

Development of an Innovative Technology-Driven Transitions of Care Service to Improve Medication Use in Rural Populations

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BACKGROUND

- Pharmacist-driven transitions of care have been recommended to reduce hospital readmissions and improve patient outcomes
- However, access to pharmacy services in rural areas limit opportunities for patients to benefit from face-to-face pharmacist care within the critical time period immediately following discharge
- An innovative approach to in-home medication reconciliation and patient education supported by technology is one solution to increasing access to care for this population

SERVICE MODEL

Eligible Patients

Any interested patient discharged from a 92-bed county hospital in rural Ohio

Enrollment

Social workers and/or pharmacy marketing representatives invite patients and/or caregivers to enroll in the service face-to-face and immediately prior to discharge

Service Workflow

- Pharmacists at the partner community pharmacy receive discharge orders and new medication orders
- Community pharmacists coordinate with hospital pharmacists, primary care providers, patients, and caregivers as needed to reconcile medications
- Community pharmacists pack new medication regimen in calendar-based adherence packaging
- New medications are delivered to patients' homes, typically within 72 hours following discharge
- Pharmacists videoconference with patients through a tablet device brought to the home by the delivery driver to provide education and instruction on new medication regimen
- Pharmacists generally follow up with patient within a few days prior to exhaustion of medication supply to prepare for next 30- or 90-day period, but also have more frequent follow-up as needed

SERVICE MODEL

Patient Discharge + Service Enrollment

Patient chooses to enroll in service at discharge

Community pharmacist receives discharge order

Medication Reconciliation

Hospital Record

Pharmacist reconciles medications

PCP

Patient

Community Pharmacy

Prescription Processing + Packaging

Prescriptions filled and packaged in calendar adherence system



Home Delivery + Consultation

Medications delivered to patient home

Delivery staff establishes communication via tablet

Pharmacist reviews medications with patient by videoconference

Pharmacist Follow Up

Pharmacist follows up by phone prior to exhaustion of supply

Pharmacist follows up by phone as needed by patient

PRELIMINARY RESULTS

- Patients participated in this service between August 2014 and May 2015
- Enrollment in the program has been discontinued due to low enrollment rates
- 18 patients enrolled in the service before the service was discontinued

Table 1. Enrolled Patient Characteristics (n=18)

Age, median (range)	81 (46-100)
Female Sex, n %	12 (67)
30-Day Follow-Up Complete, n (%)	16 (89)
180-Day Follow-Up Complete, n (%)	11 (61)

NEXT STEPS

- Next steps are to conduct an analysis of impact on 30 and 180-day hospital readmissions
- A descriptive analysis will be conducted of:
 - Hospital admission diagnoses
 - Drug therapy problems identified and resolved by pharmacists
 - 30- and 180-day patient satisfaction data, based on a tool modified from the National Quality Forum Care Transition Measure (CTM-15)
 - Medication adherence trends, based on proportion of days covered

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