



Blueprint for Pharmacy DRAFT

For Pharmacy Stakeholder Consultation, May 2007

Vision for Pharmacy

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A Changing Pharmacy Profession in Canada

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Pharmacists will respond to medication use issues by spending more time managing drug therapy in collaboration with patients, caregivers, physicians, and other providers. Pharmacists will have greater responsibility for prescribing decisions and monitoring drug therapy outcomes. They will have greater authority to prescribe (e.g., initiate and modify drug therapy), to order and perform tests, and have access to relevant patient information through electronic health records (including test results, treatment indications). Pharmacists will play a prominent role in health promotion, disease prevention, and chronic disease management.

The safety, security, and integrity of the drug distribution system will continue to be protected through the enhanced role of regulated pharmacy technicians and greater automation of dispensing.

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Introduction

The Blueprint for Pharmacy is a strategic action plan for the pharmacy profession in Canada, to strengthen its alignment with the health care needs of Canadians and to respond to the stresses on the Canadian health care system. Convenient and timely access to care, patient safety and health outcomes, financial sustainability, and optimizing scopes of practice of health professionals are the major issues challenging governments and health care leaders.

What else might we expect in the next few decades? Although the future is uncertain, we know patient needs and expectations are changing, and the delivery of health care will change. These changes have a number of drivers, including the rising costs of health care and the emphasis on self-care. The evolution of technology is helping patients to become better informed and is leading to shared electronic health records, an increase in the number of pharmaceuticals available, and the development of biomonitoring and genomic forecasting. Population demographics are also shifting: the population as a whole is aging, and the divide between rich and poor is increasing. Societal changes, such as the advent of the “24/7 society,” are also coming into play.

In recognition of these drivers, we can ascertain that health promotion and chronic disease management will be the cornerstones of health care, which will be delivered collaboratively by interprofessional health care teams. Primary care providers will have ongoing relationships with patients and will make extensive use of information and communications technologies to deliver more timely and higher quality care. Health care professionals and patients will have access to unbiased, evidence-based information about treatment choices and the appropriateness of those options for the individual patient. Electronic health records will be standardized, secure, and widely used. Physicians, nurses, pharmacists and other providers will have expanded roles, employing their skills and knowledge most effectively. Pharmacy technicians will be a regulated profession, and technicians’ scope of practice will be much expanded and more standardized across the country than is currently the case. Consumers’ responsibility for their own care will have increased, along with accountability and reporting demands on health care professionals.

The implications of the future for the pharmacy profession are numerous. Pharmacists will have increased responsibility for prescribing decisions and have access to relevant patient information (including test results and treatment indications). More noninvasive tests will be available, and pharmacists will thus be able to order and perform more tests, especially in the community pharmacy setting. All of these capabilities will give pharmacists the opportunity to play a larger role in disease prevention, health promotion, and chronic disease management. With the regulation of pharmacy technicians and more automation of dispensing, pharmacists will spend more time managing drug therapy, working collaboratively with patients, caregivers, physicians, and other health care providers. The challenge is to move forward with a sustainable and strategic action plan for the future – the Blueprint for Pharmacy.

The Blueprint reviews the current role of pharmacists in the health care system, practicing in many patient-care settings: community pharmacies, university-affiliated institutions, community hospitals, family health clinics, long-term care institutions, home care, etc. In response to health care challenges, the Blueprint recommends a greater emphasis on patient-centred, outcomes-focused care. This document enumerates the key elements required to meet the future health care needs of the population, grouped under the following five areas: pharmacy human resources; education and continuing professional development; information and communication technology; financial viability and sustainability; and legislation, regulation, and liability.

A changing pharmacy profession in Canada

The demands on the health care system and the changes in the delivery of health care require pharmacists to shift more attention to patient-centred, outcomes-focused care to optimize the safe and effective use of medications.

Pharmacists will respond to medication use issues by spending more time managing drug therapy in collaboration with patients, caregivers, physicians, and other providers. Pharmacists will have greater responsibility for prescribing decisions and monitoring drug therapy outcomes. They will have greater authority to prescribe (e.g., initiate and modify drug therapy), to order and perform tests, and access to relevant patient information through electronic health records (including test results, treatment indications). Pharmacists will play a prominent role in disease prevention, health promotion, and chronic disease management. The safety, security, and integrity of the drug distribution system will continue to be protected through the enhanced role of regulated pharmacy technicians and greater automation of dispensing. By using the full extent of their education and training, pharmacists will make even greater contributions to the health of Canadians, to the overall accessibility and safety of health care services, and to the viability and sustainability of the health care system.

