Title: Impact of a pharmacist on discharge medication reconciliation at a community hospital

Category: Resident
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Company: Olathe Medical Center

Learning Objective: Describe the impact of a pharmacist on discharge medication reconciliation at Olathe Medical Center.

1. **Purpose:**
   Discharge medication reconciliation is a process that can lead to discrepancies such as medication duplication, omission, or unnecessary continuation of therapy. Data has shown that discharge medication reconciliation completion by a pharmacist has reduced potential adverse drug events.[1] Pharmacy led medication reconciliation helps to decrease the number of discrepancies for patients who are admitted to the hospital. [2] A previous quality improvement study at Olathe Medical Center demonstrated a lower rate of discrepancies in the medication history process when the history was completed by pharmacy technicians. The goal of this research project is to promote patient safety through evaluation of pharmacist impact on discharge medication reconciliation by assessing occurrence rate and quantification of discrepancies.

2. **Methods:**
   Utilizing observational retrospective data, one independent reviewer evaluated medical records and identified discharge discrepancies based on inclusion and exclusion criteria. The reviewer identified patients who have documented pharmacy interventions regarding discharge medication discrepancies. Data collection included the type of discrepancy categorized as omission, duplication, unnecessary therapy, dose, frequency, duration, or other. The reviewer evaluated patients with a provider-completed discharge medication reconciliation as the comparator group. The rate of discharge discrepancies was compared between groups. The primary endpoint was the rate of discrepancy on discharge medication lists with and without pharmacist intervention. Secondary endpoints included types of discrepancies, rate of discrepancy per patient, discrepancies per total number of prescriptions, and the potential severity of the discrepancy.

3. **Results:**
   The primary endpoint for the provider group resulted in 113 discrepancies out of 917 prescriptions, compared to 119 discrepancies out of 1072 prescriptions for the pharmacist intervention group. Omission was the most common type of discrepancy resulting from provider completed discharge medication reconciliation, whereas duplication was the most common type of discrepancy caught in the pharmacist intervention group.

4. **Conclusion:**
   Pharmacist intervention did impact patient care by preventing harm from discharge discrepancies. Without pharmacist interventions on discharge medication reconciliation, discrepancies do occur and have the potential to cause serious harm to patients. Without pharmacist intervention, discharge discrepancies go home with the patient unresolved and have potential to cause patient harm or readmission to the hospital. This study showed that pharmacist interventions at discharge prevented 119 discrepancies. Pharmacy does have a positive impact on patient care.

References:

1. Feldman LS, Costa LL, Feroli ER, et al. Nurse-pharmacist collaboration on medication reconciliation prevents potential harm. J Hosp Med. 2012;7(5):396-401.

2. Digiantonio N, Lund J, Bastow S. Impact of a Pharmacy-Led Medication Reconciliation Program. P T. 2018;43(2):105-110.