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Commentary

Challenges of managing medications for older people at transition points of care

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Summary

In clinical practice, pharmacists play a very important role in identifying and correcting medication discrepancies as older patients move across transition points of care. With increasing complexity of health care needs of older people, these discrepancies are likely to increase. The major concern with identifying and correcting medication discrepancies is that medication reconciliation is considered a retrospective problem – that is, dealing with medication discrepancies after they have occurred. It is argued here that a more proactive stance should be taken where doctors, nurses and pharmacists collectively work together to prevent medication discrepancies from happening in the first place. Improved involvement of patients and family members will help to facilitate better management of medications across transition points of care. Efficient use of information technology aids, such as electronic medication reconciliation tools, should also assist with organizational systems problems associated with the working culture, heavy workloads, and staff and skill mix of health professionals.

Keywords: Medication discrepancies; Medication reconciliation; Older people; Communication; Patient and family involvement; Information technology

Introduction

Older people aged 65 years and over are a vulnerable group who commonly have complex medication regimens and multiple co-morbidities.[1] Due to their intricate health care needs, it is very likely that older people need to move across transition points of care in order to receive treatment by different health professionals. Transitions of care are "a set of actions designed to ensure the coordination and continuity of healthcare as patients transfer between different locations or different levels of care within the same location."[2] These transfers include movements between home and the hospital, and movements within and across various health care facilities.

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As older people move across transition points of care, it is highly likely that their medication regimens change from one point to the next and that medication discrepancies occur.[3] Medication discrepancies are differences in the medication regimens across different transition points of care.[4,5] Such discrepancies can involve omission or addition of a medication, substitution of an agent within the same pharmacologic class, and change in dose, frequency, or route of administration. Medication concerns related to transitions of care are complex.[6] In addressing these complexities, pharmacists have placed heavy emphasis on the outcome – that is, identifying medication discrepancies and correcting them. What we do know is that many medication discrepancies are preventable[1] and that miscommunication between health professionals or between health professionals and patients is a major cause of medication discrepancies.[7–9] Another major cause of medication discrepancies involves problems with organizational systems, which include the local working culture, heavy workloads, staff and skill mix of health professionals, and compliance with policies and procedures.[10,11] Attempting to improve how communication occurs across transition points of care and how health professionals work through organizational systems, will help to address problems leading to medication discrepancies.

Tensions between proactively improving communication processes and rectifying medication discrepancies

The dominant strategy used in clinical practice in managing medications across transition points of care, is for pharmacists to perform detailed medication assessments. By performing these assessments, pharmacists detect, report and correct medication discrepancies.[12] In isolation of considering the complexities of communication processes confronting older people moving across transition points, this strategy is unlikely to be sufficient on its own to ensure sustained and beneficial effects. For example, Rozich and Resar[13] showed that medication discrepancies reduced from 213 per 100 admissions to 63 per 100 admissions when pharmacists examined medication histories and medication charts at admission, transfer and discharge. However, while pharmacist input reduced the proportion of medication discrepancies, many discrepancies still remained. This strategy only tackles the problem of medication discrepancy after it has taken place. It does not attempt to resolve how the problem occurred in the first place.

During recent times, patient safety organizations have strongly advocated the use of guidelines to help health professionals in understanding and checking patients' changing medication needs as they move across transition points. Examples of these guidelines include: the medications at transitions and clinical handoffs (MATCH) Toolkit for medication reconciliation, developed for the Agency for Healthcare Research and Quality in the United States[14]; the technical patient safety solutions for medicines reconciliation on admission of adults to hospital, developed by the National Institute for Health and Clinical Excellence (NICE) and the National Patient Safety Agency (NPSA) in the United Kingdom[15]; and the medication management plan, developed by the Australian Commission on Safety and Quality in Health Care.[16] While these guidelines are very comprehensive, they do have some deficiencies. They tend to address medication discrepancies from a health professional perspective rather than using a patient-centered approach. In addition, they do not take into account the specific contextual issues that may be associated with particular environments. For example, doctors and pharmacists may not be readily available in residential aged care facilities or hospital settings such as intensive care or emergency departments to participate in medication reconciliation. In some countries, such as Australia, patients are only able to stay for a maximum of 4 h within the emergency departments of hospitals; otherwise, hospitals are required to pay penalties. Such restrictions in emergency department length of stay can impede the ability to conduct medication reconciliation effectively.[10,17,18]

Overemphasis on identifying and rectifying medication discrepancies

Many studies have alerted to the problems associated with merely identifying and rectifying medication discrepancies. In the prospective observational study involving 375 older patients conducted by Coleman et al,[19] 14% experienced at least 1 medication discrepancy, defined as a lack of agreement between prescribed medication therapy indicated on the hospital discharge record and the therapy actually received by the patient. Of the 124 discrepancies identified, 49% occurred from system-generated causes and 51% were from