Characterizing interventions provided by a post---discharge pharmacist home visit service within The Johns Hopkins Hospital

Chelsey Chenxi Song Pharm.D. Candidate,; Alyssa Lesko, Pharm.D.; Robert Green, Pharm.D.; Emily Pherson, Pharm.D., BCPS

## Purpose:

The home based medication management (HBMM) program was created as part of The Johns Hopkins Hospital as an effort to help patients create an effective transition from inpatient care to home setting care. Patients are particularly vulnerable to medication errors and preventable readmissions soon after being discharged from the hospital. For eligible patients, a trained pharmacist would visit the patient in their home, perform medication reconciliation, and make recommendations to ensure optimization of medication use. Currently, there is no system in place to track the type of recommendations, percentage of recommendations implemented, and the impact of those recommendations on 30---day hospital readmission. This study aims to assess pharmacist interventions on patients seen in the home from 2013 to 2015.

## Methods:

A retrospective review was conducted on patients who participated in the post---discharge home---based medication management program between January 2013 and December 2015. Data was collected from the electronic medical record. Key data points collected included: demographic data, reasons for admission, past medical history, length of time prior to home visits, number of medication discrepancies, types of medication discrepancies, number of recommendations, types of recommendations, implemented recommendations, and documentations of any post---visit pharmacy follow---up. Descriptive statistics were used to describe results.

## **Conclusion/Results:**

A total of 99 patients were seen by the Home Based Medication Management Program within The Johns Hopkins Hospital between January 2013 and December 2015. Hypertension and hyperlipidemia were the two most common significant past medical history diagnosis, followed by diabetes, respiratory disease, and heart failure. The average time for patients to be seen post discharge referral was 7.7 days, with the most common referral reason as "requiring additional medication education." A total of 341 medication discrepancies were found during home based visits with an average of 3 discrepancies per visit. Of those, 78% were of prescription drug origin, predominately caused by "patients not taking medications as prescribed." Eighty---one recommendations were made to healthcare providers including dose adjustment (58%), laboratory testing (49%) additional drug therapy (48%), unnecessary drug therapy (35%), and changes in medication formulation (13%). In addition, pharmacists were also able to resolved access to medications issues twenty six times, suggested cost effective alternatives sixteen times and filled drug boxes forty six times. Thirty---seven clinic referrals were also made, however only two documented cases were completed. This data demonstrates the need for better documentation and follow---up for future home based pharmacist visits.