

Readmissions NEWS

Family Caregivers: Essential Partners in Medication Reconciliation

By Carol Levine

Barbara Jensen, an 83-year-old widow, was hospitalized for four days following an episode of congestive heart failure (CHF). On the morning of her discharge there is a flurry of activity. There are discharge papers to be signed. She can't find her glasses. A nurse reminds her to record her weight daily and says that a doctor will come by soon to give her prescriptions for her new medications. Laura Fuller, Mrs. Jensen's daughter, who has been at her bedside every day, is out of the room checking with the social worker about the ambulette, which is running late.

As it happens, in this hypothetical but reality-based scenario, the ambulette driver and the doctor arrive at about the same time. The doctor gives Mrs. Jensen her prescriptions and reminds her to take her medications as directed. He asks if there are any questions. Distracted and confused, Mrs. Jensen says "No." When her daughter returns, the nurse tells her that Mom is ready to leave. "But I had a question for the doctor about the medications," Ms. Fuller says. "Don't worry," the nurse reassures her. "The doctor explained everything to your Mom."

A rushed but not atypical discharge. Yet one of Mrs. Jensen's medications is warfarin, an oral anticoagulant that must be dosed properly to prevent serious side effects like bleeding or blood clots. If she doesn't understand how and when to take the drug and what symptoms to report, she is at risk of being rehospitalized within the first few weeks after discharge. Her health and well-being will suffer, and the hospital may incur a financial penalty. Yet the one person in the scenario best situated to prevent the readmission – her daughter Laura – is not an essential part of the transition process.

Medication Reconciliation: The First Line of Defense against Medication Errors. Medication error is one of the most common reasons for preventable hospital readmissions. Most errors are attributed to patient failures: patients don't get their prescriptions filled or they don't take them as prescribed or they don't take them at all. The blaming list goes on and on. But the failures start while the patient is in the hospital, and it is professionals who are lacking. The Institute of Medicine's *Preventing Medication Errors* report (2006) estimated that the average hospitalized patient is subjected to at least one medication error every day. A different study published in 2004 by The Joint Commission estimated that more than 40% of medication errors occur because of failures in medication reconciliation at admission, transfer, and discharge.

Medication reconciliation is the formal process that is intended to prevent medication errors and adverse drug events. According to The Joint Commission, which designated medication reconciliation one of its National Patient Safety Goals in 2005, medication reconciliation is "the process of comparing a patient's medication orders to all of the medications that the patient has been taking." The purpose is to avoid omissions, duplications, dosing errors, and drug interactions. The term appears to have entered the medical lexicon in 2004, although the concept was well known before that, referred to as "concordance among drug lists" or just "drug history."

If the definition is simple, implementation is not. There are five broad steps: develop a list of current medications; develop a list of new medications; compare the two lists; make decisions based on the comparison; and review the reconciled list with the patient. Each step builds on the previous one. If there are mistakes, they will be carried over into all the succeeding iterations.

The problems start with step one: compiling a list of current medications. Very few patients arrive at a hospital Emergency Department or inpatient unit with an up-to-date, comprehensive list of the prescription and over-the-counter drugs and supplements they are taking. These patients are sick and possibly in pain. They may have memory problems. They may not be able to pronounce the names of the drugs. They may have idiosyncratic ways of describing the medications they do remember – the pink pill for blood pressure, the round one for "sugar," the "big horse pill" for "I forgot." They may report inaccurate dosages. They may neglect to mention substances like aspirin, laxatives, or antacid preparations, which are not, in their view, drugs. Some patients may be reluctant to talk about "natural" or ethnic medications that do not meet Western medicine's standards of evidence.

If a physician's medication record is available, it is likely to be out of date. Patients with serious chronic illnesses see many physicians, who rarely reconcile medications with each other. With an accurate list of current medications, the other steps in medication reconciliation can be completed with more confidence.

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The Family Caregiver as a Source of Information. Clearly professionals assigned to create an accurate medication record have a challenging task. Surprisingly, however, they do not automatically review medications with the person most likely to have accurate information -- the patient's family caregiver. Among the most common responsibilities that family caregivers assume is medication management. They typically order refills, pick up prescriptions from the pharmacy, prepare pill boxes, administer injections, and watch out for symptoms that may be related to drugs. While their knowledge may not be complete, it is likely to add a significant layer of information to what the patient or the patient's physician may be able to provide. If there are questions about dosages or drug names, the family caregiver can bring the patient's pharmaceutical armamentarium to the hospital for review.

