BLUEPRINT FOR PHARMACY

Designing the Future Together

IMPLEMENTATION PLAN

ACHIEVING THE VISION

Optimal drug therapy outcomes for Canadians through patient-centred care.

September 2009

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FOREWORD

On behalf of the Task Force on a Blueprint for Pharmacy and its working groups, I am proud to present you with the Blueprint for Pharmacy Implementation Plan.

The Blueprint for Pharmacy is a long-term initiative designed to catalyze, coordinate and facilitate the changes required to align pharmacy practice with the health care needs of Canadians. In June 2008, the Task Force on a Blueprint for Pharmacy released the Blueprint for Pharmacy: the Vision for Pharmacy – a landmark document definitively stating that "optimal drug therapy outcomes for Canadians through patient-centred care" is the ultimate vision for pharmacy. This Vision sets out a direction that is intended to strengthen the profession's alignment with the Canadian health care system and to commit pharmacists and pharmacy technicians to use their expert knowledge and skills to the fullest extent for the health of their patients. It unequivocally defines the profession's intent to take a leadership role in: developing collaborative interprofessional patient care practices, incorporating technology, enhancing the training and utilization of its human resources, and implementating regulatory practices that are defined by health outcomes, patient and medication safety, and the accountability of pharmacists and pharmacy technicians to the patient above all others.

While it may be tempting to see traditional community pharmacy as the principal object of the Blueprint initiative, the Task Force was careful to create a Vision that was concerned with all sectors of the profession where direct patient care occurs. The Blueprint therefore focuses on the widest spectrum of practice settings including those in hospitals, community pharmacies, long term care, consulting practices, highly specialized patient practices, government, industry and emerging new models of practice. The Blueprint initiative should also have significance to those who educate and train new practitioners such as faculty and instructors in pharmacy schools and pharmacy technician programs, as well as those who deliver post-licensure education.

Since its release, the Vision for Pharmacy has been endorsed by all sectors of pharmacy in Canada including national and provincial professional associations, regulatory authorities, institutional practice, academic bodies, and pharmacy chains/banners. This is a remarkable declaration of support from the many diverse interests in pharmacy. It provides tangible evidence to the public, other health professions, industry, and governments of the profession's unity around a common vision. The many bodies that have declared support to the Blueprint for Pharmacy are now prepared to work within the scope of their organizational missions to assist in the achievement of the Vision for Pharmacy.

Following the publication of the Vision for Pharmacy, several working groups were formed to develop implementation plans for the five key strategic action areas in the Blueprint. These working groups were selected from a Canada-wide cross-section of the many practice leaders, technical experts, executives, and educators who submitted letters of interest offering expertise to the process. This document is the Implementation Plan created by the five working groups.

The Implementation Plan identifies the essential action steps, priorities and timelines, and suggests leadership assignments that will need to be in place to increase the likelihood that the Vision for Pharmacy will be achieved. While it is possible that the Vision could, and perhaps, eventually will, be realized through the natural order of events of the profession over many years, it is the belief of the Task Force that the process can be greatly accelerated through a systematic, organized and dedicated process (e.g., a Steering Committee and National Coordinating Office as has been recommended in this Plan) that facilitates sequencing of priority actions, the consolidation of collaborative efforts by lead organizations or sectors of the profession, the communication of practice change to the profession, and the targeting of investments in key initiatives by stakeholders and governments.

Some of the action areas in the Implementation Plan will likely be addressed and implemented via national initiatives (e.g. education changes, human resource planning). Others are more clearly within the mandate of pharmacy's provincial bodies (e.g., reimbursement matters, regulatory changes), or will be taken up at the

corporate/institutional practice level in collaboration with provincial or government partners (information and communication technology actions).

This Plan does not presume to claim that it is the only path to realization of the Vision for Pharmacy. Leading organizations will certainly make fine tuning adjustments to their components of the Plan as dictated by circumstances. However, all sectors or stakeholders in the profession that will be expected to lead or participate in any of the strategic action areas will find this Plan to be a valuable reference as the expert groups that prepared it have worked hard to prioritize key action steps and lay out the required deliverables from an integrated, national perspective.

The identification of specific organizations as "potential leading organizations" in the Implementation Plan on each of the deliverable actions should not be interpreted to exclude others who may wish to contribute expertise or leadership. The designation was largely determined by aligning each action area with the published missions of national pharmacy organizations. For action areas that fall principally within provincial jurisdiction, it is expected that the organizations with the most well-developed expertise, interest, resources, or provincial goals with concomitant urgency will assume leadership responsibilities and coordinate involvement of partnering organizations.

The target audiences for this Plan are primarily pharmacy's major organizations in Canada — both provincial and national, governments, and corporate and institutional practice sites. These entities have the power to collaborate and address macro-level barriers to changes in patient care provided by pharmacists and pharmacy technicians. These bodies have the mechanisms by which action priorities and deliverables can be coordinated in large scale initiatives. They also have established strategic alliances in place with consumers, health professionals, industry, and other parties that will need to be consulted as the implementation proceeds. Finally, many have effective communication, research and management resources to ensure that front line pharmacists and pharmacy technicians have the information and evaluation support tools necessary to provide quality patient care.

This Blueprint for Pharmacy Implementation Plan is now, therefore, formally turned over to Canada's pharmacy organizations, practice sites, and government partners who must assume the responsibility for ensuring the Vision for Pharmacy can become a reality. The mandate for which the Task Force on a Blueprint for Pharmacy and its working groups has now been completed.

While pharmacy organizations, governments, corporate/institutional practice sites, and other stakeholders will be responsible for providing the resources and tools to re-model the environment necessary for the safe and effective medication care of patients, pharmacists and pharmacy technicians have the greatest challenge. The provision of "optimal drug therapy outcomes for Canadians through patient-centred care" is not a Vision for which organizations, governments, systems, or employers can take ultimate responsibility. Rather, safe and effective medication care depends primarily on the frontline people in the profession, and the commitment, enthusiasm, knowledge, skill and initiative of every pharmacist and pharmacy technician displayed to their patients.

Unfortunately, too many pharmacists and pharmacy technicians see themselves as passive, subordinate parts of a place—the pharmacy. This culture and the attitude of pharmacists and pharmacy technicians that reinforces this perception must change for the Vision for Pharmacy to be realized. Pharmacists and pharmacy technicians must take the opportunity presented by the Blueprint to influence the prevailing culture and to actively take a position about the future for pharmacy in Canada. The Vision for Pharmacy can only be truly realized if pharmacists and pharmacy technicians in Canada make a stronger commitment to the medication care needs and health outcomes of their patients and that this duty of care re-emerges as the force driving practice change.

It has been my pleasure and privilege to work with the dedicated individuals of the Task Force, the working groups and the Canadian Pharmacists Association to carry out our mandate. I look forward to the challenges and changes ahead.

David S. Hill, Ed.D., FCSHP
Chair, Task Force on a Blueprint for Pharmacy

April 2009

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Canadian Pharmacists Association / Association des Pharmaciens du Canada

The Canadian Pharmacists Association led this initiative, funded a number of members from the five working groups to attend meetings, and supported activities by providing the secretariat support for the Task Force and working groups.

EXECUTIVE SUMMARY

As of Spring 2009, all national pharmacy organizations, faculties, provincial pharmacy associations, provincial pharmacy regulatory authorities, student societies and most major community pharmacy chains and banners have committed to act on the Vision for Pharmacy by working together to implement the Vision and referring to the Vision document when developing their strategic plans. For the first time pharmacy has a common vision, "Optimal drug therapy outcomes for Canadians through patient-centred care," and an implementation plan to achieve this vision.

This plan lists the actions and deliverables required to achieve the vision. These actions and deliverables were recommended by the members of five working groups, one for each key area of action: pharmacy human resources; education and continuing professional development; financial viability and sustainability; legislation, regulation and liability; and information and communication technology. While this plan lists the actions and deliverables it does not describe in great detail how these should be actualized or offer the specific desirable and measurable outcomes. Working group members determined that these details were best left to the organizations that would ultimately be responsible for actualizing the actions and deliverables. This also allows for maximum flexibility to accommodate provincial differences in priorities, compensation, legislation, regulation and so forth. Such a comprehensive plan does not lend itself to a brief executive summary. Readers may wish to refer to the section Further Delay is Not an Option (Section 1) to grasp the need for this plan. Others may desire to refer to the overview of the context and recent activities in the five key areas (Section 2).

The Overview of the Implementation Plan (Section 3) provides a general overview of the activities required to achieve the common vision. Here, the activities cut across the five key action areas and are articulated from a perspective of interdependence and timing (e.g., activity A must be preceded by activity B). Readers will certainly get an overview of the implementation plan by consulting this section, but will miss many of the nuances if the Detailed Implementation Plan (Section 5) is not consulted.

An ambitious plan aimed at moving pharmacy practice forward will need some central or national coordination. As such, the creation of a national steering committee and national coordinating office is recommended. The responsibilities of this committee and office are described in Section 4.

The Task Force on a Blueprint for Pharmacy and working groups invite pharmacy stakeholders to get involved, use this plan, build on existing initiatives, partner to implement this plan, share strategies and work efficiently to maximize the use of planning and implementation resources. Ultimately, the desire is optimal drug therapy outcomes for Canadians through patient-centred care, provided by a healthy and fulfilled pharmacy workforce.

SECTION 1: BACKGROUND

The Blueprint for Pharmacy is a collaborative initiative designed to transform pharmacy practice in order to achieve "Optimal drug therapy outcomes for Canadians through patient-centred care." This Vision, along its need, is described in the landmark document the Blueprint for Pharmacy: The Vision for Pharmacy (www.pharmacists.ca/blueprint).

As of Spring 2009, all national pharmacy organizations, faculties, provincial pharmacy associations, provincial pharmacy regulatory authorities, student societies and most major community pharmacy chains and banners have committed to act on the Vision for Pharmacy by working together to implement the Vision and referring to the Vision document when developing their strategic plans.

