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Optimizing the Role of Clinical Pharmacy Services in Transitions of Care

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PROVIDENCE Health & Services

PURPOSE

The purpose of this project is to improve clinical outcomes in patients transitioning from inpatient to outpatient care by optimizing the process that primary care pharmacists use to perform comprehensive medication reviews.

BACKGROUND

- Transitions of care from the inpatient to outpatient setting is an area of great opportunity for improving patient outcomes.
- One prospective cohort study found that 20% of patients discharged from the hospital to home experienced an adverse event within 3 weeks of discharge. Of these adverse events, 66% were medication related.[1]
- Another observational study found that 14% of patients had medication discrepancies at discharge, and that readmission rates were significantly higher in these cases.[2,3]
- Currently, patients receiving care at our medical group are reviewed by a clinical pharmacist following hospital discharge if the reason for hospitalization is, or medications were changed for treatment of:
  - Congestive Heart failure
  - Osteoporosis/fragility fracture
  - Diabetes on insulin
  - Anticoagulation
  - Patient confusion with medications or difficulty taking/obtaining them
- Anecdotally our group has reported many resolved medication issues and avoided medication adverse events since this system was implemented, although these interventions have not been formally quantified.
- There is not currently a standardized process clinical pharmacists use to review medications upon hospital discharge.

METHODS

- Results from a retrospective chart review and a clinical pharmacist satisfaction survey were utilized to standardize and optimize our transitions of care review process.

Inclusion Criteria:
- All transitions of care consults completed by clinical pharmacists

Exclusion Criteria:
- None

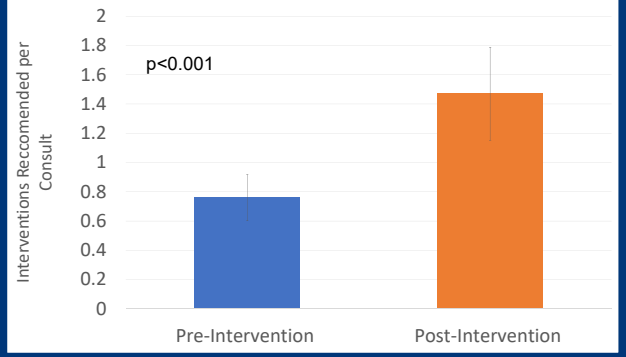
Primary Endpoint:
- The number of interventions/recommendations provided by clinical pharmacists to primary care providers per transitions of care consult

Secondary Endpoints:
- The time taken by clinical pharmacists to complete transitions of care consults
- Proportion of clinical pharmacist recommendations that are implemented
- 30-day re-hospitalization rates.

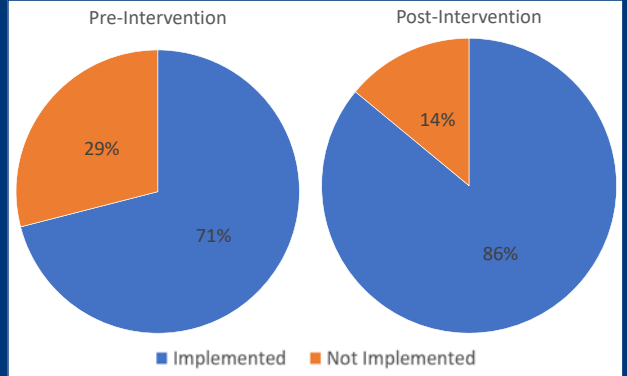
RESULTS

Pre-Intervention: 204 Consults
Post-Intervention: 45 Consults (78% used updated EPIC smart phrases)

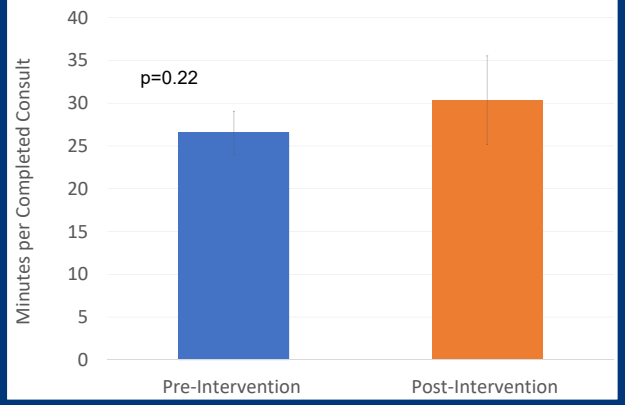
Primary Outcome: Interventions per Transitions of Care Consult



Proportion of Recommendations Implemented



Pharmacist Time per Transitions of Care Consult



METHODS (CONTINUED)

- Results of the initial review (August and September 2021) and survey were utilized to make improvements to transitions of care review process.
- Interventions implemented thus far include:
  - Development of EPIC smart phrases to standardize pharmacist review process.
  - Meeting with the Clinical Support Coordinator team to review strategies to optimize referrals to clinical pharmacy.
- A second retrospective chart review was completed 1 month after the updated EPIC smart phrases were implemented (April 2021) to determine the impact on recommended interventions and time spent per pharmacist consult.

DISCUSSION

These results suggest that a standardized review process conducted via EPIC smart phrases increases interventions provided via clinical pharmacy review during transitions of care.

Several important confounding factors such as seasonal/staffing variation and the unblinded nature of this study must be considered when interpreting study results.

NEXT STEPS

Additional Data Collection:
- One more month of data will be added to the evidence summarized here to allow 2 months of pre and post data.
- 30-day readmission rates post-intervention will be evaluated when 30 days have passed from the data collection period. This will allow for determination of increased interventions or readmission rates.

Continued Process Improvement Possibilities:
- Adjusting criteria for PharmD review
- Leverage clinical pharmacy team to continue modifying and improving recently created EPIC smart phrases
- Continued collaboration with Clinical Support Coordinator team to ensure appropriate referrals for pharmacist review.

REFERENCES

1. Forster AJ, Murff HJ, Peterson JF, et al. The incidence and severity of adverse events affecting patients after discharge from the hospital. Ann Intern Med. 2003;138(3):161–167.

2. Coleman EA, Smith JD, Raha D, Min SJ. Posthospital medication discrepancies: prevalence and contributing factors. Arch Intern Med. 2005; 165(16):1842–1847.

3. Rau J. New Round of Medicare Readmission Penalties Hits 2,583 Hospitals. Kaiser Health News. October 1, 2019. Accessed September 29, 2020. https://guides.himmelfarb.gwu.edu/AMA/websites