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# Pharmacists: Part of the Transitions of Care Team in the Ambulatory Setting

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# Pharmacists: Part of the Transitions of Care Team in the Ambulatory Setting

*By Mary Ann Kliethermes, BS, PharmD*

As the health care community continues to grapple with problems plaguing our health system, including transitions of care, it becomes increasingly important that we achieve optimal utilization of the resources already present in the system. The skill and knowledge of the ambulatory pharmacist is an example of a resource that is currently underutilized.

## The Evolving Role of Pharmacists

Pharmacist training and the practice of pharmacy have changed dramatically over the past 40 years, from a concentration on drug dispensing to a clinical pharmacy approach that focuses on the patient and his or her optimal use of medications.

Clinical patient care services by pharmacists to optimize medication use are solidly established in the institutional setting. Ample evidence demonstrates the value of hospital-based pharmacists in reducing adverse drug events, and improving medication adherence, knowledge, and appropriateness.[1,2] Because the majority of medications are used by patients in the ambulatory setting, similar medication-related needs are changing the roles of pharmacists practicing in the community.

For transitions of care to occur with the desired level of patient safety, multidisciplinary collaboration among all health professionals directly involved with patients and their medications is necessary. Of the many health care providers on the team, pharmacists are most likely to have a complete view of a patient's medications - those that are ordered by a patient's various health care providers as well as over-the-counter or herbal medications a patient may consume. Trained to provide clinical patient care services, pharmacists are well positioned to perform key elements of the medication reconciliation process as they work with other members of the team.

The most visible service provided by ambulatory pharmacists is processing and dispensing prescriptions. Tied closely to this service is counseling patients on their medications. Although this is a required service, it is not always effective and does not occur consistently for a number of reasons including the patient's right to refuse such counseling.

Simple improvements in prescription communication could greatly enhance the ability of the dispensing pharmacist to assist patients during transitions of care. For instance, providers' prescriptions written in institutional settings include information such as: stop drug X, change dose to X mg, or switch therapy to X medication. If providers wrote prescriptions in the ambulatory setting in a similar fashion, the pharmacist could assist the patient in following physician orders. Without communication from the physician, the dispensing pharmacist has no knowledge of the physician's intent to stop one medication and start another and is therefore unable to reinforce the instruction with the patient. Such small, simple "fixes" have the potential for a strong, positive impact.

Improving patient education and knowledge at every step is important in the process of understanding how to use medications. Disease and its therapy are complex concepts that are difficult to learn, especially for those who already feel poorly or those with poor health literacy. Because repetition is important in such learning, routine counseling regarding medications could serve to reinforce understanding and identify areas where patients may be confused about their therapy. Again, the more information the pharmacist has regarding patients' medical conditions and goals of therapy, the greater the benefit from the counseling process. It follows that the larger the perceived benefit from counseling the more likely this service will be demanded and provided.

## Medication Therapy Management

A growing number of pharmacists in the ambulatory setting are providing

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clinical patient care services such as those encompassed by medication therapy management (MTM). MTM is a group of ongoing, comprehensive, and coordinated services to optimize medication use, particularly for patients with chronic conditions and those with complex or expensive medications.[3] MTM is geared toward the needs of a single patient and may include any of the services listed in Table 1.

MTM is mandated by the Medicare Modernization Act of 2003 ( Medicare Part D benefit) and is a feature of the innovative initiatives mandated in the 2010 health reform legislation such as the Patient-Centered Medical Home (PCMH).[4] A major goal of MTM services is to reduce medication-related problems, making medication reconciliation an essential component of any MTM program.

Pharmacists providing MTM patient-focused services have greater knowledge of patients' conditions, therapy goals, and other health needs. In this role, they may provide the greatest benefit to patients during transitions of care. With some tweaking and resolution of existing barriers, medication-related transitions of care can be improved by the pharmacist while providing any of the above services.

Pharmacists may provide MTM services through affiliation with an outpatient or community pharmacy, or these services may be provided in more innovative settings. The number of pharmacists practicing and providing MTM services within physician offices and medical clinics is likely to increase as physician groups and health care organizations realign to adopt the PCMH model of patient care. Providing MTM services within a patient's home - another cutting-edge MTM model - may be the optimal method of providing MTM to the frail or most vulnerable patients.[5]

Personal experience providing MTM services at an urban university outpatient pharmacy-based clinic underscored the prevalence and seriousness of medication discrepancies in an indigent, elderly population with multiple conditions, multiple providers, and multiple prescription medications.[6,7] Problems occurred following multiple provider visits as well as during transitions from institutions.

Despite the availability of an integrated electronic medical record to all providers, including the MTM clinic and pharmacy, medication discrepancies were numerous and common. The MTM pharmacist's role was to identify the medication discrepancy and serve as a knowledgeable communicator between multiple providers to resolve the medication problem. Consequently, medication reconciliation and providing patients with up-to-date medication lists became an integral and expected service of the clinic.