VISION FOR PHARMACY

Optimal drug therapy outcomes for Canadians through patient-centred care

In our Vision for Pharmacy

Pharmacists and pharmacy technicians

- practice to the full extent of their knowledge and skills, and are integral to emerging health care models.
- protect the safety, security and integrity of the drug distribution system through the enhanced role of regulated pharmacy technicians and greater automation of dispensing.
- lead the development of and participate in medication safety and quality improvement initiatives.

Pharmacists

- manage drug therapy in collaboration with patients, caregivers and other health care providers.
- identify medication use issues, take responsibility for drug therapy decisions and monitor outcomes.
- initiate, modify and continue drug therapy (e.g., through collaborative agreements, delegated or prescriptive authority), and order tests.
- access and document relevant patient care information in health records, including test results and treatment indications (e.g., in electronic health records).
- empower patients in decision-making about their health, and play a prominent role in health promotion, disease prevention and chronic disease management.
- conduct practice research and contribute to evidence-based health care policy and best practices in patient care.

Pharmacists' services

- are compensated in a manner that relates to expertise and complexity of care.

This document is the plan to implement change; in other words, to implement the Vision for Pharmacy. Sections 1 and 2 of this document provide the background to the implementation plan. These two sections describe the process to date, and highlight the need for change in five key areas:

- Education and continuing professional development
- Pharmacy human resources
- Financial viability and sustainability
- Legislation, regulation and liability
- Information and communication technology

Section 3 – an Overview of the Implementation Plan – summarizes the required activities to realize the Vision. The breadth of the implementation plan will require coordination to manage its implementation; this coordination is described in Section 4. Finally, the Detailed Implementation Plan is described in Section 5. Here each action and its deliverables are enumerated along with timelines and potential lead organizations.

Process summary

Inspired by John Kotter's[1] eight steps to change, and the work of Ross Tsuyuki and Terry Schindel[2] who adapted these steps to pharmacy practice change, the Canadian Pharmacists Association (CPhA) drafted a Blueprint for Pharmacy: Background Paper[3] to elucidate the urgency for change and provide the context for change in the five key areas covered in this implementation plan (step one). In 2007, the Task Force on a Blueprint for Pharmacy was created to guide the change process, and in 2008 (step two), the Vision for Pharmacy was released following intra and interprofessional consultations (step three). While the vision was being communicated and organizations and individuals were being asked to commit to the Vision for Pharmacy (step four), five expert members working groups were formed to draft an implementation plan that would actualize the Vision for Pharmacy.

Kotter Model

Step One: Establish a sense of urgency

Step Two: Form a powerful guiding coalition

Step Three: Create a vision for pharmacy practice

Step Four: Communicate the vision

Step Five: Remove obstacles to the new vision

Step Six: Plan for and create some short-term wins

Step Seven: Consolidate improvements and produce more change

Step Eight: Institutionalize new approaches

This implementation plan is meant to address Kotter's steps five to seven that are to remove obstacles, plan, and coordinate progress to enable more change.

Intended audience of this plan

The goal of the Blueprint for Pharmacy initiative is to have each and every pharmacist, pharmacy technician, and pharmacy student in all settings contributing to optimal drug therapy outcomes for Canadians through patient-centred care. Specific communications strategies for each of these diverse audiences are an integral part of this initiative.

However, a number of systematic barriers to achieving this goal have emerged. Macro-level changes are required to remove these barriers in the five key areas. Therefore, the target audience for this implementation plan is composed of pharmacy champions, opinion leaders, policy makers and innovators who have the power to collaborate and address macro-level barriers to pharmacy practice change.

> *While change may generate potential threats, it can also open up immense opportunities. The pharmacy profession has a responsibility to identify new opportunities for pharmacy practice in a changing health sector context, to assess and to test them, and to demonstrate their ability to implement them successfully.*
>
> — World Health Organization. *Developing pharmacy practice: A focus on patient care.* Handbook – 2006 Edition. WHO and FIP, 2006. pg 7

Role of the front-line pharmacy workforce

All of the actions enumerated in this implementation plan were developed to move pharmacy practice forward in such a way as to better meet the health care needs of Canadians. A number of the deliverables are tools for the use of the front-line pharmacy workforce, and its managers, to implement new professional pharmacy services and pharmacy practice models. Until some of these tools are developed, front-line pharmacists, pharmacy technicians and students can help achieve the Vision for Pharmacy by:

- Reading and understanding the Blueprint for Pharmacy: the Vision for Pharmacy available at www.pharmacists.ca/blueprint.
- Signing the Personal Commitment to Act at www.pharmacists.ca/commitment.
- Examining their current practice and:
  - Determining the types of additional pharmacy practice services they can provide that align with the Vision for Pharmacy.
  - Determining their needs with regards to required skills and professional development in order for them to provide these additional services.
- Promoting the Vision for Pharmacy within their workplace, faculty or organization, and discussing its implications with their peers, and co-workers.

- Talking to their manager, professor, employer or pharmacy association about the benefits of the Blueprint for Pharmacy and seeking their support for this initiative.
- Sharing the great work that they are already doing that currently aligns with the Vision for Pharmacy: writing about their successes; networking with other pharmacists, pharmacy technicians and students; becoming involved in an association; or acting as a mentor.

Managers can help by:

- Incorporating the Blueprint for Pharmacy: the Vision for Pharmacy into the orientation program for new pharmacy staff.
- Supporting continuing professional development of their pharmacists and pharmacy technicians, in order for them to acquire the necessary knowledge and skills to advance their practice.
- Ensuring that structured practice rotations provide undergraduate pharmacy students with experience that emphasizes clinical tasks.
- Sharing the great work that their pharmacists and pharmacy technicians are already doing that currently aligns with the Vision for Pharmacy: writing about their successes and networking with other pharmacists and pharmacy associations.

Pharmacy educators and preceptors also have an important role in shaping the future. They should make their students, residents and other learners aware of the Blueprint for Pharmacy initiative and its impact on their practice and adapt some of the suggestions noted above to their context (e.g., encourage students to sign the Personal Commitment to Act).

Further delay is not an option

Patients benefit from enhanced pharmacy practice and patient-centred care

The Blueprint for Pharmacy is about achieving optimal drug therapy outcomes for Canadians through patient-centred care. Patient-centred care is the meaningful communication between patient and pharmacist that identifies health concerns and sets forth a mutually developed strategy aimed at achieving a desirable state of health for the patient.[4] The provision of patient-centred care may include counselling, education, medication review, clinical services, screening for disease, developing and implementing pharmaceutical care plans, prescribing medication and referral to other health care professionals. The benefits to patients, and ultimately the health care system, of patient-centred care through enhanced pharmacy practice are clear. There are many Canadian pharmacy practice research studies comparing enhanced pharmacy care to usual care that demonstrate a distinct health benefit for patients with: deep vein thrombosis and pulmonary embolism,[5] high cardiovascular risk and need for cholesterol management,[6,7] and asthma.[8-10] Canadian studies also demonstrate savings to the health care system by implementing advanced pharmacy

> *Pharmacists' services and involvement in patient-centred care have been associated with improved health and economic outcomes, a reduction in medicine-related adverse events, improved quality of life, and reduced morbidity and mortality. These accomplishments have been achieved through gradual expansion of traditional roles and, in some cases, through the emergence of collaborative drug therapy management programs. Nonetheless, the potential for pharmacists to effect dramatic improvements in public health remains largely untapped.*
>
> — World Health Organization. ***Developing pharmacy practice: A focus on patient care.*** Handbook – 2006 Edition. WHO and FIP, 2006. pg 12

care.[5, 10, 11] There is also evidence to support that patient-centred approaches are correlated with positive patient outcomes.[12-16]

The risks of inaction are equally compelling. For example, evidence shows that adverse drug events (ADEs) are associated with thousands of hospital admissions and emergency department visits, yet many of these events and visits are potentially preventable.[17] Through the Internet, consumers have uncontrolled access to pharmacy services and drugs of unknown quality, and prescription price is the sole determinant in the consumer's purchasing decisions.[18-20] Numerous reports are calling for improvements in quality of care and patient safety.[21] The estimated cost of misuse, underuse and overuse of medications ranges from $2 billion to $9 billion per year.[22] Clearly there are opportunities for the health system to optimize its use of the pharmacy profession in ensuring that medications are used safely and rationally.

Risks to the profession of inaction

It may be tempting to claim that the current environment for pharmacy practice, both professionally and financially, is strong and that the future will bring continued success. However, there are many decisions, policies and actions that are currently being implemented or considered by governments, drug plan payers, regulators, employers and other health care professionals that could prevent pharmacists and pharmacy technicians from filling their optimal roles in the health system and achieving the Vision for Pharmacy.

Consider that:

- Health professionals other than pharmacists are gaining prescribing or dispensing authority.
- Pharmacy workload or productivity continues to be measured in terms of prescription volume, rather than care provided.
- Dispensing technologies are becoming more sophisticated, decreasing the need for pharmacists whose sole focus is on the dispensing of medications.
- Pharmacy technicians are successfully advancing their skills and level of practice; in some countries pharmacy technicians have the independent right to run the drug distribution system.
- Too many pharmacists are still engaged in tasks connected to the prescription-dispensing process that do not require the clinical expertise of a qualified pharmacist.
- Traditional sources of pharmacy revenue from dispensing activities are being cut, while new mechanisms of compensation for pharmacy services are being explored.
- Emergence of electronic health records (EHRs) will provide numerous health professionals with access to patient health information, including pharmacy information.

The points above illustrate some of the realities in the health care landscape. The pharmacy profession and the practice of pharmacy need to adapt to these realities in order to ensure optimal drug therapy outcomes for Canadians through patient-centred care. Status quo is not an option.

