
Pharmacist Prescribing Task Force

This Information Paper was developed to inform pharmacists and nonpharmacists about the practice of prescribing by pharmacists. In doing so, it should support pharmacists in their attempts to expand their practices into the area of prescribing. As an information paper, it does not provide an outline of conduct or detailed guidelines on how pharmacists should prescribe. It replaces the CSHP “Information Paper on Pharmacist Prescribing in a Health Care Facility”, which was approved in 2001. The current document was approved by CSHP Council as an official CSHP publication in August 2009 and is a companion to the CSHP “Prescribing by Pharmacists: Statement”, which was approved at the same time.

1. INTRODUCTION

Historically, patients have relied on physicians and dentists to prescribe medications, order laboratory tests, and conduct or supervise procedures consistent with the patients’ diagnoses. More recently, prescribing privileges have been extended to other healthcare professionals, such as nurse practitioners, nurses with an expanded scope of practice, clinical nurse specialists, registered midwives, dieticians, podiatrists, optometrists, and, in many jurisdictions, pharmacists. The impetus for these advanced professional roles is to improve patients’ access to care, by optimizing the roles of healthcare providers.

Healthcare in Canada has undergone significant changes in the past few decades and will continue to evolve to meet the dynamic needs of the population. Both the Commission on the Future of Healthcare in Canada¹ (the Romanow Commission) and the Saskatchewan Commission on Medicare² (the Fyke Commission) emphasized the importance of multidisciplinary healthcare teams working together to improve the efficiency and accessibility of patient care. Such teamwork reduces duplication of effort among healthcare professionals and optimizes the use of each profession’s unique knowledge and skills.

Pharmacy has evolved from a profession with a product-focused practice to one with a patient-focused practice. Large-scale pharmaceutical manufacturing, the expanded use of automation, and the broader role and more widespread employment of pharmacy technicians to perform routine dispensing activities has enabled pharmacists to shift their focus from compounding and dispensing medications to optimizing patients’ healthcare outcomes. This shift was defined through the concept of pharmaceutical care, in which the pharmacist assumes responsibility for a patient’s medication-related needs.³ More recently, the Blueprint for Pharmacy: The Vision for Pharmacy⁴ envisions Canadians achieving “optimal drug therapy outcomes through patient-centred care” (p. 4) in which pharmacists “practise to the full extent of their skills and knowledge” (p. 4).

Like other healthcare professionals, pharmacists have a responsibility to work toward establishing a better healthcare system, one that will improve the outcomes and cost-effectiveness of drug therapy. It has been postulated that granting prescribing authority to pharmacists could lead to such improvements. Decreasing the number of steps that a patient must take to obtain the optimal medication regimen can help in medication management and continuity of care.⁵ Strategies to reduce the time a patient remains in hospital and to eliminate inefficiencies and duplication of effort by health-

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care professionals are being developed and implemented throughout Canada. Pharmacists are increasingly aware that the current process of providing healthcare frequently results in outcomes that are not as effective, appropriate, safe, or economical as desirable. In response, researchers have tried to assess the effects of pharmacists providing direct patient care on relevant end points such as patient outcomes, readmission to hospital, morbidity, mortality, and cost of care. For example, clinical pharmacy services have been associated with improvements in patient safety through reductions in medication errors and decreases in mortality. Inclusion of a pharmacist on clinical teams has led to improved patient outcomes, decreased length of stay in hospital, and reduced costs. Finally, prescribing by pharmacists in collaborative practice models improved patients’ outcomes in several studies.

Some commentators have suggested that if pharmacists are to fully implement direct patient care, every pharmacist should have the authority to maximize the use of their extensive drug knowledge by prescribing drugs. Ultimately, patient care and patients’ outcomes would be improved with such an expansion of practice. Therefore, the goal of prescribing by pharmacists is to improve the health of Canadians by optimizing the use of pharmacists’ expertise and knowledge. In recognition of the potential impact that prescribing by pharmacists could have on patient care and patients’ outcomes, legislation and practice models are evolving across Canada to accommodate this activity.

This paper has three main objectives:
1) To define prescribing and to describe the many methods by which pharmacists currently prescribe.
2) To review experiences with prescribing by pharmacists, both internationally and in Canada.
3) To describe the general components required for pharmacists to prescribe safely and responsibly.

