Improving Care Transitions through Pharmacy Practice
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Objectives
The objective of this study was to determine if a model for patient-centered care that integrates medication management between hospital and community pharmacists is feasible and can improve medication adherence.

Methods
Design
- This was a randomized, non-blinded, interventional study of 69 patients discharged from a hospital to home.
- The study took place in a 214-bed acute care hospital in Northeastern Pennsylvania and seventeen regional community pharmacies.
- Enrolled patients were hospitalized with a primary or secondary diagnosis of heart failure or COPD, had a planned discharge to home, and agreed to speak to one of seventeen community pharmacists within the study network (i.e., a network community pharmacist) following hospital discharge.
- Information about a comprehensive medication review completed by the hospital pharmacist was communicated with the network community pharmacist to assist with providing medication therapy management following hospital discharge.

Study endpoints
Process measures include the number and type of medication-related discrepancies or problems identified, patient willingness to participate, the quality and quantity of interactions with community pharmacists, hospital readmissions, and medication adherence.

Results
- Of 180 patients eligible for the study, 111 declined to participate. Many patients were reluctant to talk to an additional pharmacist, however if the patient’s pharmacist was already within the network of 17 pharmacies, they usually agreed to participate.
- The study enrolled 35 patients in the intervention group and 34 in the control group.
- An average of 6 medication-related problems per patient were communicated to the patient’s network community pharmacist after discharge.
- In the treatment group, 44% of patients had at least one conversation with the network community pharmacist following hospital discharge.
- There was no difference in post-discharge adherence between the groups (Proportion of Days Covered 0.76 treatment group vs. 0.73 control group, p=0.69), but there was a reduction in hospital readmissions (43% treatment group vs. 62% control group).

Conclusion
The feasibility of this model can be improved by integrating medication management with the patient’s existing community pharmacist, rather than an additional network community pharmacist. While there was no difference in medication adherence, collaboration between the hospital and community pharmacists can potentially reduce hospital readmissions, improve medication safety, and facilitate medication therapy management across care transitions. The CPF funding for this grant also lead to securing a 3-Year Cardinal Health Foundation grant in 2016 for continuing the research topic with the study titled ‘Pharmacist-led transition of care service focused on improving care for patients with multiple chronic disease.’ Additional analysis to categorize patient interventions has led to the development and ongoing validation of a tool to evaluate the significance of pharmacist interventions based on (1) the criticality of the recommendation as related to evidence-based medicine and medication safety and (2) the relevance to the patient.