SECTION 2: KEY AREAS OF ACTION[i]

A series of consultation processes identified five key areas that require action to enable pharmacy practice to move forward. These five areas were first identified in December 2005 at a think-tank meeting of 25 pharmacy leaders. They were reaffirmed in a leaders' forum of 80 participants in June 2006. Finally, they were confirmed in the summer of 2007, when more than 700 pharmacists, pharmacy students, and pharmacy technicians were asked to identify their primary concerns for their profession and for their personal practice. Respondents were then asked to indicate whether their primary concerns were captured by these five key areas; 96% responded in the affirmative.[23] The following section summarizes some of the more recent activities which have impacted these five areas, outlines the needs for change, and lists the overall objectives for change to be addressed by the implementation plan (Sections 3 and 5).

2.1 Education and Continuing Professional Development

The education system, including pre- and post-licensure/certification education, has a key role to play in achieving the Vision for Pharmacy and ensuring that new and current pharmacists, pharmacy technicians and international pharmacy graduates are practising to the full extent of their scope of practice. Current university curricula prepare new pharmacists to practise in a manner that is patient-centred, and to play an integral role on the health care team by actively managing drug therapy. Pharmacy professionals who are in practice need educational support (e.g., continuing professional development [CPD]) to maintain an up-to-date knowledge base in an area that is rapidly changing. Incorporating interprofessional education into the curricula of all health professionals, including pharmacy professionals, will be essential when focusing on optimal drug therapy outcomes for patients.

The following three sections summarize recent changes in the pharmacy education system that may impact pharmacy practice. Combined, these changes will increase the pharmacy human resources capacity, alter the certification process and create sub-specialities in pharmacy. These changes will also standardize the qualifications and education of pharmacy technicians and facilitate the transfer of technical responsibilities to accountable, regulated pharmacy technicians.

Pre-licensure education of pharmacists

Most Canadian pharmacists complete a bachelor-level program to prepare them for licensure. There are currently 10 faculties of pharmacy in Canada: eight English and two French. The University of Waterloo is the most recent university to establish a faculty of pharmacy. In January 2008, it accepted its first class into a bachelor-level program that will follow the co-op model.

In September 2007, the Université de Montréal accepted its first class into an entry-level PharmD (doctor of pharmacy) program. [ii] L' Université Laval is slated to accept its first class into an entry-level PharmD program in 2010. Several other faculties of pharmacy

i. For a comprehensive overview of pharmacy change in Canada, consult the Canadian Pharmacists Association's Blueprint for Pharmacy: Background Document (www.pharmacists.ca/blueprint). Some of the content in Section 2 is adapted (including direct quotes and paraphrasing) from the Blueprint for Pharmacy: Background Document

ii The Canadian Council for Accreditation of Pharmacy Programs refers to these programs as the First Professional Degree in Pharmacy Program Awarded as the Doctor of Pharmacy (FPDPD) Degree.

have begun work on proposals and curricula to transition from the bachelor-level program to an entry-level PharmD program.

Post-licensure education of pharmacists

Post-licensure education for pharmacists includes both formal (residencies, fellowships, PharmD, master's) and non-formal (continuing professional development, certification and other forms of workplace training) programs. A growing number of Canadian pharmacists with a bachelor's degree in pharmacy are pursuing a PharmD degree through distance education programs. Residency programs are increasing in number and variety. Specialized residencies and fellowship programs are becoming more available.

The Canadian Council on Continuing Education in Pharmacy (CCCEP) is examining options for accreditation of non-formal programs that focus on specific knowledge and skill in patient care (e.g. Certified Diabetes Educator, vaccine administration). Currently, some such programs exist, but specialist certification of pharmacy professionals has no legal standing in any province. Yet, certification programs run by non-pharmacy organizations often have credibility and recognition by external audiences. Pharmacists with some types of certification may be reimbursed by either the patient or third-party payers for their services. Other non-formal education may be recognized by employers through salary adjustments. Some regulatory authorities recognize non-formal training in the form of legally expanded scopes of practice. Most regulatory authorities require continuing professional development to maintain licensure.

Education of pharmacy technicians

The role of pharmacy technicians is important to the Vision for Pharmacy. As the role of pharmacy technicians expands and provincial regulation of pharmacy technicians is implemented by some and considered by other provinces, accreditation of pharmacy technician programs will be required. The Canadian Pharmacy Technician Educators Association (CPTEA) has worked closely with other stakeholders, including the Ontario College of Pharmacists (OCP) and the Canadian Council for the Accreditation of Pharmacy Programs (CCAPP), to publish *Educational Outcomes for Pharmacy Technician Programs in Canada.*[24] In addition, CPTEA and CCAPP have established an accreditation process for pharmacy technician programs based on the CPTEA educational outcomes document.[25] These accreditation standards should help to address the wide variation in programs and resulting skill levels of graduates.

Formal pharmacy technician education beyond completion of a recognized pharmacy training program is in its infancy. Pharmacy technician bridging programs are in the early stages of implementation in some provinces. Non-formal pharmacy technician training programs have been established in areas such as appliance fitting, best possible medication history-taking and aseptic technique validation. As pharmacy technician roles evolve, additional needs for non-formal programs (CPD) are becoming evident.

These changes to the pre- and post-licensure education of pharmacists and to the education of the pharmacy technicians need to be implemented in a coordinated fashion – working in concert towards a common Vision for Pharmacy.

Overall Objectives

The ECPD section of the implementation plan (Section 5.1) outlines actions that will lead to:

- **Educational programs (e.g., undergraduate, graduate, CPD) that influence the future of the pharmacy profession and ensure that learners have the knowledge and skills to practise in innovative or expanded models of pharmacy practice;**
- **Canadian standards for bridging programs to meet the needs of international pharmacy graduates (IPGs) and pharmacy technicians; and**
- **Labour mobility by ensuring consistent standards in education in pharmacy personnel across the country.**

2.2 Pharmacy Human Resources

Pharmacists have been identified as a high-priority health human resource (HHR) with a key role to play in delivering health care both now and in the future. Ensuring the availability of an appropriately skilled pharmacy workforce, deployed where and when it is most needed, continues to be a challenge for Canada.[26] Canada's 31,000[27] licensed pharmacists make up the third-largest segment of health care professionals in Canada.[28] Pharmacists are the only health care providers whose education focuses on medications and their use and, as such, they are critical for optimal drug therapy outcomes for patients.

There are a number of interconnected factors that make it difficult to accurately plan for the pharmacy human resources (HR) that will be needed to meet the future health care needs of Canadians, including:

- The reported pharmacist shortage, both nationally and internationally.[29-32]
- The emergence of new interdisciplinary collaborative models of health care delivery.[33]
- The increasing skill level of pharmacy technicians and the use of their skills (e.g., in the USA the "employment of pharmacy technicians is expected to increase by 32% from 2006 to 2016.")[34]
- The significant and growing proportion of the pharmacy workforce who are IPGs and their unique challenges (e.g., close to one-third of all newly licensed pharmacists in Ontario are IPGs.)[35]
- Advances in technology (e.g., automation, EHRs, dispensing kiosks).
- Changes in scope of practice of pharmacists, pharmacy technicians and other health care professionals; inconsistencies in roles of unregulated assistants or aides working in pharmacies.
- The rise in chronic diseases and the growing costs of managing care.[36]
- The aging population and increased need for health care services including medications.[37]
- The increasing complexity and array of pharmaceuticals available for medication therapy.[38]
- The increased morbidity and mortality incidences linked to adverse drug events.[39]

Pharmacy is not the only health sector to be facing HR challenges. Federal, provincial and territorial (FPT) governments have stated that the "appropriate planning and management of [HHR] are key to developing a health care workforce that has the right number and mix of health professionals to serve Canadians in all

regions of the country."[40] In the last five years, substantial resources have been committed by FPT governments to support health care renewal initiatives across Canada. Many of these initiatives have implications for HHR planning, and more specifically pharmacy human resources planning. National consultations on health service priorities in Canada, held in 2001 and 2004, and the First Ministers' Accord on Health Care Renewal (2003) identified HHR planning as the top priority needing attention if Canadians are to enjoy a strong and sustainable health care system in the future. The inaugural report to Canadians of the Health Council of Canada, released in January 2005, also identified HHR planning as a priority area in need of "accelerated action."

The FPT governments have further identified seven health professions (medicine, nursing, pharmacy, physiotherapy, occupational therapy, medical laboratory technology and medical radiation technology) that they believe should have priority when planning for HR in health. This focus led to the development of a national pharmacist database in 2006 by the Canadian Institute for Health Information (CIHI), the first-ever comprehensive compilation of pharmacy workforce data. This database represents a major achievement in pharmacy HR planning.

Another significant federal investment for pharmacy human resources was $1.48 million in funding for a comprehensive pharmacy HR research and consultation initiative titled Moving Forward: Pharmacy Human Resources for the Future. The initiative, funded by Human Resources and Social Development Canada's Foreign Credential Recognition Program, produced a series of technical research reports analyzing various pharmacy workforce populations and issues and proposed 36 specific pharmacy HR planning recommendations to help ensure that Canada has a strong pharmacy

workforce prepared to meet the future health care needs of Canadians.[26] More importantly, the initiative concluded that if Canada is to make the optimal use of its pharmacy workforce, then expanded and innovative roles for pharmacists and pharmacy technicians are required.

In the future, pharmacists will take more responsibility for, and gain more accountability in, managing drug therapy in collaboration with patients, physicians and other health care providers, thereby playing more prominent roles in health promotion, disease prevention, and chronic disease management. Pharmacists will spend more of their time focusing on these clinical aspects of their profession. While pharmacists will continue to have a leadership or oversight role in the dispensing process, specially trained and regulated and/or certified pharmacy technicians will take on more responsibilities in the technical aspects of dispensing. Many actions are required to ensure the availability, appropriate education, compensation and deployment of the necessary pharmacy human resources – Canada's current and future pharmacists and pharmacy technicians – whose practice will reflect the Vision for Pharmacy.