2. DESCRIPTION OF PRESCRIBING BY PHARMACISTS

2.1 Definition of Prescribing

The act of prescribing medications has been defined in various ways by different authorities. For the purposes of this paper, the definition from *Stedman’s Medical Dictionary* is used: “to give directions, either orally or in writing, for the preparation and administration of a remedy to be used in the treatment of any disease”. This activity is separate from “diagnosing”, which is defined as “the determination of the nature of a disease, injury, or congenital defect”. Although the act of prescribing depends upon a diagnosis, these two activities need not be performed by the same healthcare professional.

Assessing patients, managing medications, and monitoring care are core elements of pharmacists’ practice in all care settings (community and institutional). This combination of activities may translate into different types of prescribing, reflecting both the patient’s health needs and the collaborative professional environment in which the pharmacist practises. Some examples of situations in which pharmacists prescribe are outlined below. The terms used (e.g., “adapting” versus “altering”) may differ by province or by country.

2.2 Initial-Access Prescribing

Pharmacists form a widely accessible group of primary care practitioners who can effectively manage minor diseases and conditions and some emergency situations. Initial-access prescribing occurs when a patient approaches a pharmacist for advice and treatment of minor conditions, for information about health promotion, and in emergency or urgent situations. A self-medication consultation begins with a pharmacist’s assessment of the patient’s signs, symptoms, history, and precipitating factors to determine if the disease or condition requires treatment. If a nonprescription drug therapy or a nondrug therapy is appropriate, the pharmacist prescribes the treatment and recommends appropriate follow-up. If further diagnostic evaluation is necessary, the pharmacist refers the patient to the appropriate healthcare professional.

Prescribing in an emergency situation is familiar to all pharmacists. Whether they are providing medication refills pending the patient’s next visit to his or her physician, extending the stop date of a long-term medication in a hospital setting, or providing emergency contraception, pharmacists have worked for many years to meet the emergency needs of the patients within their care. The underlying premise for prescribing in an emergency situation is to offer patients effective, timely access to care. Legislative changes in many provinces have already made this component of pharmacists’ practice routine.

2.3 Adapting a Prescription

During the process of reviewing a prescription, a pharmacist may identify a problem with a prescription written by another healthcare professional. To improve the overall outcomes of drug therapy or to provide continuity of therapy, the pharmacist may modify the pre-existing prescription, thus supporting safe and effective medication use. Such modifications may include alteration of the formulation, dose, regimen, or duration of therapy, or they may involve therapeutic interchange, with the general goal of providing patient-centred care. An incredible variety and complexity of medications are available today, and pharmacists, with their in-depth knowledge of these compounds, represent an essential expert resource in ensuring that medication therapy has optimal outcomes.

2.4 Comprehensive Medication Management

Comprehensive medication management for a known diagnosis may include the following steps: selecting appropriate drug therapy according to patient-specific factors; prescribing
drug therapy, initiating a monitoring plan, modifying therapy on the basis of ongoing assessments, and discontinuing therapy if deemed appropriate. It may also involve referral to other members of the collaborative team if necessary to achieve the best possible outcomes for patients. Pharmacists working in a collaborative setting with other members of the healthcare team are in an ideal position to be responsible for the ongoing management of patients’ drug therapy.

2.5 Pharmacists as Prescribers

As demonstrated above, the practice settings in which pharmacists are able to prescribe are as varied as the practices themselves. Pharmacists in both inpatient and ambulatory clinic practices work within interdisciplinary teams. In these settings the pharmacist serves as the team’s resource for medication management. Prescribing for patients in this setting is a natural extension of this role. Prescribing may also occur in a dispensary facility, where pharmacists’ knowledge of their patients may be incomplete because of limited access to patients and their health records. Nonetheless, pharmacists are often able to assess the appropriateness of a patient’s medications on the basis of information available in the patient’s medication profile (such as organ function, drug interactions, and allergies). Although prescribing in these settings is less than ideal, it still affords an approach to improving patient care, ensuring that the pharmacist maintains open and clear communication of all prescription changes and the rationale for them.

Regardless of the setting, models of prescribing by pharmacists have been developed with the ultimate goals of improving patients’ access to care and using pharmacists to the full scope of their skills and abilities.

