Expansion of pharmacist prescribing could help improve health care access and quality

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To date, all 10 Canadian provinces authorized pharmacists to prescribe therapies for minor ailments. This expansion in scope emerged as one potential solution to address health care challenges, particularly in the context of minor ailment management, as it intends to enhance access to care amid the primary care crisis. A growing body of research on pharmacist prescribing demonstrated patient benefits.[1] However, concerns have been raised about the effectiveness and safety of this practice. This commentary provides an overview of the current state of pharmacist prescribing in Canada, including its proven benefits, potential pitfalls, and overall implications for patient care.

Current state of pharmacist prescribing in Canada

While no universal definition of *minor ailments* exists, they are often described as health conditions that can be reliably self-diagnosed by a patient and managed with self-care strategies (eg, nonprescription therapeutics, nonpharmacologic therapy) or with minimal treatment using prescription agents.[2] This includes conditions that can be managed in the pharmacy and require only minimal or short-term follow-up, such as allergies, uncomplicated urinary tract infections (UTIs), and cold sores.[2]

In 2007 Alberta became the first province in Canada to implement autonomous pharmacist prescribing.[3] Since then, all remaining provinces adopted some degree of prescriptive authority for minor ailments, with many provinces expanding the number of conditions over time.[4]

Because prescribing is a provincial and territorial matter, pan-Canadian standards do not exist; however, most provincial minor ailment programs have developed individual policies, setting standards for education and training and clearly defining limitations to pharmacist prescribing.

Provinces vary in both the number of conditions pharmacists are allowed to treat and the process by which these conditions are selected. For example, in Ontario, the selection of minor ailments was predicated on several factors: the condition's time sensitivity, potential to prevent avoidable emergency department (ED) visits, inclusion in other provincial programs, and reliance on prescription medication for treatment.[2]

Evidence evaluating prescribing for minor ailments by pharmacists

Several Canadian studies indicate pharmacist prescribing for minor ailments is safe and effective, associated with a positive patient experience and a decreased burden on primary care and nonurgent ED visits. An evaluation of clinical outcomes for the minor ailment program in Saskatchewan found pharmacist prescribing resulted in high levels of patient satisfaction (95% would return to the same pharmacist for treatment of another minor ailment), symptom improvement (81.4% experienced substantial to complete resolution of symptoms), and a 30% reduction in visits to medical clinics (24.8%) or EDs (2.4%).[5] This study had notable limitations: patients presented most often with cold sores, which are frequently self-limiting, and only 7 minor ailments in total (allergic rhinitis, diaper dermatitis, cold sores, canker sores, insect bites, mild acne, and thrush) were evaluated. This program was also found to be cost-effective, with an estimated return on investment of $2.15 in direct and indirect health care costs for every dollar invested, with total cost savings projected to reach $3.50 million over 5 years of implementation (2015 to 2019).[6] A more recent modelling study in Ontario evaluating the potential economic impact of pharmacist prescribing for 3 minor ailments (upper respiratory tract infections, contact dermatitis, and conjunctivitis) found the program was projected to be cost-saving from a public payer perspective, ranging from $4.08 to $7.51 per patient.[7] Additionally, a cohort study of administrative data estimated up to 4.3% of ED visits in Ontario could potentially be managed by community pharmacists with expanded scopes of practice.[8]

Uncomplicated urinary tract infections are a common reason for primary care visits and a condition pharmacists can now manage in all 10 Canadian provinces.[2,9] Research has shown pharmacist prescribing for uncomplicated UTIs helps facilitate access to treatment. A study of 750 patients presenting with uncomplicated UTI to 39 community pharmacies in New Brunswick demonstrated pharmacist management resulted in high levels of patient satisfaction alongside notable and sustained symptom resolution.[10] Clinical cure was achieved in 88.9% of patients.[10]

Pharmacists were shown to maintain high adherence to clinical practice guidelines. For example, a substudy of the New Brunswick trial described previously found antibiotic prescribing for uncomplicated UTI by pharmacists was 95.1% guideline-concordant compared with 35.1% for physicians.[11] A similar clinical cure rate was achieved between groups (88.6% for pharmacist-initial arm vs 91.1% for physician-initial arm, $P>.99$).[10] This study had notable limitations: it was conducted in a single province,

was nonrandomized, and had a much smaller sample of patients initially assessed by physicians (n=94) compared with those assessed by pharmacists (n=656).[10,11] By adhering to guidelines when autonomously prescribing and by using their prescriptive authority to modify duration and antibiotic selection when physician-initiated therapy is suboptimal, pharmacists may help reduce unnecessary antibiotic prescribing and increase appropriate antibiotic use in community settings.[10,12]

What are potential pitfalls and how can these be mitigated?

Several important considerations relevant to medication prescribing for minor ailments by pharmacists have been raised. These factors include, but are not limited to, pharmacists possessing necessary skills and training, practice expectations, professional liability, workload burdens, and potential conflicts of interest.

Possessing the requisite expertise, knowledge, and training are essential for effective health care provision. Pharmacists' training and licensure encompass a wide range of responsibilities, including clinical assessment, differential diagnosis, selection of appropriate therapeutic interventions, adherence to clinical practice guidelines, identification and management of drug interactions, provision of patient education, and communication with other primary care providers.[13] Regulatory bodies for pharmacists require ongoing maintenance of competency to meet practice standards. In Ontario this includes completion of a mandatory orientation module to ensure adequate understanding of ethical, legal, and professional obligations prior to prescribing for minor ailments.[2] Pharmacists in provinces such as Alberta and Saskatchewan have more extensive clinical training prerequisites.[2] All pharmacists are obligated to stay abreast of clinical advancements and augment competencies through continuing professional development and certification programs. However, risks of incorrect patient self-diagnoses and higher rates of antimicrobial resistance due to overprescribing were raised as concerns associated with expanded scopes of practice for pharmacists.