Overall Objectives

The HR section of the implementation plan (Section 5.2) outlines actions that will lead to:

- **Canadians having access to high quality, patient-centred pharmacy services through appropriate utilization of the pharmacy workforce;**
- **Care provided to Canadians in a collaborative manner where pharmacists focus on medication management and patient health outcomes, and pharmacy technicians focus on drug distribution;**
- **Access to a sufficient number of appropriately trained pharmacists and pharmacy technicians to meet the health care needs of Canadians; and**
- **An increased understanding among policy makers and the public of the contribution that the pharmacy workforce can make to improve patient health outcomes.**

2.3 Financial Viability and Sustainability

Close to 75% of all Canada's licensed pharmacists (and large percentages of pharmacy technicians) practise in the community setting,[41] meaning that community pharmacies account for a large proportion of the pharmacy services received by Canadian patients. Ensuring the continued financial viability and sustainability of

Canada's community pharmacies is therefore critical to achieving optimal drug therapy outcomes for Canadians through patient-centred care.

The prevailing payment model in community pharmacy is a fee-for-dispensing service model. Payment to pharmacies for professional services is primarily through a combination of professional fees (paid by public or private insurers, or by individual patients) and "professional allowances" (i.e., rebates paid by pharmaceutical manufacturers). However, pharmacy practice is changing faster than compensation models. The widespread adoption of the evolving roles of pharmacists and pharmacy technicians that is needed to achieve the Vision for Pharmacy is predicated upon a change in the compensation model for professional pharmacy services.

Studies have demonstrated that pharmacies are not adequately compensated for dispensing medication. For example, the 2007 Activity-Based Costing Study conducted in British Columbia identified a five-dollar discrepancy between the real costs of providing dispensing services ($13.60) and the maximum allowable fee payable to the pharmacies by the provincial government ($8.60).[42] These findings are consistent with the results of a subsequent Ontario study in which the median cost of providing dispensing and related pharmacy services was $13.77 per prescription. [43] The estimated average compensation to pharmacies for these services, however, is far less – approximately $8.70 and declining.[43] This trend has also been observed in Newfoundland.[44]

Historically, pharmacies have been able to subsidize the dispensing services provided by their pharmacists and pharmacy technicians in spite of these compensation gaps by relying on revenues obtained from pharmaceu-

tical manufacturers in the form of professional allowances. However, a number of provincial governments and private insurers have recently been implementing or considering policies to substantially decrease the professional allowances available to pharmacies (e.g., Ontario's 2006 Transparent Drug System for Patients Act [TDSPA]). In some cases, policy makers claim that reductions in allowances will be partially offset by new payments for non-dispensing professional pharmacy services.

Although the creation of new compensation streams is a move in the right direction, and required for the realization of the Vision for Pharmacy, the need for adequate compensation of dispensing services should be considered as a separate issue. Relying upon revenues from other sources (professional allowances or fees from non-dispensing services) to subsidize a pharmacy's dispensing services is not a sustainable business model. Furthermore, the fee-for-dispensing services compensation model discourages the provision of non-dispensing services and collaboration with other providers – the evolving role of pharmacists. Models for obtaining compensation for professional pharmacy services in the community setting must continue to be explored in order for the community-based pharmacy workforce to deliver the care and services required by patients.

Some strides have already been made to study new practice models by the Moving Forward: Pharmacy Human Resources for the Future initiative. Part of Moving Forward's research included the identification and documentation of innovative pharmacy practices, along with details of the required resources and financial support. The report also highlighted challenges identified by some of the featured practitioners in implementing their innovative strategies.

— Management Committee, Moving Forward: Pharmacy Human Resources for the Future. Innovative Pharmacy Practices, Volume 1; CPhA 2008

There is a growing body of evidence on the benefits of professional pharmacy services and, as a result, some provincial governments have introduced compensation mechanisms for such services.[5-8, 10, 11] For example, both Ontario and Nova Scotia governments compensate pharmacies for medication review services and for many years, Québec pharmacies have been compensated for providing pharmaceutical opinions. Pharmacists in other countries (e.g., the United Kingdom, Australia and Germany) face similar issues and are implementing new roles, new services and alternative business models. In Germany, under the "family pharmacy contract", for example, pharmacists are compensated for a variety of activities including:[45] "pharmaceutical management", incorporating drug profiles, short medication reviews, counselling and medication reports for asthma and chronic obstructive pulmonary disease as well as drug-related problems (DRPs) detected and communicated to the patient's prescriber, and individual counselling on DRPs.

Medication dispensing and related professional pharmacy services will continue to be the mainstay of pharmacy practice. New pharmacy services and changes in practice will be layered onto existing services; however, a clear, well defined framework for pharmacy services is required. A framework is necessary to capture existing,

In this implementation plan these terms mean the following:

Professional pharmacy services

Patient care services (including dispensing and clinical services) rendered by pharmacists and/or pharmacy technicians. Note: to avoid some repetition, these services are at times referred to as "pharmacy services."

Pharmacy service framework

Includes a description of how a pharmacy service is delivered; listing the human resources, information and communication technology, legislation, regulation and liability, education and continuing professional development and other requirements to deliver this service, the expected patient-outcomes, and any evidence to support this service.

Pharmacy practice model

The combination of the professional pharmacy services offered as they are adapted to the population, the setting, and the available funding and compensation mechanisms. Note: to avoid some repetition, these models are at times referred to as "practice models."

Pharmacy business model

A description of the budget, revenue, expenses, and other costs associated with the delivery of the pharmacy service (based on the pharmacy service framework), the target audience, the compensation model, and the cost-effectiveness to determine financial viability and sustainability and return-on-investment of the pharmacy service.

Pharmacy practice

Is the pharmacy practice model overlaid by professional ethics, values, regulations, and other macro level elements.

emerging and potential services and to inform business models that are clearly understood by all and addresses all potential service category's investments and change management incentives.

What is clear is that the present business model for community pharmacy will not move pharmacy practice forward. For the role of the pharmacist to evolve, the results of research on new and innovative services and the positive experiences in Canada and other countries must be studied, evaluated and adapted into future business models.

The implementation of business models that ensure the continued financial viability and sustainability of pharmacies by meeting the health care needs of the population requires that pharmacists, pharmacy technicians and pharmacy owners/managers be open to practice and business change. Pharmacy owners/managers must examine and consider the costs that such pharmacy practice and business change will entail. In addition, additional funding will be required for broader change management, information and communication technology (ICT), business development and education of the pharmacy workforce. Strategies must be developed to procure this funding. Pharmacy may need to re-examine the "fee-for-dispensing prescriptions" service model, and new incentives may need to be developed to promote best practices in pharmacy.

Business models should be developed and adapted to the realities of each jurisdiction. The evidence should be gathered to inform a national business case. Ultimately, a business case for new professional pharmacy services and practice models must be presented to FPT governments, private sector drug plan managers and other stakeholders.

Overall objectives

The FVS section of the implementation plan (Section 5.3) outlines actions that will lead to:

- **Financially viable and sustainable pharmacy services that optimize medication use, promote wellness and prevent disease;**
- **Delivery of, and compensation for, new pharmacy services that positively contribute to patients' health outcomes; and**
- **Reimbursement models that recognize the complexity and demonstrated value of the service provided, as well as the time required from the pharmacist.**

2.4 Legislation, Regulation and Liability

Provincial pharmacy regulatory authorities and the respective provincial/territorial governments must commit to reviewing and updating policies that impact the ability, efficiency and effectiveness of pharmacists and pharmacy technicians in addressing patients' health and drug related needs. In doing so, new enabling legislation must maintain the principles of patient safety and public protection.

The current provincial pharmacy regulatory landscape needs to be reviewed and updated for the Vision for Pharmacy to become a reality. Pharmacists are one of the self-regulated professions in Canada. Each province has a regulatory organization for pharmacists. These colleges operate in a context where provinces set their own priorities, health care regulations and budgets. As such, there are variances between provinces that may impact the portability of credentials and the movement of human resources. Currently, the movement of pharmacists around the country occurs under the umbrella of the National Association of Pharmacy Regulatory Authorities (NAPRA) Mutual Recognition Agreement. Stakeholders have identified certain issues within this agreement for which adequate harmonization among the provinces has not been achieved.[26] Mechanisms to standardize definitions of key concepts (e.g., pharmacist prescribing) should be agreed upon to facilitate discussion and ease the inter-jurisdictional movement of health professionals. Health care policies not directly related to pharmacists have the potential of affecting the pharmacy profession and/or the safety of the drug distribution system (e.g., privacy legislation restricting access of pharmacists to appropriate or relevant areas of electronic health records). These policies need to be closely monitored and pharmacists should position themselves to be consulted and provide strategic assistance in formulating key FPT policies.

Actions are also required to ensure that the regulation of a new health profession, pharmacy technicians, is implemented in a fashion that is congruent with the Vision for Pharmacy. Progress has occurred in many provinces. For example, an expanded role for regulated pharmacy technicians was enabled in Ontario with the passing of The Health Systems Improvement Act (Bill 171) in June 2007, which enables the Ontario College of Pharmacists (OCP) to regulate pharmacy technicians. Similarly, Schedule 19 to the Health Professions Act in Alberta was amended in December 2008,

allowing the Alberta College of Pharmacists (ACP) to regulate pharmacy technicians.[46] Both provinces expect to begin registering pharmacy technicians in 2010. British Columbia is also exploring the creation of a new class of registration for pharmacy technicians, while the Newfoundland and Labrador Pharmacy Board is looking at developing legislation for pharmacy technicians.[47,48]

Liability is a key issue for pharmacists, pharmacy technicians and for other health professionals as roles evolve and collaborative care is emphasized.[49] All health care professionals involved in working with other health care professionals need to ensure that they clearly understand their roles and responsibilities when providing and transferring care, as well as those of the other professionals with whom they work.[49]

Liability was discussed in detail in the principles and framework document from the Enhancing Interdisciplinary Collaboration in Primary Health Care (EICP) Initiative:

> *Two directions are needed: an integrated approach to liability insurance that links the various systems now in place and recognizes shared decision-making in ways that are consistent with patient safety and risk management; and clearly legislated scopes of practice for each health profession for collaborative services . . .*
>
> *An insurance system that supports an interdisciplinary collaborative approach will allow team members to give full attention to the care of the patient/client. To support informed legal decisions related to liability, an educational program is recommended for those working in the judicial/legal system about collaborative practice.*

With changing roles for pharmacists and pharmacy technicians, and the shift towards collaborative practice teams, there may be new concerns about liability that need to be addressed. As legislation and regulation for health care professionals change, the balance of liability may shift, depending on the role of and services provided by the individual health care professional. As more individual responsibility is accepted, there is the potential for more liability; however, this liability can be mitigated by compliance with professional standards, codes of ethics and the application of professional judgement based on good evidence. The implications

of shared liability, depending on the scope of practice, needs to be further explored.