It is important to note that pharmacists do more than just verify a prescriber's order, check for drug interactions, and confirm dosages. They collaborate with patients, their families, and other health care providers to benefit the health of Canadians by:

- Ensuring convenient access to medications and drug therapy expertise.
- Managing medication distribution systems to ensure safety, accuracy, quality, and integrity of pharmaceuticals.
- Providing information about the optimal use of medications and promoting the cost-effectiveness of medications through evidence-based decision-making.
- Reducing harm by decreasing unnecessary, unsafe, or inappropriate use of medications.
- Optimizing health outcomes by identifying, resolving, and preventing actual and potential drug-related problems; initiating or modifying drug therapy; and monitoring and evaluating response to drug therapy, in a collaborative framework with physicians, and other health care providers.

- Supporting patient self-care by assessing symptoms, providing advice on the management of minor symptoms and the use of nonprescription medications, and referring patients to other health care providers, where appropriate.
- Promoting immunization and other public health services.
- Providing education and interventions to prevent disease and disability, thereby promoting healthy lifestyles.

Addressing medication use challenges

Most relevant to this discussion is the increase in the number and sophistication of medications available. Although drug therapy has been proven to prolong and increase quality of life, and is often more cost effective and less invasive than surgery, it has also contributed to the rising costs of health care and adverse events. As such, there is an increased need for professionals with special skills in drug therapy, that is, pharmacists. Examples abound of the high direct and indirect costs of pharmaceuticals in Canada:

- Pharmaceuticals represent the second-largest, and fastest-growing, health care expenditure, with retail costs forecasted to reach \$25.2 billion in 2006 or 17% of the total.¹
- Pharmacies dispense over 414 million prescriptions each year, which represents 84% of total drug costs.²
- Studies have estimated that 5% to 10% of all hospitalizations are drug-related. A large proportion (4% to 28%) of all emergency department visits are also drug-related, and 38% to 70% of these visits are preventable.³ In a recent Canadian study, 24% of patients were admitted to a hospital's internal medicine service for drug-related causes, and over 70% of these admissions were deemed preventable.⁴
- Adverse events are not uncommon in Canada. A major Canadian study estimated that of the almost 2.5 million annual hospital admissions in Canada, about 185 000 were associated with adverse events; close to 70 000 of these were potentially preventable.⁵ The second most common type of adverse events were associated with drug- or fluid-related events.
- Adverse events after hospital discharge are also of concern, with 23% of patients experiencing an adverse event within 30 days; 50% of these adverse events were deemed preventable and 72% were due to medications.⁶
- The estimated cost of misuse, underuse, and overuse of medications ranges from \$2 billion to \$9 billion per year.⁷

The evidence underscores the fact that medications must be used more rationally. "This requires that patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements for an adequate period of time, and at the lowest cost to them and their community."⁸ If drugs are *not* used more rationally the Canadian health care system will continue to expose patients and taxpayers to concerns related to quality of care, safety, and value for money.

Clearly, pharmacists have a more important role to play. As medication specialists, pharmacists can take on a greater responsibility for outcomes from medication therapy. Pharmacists, as visible and vital members of the health care team, can enhance the public's access to many aspects of primary care, improve the safety of the medication-use system, and increase the rational use of medicines.

Efficiencies are being sought throughout the health care system to take full advantage of the contributions of all health care professionals. Canadian pharmacists have a responsibility to align professional services to meet the population's health care needs. In addition to responding to the shifting health care context, they must respond to the stereotype of pharmacists as compounders and dispensers of medications. While pharmacists provide dispensing and compounding services, ensuring the safety, integrity and quality of the drug distribution system, they also are medication experts committed to preventing adverse drug events and optimizing drug therapy outcomes. Pharmacists are increasingly accountable and responsible for the safe and effective use of medications. Pharmacists promote wellness and disease prevention, and empower patients, in collaboration with other health professionals.

The future vision for the pharmacy profession in Canada has a clear focus—the patient. To meet this vision, pharmacists' practices need to be more holistic and rooted in a patient-centred, outcomes-focused approach to care. According to the World Health Organization:

Public health interventions, pharmaceutical care, rational medicine use and effective medicines supply management are key components of an accessible, sustainable, affordable and equitable health care system which ensures the efficacy, safety and quality of medicines. It is clear that pharmacy has an important role to play in the health sector reform process. To do so, however, the role of pharmacists needs to be redefined and reoriented.⁸

Pharmacy responds

Status quo is not an option. Pharmacy must shift from a profession-centred to a patient-centred culture. Pharmacists, as an integral member of the interprofessional team, can better meet patient, professional, and health system needs. To achieve societal and economic goals for the health care system, the pharmacy profession needs to institute a series of integrated changes to ensure that it can respond and adapt to both internal and external demands.