While the family caregiver's information starts at the first medication reconciliation, it does not end there. At discharge the family caregiver can identify gaps in the supposedly reconciled list. Frequently drugs are discontinued in the hospital and never reinstated unless the patient or a family caregiver asks, "But what about my father's cholesterol medication? Shouldn't he still be taking that?" Or, "My mother's going to take her laxatives no matter what you or I say. What is the least harmful one for her?"

The TC-QuIC Experience. The importance of family caregiver involvement in care transitions is the guiding principle behind the United Hospital Fund's Transitions in Care --Quality Improvement Collaborative (TC-QuIC). Starting in July 2010, TC-QuIC has involved 37 New York City hospitals, nursing home rehab programs, home health care agencies, and hospices in two rounds of activity, the second ending in June 2012. Using the Institute for Healthcare Improvement's Model for Improvement, teams from these facilities and agencies focused on improving transition processes by including family caregivers of seriously and chronically ill patients in decision making and providing focused information, preparation, and training.

The foundation for this quality improvement effort is early identification of family caregivers and assistance with self-assessment of their needs for training and support. The first of five strategies is inclusion of the family caregiver in medication reconciliation. (The others focus on post-discharge options, discharge preparedness, well-orchestrated day of discharge, and closing the loop with the family caregiver and receiving provider after discharge.) Guides for family caregivers and providers from the Fund's Next Step in Care website (www.nextstepincare.org), along with selected other materials, are the basic tools.

Identifying the family caregiver proved to be the first stumbling block in involving them in medication reconciliation. None of the participating teams had a systematic way of identifying the family caregiver who was most involved in medication management at home. Assumptions that the family member at the bedside on a particular day or shift was the one who knew about the patient's care were as often false as correct, as were assumptions that a particular relationship (eldest or youngest daughter or spouse) took on this role. The only accurate way to identify the family caregiver most appropriate to involve in medication reconciliation was to ask the patient: Who helps you most with your medications? Or if the patient was unable to respond, to ask the family members at the bedside who played this role. Teams that tried this simple approach were usually able to identify the right person.

Just as there was no systematic way of identifying the appropriate family caregiver, there was no system in place to enter this information in the medical record, whether it was electronic or on paper. The information obtained by one nurse was lost to others who took on the medication reconciliation task. Many of the teams are now working toward incorporating this vital information in the patient's chart.

Family Caregivers Made a Difference. During both rounds of TC-QuIC, teams reported their rapid cycle tests of change monthly. In round one, from December 2010 to May 2011, 1,086 family caregivers were identified. At the beginning of the period, which followed an intensive preparatory period, medication reconciliations were completed with 53 percent of the identified family caregivers; this rose to 84 percent by the end of the period. Equally important, medication reconciliation took place one full day earlier -- from the second day to the first -- following admission, which allowed more time to sort out the differences. On average three medication discrepancies were found when the family caregiver was part of the process. Hospitals found an average of six discrepancies, while home care agencies found two. Nearly all (95 percent) of the family caregivers had questions about medications. Results from round two are still pending.

Staff attitudes began to change during TC-QuIC. At one session a nurse reported that a colleague did not understand why he should involve a family member in medication reconciliation because "this patient is alert and oriented times three." The nurse informed her colleague that just because the patient knew her name, where she was, and the year was no guarantee that she could name all her medications, dosages, and how to take them. It was essential to review the list with the family caregiver. The nurse added that before TC-QuIC she probably would have agreed with her colleague.

Reducing hospital readmissions was not an explicit TC-QuIC goal. Teams that measured hospital readmissions, however, did find a significant decrease, in one case from 23% to 14% for CHF patients. During the second round, all teams are reporting on hospital readmissions (to the extent that they have access to the data, which is by no means a given). They too are finding that the process of involving family caregivers is having a positive impact on reducing readmissions. Just as important, patients and families report being more satisfied with the transition, and staff find that involving family caregivers takes no more time and results in fewer "fires to put out."

A Better Transition for Mrs. Jensen. Mrs. Jensen's transition could have been improved and her chances of being readmitted lessened had her daughter been more closely involved in the medication reconciliation process and the final discharge plans. She would have been able to ask her questions and obtain answers earlier in the process.

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The medication sheet handed to her mother at discharge would have been more understandable and complete, and she would have been more aware of what to look out for at home. She might even have been able to identify areas where clarification was needed with her mother's primary care physician or cardiologist. If she realized that her mother was gaining weight and showing other symptoms, she might have been able to prevent a hospital readmission.

Family caregivers cannot solve the many systemic problems that result in preventable hospital readmissions. Nor should they be expected to. But they can play an important role in making sure that their intimate knowledge of the patient and the patient's medications is reflected in the care plan.

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