Mechanisms are needed to give regulators of all the various health professions the opportunity to work together. Existing and new regulations must not impede collaboration between pharmacists, patients and other health care professionals. Changes to provincial and federal legislation are necessary so pharmacists can further expand their scope of practice to meet patient needs and practise collaboratively. Progress has been made in this area, with most provinces either passing or developing regulations to enable pharmacists to initiate and modify drug therapies.

Overall Objectives

The LRL section of the implementation plan (Section 5.4) outlines actions that will lead to:

- **Legislation and regulation that enables pharmacists and pharmacy technicians to practice to the full extent of their knowledge and skills to provide quality health care;**
- **Clarity about responsibilities and accountabilities when caring for or transferring the care of patients, so as to minimize potential risks towards patients, pharmacists and pharmacy technicians; and**
- **Support from the federal/provincial/territorial governments and pharmacy regulatory and advocacy organizations, to review and amend policies and legislation important to enabling change.**

iii. The regulation of pharmacists practising in the territories is governed by the territorial governments.

2.5 Information and Communication Technology

Information and communication technology (ICT) improves patient care by enabling the pharmacy workforce to practise more efficiently and effectively in a collaborative environment. It encompasses software applications, hardware, and communications tools used in distributive and medication management services. Sharing information among team members is essential to optimal drug therapy, and ICT creates these critical information pathways. ICT has the potential to revolutionize health care, and in particular, pharmacy practice. However, learning about and adapting to rapidly expanding ICTs will be another challenge.

Several national health-related ICT initiatives are underway. Canada Health Infoway (CHI) is leading the development of pan-Canadian interoperable electronic health records (EHRs) and electronic pharmacy/prescribing networks in collaboration with FPT governments to facilitate improved health information access and transmission. The integration of this new technology is fundamental and a priority for pharmacists to provide optimal medication management services and to be part of collaborative primary health care teams. The evidence linking EHRs to patient safety is incomplete. As this technology is developed, lessons from jurisdictions that have implemented EHRs should be sought.[50]

Prevention of medication errors is anticipated to increase through implementation of computerized prescriber order entry (CPOE). CPOE systems are electronic prescribing systems in which orders are entered directly into the computer system and integrated with patient information, including laboratory and prescription data. Thus, CPOE systems can intercept errors when they most commonly occur — at the time the medications are ordered. Electronic prescribing systems have also been shown to decrease medication errors, improve the safety and appropriateness of prescribing, and increase the efficiency of the drug-use process.[51, 52] Evidence demonstrates that these systems enable pharmacists to concentrate on the most serious errors.[53] A key barrier to maximizing the benefits of CPOE systems is the slow uptake of the technology by the end user.[54, 55] This technology affects workflow and care should be taken when implementing.[56] However, evidence demonstrates that pharmacists appear to be favourable towards this technology.[57]

Provincial drug information systems (DIS) or pharmacy information networks (PIN) will enable authorized health care providers to view a patient's complete drug profile online, order a prescription electronically and receive notification of drug interactions automatically. It is expected these systems will help to reduce prescription errors and adverse drug events, improve clinical decision-making through availability of a patient's complete drug profile, result in fewer callbacks by pharmacists to prescribers for clarification, and lower costs through reduced hospitalization, long-term care admission and physician visits.[58]

To support ICT applications, pan-Canadian standards relating to e-health, including e-pharmacy, are required. The CPhA Pharmacy Claim Standard is used across Canada to electronically adjudicate more than 300 million prescription drug claims annually. The CPhA Standard has now evolved into the National e-Claims Standard (NeCST), managed by CHI.[59] NeCST is an HL7-V3 internationally approved claim standard, for use by pharmacists and other health professionals. The NeCST standard has yet to be widely implemented and issues of a sustainable funding model and standards maintenance are still being addressed.

CHI's Canadian Electronic Drug Messaging Standard (CeRx), for clinical messages to support e-prescribing and PIN/DIS, is being implemented in several jurisdictions. CHI plays a coordinating role in development and maintenance of pan-Canadian health information standards. This is overseen by the Standards Collaborative Strategic Committee (SCSC), with input from the Standards Collaborative Coordinating Committee (SCCC) and a number of working groups. It is already becoming apparent that version control of the pan-Canadian standards is a challenge that must be

addressed through concerted multi-stakeholder effort. As a result of ICT initiatives, it is clear that a number of patient/practice-based policy issues and business/implementation issues need to be addressed. Integration and implementation of provincial PIN/DIS and other ICT initiatives require fundamental changes in the work practices of pharmacists and pharmacy technicians and significant investment in software, and in some instances, hardware. These changes need to be recognized, explored and planned for.

The National e-Pharmacy Task Force (NePTF) has been jointly established by CPhA and the Canadian Association of Chain Drug Stores (CACDS) to address pharmacy specific e-health issues. Key areas include e-prescribing, e-dispensing, e-health standards and technologies, with a particular focus on impacts on practice and pharmacy operations. A key role for NePTF is to facilitate communication and engagement with stakeholders on pharmacy e-health issues, in particular with pharmacists, pharmacy organizations, software vendors and jurisdictions. In January 2006, CACDS, CPhA, and the Canadian Society of Hospital Pharmacists (CSHP) approved a joint e-pharmacy document, *Principles and Elements for Optimal Pharmacy Participation in the Development of Pharmacy Information Networks.*[60] Key areas include:

- Standards, common patient identifiers, common services and communications that integrate applications and allow for data access across the continuum of care and geography.
- Routine, systematic consultation, communication and regular ongoing system evaluation with pharmacists, pharmacy organizations, other health care providers, and other network users in support of ongoing quality improvement.
- Provision of timely, accurate and complete clinically relevant data.
- Thorough reviews of all relevant legislation and regulations, and the active engagement of pharmacy organizations in the development of necessary revisions.
- Appropriate network user support during system transition and launch phases, and backup systems and protocols in cases of network disconnection, system failure and data loss.
- Application of robust quality assurance programs that include audit and tracking mechanisms.

CHI recognizes that health provider acceptance and adoption are clearly critical success factors for realizing the full benefits from the CHI investments. CHI is initiating a number of end-user projects.

CHI has established a team of clinicians including senior medical advisors, a senior nursing advisor and a senior pharmacy advisor to support the implementation of their end-user initiatives. In addition, CHI is putting together advisory groups with representation from pharmacists, nurses, physicians and the academic/learning community to provide strategic, operational and delivery advice on the design and implementation of their end-user acceptance strategy.[61]

In addition to EHRs, CPOE systems and DIS/PIN, there are a number of other technological advances that impact pharmacy practice such as the automation of drug distribution, robotics devices, bar coding, and workflow management applications. In order to fully realize the potential for these innovative ICT solutions to improve efficiency, optimize accuracy, reduce medication errors, and improve patient care, the pharmacy profession must embrace and actively participate in their adoption. In summary, the profession needs to be aware of and participate in directing the changes in ICT to ensure optimal drug therapy for their patients.

Overall Objectives

The ICT section of the implementation plan (Section 5.5) outlines actions that will lead to:

- The use of information and communication technology to better optimize drug therapy for patient care;
- A consistent and coordinated approach to implementing new information and communication technology in pharmacy; and
- Safe, efficient drug distribution through enhanced use of technology.

SECTION 3: OVERVIEW OF THE IMPLEMENTATION PLAN

Section 5 provides a detailed implementation plan listing approximately 50 actions and more than 150 deliverables. Most of these actions and deliverables are interdependent; that is, the realization of a few deliverables will not move the profession forward, nor will the implementation of deliverables in only one of the five key areas.

Most of the actions and deliverables need to happen in a specific sequence (i.e., A precedes B). Table 1 and Figure 1 are general overviews of the actions and deliverables listed in Section 5 – to avoid confusion, these high level summary items will be called "activities". **Table 1 and Figure 1 are not meant to represent the importance of activities.** They represent the sequencing of activities. Figure 1 is included to appeal to those with a greater visual inclination.

It is important to remember that, with very few exceptions, the items listed in Table 1 below have corresponding actions and deliverables listed in Section 5 under each of the five key areas. Therefore, as one reads this table it is important to think of how ECPD, HR, FVS, LRL and ICT relate to any given activity in Table 1.

Interpreting Table 1:

Table 1 attempts to indicate general timeframes for these high level activities. The timeframe is the span of time from the release of the implementation plan to the completion of the deliverable, and ranges from short to long (i.e., short: 6 to 18 months; medium: 18 months to 3 years; long: 3 to 5 years). The actual timeframe will depend on funding and the pharmacy organizations' capacity to complete the work. Some of the work will start in the short term but will continue or need to be updated in response to progress (e.g., monitoring legislation, outcomes research on emerging services). In these instances, "O" signifies ongoing work.

