

Pharmacy's role in a modern health continuum

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Introduction

Developing a health care system that puts people at the center of their own care and uses all available resources as effectively as possible has become a consistent goal of most governments. Achieving this goal requires different health professionals to work in collaboration with each other to meet the health needs of patients. In order for that to happen, governments must work with all key professional groups to use all available resources of the system most effectively and, importantly, pharmacists must be recognized as the professional that coordinates drug therapy management. In addition, governments must put in place policies and a regulatory and funding environment that facilitates team-based care and acknowledges and supports the professional competencies of all health professions. These basic points were made in a White Paper prepared for the Alberta Minister of Health. This article, derived from that paper, was prepared to help pharmacists and other pharmacy organizations understand the critical steps needed for individuals and the health system to fully experience and benefit from pharmacists' skills and services.

Progress has been made

Much has already been achieved by pharmacy and governments working together to optimize system outcomes through improved coordination of drug therapies and the use of care plans to support patient outcomes. There have also been advances in regulation, education and training, testing of new models of care and participation in interprofessional initiatives and in electronic health systems. For example,

in 2007, legislation was enacted in Alberta that provided pharmacists with a new scope of practice and entitled them to adapt prescriptions initiated by other prescribers and initiate drug therapy in an emergency. In addition, pharmacists who meet specific requirements can administer drugs by injection, order laboratory tests and can be granted additional independent prescribing privileges. Similar changes are taking place in other jurisdictions around the world. Technician regulation is another example that has fostered an optimization of the pharmacists' role in direct patient care, as technicians assume greater responsibility for distribution activities.

Despite legislative changes, more is required for the system and patients to benefit fully. Pharmacy education continues to evolve to better prepare pharmacists for their roles and responsibilities in an increasingly complex health care environment with advanced patient health needs. Another important factor is the pharmacists themselves. Rosenthal et al.¹ reported in 2010 on the reluctance of pharmacists to take on additional responsibilities, concluding that pharmacist personality traits, including a lack of confidence, fear of new responsibilities, paralysis in the face of ambiguity, need for approval and risk aversion, are at least in part responsible. However, the significant increase in uptake of new responsibilities in Alberta over the past year indicates that a tipping point may have been reached. Overall, the ability of pharmacists to improve patient care and decrease costs has been tested and proven many times.^{2,3} The future of pharmacy practice clearly lies in the value of the clinical decisions made by pharmacists with each patient encounter.

Pharmacists—The experts in drug therapy management

All people who take medications are at risk of actual or potential drug therapy problems. These problems are a significant source of morbidity and mortality when left undetected and unresolved and drive huge costs across the health system. As drug therapy experts, pharmacists provide drug therapy management services built around a partnership between the pharmacist, the patient (or his or her caregiver), physicians and other members of a patient's health care team. The goals of these services are to identify and resolve actual or potential drug therapy problems for patients and to promote the safe and effective use of medications and enable patients to achieve positive, targeted therapy outcomes. The medication management framework includes the following:

Assessment: The pharmacist assesses each patient through observation, dialogue and consideration of clinical indicators. Treatment alternatives are assessed for appropriateness, effectiveness and safety (including interactions), to prevent and resolve medication-related problems.

Care plans: The pharmacist creates a plan in consultation with the patient and, when necessary, other members of the health care team. The care plan includes goals and actions to achieve the patient's personal health goals through optimal drug therapy. Actions include patient and/or caregiver education about chronic disease, writing a prescription to continue care, initiating new treatment and disease prevention such as immunization and lifestyle modification programs. Care plans also include medication support systems such as compliance packaging and medication reminders.

Monitoring compliance and evaluating effectiveness: The pharmacist monitors the patient's compliance with and response to drug therapy through regular follow-ups. These allow for progress evaluation and support and early detection of adverse effects, drug misuse or abuse.