From a broad perspective, pharmacists require the authority and autonomy to initiate and assess medication therapy, within a collaborative framework, and must be accountable for the therapeutic outcomes of their patients. In doing so, they need to communicate and collaborate with patients, caregivers, other health care professionals, and support personnel in various health care settings.

Patient-centred care has many benefits, which include improving patient adherence to medications and increasing the likelihood that patients will succeed in self-care. The actions described in the Blueprint for Pharmacy are intended to achieve this approach to care and improve outcomes.

Achieving a greater emphasis on patient-centred, outcomes-focused care will require true commitment by all pharmacists and leaders. Pharmacists should become agents of change and will need to align their efforts to achieve change—they need a plan. The Blueprint for Pharmacy is such a plan, our road map for change within Canadian pharmacy. The process of implementing the Blueprint will be inclusive, involving the broadest range of pharmacy stakeholder groups. Leadership will be required to facilitate change. As such, development and consultation on the Blueprint is being led by a Task Force on a Blueprint for Pharmacy, with representatives from pharmacy stakeholders across the country.

The Blueprint for Action

Vision for Pharmacy

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To ensure the viability, sustainability, and effectiveness of the Canadian health care system, all available resources, including pharmacists, must be utilized more effectively. Such change will not come easily—it necessitates resources, organization, and commitment. It also requires a collaborative effort by all of the various bodies involved, including federal, provincial, and territorial governments, other funding bodies such as private third-party insurers, professional pharmacy groups, pharmacy regulatory bodies, pharmacy schools and pharmacy technician programs, other related health professional groups, and consumer groups.

To realize this vision, all individuals and groups with a stake in a viable Canadian health care system need to work toward the following goals:

- Integrating pharmacists into new models of health care delivery (examples of new models include employment of pharmacists on interprofessional primary health care teams; provision by pharmacists of comprehensive medication reviews, medication reconciliation, and chronic disease management; and provision by independent pharmacists of medication consultation services outside of community and hospital pharmacy settings).
- Compensating pharmacists in a manner that relates to the expertise required, the complexity of care provided, and the outcomes achieved.

- Enabling pharmacists to access patient care information in health records and to enter patient information into these records, including electronic health records.
- Integrating new powers under legislation that allows pharmacists to initiate and modify drug therapy, and encouraging pharmacists to practice to the full extent of their competencies and legislated scope of practice.
- Recognizing and rewarding pharmacists for new responsibilities that they accept, and supporting pharmacists and pharmacy owners in developing and facilitating these changes.
- Encouraging innovative models of practice in traditional community and institutional pharmacy settings, interprofessional care teams, rural and remote health settings, and independent consulting practices.
- Facilitating change in the infrastructure within the education system that will be necessary for pharmacists to take on new practice roles.
- Recognizing the contributions of all health care providers to the management of medication therapy and providing leadership for integrated management of medication therapy that ensures optimal continuity of care and patient safety.

Pharmacists and pharmacy stakeholders need to:

- Embrace the vision of future pharmacy practice embodied in the Blueprint.
- Assume responsibility for preventing and resolving medication-related problems within a collaborative framework.
- Ensure that the patient's important health considerations are addressed in patient encounters.
- Collaborate with others in the health care system to facilitate the effective, safe, efficient, ethical, and respectful care of patients.
- Strengthen existing relationships and build new relationships with patients, other health care professionals, and other sectors of the health care system (e.g., regional health authorities).
- Make best use of the profession's human resources, so that they practice to the fullest extent of knowledge, skills, competence, and abilities.
- Use appropriate information and decision-making tools in the course of providing clinical care to patients, and apply practice tools to improve the efficiency and effectiveness of their services.
- Maintain their dedication to education and continuing professional development.
- Enhance their collaborative practice skills (e.g., communication, interdisciplinary, and team development skills).
- Participate in medication safety and quality improvement initiatives.
- Support best practices by developing and implementing protocols and outcome measures for quality pharmacy services.
- Demonstrate leadership in the application of technology for the storage, retrieval, and communication of the information required for patient care.