In this implementation plan these terms mean the following:

Professional pharmacy services

Patient care services (including dispensing and clinical services) rendered by pharmacists and/or pharmacy technicians. Note: to avoid some repetition, these services are at times referred to as "pharmacy services."

Pharmacy service framework

A description of how a pharmacy service is delivered; listing the HR, ICT, LRL, ECPD, and other requirements to deliver this service, the expected patient-outcomes, and any evidence to support this service.

Pharmacy practice model

The combination of the professional pharmacy services offered as they are adapted to the population, the setting, and the available funding and compensation mechanisms. Note: to avoid some repetition, these models are at times referred to as "practice models."

Pharmacy business model

A description of the budget, revenue, expenses, and other costs associated with the delivery of the pharmacy service (based on the pharmacy service framework), the target audience, the compensation model, and the cost-effectiveness to determine financial viability and sustainability and return-on-investment of the pharmacy service.

Pharmacy practice

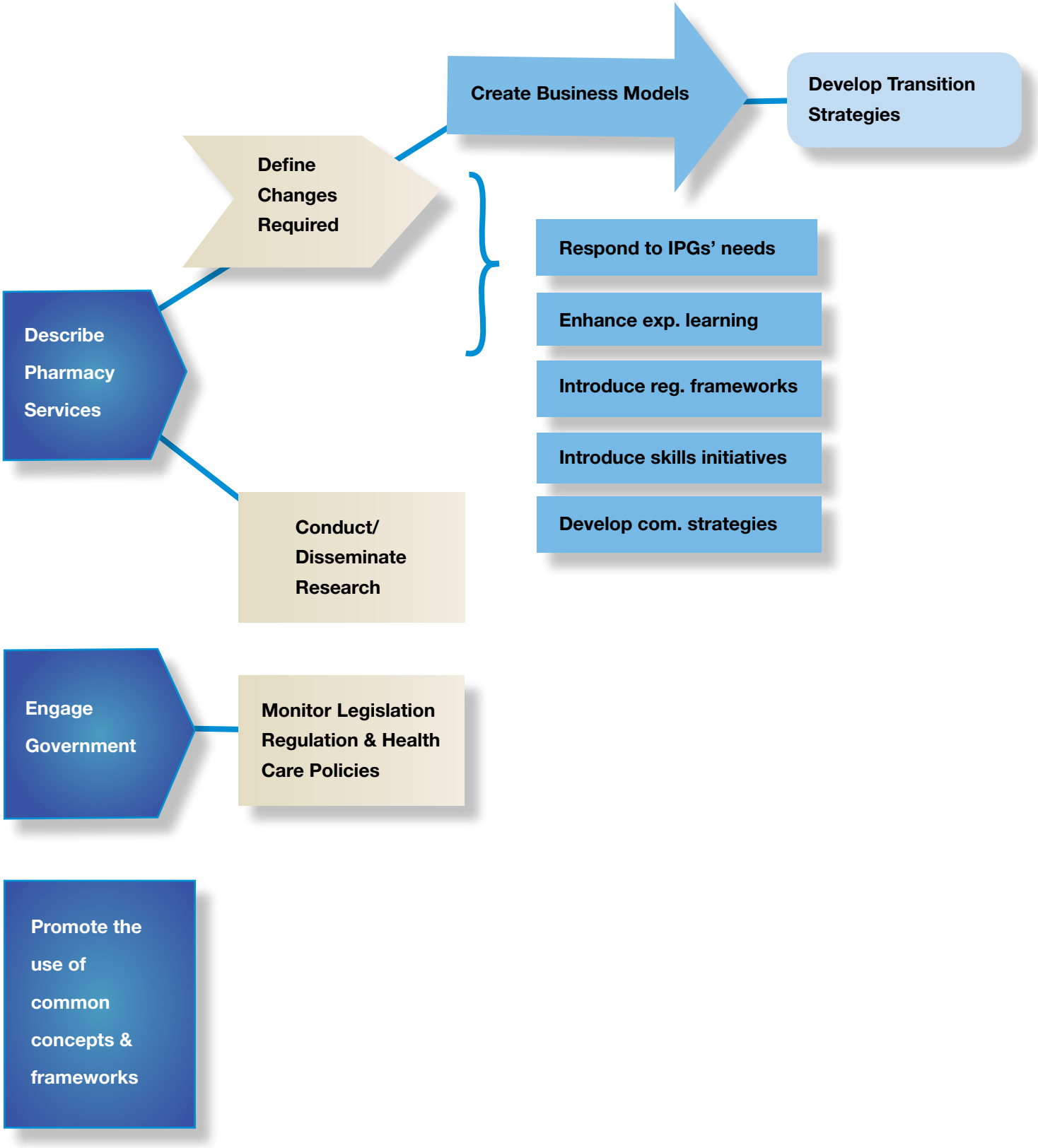
The pharmacy practice model overlaid by professional ethics, values, regulations, and other macro level elements.

Table 1. Overview of the implementation plan

Interpreting Table 1: See bottom of previous page.

Vision for Pharmacy: Optimal drug therapy outcomes for Canadians through patient-centred care.	Time Frame		
High Level Activities	**Short**	**Med.**	**Long**
Describe emerging and innovative professional pharmacy services, including but not limited to expected patient outcomes, resource requirements, workforce roles and skill requirements, and legislative enablers.	■		
↳ **Define required changes** (e.g. to education, to legislation, to facilities, to human resources) to facilitate the implementation of emerging and innovative professional pharmacy services.	■		
↳ **Enhance experiential learning** opportunities.	■	O	O
↳ **Introduce appropriate regulatory frameworks** to authorize pharmacists (and pharmacy technicians) to deliver expanded professional pharmacy.		■	■
↳ **Respond to the needs of international pharmacy graduates.**	■	O	O
↳ **Introduce initiatives** to ensure that pharmacists and pharmacy technicians are available and have the required skills.	■	O	O
↳ **Develop communications strategies and tools** to facilitate the implementation of emerging and innovative professional pharmacy services (including, but not limited to: stakeholder engagement, buy-in from third-party insurers and other payers, awareness strategy for patients, caregivers and other health care providers).	■	O	
↳ **Develop new business models** for each innovative and emerging professional pharmacy service, including the budget, revenue, expenses, and other costs associated with the delivery of the pharmacy service framework (including HR, ICT, ECPD and other related costs), the target audience, the compensation model, and the cost-effectiveness to determine financial viability, the return-on-investment and sustainability of the pharmacy service.	■		
↳ **Develop transition strategies** to assist pharmacy employers to implement new professional pharmacy services and pharmacy practice models.		■	
↳ **Conduct and disseminate pharmacy practice research** to enhance pharmacy services and practice models, and patient safety (including, but not limited to: patient outcome research, workforce impact analysis).	■	O	O
Ensure that pharmacy is involved in government initiatives and committees that influence the profession and/or patient safety.	■	O	O
↳ **Monitor health policy and legislation** that may impact the profession and/or patient safety.	■	O	O
Promote the use of common concepts, frameworks, principles and guidelines across jurisdictions whenever appropriate.	■	O	O

Figure 1. Sequencing of activities in the overview of the implementation plan



SECTION 4: COORDINATING THE IMPLEMENTATION

Individual and organizational change is challenging; implementing a plan to set in motion a series of actions to lead to change within the pharmacy profession is an ambitious exercise that requires the commitment of pharmacists and pharmacy technicians, and all the organizations representing, educating, regulating and employing them. This plan enumerates a large number of actions, and the organizations best suited to lead those actions, to achieve the coordinated changes required to achieve the Vision for Pharmacy. This plan, and therefore the actions and deliverables it outlines, are at great risk of "sitting on the shelf" unless there is a coordinated effort to translate these items into sets of activities that can be funded, managed and delivered.

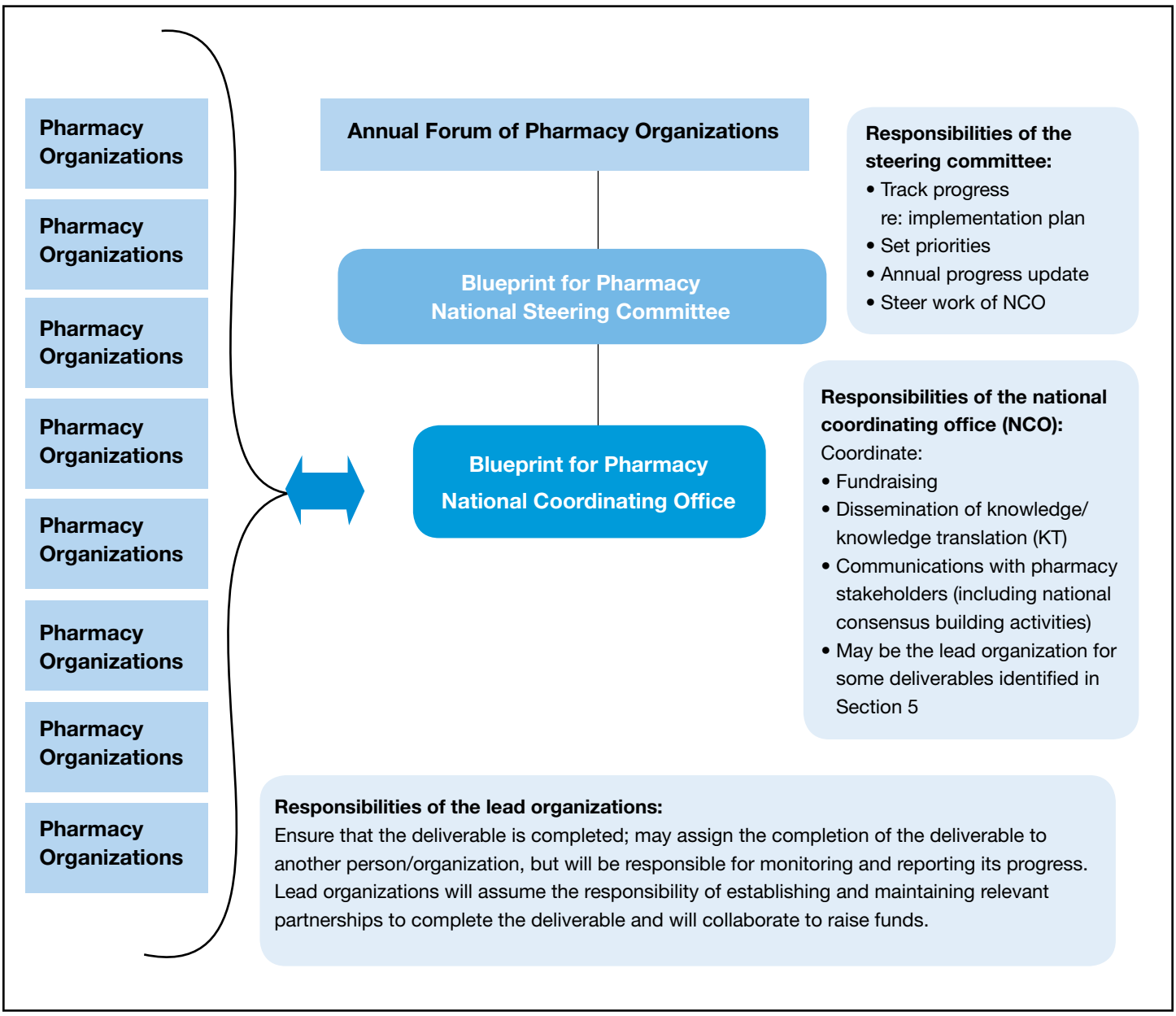
While the Blueprint for Pharmacy was conceived as a "leadership without ownership" initiative by the Canadian Pharmacists Association, the entire pharmacy profession truly "owns" the initiative. The Task Force on a Blueprint for Pharmacy was established to develop a common vision for pharmacy, engage pharmacy stakeholders to commit to the Vision and oversee the development of an implementation plan to achieve the Vision. In order for the pharmacy profession to carry out this plan, another group representing pharmacy stakeholders will need to be established. The Task Force has proposed the following governing body and organizational structure to do this.