3. EXPERIENCE WITH PRESCRIBING BY PHARMACISTS

3.1 Review of Worldwide Experience

Various models of prescribing by pharmacists exist around the world. In a recent global survey on hospital pharmacy practice, 20 (24%) of 85 responding countries reported that pharmacists prescribed medications in hospitals under certain circumstances (such as an agreement with a physician).18

The United Kingdom has two models of prescribing, known as supplementary and independent prescribing. Supplementary prescribing, a form of dependent prescribing, came into effect in 2003.19 In this model, a pharmacist (the supplementary prescriber) enters into an agreement with an independent prescriber (a physician) to implement a patient-specific care plan for a medical condition diagnosed by the physician. In May 2006, the relevant legislation was expanded to give pharmacists independent prescribing authority.19 In the United States, pharmacists in 45 states are authorized to manage medications under a physician’s guidance through various collaborative drug therapy management agreements.20-24 Similarly, in New Zealand, registered healthcare professionals can enter into dependent prescribing arrangements with authorized prescribers through standing orders or protocols.25

3.2 Review of Canadian Experience

Several government commissions, pharmacist regulatory authorities and associations, and other organizations across Canada have been advocating for a generally enhanced role for pharmacists.1,2,26-27 The prescribing authority given to pharmacists has evolved over the past decade.28 Across Canada, the provinces are at different stages of adopting or changing legislation to expand prescribing rights for pharmacists (Appendix A).22 Currently, regulations vary among provinces, with the types of prescribing authority granted to pharmacists ranging from renewing or adapting prescriptions (e.g., British Columbia, Nova Scotia, Saskatchewan, and Quebec) and prescribing in emergencies (e.g., Alberta and New Brunswick) to initiating or managing ongoing therapy (e.g., Alberta, Manitoba, and Quebec). The requirements for prescribing also differ between provinces. For example, in Alberta, all pharmacists have basic prescribing rights (i.e., for adaptation and emergency prescribing), but “additional prescribing authorization” requires a detailed, peer-reviewed application to the Alberta College of Pharmacists. In that province, pharmacists with “additional prescribing authorization” are able to initiate, monitor, modify, and manage medication therapy as appropriate at the time of initial access or in collaboration with another healthcare professional.21 In contrast, pharmacists in Manitoba must make a detailed application to the College of Physicians and Surgeons of Manitoba.

For years, pharmacists have performed many types of prescribing within Canadian institutional settings, such as pharmacokinetic dosing services and therapeutic interchange.29 Interestingly, according to the latest Hospital Pharmacy in Canada survey (for 2007/2008),23 the proportion of hospitals that reported prescribing by pharmacists increased since the previous survey in 2005/2006 (61% [99/163] versus 46% [66/142]). The majority of the activity was for dosage adjustments through “dependent” prescribing (79%), such as medication management protocols or automatic substitutions.30

4. SAFE AND RESPONSIBLE PRESCRIBING

The achievement of optimal patient outcomes requires that prescribing be done safely and responsibly. Whether the pharmacist is recommending a nonprescription product to an ambulatory patient, adjusting the prescription for an antibiotic
because of decreased renal function, or initiating lipid-lowering therapy in a patient at high risk for cardiovascular disease, certain practice components contribute to safety and optimal care. These components include appropriate legislation and policy, the prescriber’s competence, access to appropriate and sufficient information about the patient (e.g., medical and medication history, health goals), a relationship with the patient, collaboration and communication with other healthcare professionals, and comprehensive documentation. Underpinning each of these components is the pharmacist’s responsibility for his or her actions.

4.1 Legislation and Policy

Legislation and policy can support safe and responsible healthcare by authorizing pharmacists to practise to the full extent of their knowledge and skills. Pharmacists work in a variety of practice environments and hence may be subject to additional policies or directives within their respective employer organizations, beyond those set by legislation. Such policies, directives, and procedures must be aligned with the relevant provincial legislation to allow pharmacists to work to their full scope of practice.

4.2 Competence of Individual Prescribers

In Canada, all pharmacists must complete an undergraduate university degree from a school of pharmacy and must have some practical experience before entering practice. In addition, many pharmacists continue their formal training through residencies, graduate studies, and postgraduate fellowships. Recognizing the evolving role of the pharmacist, pharmacy faculties in Canada have increased clinical training and experiential learning. Patient care skills are learned and enhanced through hands-on experience with patients and the mentoring that pharmacy students and pharmacists receive from their peers and other healthcare professionals.

In addition to this formal learning, provincial pharmacy regulatory authorities require licensed pharmacists to continually maintain and upgrade their knowledge and skills, regardless of whether they prescribe. A key component of continuing education is self-evaluation. As such, pharmacists are well placed to critically evaluate their own knowledge, skill sets, and practice environment to ensure that they are practising both to their full scope of practice and within the limits of their individual competence.

