

Team-Based Primary Care Pharmacists Position Statement



Canadian Society of
Hospital Pharmacists



Société canadienne des
pharmaciens d'hôpitaux

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Published by the Canadian Society of Hospital Pharmacists (CSHP), Ottawa, Ontario. 2020

Suggested citation:

Team-based primary care pharmacists position statement. Ottawa (ON): Canadian Society of Hospital Pharmacists; 2020.

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Team-Based Primary Care Pharmacists Position Statement

Statement

The Canadian Society of Hospital Pharmacists (CSHP) is committed to ideal patient care through the advancement of the role of pharmacists within the primary care setting. Greater involvement of pharmacists in primary care will improve the health of populations, enhance the patient experience of care, reduce the per capita cost of healthcare, and improve the experience and satisfaction of those working in the healthcare system. Team-based primary care pharmacists working collaboratively with other healthcare professionals in this setting also contribute to optimal prevention and management of disease, rational medication use, and cost-effective care.¹

CSHP supports expanding pharmacists' role and scope of practice in team-based primary care and increasing accessibility to the services they provide in this setting by growing the number of these positions across the country to serve the needs of all Canadians. All primary care teams should include at least one designated pharmacist as a member of the team. CSHP also supports broad dissemination of the value and benefits of the role both to the public and to decision makers at regional, provincial, and national levels to bring about greater demand and funding for team-based primary care pharmacists.

Background

Primary care practice presents an opportunity to expand pharmacists' roles in Canada. Currently, a limited number of pharmacists work as collaborative practitioners integrated into primary care teams, despite the significant evidence to support such a role.

An aging population, a high prevalence of chronic conditions, and fragmentation of care delivery all contribute to increasing pressures on the Canadian healthcare system.^{2,3} Over the next 20 years, the proportion of the population aged 65 years and older is expected to grow by 68%. Two-thirds of these individuals take five or more medications, and just under one-third take at least one potentially inappropriate medication.⁴ Studies estimate one in nine visits to the emergency department are due to adverse drug events, with approximately 70% of these considered preventable.⁵ Older adults are very susceptible to the detrimental effects of complex drug regimens, polypharmacy, and adverse drug reactions.² These factors all contribute to poor patient experiences within the healthcare system, an increased cost of delivering care, and suboptimal patient outcomes.²

In Canada, chronic diseases contribute to nearly 90% of all deaths, and their prevalence is increasing.⁶ In today's healthcare system, medication interventions are among the most significant components of treatment, and medication usage is becoming increasingly complex.^{7,8} Optimal management of chronic disease in primary care settings reduces serious sequelae and is more cost-effective than management in the acute care setting.^{1,8} Having pharmacists available at each point in the healthcare system can help ensure that patients receive high quality care, by improving medication use and reducing the potential for harmful and costly medication misadventures.

Integrated within a team of healthcare professionals as a component of the Patient's Medical Home,⁹ pharmacists use their unique knowledge of medication management to: optimize drug therapy (eg. eliminating harmful or unnecessary drugs, adjusting doses and recommending superior alternatives); educate patients and providers about medication; and respond to drug information requests by prescribers and other healthcare professionals.^{8,10} Pharmacists practicing to the full extent of their knowledge and scope in this setting have demonstrated meaningful improvements in outcomes for those living with diabetes, hypertension and dementia, those taking inappropriate medications, and those with cardiovascular risk factors.^{1,11-14} While the majority of the evidence is with select patient populations as described above, the benefits of this role is believed to extend to all patients receiving pharmacist care. Whether they be adults or children; suffering from mental illness or chronic pain; infectious disease or substance use disorders, the knowledge and care provided by team-based primary care pharmacists can improve health. Patients also report increased satisfaction when a team-based primary care pharmacist is involved in their care.¹⁵ Studies have shown that practitioners recognize the medication-specific expertise and clinical competence of primary care pharmacists and see them as positive contributors to the provision of care for their patients.¹⁶

Pharmacists working as collaborative members of primary care teams identify drug therapy problems and work with patients and other healthcare professionals to resolve them.^{17,18} Including pharmacists in primary care teams is cost-effective and has the potential to reduce emergency department visits and acute care utilization.^{1,19,20}

Roles

Team-based primary care pharmacists take responsibility for patient care by ensuring medications are necessary, safe, and effective. This is achieved when pharmacists practice to the extent of their full scope and knowledge in the following key roles: direct patient care, drug information, education, and clinic-based quality improvement projects.^{21,22} In general, roles are divided into those that provide clinical benefits and practice-level benefits.²³

Notably, pharmacists have identified that their most important contribution to improving patient care is through work within the healthcare team conducting comprehensive medication assessments.²⁴ These assessments allow pharmacists to identify and prevent or resolve drug therapy problems (DTPs).