The Task Force will establish a representative **Steering Committee** composed of delegates from pharmacy organizations who are responsible for educating, training, employing, regulating and representing the pharmacy profession. The mandate of this committee will be to track the execution of this implementation plan by the leading or partnering organizations carrying out the activities. It is recommended that:

- this committee be composed of 10-15 individuals who are empowered to speak on behalf of their organizations and who will make decisions on a consensus basis;
- a memorandum of understanding and terms of reference be drafted; and that
- organizations fund their own delegates to participate.

The Task Force has also recommended the establishment of a **National Coordinating Office** (NCO) to report to the Steering Committee. This NCO will be located at the CPhA offices. CPhA will manage the staff resources of the NCO. The NCO will coordinate fundraising, dissemination of information (knowledge translation), communications with the pharmacy profession (including national consensus-building activities), and may be the lead organization for certain deliverables outlined in the following sections. It will be the Steering Committee's responsibility to steer and monitor the work of the NCO.

Figure 2. Blueprint for Pharmacy National Steering Committee and National Coordinating Office



SECTION 5: DETAILED IMPLEMENTATION PLAN

Section 5 is a detailed list of actions and deliverables deemed necessary to actualize the Vision for Pharmacy. This following is a legend and important notes required to maximize the use of sections 5.1 to 5.5.

LEGEND:

Potential Lead Organization(s): The organization that will be responsible for ensuring that the deliverable is completed. The organization may assign the completion of the deliverable to another person/organization, but will be responsible for monitoring and reporting its progress. The organization will assume the responsibility of establishing and maintaining relevant partnerships to complete the deliverable and will collaborate to raise funds. [THE BLUEPRINT FOR PHARMACY INITIATIVE HAS IDENTIFIED POTENTIAL LEAD ORGANIZATIONS FOR THE DELIVERABLES, BUT THESE ORGANIZATIONS HAVE NOT YET BEEN CONSULTED NOR CONFIRMED THEIR INTENTIONS OF ACTING AS LEAD ORGANIZATIONS.]

Time Frame: The span of time from the release of the implementation plan to the completion of the deliverable: Short (6-18 mths), Medium (18 mths-3 yrs), Long (3-5 yrs). Some deliverables will be ongoing.

Important NOTES:

- Potential Lead Organizations were assigned based on their mission statements, rather than on their resources or capacity. We recognize that some organizations do not have the resources to lead all deliverables; however, these organizations can discuss deliverables with other organizations and choose to endorse a particular organization to take the lead.
- In instances where a provincial regulatory authority (PRA) or provincial pharmacy association (PPA) could/should take the lead for a national deliverable, NAPRA or PPA was listed. It will be up to NAPRA and the PPAs to discuss these deliverables with the provincial organizations, or among themselves, and identify the lead organization (whether it be a national or provincial organization). A consortium of organizations may also be established to lead.
- Many of the deliverables call for new models, initiatives or processes. It is assumed that only realistic and evidence-based models or initiatives will be implemented. In addition, all initiatives will be evaluated when appropriate and findings disseminated to all pharmacy stakeholders. Many of the deliverables related to these assumptions (e.g., evaluation, dissemination) have been omitted to avoid repetition. Lead organizations should plan around these assumptions when executing the deliverables.
- The target audiences of the actions and deliverables described in this plan include the entire pharmacy workforce (pharmacists and pharmacy technicians practising in all manner of settings) as well as numerous additional pharmacy stakeholders; but it is understood that some actions and deliverables might be specific for particular subsets of the pharmacy workforce and its stakeholders."

5.1 Education and Continuing Professional Development

Overall Objectives

- Educational programs (e.g., undergraduate, graduate, CPD) that influence the future of the pharmacy profession and ensure that learners have the knowledge and skills to practice in innovative or expanded models of pharmacy practice;
- Canadian standards for bridging programs to meet the needs of international pharmacy graduates (IPGs) and pharmacy technicians; and
- Labour mobility by ensuring consistent standards in education for pharmacy personnel across the country.

* Denotes where lead organizations are encouraged to work directly with workplace leaders/advocates and CPD providers.
** Denotes circumstances where provincial pharmacy associations are the lead organizations, and are encouraged to work directly with the CPTEA

1. Education and Continuing Professional Development			
Actions	**Potential Lead Orgs**	**Deliverables**	**Time Frame**
1.1 Ensure that core pharmacy curricula address the knowledge, skills and values required for future pharmacy practice to ensure new graduates are prepared to develop and practise in emerging roles.	AFPC/ADPC & CPTEA	1.1.1 Process to review educational outcomes for pharmacy and pharmacy technician programs and to identify knowledge and skills to be incorporated in pharmacy learning (Based on 1.13.1).	Short
	AFPC/ADPC	1.1.2 Upon identification of 1.1.1, curricula that reflects the core competencies.	Med.
1.2 Promote and increase interprofessional and intraprofessional approaches to education and training to ensure optimal patient-centred care in an integrated health care environment.	AFPC/ADPC & CPTEA	1.2.1 National inventory of programs that promote and increase interprofessional and intraprofessional approaches to education and training.	Short
	AFPC/ADPC & CPTEA	1.2.2 Initiatives to expose students to other health care providers in the early stages of their education.	Short
	AFPC/ADPC & CPTEA	1.2.3 Opportunities for training amongst pharmacists and pharmacy technicians (e.g., practice labs, CPD workshops).	Short
1.3 Address challenges that affect the education, recruitment and retention of pharmacy educators and learning facilitators, to ensure the quality and quantity of educators, facilitators and preceptors.	AFPC/ADPC & CPTEA	1.3.1 List of challenges across all stakeholder groups that affect the education, recruitment and retention of pharmacy educators and learning facilitators.	Short
	AFPC/ADPC & CPTEA	1.3.2 National inventory of programs that address these challenges, including a summary of evaluations (when available).	Short
	AFPC/ADPC & CPTEA	1.3.3 List of sustainable recruitment and retention best practices, including design, evaluation and dissemination of best practices.	Short-ongoing
1.4 Ensure all pharmacy professionals, including students, value and develop life-long learning and personal performance assessment skills to assist them to be competent to practise in these emerging roles.	CCCEP*	1.4.1 Best practices and environmental scan of current practice for personal performance assessment.	Short
	CCCEP*	1.4.2 Discussion paper on the value of lifelong learning.	Short
	NAPRA*	1.4.3 National competencies for personal performance assessment – part of regulation and requirements for pharmacy professionals.	Short
	CCCEP*	1.4.4 Policy statements for CPD.	Short
	CCCEP*	1.4.5 CPD Self-Assessment toolkit for practising pharmacists and pharmacy technicians (e.g.,"CPD and Me").	Med.
1.5 Increase the accessibility, quality, quantity and variety of experiential learning opportunities to prepare pharmacy professionals, including students, to practise in expanded and innovative roles.	AFPC/ADPC & PPAs**	1.5.1 Funding to design, evaluate and disseminate best practices of experiential learning.	Short-ongoing
	AFPC/ADPC & PPAs**	1.5.2 Inventory of best practices and examples of exemplary models in experiential learning.	Short
	AFPC/ADPC & PPAs**	1.5.3 Creation, evaluation and dissemination of new learning models.	Med.-ongoing
	AFPC/ADPC & PPAs**	1.5.4 Support mechanisms for practitioners to offer experiential learning opportunities.	Med.-ongoing

