Enhancing Advanced Practice Providers' Knowledge of and Compliance to Medication Reconciliation Through Education in the Emergency Department

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Intro-Purpose-Methods-Setting-Intervention

Abstract

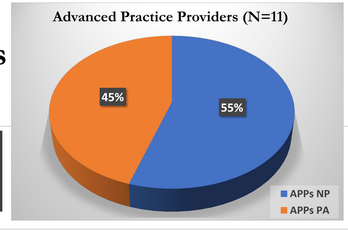
Introduction: Medication reconciliation (MedRec) was designated by The Joint Commission (TJC) in 2005 as the National Patient Safety Goal (NPSG) that has become the standard of practice to identify discrepancies and medication (meds) errors through reconciling medications in all healthcare organizations. *Purpose*: To increase the knowledge & compliance of APPs on the MedRec process in the ED to prevent discrepancies. *Methods*: A 10-item Pre & Posttest survey. *Setting*: 600-bed Academic Trauma Center with an average of 450 daily ED triage visits. *Intervention*: Education Brochure on the MedRec Process.

Background

- ❑ Medication errors cause Morbidity & Mortality
- ❑ In US 82% adults take 1 med/day – 29% take 5 or >/day
- ❑ 79.5% ED visits involves the use of Medications
- ❑ 67% of Med discrepancies are found on ED arrival

MedRec Process: 1) obtaining the pts best possible med history (BPMH), 2) comparing list to current med orders 3) producing the most up-to-date list

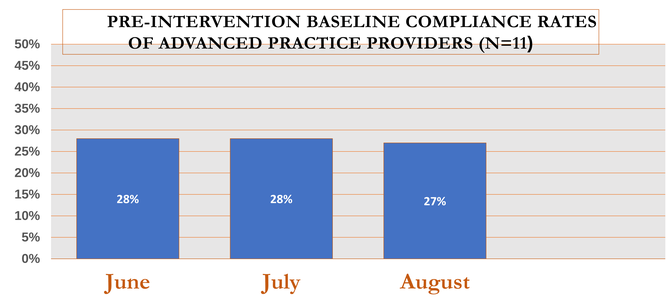
Advanced Practice Providers Sample size



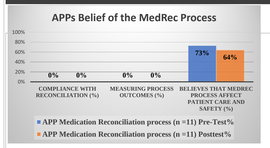
AIMS

1. Assess APP baseline compliance rates in the ED
2. Evaluate if APPs knowledge of MedRec improved after providing education
3. Compare the APP compliance rate of MedRec before and after education

AIM #1



AIM #2



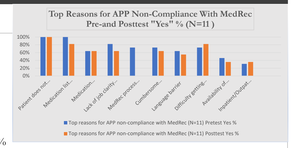
Pre & Post % Increase in Knowledge

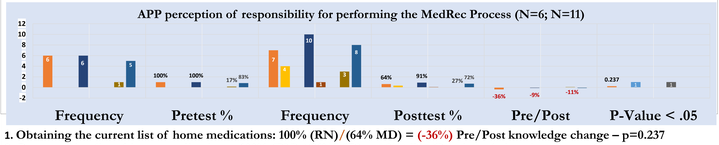
APPs Beliefs

Believes MedRec affects Pt care -9%

Top Reasons for APP Non-Compliance

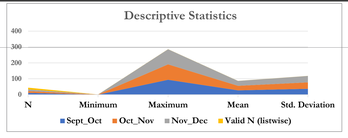
Pt not knowing meds: 100%
Med list not available: -18%
MedRec takes too long: 64%
Lack of job clarity for MedRec: -18%





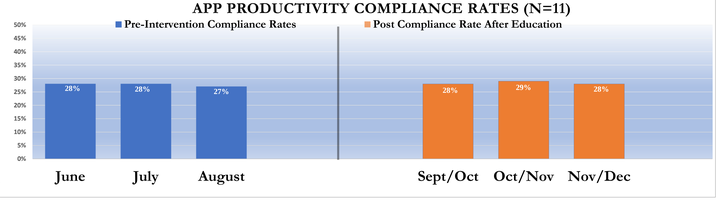
1. Obtaining the current list of home medications: 100% (RN)/(64% MD) = (-36%) Pre/Post knowledge change – p=0.237
2. Documenting list of home medications: 100% (RN)/(91% MD) = (-9%) Pre/Post knowledge change - p=1
3. Reconciling home meds with new medication orders (83% MD)/(72% MD) = (-11%) Pre/Post knowledge change – p=1

AIM #1 & #3



- Mean proportion compliance
- 1% knowledge increase in Oct/Nov
- Results are not significant

- The results are considered directional, meaning in this sample there was an increase in knowledge, but statistical significance did not occur



Results

- The outcome of this intervention for MedRec showed a 1% increase indicating a higher level of knowledge for Oct/Nov (29%) and no statistically significant change from APP baseline practice compliance data to post education compliance rates.
- The outcome of the survey analysis for the pre-and posttest showed an increase in knowledge after education, and no statistical significance. The increase in knowledge was achieved in >50% in the survey questions.
- The goal to achieve 70% for the MedRec compliance among the APPs for this project was unsuccessful.

Strengths - & - Limitations

- Project introduces awareness of a gap in the literature
- Heightens awareness to this category of providers (APPs) eligible to perform MedRec
- Potential expansion of the intervention on larger sample size may improve outcomes
- This project is relevant to practice
- Publication of this project could impact practice change

- Small sample size
- Unscheduled COVID-19 guidelines changed the initial implementation intervention from a face-to-face interaction
- Program coding error negatively skewed responses to a survey question
- Local project site percentages may not be comparable to other teaching hospitals and EDs

Conclusion

APPs in the ED must continue to increase their knowledge and compliance for the MedRec process. The survey responses consistently described the MedRec process as having a positive effect on patient care and safety. Still, most participants reported uncertainty about who performs the MedRec process and were unclear why this lack of clarity exists. This is a direct associations with the underutilization of performing the MedRec process. Therefore, this supports the need to revisit the intervention to strategize a new approach to increase APP knowledge and compliance to promote safety in the ED.

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