Medication assessments may include information gathering through patient and/or caregiver interviews, a review of the patients' medical charts, collaboration with other team members, provision of patient education, monitoring drug therapies, performing physical assessments, identifying DTPs, and providing medication recommendations to physicians and other clinicians to improve medication therapy.²⁵

Another important role is responding to drug information requests from other health-care providers on the primary care teams, including non-prescribers such as social workers, life-skills workers, mental health clinicians, etc.²³ In healthcare teams, pharmacists are known to efficiently provide support to prescribers by assessing literature and providing evidence-based recommendations to resolve drug-related information requests.¹⁰ While mostly physicians and nurse practitioners, prescribers may also be dentists, optometrists, midwives, naturopaths and others depending on the province of practice.

Team-based primary care pharmacists also have a significant role in intraprofessional collaboration with pharmacists working in acute care, and community settings to accomplish the goals of each individual's care plan.

Resolving Drug Therapy Problems

Pharmacists provide patient-centered care by focusing on resolving DTPs. DTPs are generally categorized by their relationship to the drug: relating to the necessity, effectiveness, and safety of drugs, and the patient's ability to be adherent to a prescribed therapy.

Pharmacists in team-based primary care settings have demonstrated the ability to consistently prevent, identify and manage DTPs. Typically, pharmacists identify at least one DTP per patient they review, with the average number of DTPs identified ranging from three to seven.²⁶⁻²⁸ Since the number of potentially inappropriate medications is positively correlated to emergency department visits, reducing exposure to these should be a healthcare priority.¹⁹ Pharmacists are known to identify potentially inappropriate medications and their interventions result in medication changes that could reduce adverse patient experiences and outcomes as well as inappropriate healthcare.²⁹

Target Populations

Pharmacists integrated into primary care are often involved in the care of patient populations who may be vulnerable to adverse medication events. They often focus on those who are at highest risk: those on medications most associated with serious harm (e.g. opioids, insulin, and anticoagulants), and those with conditions or situations most associated with medication-related harm. As an example, pharmacists support safe transitions of care, with many completing post-discharge medication reconciliation when patients return to the community setting from acute care.^{20,30}

They have also been shown to improve patient outcomes in those living with cardiovascular disease, diabetes, and dementia.^{1,14,31} Improvements include reductions in cardiovascular risk score, and achieving target blood pressure and cholesterol levels.^{1,31}

An interdisciplinary team approach including pharmacists supports management of patients with diabetes, coronary artery disease, congestive heart failure, or chronic obstructive pulmonary disease and increases their quality of care.³² It has been demonstrated that the addition of primary care pharmacists facilitates additional time during patients' visits with their primary healthcare provider to discuss multiple chronic conditions and take a holistic approach to their healthcare.³³

Pharmacists provide additional supports depending on individual team needs. These can include taking leadership in quality improvement projects, developing clinic medication-related policies and procedures, and creating educational supports and prescribing resources such as drug cost charts.¹⁰ While these pharmacists typically focus on those with the highest medication related needs they also support optimal healthcare for routine and non-complex people. They endeavor to ensure community members receive the best medication management possible and have limited criteria that exclude people from service.

Pharmacists act as respected educators, often contributing significantly to the training of health professional learners including medical residents.³⁴ Formal academic detailing by pharmacists also occurs across Canada, influencing prescribers to improve clinical decision-making and evidence-based prescribing.³⁵

Cost-effectiveness

Some research has been performed to determine the degree of cost effectiveness of integrating pharmacists into primary care teams. A recent systematic review on the topic identified a lack of clarity on the overall cost effectiveness of pharmacists in this role.³⁶ While many studies have demonstrated reductions in medication costs³⁷⁻³⁹; reductions in overall healthcare costs due to more efficient resource utilization⁴⁰⁻⁴²; and reduced emergency department visits^{43,44}; not all research has shown these effects to be statistically significant, and a minority of studies have demonstrated increased costs.^{1,26,45-50} The results of this analysis indicate that more research is required in the modern healthcare landscape with greater pharmacist role clarity to fully elucidate the economic related potential for pharmacists in this role.

Satisfaction of patients and providers

Studies support patients being satisfied with their care when a team-based pharmacist is involved with its provision.^{15,22,51-53} Factors that contribute to this increase in satisfaction are: improved understanding of their medication; monitoring of medications; and improved access to a knowledgeable healthcare professional.^{22,30,54} Likewise, studies have shown that prescribers are satisfied with pharmacists in this setting and the care that they provide.^{15,21,22,55} Physicians have also demonstrated this collaboration makes their jobs easier and improves their job satisfaction.^{56,57}

How many pharmacists do we need?