Pharmacists must be part of person-centred care

Key barriers must be overcome to shift from a mind-set of "Getting the Right Drug to Each Patient" to "Getting the Drug Therapy Right for

Each Patient" and to reap the benefits of fully integrating a pharmacist into a person's health care team. These barriers include the following:

Governance models: It has been reported that 70% of hospital beds are occupied by people with chronic illnesses.⁴ Pharmacists are repeatedly asked to cooperate in care delivery and are doing so on many fronts. But the inclusion of pharmacists in governance models for care delivery has been limited. Similarly, at a local level, community pharmacists need to be more involved in primary care teams.

Information management systems: Improved information management systems that support both drug therapy management and drug dispensing are needed. The lack of such systems impedes the coordination of care, informed decision making and workflow, contributing to less than optimal care and increased cost.

Funding: Funding entities and pharmacists must work together to develop an economic model for pharmacy that supports the behaviours and outcomes that the health system needs and wants. The right balance needs to be achieved as the focus shifts from drug dispensing-related incentives to payment for drug therapy management in various settings and models of care. An acceptable economic model must address the principles of patient-focused, team-based care and integrate pharmacists and other health professionals across a sustainable health system. Overall, funding should follow the patient, not the provider, so that financial and other incentives are to optimize care.

Pharmacists are uniquely positioned to coordinate system-wide drug management

Many patients interact with the health system at multiple points. Medication therapy may be started, altered or adjusted at any point along this continuum of care by multiple providers. But pharmacists are the health professionals with the best potential to effectively coordinate medication across the continuum. In particular, community-based pharmacists are accessible and uniquely positioned to support a continuum of primary care, the challenges of living with chronic disease, assisting people to remain in their homes as they age and assisting people living with mental illness or chronic diseases.

Pharmacists are some of the most easily accessible members of a person's health care team.

Better coordination of this accessibility can help ensure that patients get the treatments they need, when and where they need them. In addition, better coordination and monitoring improves care, reduces duplication of services, decreases emergency room visits and hospital admissions, helps prevent abuse/misuse of medications and reduces the risk of drug therapy problems. All of these outcomes will save the system money.

It is estimated that 12% of emergency department visits are due to drug-related adverse events.⁵ In addition, the probability of admission to a hospital is significantly higher among patients who had a drug-related visit.⁴ Pharmacists are the health care team member with the most complete drug therapy knowledge, and they are prepared to use that information and act as the key coordinator of drug therapies. This is particularly useful with complex patients who have multiple prescribers and more than one condition requiring treatment. It is also notable that pharmacists see a significant number of patients more often than other members of the health team. Changes in conditions can thus be detected sooner, including instances where patients would benefit from better adherence to their treatment plan. This can be particularly beneficial if quickly flagged and shared with the health care team.

Actions to accelerate system-wide drug therapy management

Some advances have been made to better enable pharmacists to contribute to patient care, but more is needed to optimize the potential of these changes. We recommend the following practical and achievable actions:

1. Governments recognize pharmacists as the health system's drug management experts

2. Health systems support the role of pharmacists as coordinators of drug therapy management in all settings within and across care delivery models
3. Pharmacists are included in the governance and delivery of team-based, interdisciplinary models of care
4. Integrated information management systems are implemented that enable pharmacists to coordinate and manage drug therapies in cooperation with other health professionals
5. A balanced funding model be developed for pharmacy services, to support coordinated person-focused care by aligning clinical practices with desired patient and health system outcomes

Conclusions

In most countries, existing health care systems do not optimize the practices of all health professionals and cost an increasing amount without comparable increases in quality and accessibility. Numerous proposals have been made on how to address these shortcomings. We suggest that by taking actions to better integrate pharmacists into the health care system, government priorities of person-centred care, continuing care, mental health and chronic disease management will gain significant traction. Specifically, there will be improvements in access and quality through accelerating the development of innovative team-based models of care, enhancing the coordination of drug therapy management across the health system and recognizing and promoting opportunities to access the health system through community-based pharmacists. Sustainability will be improved by containing system-level costs as a result of better-coordinated drug therapy, leading to decreased redundancy and better patient outcomes. ■

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Acknowledgments: Thanks go to other members of the team who created the original White Paper: Ian Creurer, Anjali Acharya, Eric Holt, Valerie Kalyn, Neil Cameron and Gail Hufty.

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