Key Strategic Actions

More specifically, to achieve the vision for pharmacy in Canada, strategic actions in five key areas are needed:

1. Pharmacy human resources
2. Education and continuing professional development
3. Information and communication technology
4. Financial viability and sustainability
5. Legislation, regulation, and liability

Pharmacy human resources

Canada's 30 000 licensed pharmacists make up the third-largest segment of health care professionals in Canada. Pharmacists are the only health care providers whose education focuses on medications and their use. Approximately 70% of licensed pharmacists work in community pharmacies, 15% work in hospital facilities, and 15% work in academia, industry, government, and other areas. Current reports estimate that there are between 1.0 and 1.3 pharmacy technician full time equivalents (FTEs) for every pharmacist FTE, depending on the setting.⁹

The actions listed below are required to ensure that the pharmacy workforce meets the future needs of Canadians and the Canadian health care system. A number of pharmacy human resource initiatives are undertaking many of these key actions. For example, two of these initiatives are funded by the federal government: the "Moving Forward—Pharmacy Human Resources for the Future" project and the development by the Canadian Institute for Health Information (CIHI) of a pharmacist database, which will be updated annually.

The following key actions are among those needed in the area of pharmacy human resources:

- Describe new roles and achieve consensus on required skills for pharmacists within the key sectors of pharmacy practice.
- Lead research initiatives to evaluate the effect of pharmacy practice on patient health and health care services and the effect of changes in the utilization of pharmacy human resources on patient health and health care services.
- Promote a greater understanding of the factors determining pharmacist satisfaction in the workplace.
- Address recruitment and retention issues associated with new workplace roles.
- Define and achieve consensus on the roles, responsibilities, and competency requirements of regulated pharmacy technicians.
- Promote the availability of an appropriate number of pharmacy technicians with higher qualifications and expanded responsibilities as the role of pharmacists evolves.

- Address the challenges faced by international pharmacy graduates to support them in attaining licensure and integrating into pharmacy practice in Canada (e.g., in terms of education, culture, and language).
- Use the forthcoming CIHI national database of pharmacists for human resources planning.
- Ensure that pan-Canadian health human resource planning is an ongoing process that includes pharmacists and recognizes the complexity of the profession.

Education and continuing professional development

In 1997, the World Health Organization (WHO) developed the concept of the “seven-star pharmacist,” detailing the skills and attitudes required of pharmacists to be effective members of the health care team¹⁰. In 2000, the International Pharmaceutical Federation (FIP), of which Canada is a member, adopted this concept in its policy on pharmacy education.¹¹ The roles of the pharmacist are caregiver, decision-maker, communicator, manager, life-long learner, teacher, and leader. The WHO and FIP added the function of researcher in their 2006 handbook entitled *Developing Pharmacy Practice: A Focus on Patient Care*.⁸ Clinical and pharmacy practice research are essential to ensuring better health for Canadians and a sustainable and viable health care system.

To effectively meet the changing needs of the pharmacy workforce, the education and continuing professional development (CPD) system must achieve the following:

- Promote and increase interprofessional and intraprofessional approaches at the undergraduate level and in CPD programs.
- Identify the best evidence for improving the effectiveness and efficiency of education and CPD initiatives, and apply these research results in practice.
- Put greater emphasis on foundational skills, such as communications, decision making, and confidence building, in the curriculum and in clinical experiences.
- Incorporate management, leadership, and change management skills into both undergraduate and post-licensure education.
- Increase the quality of experiential training and enhance the core professional curriculum to recognize the skills and knowledge required of graduates if they are to assume the new responsibilities inherent in future pharmacy practice models.
- Secure sufficient training sites in academic health sciences centres, university-affiliated institutions, community hospitals, community pharmacies, family health clinics, and other patient care settings to ensure that students have access to the quality patient care facilities necessary to achieve required educational outcomes.
- Incorporate support programs (e.g., bridging programs) to meet the specific needs of international pharmacy graduates.
- Implement accredited CPD and practice support programs for pharmacists seeking to implement new services, specialty practices, or new practice models.

- Encourage students, pharmacists, and pharmacy technicians to develop life-long learning skills and partner with others to develop CPD programs (e.g., governments, universities, pharmaceutical industry, health and disease organizations).
- Define the skills and competencies needed by pharmacy technicians and introduce an accreditation system for pharmacy technician training programs.
- Support the development of programs to certify pharmacy technicians and bridging programs to assist existing pharmacy technicians to become regulated and take on new responsibilities.

Information and communication technology

Pharmacists need appropriate information to effectively manage drug therapy and to function as team members responsible for health outcomes related to medication therapies. Furthermore, all care providers require access to all relevant patient information to make the best therapeutic choices for individuals. Technological tools represent key vehicles for communicating information and enhancing the safety of the drug distribution system. Across the country, in partnership with Canada Health Infoway, provincial governments are developing Pharmacy Information Networks/Drug Information Systems (PINs/DIS), which will include a complete drug profile and e-prescribing applications. The National e-Pharmacy Task Force is addressing policy, privacy, business, and patient care issues as they relate to information technology.