At this time, there is no evidence-based standard for the number of pharmacists that should be part of the primary care team. Proposed ratios have been estimated from many vantage points: the number of clinicians on the team, the patient roster size, the number of annual patient encounters, and the complexity of the patient population.⁵⁸ In Ontario, pharmacists integrated in Family Health Teams were originally funded to the level of one pharmacist per 10,000 patients.²¹ The National Health Service of England has indicated its goal is to provide one primary care pharmacist per 30,000 people.⁵⁹ The total number of pharmacists working in inter-professional team-based primary care in Canada is currently unknown, but it is believed there are less than seven hundred positions across the country, with the majority of these being in Ontario and Quebec. In 2018, the government of British Columbia announced the addition of 50 new primary care pharmacist positions across the province. This initial investment is a welcome step in formally developing the role in British Columbia, and fulfills a component of the province's primary health care strategy which focuses on team-based care.⁶⁰

Guidelines for integration into health teams

To create a successful integration into the primary health team, a number of factors need to be considered and implemented⁶¹⁻⁶⁵:

- Determine the needs and priorities of the team and its patients
- Define the role and educate the team about the pharmacist's position
- Be highly visible and accessible
- Ensure clinic infrastructure is in place to support the pharmacist role
- Provide proactive care and take responsibility for patient outcomes
- Develop and maintain professional relationships
- Ensure clinical/therapeutic skills are strong
- Understand the roles of the other team members
- Develop a job description
- Regularly seek feedback from the team

Being assertive and confident are key characteristics for pharmacists to integrate well into the team. Some primary care teams and pharmacists utilized mentoring programs to aid in the integration of a primary care pharmacist; this may help pharmacists who are new to the team deal with any clinical uncertainty or complex cases that a primary care pharmacist may experience.²³

A key barrier to integration is a lack of communication and collaboration amongst team members. In successful teams, timely and effective communication was important.⁵¹ During the recruitment process, teams should select candidates who are committed and experienced with collaboration and display exemplary communication skills.^{21,66} Other factors such the ability to quickly develop professional relationships, building trust and respect between the team members, and geographic proximity of each team member also contribute to successful integration.^{63,67} Full guideline documents supporting a pharmacist's integration into team-based primary care have been developed, and we encourage readers to review the associated references for details beyond the scope of this document.^{60,61}

Conclusion

Pharmacists are medication experts and, when integrated into healthcare teams, complement the skills provided by other healthcare professionals. Pharmacists embedded within collaborative primary care settings improve patient outcomes by ensuring medication use is necessary, safe, and effective. Primary care pharmacists provide value to the healthcare system and improve patient satisfaction with healthcare. Expansion of the role of pharmacists in inter-professional primary care practices should be a priority so that more Canadians have access to optimal high-quality care.

Glossary

The following definitions apply for terms used in these statements. They may have different meanings in other contexts.

Adverse drug event	Harm caused by the use of a drug. ⁶⁸
Adverse drug reaction	Harm directly caused by a drug at normal doses. ⁶⁸
Medication management	Medication management involves patient-centered care to optimize safe, effective and appropriate drug therapy. Care is provided through collaboration with patients and their health care teams. ⁶⁹
Polypharmacy	Defined in this document as taking 5 or more medications. ⁷⁰
Primary care	The setting in which Primary Health Care is coordinated and delivered. Primary Health Care typically comprises; routine care for chronic diseases, care for urgent but minor or common health problems, mental health care, maternity and childcare, psychosocial services, liaison with home care, health promotion and disease prevention, nutrition counselling, and end of life care. Primary Care is also the setting in which coordination to ensure continuity and ease of movement across the system occurs to ensure integrated care when individuals require more specialized services (such as through specialists or hospital services). ^{71,72}
Team-based primary care pharmacist	We have selected this term to describe the role acknowledging there is no agreed upon universal term in current use. In Canada, this role is described differently from province to province. In Ontario, this role is commonly referred to as a Family Health Team Pharmacist, while it will be known as a Primary Care Clinical Pharmacist in British Columbia. We have chosen this term to describe a pharmacist integrated into a primary care, or family medicine team, which may include a large number of individuals working interprofessionally on a person's care plan goals. Pharmacists working within community pharmacy dispensaries are a critical component of the primary health care system. The role of team-based primary care pharmacists complements that of community pharmacists but does not replace it.

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Acknowledgements

CSHP gratefully acknowledges the contributions made by the following individuals to various drafts of these guidelines:

Robert Pammett
J. Matthew Miller
Gisele Scott-Woo
Natalie Kennie-Kaulbach
Suzanne Singh

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