

The Future of Pharmacy is Now: A Canadian Perspective

Opinion Piece

Completed 2024

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We know that pharmacists play a big role in the healthcare system and continue to do more for patients with the expansion of scope of practice. In Canada, with the current shortage of family physicians and long emergency room wait times, pharmacists have played a critical role as primary care providers.¹ In the province of Alberta in Canada, pharmacists have the ability to prescribe medications, order laboratory tests, provide injections, and adapt and extend prescriptions. This has helped with providing timely access to healthcare.

I envision the future of pharmacy to include a larger involvement in primary care, which is already a reality in Canada. In 2022, pharmacist-led walk-in clinics began opening across Alberta and Canada.² Many of these clinics have dedicated examination rooms for patient consultations. Pharmacists are assessing and managing patients with acute infections (e.g. urinary tract infections), chronic conditions (e.g. asthma, diabetes, cardiovascular disease), and mental health. We already see countries such as Australia following suit in a similar fashion with pharmacies in Queensland recently piloting pharmacist prescribing, which is an important role in primary care.³ Perhaps this foreshadows what is to come.

With change comes resistance. As pharmacists take on more responsibilities in patient care such as prescribing and playing a larger role in primary care, some have voiced concerns on expanding pharmacist's scope of practice,

citing concerns about safety and efficacy. I will share some robust evidence for pharmacists prescribing and managing conditions in Canada. The following studies evaluated pharmacist-directed prescribing and care of acute or chronic conditions (*Table 1*). Outcomes such as cure and/or clinically significant change, adverse events, quality of life, and patient satisfaction were evaluated. Overall, pharmacist management of conditions is demonstrated to be safe, efficacious, cost- and time-saving, guideline-concordant, and of high patient satisfaction. Pharmacist-directed care is one solution to the overwhelmed healthcare system. This evidence can also inform what limits are appropriate. So, to answer the question, limits are important and should be based on whether the individual pharmacist is knowledgeable in the disease area, their ability to monitor and follow-up with the patient, and knowing when to refer to other healthcare providers. For example, pharmacists are not trained to be diagnosticians, thus collaboration with physicians and other healthcare professionals is still essential in practice.

In conclusion, there are already invisible barriers that limit pharmacists' full scope of practice. These include remuneration, staffing, and workload, to name a few.⁹ These barriers have to be addressed before an expanded scope of practice can be fully implemented. In the end, whether it be the limits to what pharmacists should be allowed to do, or how the pharmacy field evolves, what matters most is our patients. And if that is what leads us, then that is the right direction.

TABLE 1: Studies on Canadian pharmacist-directed prescribing and management of acute and chronic conditions.

Condition	Study (n)	Main Finding
Uncomplicated Urinary Tract Infection	Study of pharmacist prescribing and care in patients with uncomplicated urinary tract infections in the community (n = 750). ⁴	Clinical cure was achieved in 88.9% of patients. High patient satisfaction.
Hypertension	Randomized Trial of the Effect of Pharmacist Prescribing on Improving Blood Pressure in the Community (n = 248). ⁵ Intervention group: Pharmacists assessed patient blood pressure (BP) and cardiovascular risk, educated on hypertension, prescribed antihypertensive medications, monitored laboratory results, and had monthly follow-up visits. Control group: Patients received a wallet card for BP recording, written hypertension information, and usual care from their pharmacist and physician.	The intervention group had a mean \pm SE reduction in systolic BP at 6 months of 18.3 ± 1.2 compared with 11.8 ± 1.9 mmHg in the control group, an adjusted difference of 6.6 ± 1.9 mmHg (P=0.0006).
Diabetes	Pharmacist intervention for glycemic control in the community (n = 100). ⁶	HbA1c was reduced from 9.1% (SD 1) at baseline to 7.3% (SD 0.9); a change of 1.8% (95% CI 1.4 to 2, p<0.001).
Dyslipidemia	Randomized trial of a community-based approach to dyslipidemia management: pharmacist prescribing to achieve cholesterol targets (n = 99). ⁷ Intervention group: Pharmacist-directed dyslipidemia care: assessment of cardiovascular risk, review of LDL-C, prescribing of medications, health behavior interventions. Usual care: Patients received their lipid results and a pamphlet on cardiovascular disease and usual care from their physician and pharmacist.	Proportion of patients achieving the LDL-C target was 43% intervention versus 18% control (p = 0.007).
Minor Ailment	Evaluating pharmacist prescribing for minor ailments (n = 125). ⁸	Condition significantly/completely improved in 80.8% of study participants.

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