Assessment	Create a weekly interdisciplinary Medication Reconciliation Committee to understand the ideal workflow
2	Educational Materials	Create nursing and provider education: • Tip sheets • Educational video demonstration
3	Distribution	Distribute education to target staff: • Online learning modules • Staff meetings • 1:1 education/huddles with a demonstration of the process by the provider/nurse
4-5	Compliance Reviews	Daily review of non-compliant charts within Electronic Medical Record with real-time feedback/teaching
6	Target Compliance	Increase admission med rec compliance to ≥90%

Results

- ✓ >90% compliance with admission medication reconciliation within 24 hours of admission by month 6 of the project
- ✓ Improved patient satisfaction with more accurate medication lists at discharge
- ✓ Improved patient safety with decreased medication errors and discrepancies

Conclusion

- Medication reconciliation is a vital component during transitions of care and can improve patient safety when completed properly.
- It was identified that the process needed to start and be accurate at admission to reduce overall medication errors.
- By understanding the process and challenges for each team member, we developed an improved workflow resulting in reduced medication errors and less confusion for patients.
- Utilizing the PDSA cycle and management skills, such as stakeholder analysis and a timeline, we were able to successfully reach our goal by the completion of the project

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