Transition of Care Settings and the Value of a Pharmacist: A Literature Review

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INTRODUCTION

- Medication errors and interruptions in the continuum of care for patients transitioning across various settings, such as from hospital to community, still persist. Literature has shown, that there are more clinical risks or negative patient outcomes when programs involving transitions of care (TOC) are not implemented.
- Some examples include increase with hospital readmission rates, gaps in care, or lack of proper medication reconciliation.
- One specific patient population that could be at high risk for not having a strong TOC in place are elderly patients with multiple comorbidities.
- The current distribution of patient population has patients living longer, therefore there is more economic burden associated with Centers for Medicare and Medicaid Services (CMS).
- The 30-day hospital readmission rates has been estimated to $26 billion annual cost to CMS alone.
- Pharmacists play a very important role within the healthcare team, however, there is a gap in current literature to evaluate the clinical and economic benefit of a pharmacists' role as transition of care coordinators versus without a pharmacist.
- As medication experts, pharmacists are valuable members of the healthcare team and are instrumental in supporting continuity of care during transition of care.

OBJECTIVES

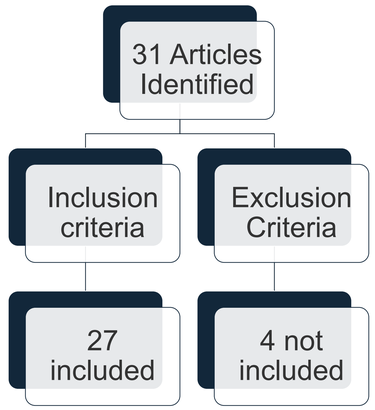
- To evaluate previous literature and identify the various TOC services implemented, the type of healthcare settings with these TOC programs, inclusion of pharmacists and the type of pharmacist led interventions.
- To further understand the cost-benefit analysis of a pharmacist-led intervention in TOC program versus no pharmacist-led intervention.

Methods

- A literature review was conducted using PubMed to identify and highlight the true value of a pharmacist's role in the TOC setting.
- To identify studies with a pharmacist in the TOC role, the following terms were used: 'transition of care', 'readmission rates', pharmacist-led intervention', 'coordination of care', 'medication, reconciliation', 'medication review', 'medication errors', 'pharmacists', 'transitional care', 'patient readmission', 'medication therapy management', and 'cost-benefit analysis'.
- Pharmacist-led interventions included medication reconciliation and patient education.
- Thirty-day pharmacist-led intervention readmission rates, medication errors, and adverse drug event (ADE) prevention were compared to those without pharmacist intervention in different healthcare settings.

METHODS (continued)

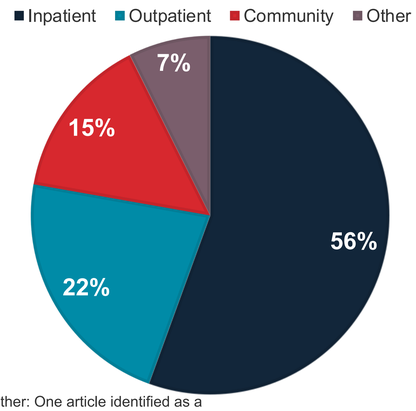
FIGURE 1: LITERATURE REVIEW FLOW DIAGRAM



- Thirty-one articles were identified and twenty-seven were included.
- No time limit was set on the search.
- No IRB was required since this was a literature review.

RESULTS

FIGURE 2: TRANSITIONS OF CARE SETTINGS



Other: One article identified as a systematic review; one article studied TOC in multiple settings

- Majority of TOCs were identified with-in the inpatient setting (54%); followed by outpatient setting (21%) [Figure 2]
- Pharmacists were mostly involved in medication reconciliation efforts (77.8%) and conducting clinical interventions (59.2%) [Figure 3].
- The impact of the interventions identified were mostly demonstrated by reduced hospital readmission rates (70.3%) [Figure 4].

FIGURE 3: MOST COMMON TYPES OF INTERVENTIONS

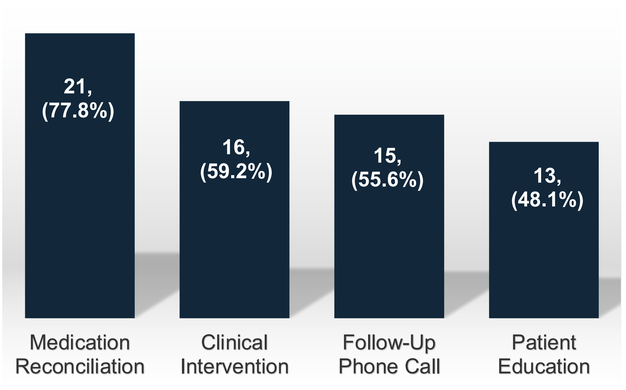
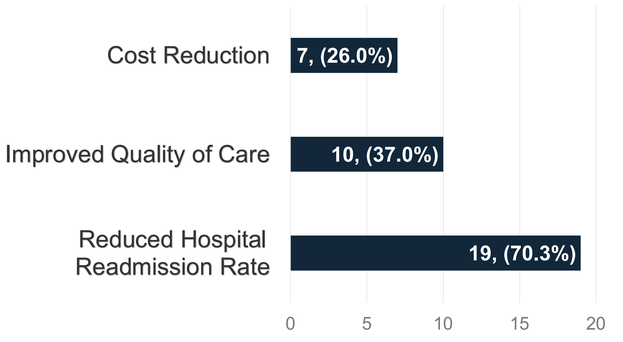


FIGURE 4: MOST COMMON CLINICAL OUTCOMES



RESULTS (continued)

- Twenty-seven primary literature articles were included, and three main settings were found.
- Fifteen articles included studies in the inpatient setting, six in the outpatient setting, four in the community setting, and three categorized as other.
- The most common interventions noted in the studies were clinical interventions, medication reconciliation, patient education, and follow-up phone calls.
- The most common clinical outcomes were reduction in hospital readmission rates, improved quality of care and cost reduction.
- A statistically significant reduction was demonstrated with the thirty-day readmission rates and was seen in the settings of pharmacist involved TOC.

CONCLUSION

- The literature review provided insights to support a pharmacist role and their benefit of being involved in a TOC to improve clinical and economic outcomes.
- With pharmacist intervention, many drug related discrepancies were caught early, preventing medication errors.
- The involvement of a pharmacist within a multidisciplinary health care team during the admission medication reconciliation process demonstrated a significant improvement in patient safety and an economic benefit.
- Incorporating pharmacist intervention at discharge with follow-up phone calls and monitoring reduces the rate of readmission and increases medication adherence.
- In conclusion, the pharmacist role is crucial in the continuum of health care when transitioning within the system to obtain optimal health and quality of care for the patient.
- Our future direction involves the creating a cost-benefit model evaluating the role of a pharmacist versus no pharmacist in TOC.

REFERENCES

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