4.3 Access to Patient Information

Safe and responsible prescribing involves making the most appropriate decision regarding drug therapy, with pertinent patient information at hand. Having up-to-date laboratory results, progress notes, medication profile, medication history, and medical history that can be accessed by multiple healthcare providers enhances collaboration and the sharing of relevant information. Like all other healthcare professionals, pharmacists are expected to protect the confidentiality of patient information, as required by provincial regulations and ethical obligations.

4.4 Relationship with Patient

Patient care is best practised when the needs and goals of the individual patient are the guiding elements. In providing patient-centred care, the care provider first establishes a relationship with the patient. This is clearly stated as the first step in the pharmaceutical care process. Although the nature of the relationship may vary according to the complexity of the care being provided, the role of the pharmacist can be clearly described to the patient, such that the patient will have the opportunity to express his or her needs and goals.

The relationship between the patient and the pharmacist is not a substitute for the patient’s relationship with other healthcare providers, and any given patient may have care relationships with a variety of care providers. Ideally, open communication and a collaborative spirit will allow these relationships to be complementary, each one enhancing the others.

4.5 Collaboration with Other Healthcare Providers

Within the healthcare team, pharmacists possess a unique skill set and knowledge base related to the use of medications. These attributes complement those of other healthcare providers, and, when they are exercised in a collaborative environment, patient care is optimized. For many healthcare professionals, the environment in which they practise is becoming more collaborative. This positive step can be encouraged and fostered by keeping the goal of patient safety paramount. Optimizing interactions among healthcare professionals will allow each profession to more fully appreciate the contributions that the others make and will allow for mutual support. Even if providers do not work in the same physical space, resources and energy can be directed toward timely and effective communication between providers by utilizing technology more fully.

4.6 Documentation and Communication

Legislation requires the pharmacist to document the care provided in a patient record. Proper documentation is essential for maintaining an ongoing record of interventions and care, and for communicating care plans to other healthcare professionals. Practice environments can be modernized and technology fully integrated to enhance and facilitate the sharing
of information. Use of standardized technology and clear policies and procedures for documentation can do much to ensure patient safety and facilitate care.

4.7 Responsibility

An underlying theme in the above components of care is responsibility. As defined by Hepler and Strand,1 pharmaceutical care is “the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient’s quality of life”.

Thus, pharmacists practising according to this model of care will be responsible in all facets, from establishing a relationship with the patient and setting patient-specific goals to documenting and monitoring the patient’s care plan. As well, pharmacists are expected to work within their respective scopes of practice and to follow their respective provincial codes of ethics.

With increased authority comes increased accountability. As pharmacists practise within new scopes of practice, it will be their responsibility to ensure that they have the appropriate liability coverage for their individual practice.

5. CONCLUSION

Pharmacist practice has evolved to facilitate better patient care; prescribing is one tool to facilitate the delivery of safe and effective healthcare. Prescribing by pharmacists can take a variety of forms, including initial-access prescribing, prescribing in emergency situations, adapting prescriptions, and performing comprehensive medication management. Most Canadian provinces now have legislative support for some form of prescribing by pharmacists. Key components that ensure safe and successful pharmacist prescribing include adequate access to patient information, the establishment of a relationship with the patient, collaboration with other healthcare providers, documentation, communication, and individual responsibility. Ultimately, pharmacist prescribing improves patient care by improving access to care and using pharmacists to their full scope of practice.

