The Impact of Pharmacist Involvement in the Transitional Care of High Risk Patients through Medication Reconciliation, Medication Education and Post Discharge Callbacks.

Background: Transition between care settings is associated with a significant incidence of adverse effects. Previous data suggest that direct pharmacist interaction with patients, through medication reconciliation, discharge counseling, and post-discharge phone calls, improves patient knowledge regarding their medication regimens and decreases the number of adverse drug events (ADEs). Recent literature suggests that pharmacists play a positive role in transitional care from the inpatient to outpatient setting however the impact on readmission rates has not been described.

Objectives: The primary objectives of the pharmacist transitional care intervention are to (1) assess patient’s perception related to communication about their medications as measured by improvement in Hospital Care Assessment of Health Care Provider and Systems (HCAHPS) scores for this domain and (2) assess effectiveness of the model measured by a composite end point of decreased medication errors and ADEs at time of discharge, and with three post-discharge phone calls (3 days, 14 days and 30 days). The secondary objective will be to assess the impact of the intervention on 30-day all cause readmission rates.

Methods: We propose a prospective, two-period, longitudinal evaluation of enhanced pharmacist drug therapy management. Patients will be eligible if they are admitted to two Medicine units at Northwestern Memorial Hospital (NMH). A control group (n=60) will be selected from patients identified as high-risk during the three-month control period. High-risk patients will be defined as those patients discharged on ≥4 scheduled prescription medications and/or a high-risk medication such as anticoagulants, anti-diabetics, immunosuppressants, or anti-infectives. Control patients will receive the current standard of care during their hospital admission, and will be called at 3, 14, and 30 days post-discharge. The purpose of phone calls in the control phase will be to assess rates of medication errors, ADEs and emergency department (ED) or hospital admissions. During the intervention period (three-months), all patients admitted to the same medicine unit will receive a face-to-face pharmacist medication consultation, which will include complete medication history and medication reconciliation. Patients identified as high-risk will receive discharge counseling and post-discharge phone calls at 3 days, 14 days, and 30 days post-discharge. Patient satisfaction with their knowledge of medications will be measured on returned surveys as part of the HCAHPS survey administered to discharged patients. HCAHPS score, the incidence of medication errors and ADEs, and all cause readmission during the 30-day post-discharge period will be compared to a similar high-risk patient group not receiving face-to-face medication reconciliation, discharge pharmacist education and post-discharge care. Based on a previous pilot study in heart failure patients at Northwestern Memorial Hospital (NMH) that demonstrated a 25% improvement in HCAHPS scores related to medication knowledge, it is estimated that a sample size of 60 patients in each group will provide 80% power to demonstrate a 25% improvement in the pharmacist care group.