Very little research exits in the area of ambulatory pharmacists and their roles in medication reconciliation in the community setting. A recent study in an internal medical clinic associated with an urban safety net hospital measured accuracy of a nurse-completed medication reconciliation form for 90 clinic patients before and after a pharmacist-led 20-minute education session.[8] The in-service session focused on the importance, process, and organizational policy of medication reconciliation. The researchers found that errors in the nurse-completed medication reconciliation forms were common (only 14.4% of completed forms were correct) and the 20-minute education intervention increased the accuracy by a mere 4.5% to18.9%.

A second study - a retrospective review of 100 patients in a family practice center affiliated with a university health system - compared the pharmacy's and the physician office's patient medication lists[9] with the goal of describing the types and frequencies of medication discrepancies between the 2 sites. Patient usage of physicians and the pharmacy within the center was high. Researchers found an average of 6 medication discrepancies per patient. The top reasons for discrepancies were inactive medications, medications excluded, dose mismatch, and therapeutic duplication.

Although these studies add to our knowledge of the issues pertaining to medication use and reconciliation in the community setting, they do not evaluate the role and benefit of the ambulatory pharmacist in the medication reconciliation process.

Despite the lack of evidence, it is reasonable to assume that the services provided by an ambulatory or community pharmacist would likely mirror the evidence that exists for the hospital pharmacist. However, additional barriers in the community setting must be resolved. The average community or ambulatory pharmacist often practices in isolation with little information about the patient and the purpose and goals of the prescribed medication(s). This greatly impedes the pharmacist's ability to contribute at an optimal level within the multidisciplinary team. Connecting the pharmacist to the medical practice as proposed in the PCMH model is one way to overcome this barrier.

A lack of standard communication methods among the multidisciplinary team members is another impediment. It is difficult to resolve medication discrepancies identified for a patient if team members are unable to communicate in an efficient and timely manner.

Because MTM programs are fairly new, the number of programs with trained pharmacists may be insufficient to adequately address the prevalence of the problem and the number of patients who could benefit from the service.

Finally there is little or no reimbursement for MTM or medication reconciliation, placing the growth and sustainability of these needed services at risk.

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The substantial medication needs of patients in the community require each member of the care team to participate fully to improve medication transitions of care. This premise is a key tenet of the Pharmacy Quality Alliance (PQA), a collaborative of key stakeholders including pharmacy organizations (representing pharmacists in all areas of practice), the federal government, insurers, industry, and other health care providers whose purpose is to improve health care quality and patient safety.

The Medication Reconciliation Cluster Group, convened by the PQA, was charged with developing quality measures pertaining to medication reconciliation in the community (2008) and developing a research concept proposal to utilize ambulatory pharmacists as part of the health care team involved in medication reconciliation (2010). The group has developed a set of 5 measures to comprehensively evaluate the medication reconciliation process, as well as a smaller, more focused, measure geared toward measurement of the process in a high-risk cohort (Table 2). Development of the concept paper is well under way.

We all recognize that, of the many problems facing patients in our health care system, medication problems are among the most prevalent. It will take a team of all involved health care providers, working efficiently in tandem and at their highest levels, to provide the best quality and safest care for our patients.

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## Table 1. Medication Therapy Management Services

1. Assisting patients with access to medications and care
2. Assisting patients with medication adherence
3. Performing medication reconciliation
4. Performing or obtaining necessary assessments of the patient's health status
5. Coordinating care among a patient's providers with regard to medications
6. Performing a comprehensive medication review
7. Identifying medication-related problems
8. Formulating a medication treatment plan
9. Selecting, initiating, modifying, or administering therapy under a collaborative practice agreement
10. Monitoring and evaluating the patient's response to therapy, including safety and effectiveness
11. Providing patient education and training designed to enhance patient understanding and appropriate use of medications
12. Documenting and communicating care to other providers.

## Table 2. Pharmacy Quality Alliance Medication Reconciliation Measures

- Percent of patient encounters during which a patient's personal medication list is available
- Percent of patients for whom a documented personal medication list was created among patients without documented personal medication lists
- Proportion of pharmacist-patient encounters where a patient's personal medication list is reviewed, updated, and reconciled
- Percent of the patient's personal medication list discrepancies resolved per patient encounter compared to the patient's personal medication list discrepancies identified per patient encounter
- Percent of patient encounters during which the patient is provided with a reconciled personal medication list compared to the number of patient encounters
- Percent of high-risk patients with a new prescription or renewal of a prescription whose medications were reconciled *

* High-risk refers to a Medicare Part D beneficiary who takes 8 or more chronic medications or who receives an oral high-risk medication as defined by Institute for Safe Medication Practices.

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