

An Assessment of a Pharmacy-Based Enhancement to The Hospital Medication Reconciliation Process

Pharmacy Resident Investigator: Lucy Dalzot, Pharm.D.

Senior Investigator: Douglas Slain, Pharm.D., BCPS

Abstract

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) established national patient safety goals that included the revolutionary concept of medication reconciliation. The purpose of this goal is to “accurately and completely reconcile medications across the continuum of care,” which requires each institution to establish a process by which a complete and accurate list of home medications is compiled upon patient admission. This process can be enhanced by having a pharmacist direct the medication reconciliation process and by matching home medications with recognized indications for use upon hospital admission. Home medications are deemed “unspecified” if an indicated disease state or condition for the medication is not reported in the admission note or pre-admission chart information. Medication-condition matching, which is a tool for taking a proper medication history, is an important principle that has not been officially advocated by JCAHO in the medication reconciliation process. The use of medications without a clear reported indication is of particular concern and has been associated with polypharmacy. Polypharmacy, defined as excessive or unnecessary use of prescription or nonprescription medications, can result in higher drug costs, adverse events, drug interactions, and may reduce compliance with other medications. The objectives of this mentored residency project are to provide estimates of the occurrence of unspecified home medications continued at hospital admission, to identify the types of medications most frequently regarded as unspecified at admission, identify types of patients at risk for having unspecified medications at admission, and to evaluate if a pharmacist can enhance the collection of accurate information about home medication use in admitted patients. The study pharmacist in this pilot project is a Pharmacy Practice Resident. The pharmacist will assess medication histories (including current medication reconciliation forms) for completeness and will work in a multidisciplinary fashion with physicians, nurses, patients, and caregivers to clarify when there are medication-condition mismatches for admitted patients’ home medications. The pharmacist will evaluate 300 adult patients, aged 50 years or older and taking 4 or more home medications. Patients will be excluded from the study if they were directly admitted to an intensive care unit or if their nurse or physician deems them to be a fair or poor historian. The admission note, medication reconciliation form, and all pre-admission paperwork, including the home medication list, will be reviewed for each patient selected for this study. Only home medications continued upon admission will be evaluated in the present study. Each home medication listed in the admission note will be matched with an indication listed in the admission note or pre-admission paperwork. If an unspecified medication is found, the study pharmacist will proceed through a study algorithm in an attempt to clarify the reason for the unspecified medication. In this process the pharmacist can check old clinic or hospital records and work closely with patients, caregivers, nurses, and physicians to clarify information about the use of any home medication initially deemed as unspecified. If the hospital physician cannot clarify the use for any unspecified medications, it is within their rights to discontinue the medication if they see fit.

If this pilot project proves to be beneficial to patient safety, it may serve as a template for hospital pharmacists everywhere to take a more active role in the medication reconciliation process. Although the pharmacist in this study will “retrospectively” evaluate the medication history initially recorded by a physician within a 24-hour period, the implications are inherent that pharmacists can do this kind of work “prospectively.” While pharmacist-directed medication reconciliation can be a multi-faceted program, we have chosen to focus on one major part of the process given that this is a pharmacy practice residency project. This project has tremendous potential for replication by staff pharmacists, clinical specialists, and pharmacy residents at hospitals across the country. The novel approach of employing a pharmacist’s knowledge of medications and drug information resources, a structured approach (algorithm), and the use of medication-condition matching provide strength to this pilot project. The consistent use of these methods may improve compliance with national patient safety goals and the ASHP 2015 Initiative goals and objectives. In addition to potentially improving patient safety, these efforts can improve the visibility of pharmacy within hospitals.