The potential for misdiagnosis due to lack of a physical examination or comprehensive laboratory workup is often highlighted as an issue. However, it is important to recognize minor ailments included in provincial programs typically require limited physical assessment for diagnosis, do not require laboratory tests, and generally require minimal or no follow-up. Any individual with recurrent or severe symptoms should instead be referred either urgently to the ED or nonurgently to a primary care provider.

Professional guidelines and protocols seek to provide structured frameworks to assist pharmacists in navigating clinical situations effectively. This includes differentiating minor ailments from potentially more serious conditions and recognizing red flags requiring referral to reduce the likelihood of misdiagnosis or delayed diagnosis. Standards of practice mandate pharmacists to employ evidence-based practices and critical evaluation skills to inform professional activities. Using evidence-based clinical practice guidelines and algorithms for minor ailments—accessible through resources such as RxTx, MedSask, and MAPflow, and from bodies such as Ontario Health or Public Health Ontario—helps ensure prescribing is of high quality.

The potential for professional liability in the context of pharmacist-led prescribing is a subject of careful consideration within health care systems. As outlined by the Canadian Medical Protective Association, the probability of physicians facing medico-legal liability due to adverse events stemming from independent pharmacist prescribing for minor ailments is minimal.[14] Since the mid-2000s, pharmacists in Canada possessed the authority to independently prescribe medications for specific conditions. It is important to recognize both physicians and pharmacists function as independent providers within the health care ecosystem. They have distinct regulatory bodies and carry individual accountabilities regarding patient care within their respective scopes of practice. Pharmacists, as a separate class of regulated health care professionals, bear sole responsibility for their actions in prescribing medication under a minor ailment protocol, thereby assuming individual duty and accountability for their patients. This delineation of responsibilities underscores the autonomy and accountability inherent in pharmacist-led prescribing initiatives. Moreover, physicians will generally not be held liable for the actions of a pharmacist when the pharmacist is acting independently of the physician and autonomously practising within their defined scope of practice (ie, not acting on authority delegated by the physician).[14] It is important to note that while specific requirements may differ across jurisdictions, regulatory colleges expect pharmacists to be well-versed in the ethical, legal, and professional obligations associated with prescribing for minor ailments. This encompasses but is not limited to understanding scope of practice, referral criteria, and the importance of thorough documentation. These measures, alongside continuing education and robust quality assurance programs, play a pivotal role in mitigating risks inherent in patient care delivery.[15]

In light of heavy workloads faced by some pharmacists and pharmacies, the provision of minor ailment services may present a notable challenge. This may lead some pharmacists or pharmacies to opt out of providing these services; this is an important consideration for governments, particularly when addressing access to care in rural or underserved areas. However, with adequate support and workflow optimization, pharmacy teams may integrate these minor ailment services into their practice effectively without compromising care quality or exacerbating existing workload pressures. For instance, delegating technical tasks to pharmacy

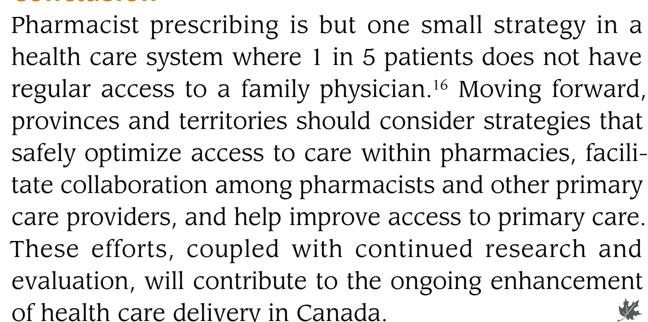
technicians, whose scope is expanding to encompass activities such as vaccination administration, could further alleviate workload pressures.

Finally, financial conflict of interest is frequently flagged as a potential concern. Pharmacists are bound by their code of ethics, which ensures they consistently prioritize appropriate clinical decision making over business interests. Furthermore, pharmacists are required to inform patients that prescriptions they write can be filled at any pharmacy, promoting patient autonomy and choice. Moreover, across most Canadian jurisdictions, public remuneration of pharmacist assessments remains independent of consultation outcomes, such as referrals to physicians or over-the-counter recommendations. This structure aims to ensure impartiality in patient care and to mitigate potential conflicts of interest.

Implications

Pharmacist prescribing for minor ailments in Canada leverages pharmacists' expertise and availability in the community to provide improved access to care for patients while reducing nonurgent visits to physicians and EDs.[5-8] Positive outcomes observed in studies to date and cost savings associated with pharmacist-led services highlight the potential of this practice to optimize health care delivery and improve patient experiences in the health care system. The current evidence base is largely limited to nonrandomized or small studies and is evolving. There is a need for further high-quality and randomized controlled research studies to monitor and understand the impacts of pharmacist prescribing programs. Additional research endeavours should investigate potential variation in the quality of minor ailment service delivery, especially in underserved regions, as these evaluations could provide invaluable insights for refining pharmacist training and practices to address community health care needs more effectively.

Conclusion



Pharmacist prescribing is but one small strategy in a health care system where 1 in 5 patients does not have regular access to a family physician.[16] Moving forward, provinces and territories should consider strategies that safely optimize access to care within pharmacies, facilitate collaboration among pharmacists and other primary care providers, and help improve access to primary care. These efforts, coupled with continued research and evaluation, will contribute to the ongoing enhancement of health care delivery in Canada.

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Competing interests

Dr Nardine Nakhla is Chief Executive Officer and a co-founder of MAPflow Inc, provider of a Web-based clinical decision support tool used to facilitate minor ailment prescribing.

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