

Medication Reconciliation: Who and How?

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Medication reconciliation is the “process of comparing the medications that the patient has been taking prior to the time of admission or entry to a new setting with the medications that the organization is about to provide.”¹ The primary purpose of medication reconciliation is to reduce the frequency of medication errors that could result in harm to patients.² Medication reconciliation has been shown to improve the accuracy of recorded medication and allergy information, medication adherence, and medication knowledge; it has also been associated with reductions in the incidence of preventable adverse drug events, frequency of physician visits, and frequency of hospital readmissions.³ Admission drug histories obtained by pharmacists, one component of medication reconciliation, have been associated with reductions in in-hospital mortality.⁴ The Safer Healthcare Now! campaign has identified medication reconciliation as a targeted intervention for improving patient safety in acute and long-term health care institutions.⁵

Implementation of a process for medication reconciliation has been challenging for some institutions. There is no single model of medication reconciliation that is the “gold standard” and, because of distinct models of care delivery, each institution generally develops its own method of performing medication reconciliation.² One of the questions that arises during implementation of medication reconciliation models is, Which health care professional (or professionals) should have responsibility for medication reconciliation? Many advocate that pharmacists should be responsible for medication reconciliation⁶⁻⁸ since, after all, medication safety is (or should be) our domain, and pharmacists have the most appropriate training to carry out this function. However, medication reconciliation can be time-consuming, and many hospitals have limited pharmacy resources; as a result, some believe that successful systems of medication reconciliation develop and incorporate cooperation and collaboration among multiple health care professionals.²

Elsewhere in this issue of *CJHP* (see page 267), Jacko Namespetra⁹ describes the implementation of a seamless discharge prescription form that incorporates a multidisciplinary approach, involving primarily nurses and physicians, for medication reconciliation. The



seamless discharge prescription is initiated by nursing staff upon the patient's admission to hospital. The admitting nurse obtains the initial medication history, and a pharmacist may perform a medication review. Upon discharge, a physician completes the seamless discharge prescription and signs the form, which then becomes the patient's discharge prescription. The form is then faxed to the patient's health care providers and to his or her community pharmacy. A survey of physicians' perceptions of the utility of the seamless discharge prescription revealed a positive response, with substantial acceptance of the form and the process. The response from nurses was mixed, with some expressing concern about patients' understanding of the information provided, which was presented in the form of a prescription, including Latin abbreviations and military time. In response to this concern, another form, the discharge medication teaching sheet, was created specifically for patient teaching; this added a time-consuming task for the nursing staff but was perceived to be important for adequate patient understanding. Overall, this interdisciplinary model of medication reconciliation and seamless discharge, relying heavily on health care professionals other than pharmacists, appears to work reasonably well for this specific institution.

Is this a more effective method of performing medication reconciliation than other methods that have been

described in the literature? Few published data comparing methods of medication reconciliation are available. Nester and Hale¹⁰ reported that pharmacists identified a greater number of discrepancies between patients' reported home medications and initial hospital medications than nurses did. Pharmacists also identified a significantly higher proportion of patients taking herbal products or nonprescription medications than did nurses, and pharmacists were significantly more likely to contact patients' community pharmacies to clarify patients' home medications. Paquette-Lamontagne and others¹¹ described the use of a discharge prescription form for which the majority of information was collected by pharmacists. This system resulted in increased "conformity" rates of community pharmacy patient profiles after discharge from hospital. For example, when a medication was discontinued in the hospital, this system resulted in a higher rate of cancellation of the medication in the community pharmacy. Similarly, if therapy with a new medication was initiated in the hospital, this system resulted in a higher rate of postdischarge prescription of the medication. In general, however, we know relatively little about the optimal methods and models of performing medication reconciliation. It is likely that no single model exists that will be appropriate for all hospitals; however, it may be possible to identify specific methods of medication reconciliation that work better for large teaching hospitals and others that work better for smaller community hospitals, for example. Ideally, medication reconciliation should be performed primarily by pharmacists, but there may be certain situations in which an interdisciplinary approach is optimal.

Medication reconciliation is an important process for improving medication safety. The optimal models and methods for performing medication reconciliation continue to evolve. Future research should focus on improving medication reconciliation processes and comparing different models, including comparisons between systems that use primarily pharmacists and those that are more interdisciplinary in nature.

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