6. LITERATURE CITED


7. ADDITIONAL RESOURCES


## Appendix A: Prescribing By Pharmacists in Canada, 2009

<table>
<thead>
<tr>
<th>Province or territory</th>
<th>Relevant legislation</th>
<th>Prescribing privileges or type of prescribing</th>
<th>Requirements to prescribe</th>
<th>Effective date*</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>Bill-25: Health Professions Amendment Act 2008</td>
<td>Prescribe in an emergency, adapt a prescription (renewals, dose or formulation adjustments, and therapeutic substitutions)</td>
<td>Registered pharmacists, upon completion of orientation session</td>
<td>Jan 2009</td>
</tr>
<tr>
<td>Alberta</td>
<td>Health Professions Act</td>
<td>Prescribe in an emergency, adapt a prescription (renewals, dose or formulation adjustments, and therapeutic substitutions); Additional prescribing authorization (initiate or manage ongoing therapy)</td>
<td>Pharmacists on the ACP clinical register, upon completion of the orientation to new standards Pharmacists who have been given authorization after application to ACP</td>
<td>Apr 2007</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>The Pharmacy Act, Bill 22, An Act to Amend The Pharmacy Act (1996)</td>
<td>Emergency contraception SCP can create supporting bylaws for prescribing by pharmacists Proposed: Level I Authority Prescribing – refills, continuing therapy, emergency medications, medications for self-care, nonprescription medications (for third party), seamless care Level II Authority Prescribing – independent, collaborative agreements; therapeutic substitution; dosage adjustments</td>
<td>All registered pharmacists, with additional training Level I – all registered pharmacists Level II – pharmacists with additional training (evidence of proper training must be submitted)</td>
<td>TBA</td>
</tr>
<tr>
<td>Manitoba</td>
<td>Bill 41: The Pharmaceutical Act</td>
<td>Continued care prescription (renewal or refill of a prescription) New regulations will include provisions to prescribe and administer drugs, to interpret results of point-of-care patient self-tests, and to order and receive results for screening and diagnostic tests (pending acceptance by a majority vote of pharmacists registered in Manitoba).</td>
<td>All registered pharmacists Extended practice – application to MPhA Clinical assistant specialist – registered under The Medical Act (can currently prescribe)</td>
<td>TBA</td>
</tr>
<tr>
<td>Ontario</td>
<td>Regulated Health Professions Act</td>
<td>Interim report from HPRAC recommended authority to prescribe for minor ailments, to extend prescriptions, to adapt prescriptions on the basis of laboratory test results, and to administer drugs. Prescribing is referred to as “professional collaboration”.</td>
<td>Under development</td>
<td>TBA</td>
</tr>
<tr>
<td>Quebec</td>
<td>Bill 90: An Act to Amend the Professional Code</td>
<td>Initiate or adjust medication therapy according to a prescription by a physician (authorizing the pharmacist), prescribe emergency contraception</td>
<td>All registered pharmacists (specific training required for emergency contraception)</td>
<td>Jan 2003</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>Bill 60: An Act to Amend the Pharmacy Act</td>
<td>Renew or extend prescriptions, adapt prescriptions under certain conditions, prescribe in emergencies, and initiate therapy for pre-existing conditions</td>
<td>All registered pharmacists</td>
<td>Oct 2008</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>Pharmacy Act S.80</td>
<td>Conditional authority (written agreements with College of Physicians and Surgeons of Nova Scotia) Extend prescriptions Further regulations to expand practice are under development</td>
<td>All registered pharmacists</td>
<td>2006</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>Bill 10: An Act to Amend the Pharmacy Act</td>
<td>Act added “giving prescription for a drug” to the practice of pharmacy; regulations currently under development</td>
<td>Under development</td>
<td>TBA</td>
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### Appendix A: Prescribing By Pharmacists in Canada, 2009 (continued)

<table>
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<th>Province or territory</th>
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<th>Prescribing privileges or type of prescribing</th>
<th>Requirements to prescribe</th>
<th>Effective date*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newfoundland and Labrador</td>
<td>The Pharmacy Act</td>
<td>Under discussion; changes to the Act have not yet been proposed</td>
<td>NA</td>
<td>NA</td>
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<td>Northwestern Territories</td>
<td>Pharmacy Act, S.N.W.T. 2006, c. 24 Adoptions of Formulary for the Substitution of Pharmacologically Equivalent Drugs Order, N.W.T. Reg. 028-2007 Pharmacy Regulations, N.W.T. Reg. 018-2007</td>
<td>Immediate need for refill Substitute a pharmaceutically equivalent drug for the drug prescribed by the practitioner, in accordance with the territory's formulary Modify or include instructions in respect of medical devices or packaging requirements</td>
<td>All registered pharmacists</td>
<td>2007</td>
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<td>Nunavut</td>
<td>Pharmacists Act</td>
<td>Cannot prescribe</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>Yukon</td>
<td>Pharmacists Act</td>
<td>Cannot prescribe</td>
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Abbreviations: ACP = Alberta College of Pharmacists, SCP = Saskatchewan College of Pharmacy, HPRAC = Health Professions Regulatory and Advisory Council, NA = not applicable, MPhA = Manitoba Pharmaceutical Association, TBA = to be announced.

*Date of implementation of regulations.

### Bibliography