The following are required to maximize the usefulness of information and communication technology (ICT):

- Reach consensus for pharmacists to read and add to the relevant sections of a patient's electronic health record.
- Ensure that pharmacies are engaged in the development and implementation of interoperable health informatics programs across Canada.
- Develop and implement policies and practices relevant to electronic prescribing and electronic transfer of prescriptions.
- Develop and apply standards for pharmacy practice management software to meet the evolving roles of pharmacists and to maximize the usefulness of information and communication technology.
- Ensure that the development of secure information and communication technology in hospital, community, primary care, and long-term care settings facilitates continuity of care and improves safety with respect to patients' drug therapy (e.g., through medication reconciliation).
- Prepare and use a provider-level business case to support end-user adoption of changes in information and communication technology, and ensure a coordinated, phased-in approach to the adoption of new technologies.
- Ensure that pan-Canadian e-health standards are in place and are sustained on a national level, to support integration and data access across systems and to facilitate communication among health care providers.

- Address policy issues identified through the work of Canada Health Infoway and provincial governments on PINs/DIS, and promote implementation and adoption of new technologies and standards.
- Evaluate how improved usefulness of ICT by pharmacists affects health care services and outcomes.
- Integrate training on the use and understanding of ICT into the curriculums and CPD programs for pharmacists and pharmacy technicians.

Financial viability and sustainability

The health care system needs pharmacists to provide patient-centred care and accept responsibilities as drug therapy experts. New practice, reimbursement and business models are needed to render this shift viable and sustainable for patients, pharmacists, pharmacy owners, and the public and private purses.

The following are among the actions required to ensure financial viability and sustainability:

- Identify, define, test, and evaluate new professional services and expanded pharmacy practice models to determine their cost-effectiveness and impact on quality of care.
- Describe and implement reimbursement models for professional services that ensure financial sustainability.
- Formulate new methods for the reimbursement of pharmacist's patient care and medication dispensing services that are consistent with the complexity, skill, demonstrated value, and time required to deliver care to patients.
- Work with governments, third party insurers, and with other health care providers to clearly define the services to be included and reimbursed in primary health care, hospitals, home care, palliative care, and other practice environments.
- Establish national standardized electronic billing procedures for professional services.
- Provide clear incentives for change in business models for pharmacies, and develop transition strategies.
- Secure resources to support practice development and practice change.
- Conduct policy research to determine the effect of new pharmacy-focused policies on health care practice and patient outcomes.

Legislation, regulation, and liability

Change cannot occur without support from the federal, provincial, and territorial pharmacy regulatory authorities and governments, and their commitment to review and adjust policies to address and encourage necessary initiatives, such as interdisciplinary team-based care. As with other health care professionals in Canada, regulation is important for protecting the public.

The following actions are required to enable change in this area:

- Develop scopes of practice and enact enabling legislation and/or regulations to support pharmacists in delivering expanded services in new practice models, in particular, to give pharmacists more authority to initiate and modify drug therapy in both collaborative and independent practice models.
- Address issues of importance to pharmacy technicians, such as competency requirements, roles and responsibilities, certification and regulation, and accreditation of training programs.
- Enact enabling legislation and/or regulations to give more authority and accountability to pharmacy technicians.
- Establish an understanding of how liability will be assessed and how practitioners will be insured in collaborative practice models.

Next steps

An implementation plan for the key actions in all five areas will be developed by expert working groups, which are to be established by the Task Force on a Blueprint for Pharmacy. The plans will provide more detail regarding the implementation process related to each action: Who will be the lead to take action?; Who will be the partners of these actions?; What will be the timelines and deliverables?; What will be the measures of success? These working groups will use existing research and consult accessible documentation when devising the implementation plan and setting the course for Blueprint activities.

Commitment to act

Change needs agreement on process. A shift toward a truly patient-centred, outcomes-focused approach requires the agreement, commitment and engagement of all key pharmacy stakeholders.

The undersigned organizations support the vision and high-level actions elucidated in the Blueprint for Pharmacy and commit to employ the Blueprint when developing their strategic plans and when engaging in other planning exercises. Furthermore, they agree on the creation of working groups to develop the implementation plan for the Blueprint for Pharmacy. These organizations also agree to support the working groups and to consider and adopt or adapt the plans developed by the working groups to move the pharmacy profession forward.

(Proposed list of pharmacy organizations that will sign off on the Blueprint for Pharmacy).

National pharmacy organizations

Pharmacy regulatory authorities

Provincial pharmacy advocacy associations

Faculties of pharmacy

Corporate community pharmacy owners

For further information, please contact:

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