1. Education and Continuing Professional Development			
Actions	**Potential Lead Orgs**	**Deliverables**	**Time Frame**
1.6 Identify needs and deliver programs to meet the needs of international pharmacy graduates (IPGs).	CCAPP	1.6.1 Standards and competencies for IPG programs.	Med.
	NAPRA	1.6.2 Competencies of IPG programs that align with core competencies for pharmacy curricula and interprofessional training.	Med.
		1.6.3 Capacity assessment of bridging programs and plan to increase capacity to respond to the needs of IPGs.	Short-ongoing
	CCAPP	1.6.4 Common standards for teaching and assessment within pharmacy bridging programs for IPGs.	Med.
	NAPRA	1.6.5 Pan-Canadian standards and model training programs to support preceptors and mentors of IPGs.	Med.
	U of Toronto	1.6.6 Interprofessional orientation program on the Canadian health care system for IPGs and other health professionals.	Med.
	NAPRA	1.6.7 Pan-Canadian standards for the level of communicative competency required for safe and effective pharmacy practice.	Med.
	AFPC	1.6.9 Pharmacy-specific communications programs.	Med.
	PEBC	1.6.10 Develop a diagnostic tool and support system to assit international pharmacy graduates in assessing and customizing their learning needs	
1.7 Implement accessible programs to upgrade knowledge, skills and values to support current practice and services, the implementation of new professional pharmacy services, specialty practices, or new practice models.	CCCEP	1.7.1 Environmental scan and gap analysis of existing programs and approaches.	Med.
	CCCEP	1.7.2 Models of CPD best practices, different method and approaches (e.g., certificates, specialty areas).	Med.
	CCCEP	1.7.3 National consensus around models, best practice and approaches.	Med.
	CCCEP & NAPRA	1.7.4 Policy framework to support development, administration and ongoing access to programming and credentialing.	Med.
1.8 Create partnerships to develop and deliver learning programs to facilitate innovation in pharmacy services.	AFPC	1.8.1 Inventory of education programs (including descriptions) (building on 1.7.1).	Long
	AFPC	1.8.2 Gap analysis – identification of areas that need development, including geography and delivery methods gaps.	Long
	AFPC	1.8.3 Plan and implementation strategy for new programs that fill in gaps.	Long
1.9 Ensure that all pharmacy technician programs meet the nationally defined competencies and are accredited to prepare pharmacy technicians to practise in expanded and innovative roles and to ensure positive patient health outcomes.	NAPRA	1.9.1 National consensus to adopt NAPRA's core competencies for all jurisdictions (relates to 1.8.1).	Short
	CCAPP	1.9.2 Inventory of all pharmacy technician programs (identify which programs are accredited and which are seeking accreditation), updated on a regular basis.	Short
1.10 Develop bridging programs to assist non-regulated pharmacy personnel to achieve the competencies required for pharmacy technician regulation.	CCAPP	1.10.1 National accreditation standards for bridging programs.	Short
	CCAPP	1.10.2 Consensus on national standards.	Short
1.11 Conduct and utilize research to develop, evaluate and improve education and CPD programs.	AFPC/ ADPC	1.11.1 Sufficient capacity in the number and quality of researchers in the area of education and CPD.	Med.-ongoing
	AFPC/ ADPC	1.11.2 Dissemination of research results.	Med.-ongoing
1.12 Define core competencies required by other pharmacy support personnel to protect the safety, security and integrity of the drug distribution system.	NAPRA & CPTEA	1.12.1 List of roles and standards for core competencies for other pharmacy support personnel.	Med.
	NAPRA& CPTEA	1.12.2 National consensus on roles, and standards for core competencies for other pharmacy support personnel.	Med.

1. Education and Continuing Professional Development

Overall Objectives

- Canadians having access to high quality, patient-centred pharmacy services through appropriate utilization of the pharmacy workforce;
- Care provided to Canadians in a collaborative manner where pharmacists focus on medication management and patient health outcomes, and pharmacy technicians focus on drug distribution;
- Access to a sufficient number of appropriately trained pharmacists and pharmacy technicians to meet the health care needs of Canadians; and
- An increased understanding among policy makers and the public of the contribution that the pharmacy workforce can make to improve patient health outcomes.

2. Pharmacy Human Resources

Actions	Potential Lead Orgs	Deliverables	Time Frame
2.1 Promote workforce roles of new and emerging professional pharmacy services and pharmacy practice models and identify their enabling characteristics to optimize patient health outcomes (linked 1.13.1).	NCO	2.1.1 Definition of workforce roles of new and emerging professional pharmacy services and pharmacy practice models based on Moving Forward findings (as defined in 1.13.1).	Short
	NCO	2.1.2 Resource guide that identifies and describes key enabling characteristics that support workforce roles in new and emerging professional pharmacy services and pharmacy practice models.	Short
	NCO	2.1.3 Resource guide to assist pharmacists, pharmacy technicians and pharmacy employers adopt new and emerging professional pharmacy services and pharmacy practice models.	Short
	NCO	2.1.4 Communications strategy to widely disseminate the resources supporting emerging professional pharmacy services and pharmacy practice models (2.1.2 and 2.1.3) to the pharmacy workforce and to pharmacy employers (linked to 1.13.1).	Short
	NCO	2.1.5 Research strategy that builds on the Moving Forward findings and ensures continued collection and dissemination of information on innovative or evolving pharmacy workforce roles, professional pharmacy services and practice models (linked to 1.13.1).	Short
2.2 Define and achieve consensus on the future roles and responsibilities, and required skills and knowledge, of regulated pharmacy technicians to maximize their effectiveness in the delivery of professional pharmacy services (linked to 1.13.1, 4.1.1 & 4.1.2).	CAPT & CPhA	2.2.1 Report (based on analysis of Canadian and international literature) describing innovative/advanced uses of pharmacy technicians in the delivery of community and hospital pharmacy services.	Short
	CACDS & OCP	2.2.2 Consensus document on common elements of job descriptions for pharmacy technicians who play innovative/advanced roles in the delivery of community and hospital pharmacy services and the functions to be carried out by pharmacy assistants.	Short
	CACDS & OCP	2.2.3 Pilots of integration of regulated pharmacy technicians into community and primary care practice settings	Med.
2.3 Define and achieve consensus on the future roles and responsibilities, and required skills and knowledge, of pharmacists to maximize their effectiveness in the provision of medication management services.	NAPRA	2.3.1 Document defining future roles and responsibilities (build on 1.13.1).	Short
	NAPRA	2.3.2 Consensus on future roles and responsibilities (linked to 2.3.1).	Short
	NAPRA	2.3.3 Communications strategy and documents to disseminate and encourage adoption of (in education programs and in practice) NAPRA entry to practice competencies and standards of practice (in concert with 1.1.1).	Short ongoing
2.4 Address the challenges faced by international pharmacy graduates (IPGs) to support them in attaining licensure and integration into pharmacy practice in Canada. (Linked to 1.6)	NAPRA	2.4.1 Web portal to guide IPGs through licensing and integration process.	Short
	CPhA & UofT	2.4.2 Resource systems to support IPGs integrating into Canadian pharmacy practice.	Med.

2. Pharmacy Human Resources			
Actions	**Potential Lead Orgs**	**Deliverables**	**Time Frame**
2.5 Promote the availability of an appropriate number of regulated pharmacy technicians with higher qualifications to assume expanded responsibilities and accountability for the safety and security of the drug distribution system.	CSHP & CPhA	2.5.1 Position statement, endorsed by key organizations representing employers, on pharmacy technicians in the workplace.	Short
	CAPT & CPhA	2.5.2 National communications strategy describing the value of pharmacy technician regulation to: the public; pharmacy employers; pharmacists; and pharmacy technicians.	Short-ongoing
2.6 Promote best practices and innovative approaches to drug distribution to enable optimal use of pharmacy human resources and to enhance patient safety.	CACDS & CSHP	2.6.1 Communications strategy and documents to identify and promote the value of improved drug distribution approaches to patient outcomes and safety, workforce satisfaction and workplace efficiency.	Short
2.7 Ensure that pharmacy is involved in pan-Canadian HHR planning to ensure the adequate supply of a pharmacy workforce focused on meeting patient health needs.	NCO	2.7.1 Communications and engagement strategy to inform policy makers and HHR planners about pharmacy, including process to identify and capitalize on opportunities for involvement.	Med.
	NCO	2.7.2 Communications and engagement strategy to encourage involvement of pharmacy leaders in pan-Canadian HHR planning.	Long
2.8 Promote a greater understanding of the factors determining job satisfaction in pharmacy workplaces to better attract and retain the pharmacy workforce.	CPhA	2.8.1 Communications strategy to disseminate Moving Forward findings related to workplace satisfaction.	Short
	CPhA	2.8.2 Survey and report on health and satisfaction of pharmacy workforce, in collaboration with Health Canada.	Med.
2.9 Address recruitment and retention issues associated with traditional and emerging pharmacy practice models to ensure an appropriate pharmacy workforce.	CACDS & CSHP	2.9.1 Resource guide on recruitment and retention strategies.	Med.
2.10 Apply the CIHI national database of pharmacists to needs-based health human resources planning.	NCO	2.10.1 Communications document to promote the availability of CIHI data and demonstrate how data can be used.	Short
	NCO	2.10.2 Process to identify gaps and recommend enhancements to pharmacist database, and request further CIHI analysis reports on specific issues.	Short-ongoing
2.11 Lead and collaborate in research to evaluate the effect of pharmacy workforce roles and pharmacy practice models centred on patient care on individual patient health, population health and health care services. (linked to 3.1).	CPPRG (CPhA)	2.11.1 Prioritized list of pharmacy practice research needed on pharmacy workforce roles (linked to 3.1.3).	Short
2.12 Encourage pharmacists to pursue and secure significant positions of leadership in government, educational institutions and stakeholder organizations to contribute to health system improvements. (linked to 3.4; 4.1.2; 4.7.1; 5.6.1).	CPhA & CSHP	2.12.1 Mechanism for monitoring opportunities for leadership and advocacy roles for pharmacists.	Short-ongoing
	CPhA & CSHP	2.12.2 Mechanism for identifying and sharing communication tools that highlight the contribution the pharmacy workforce can make to improve the health system/health care, and/or patient health outcomes for advocacy purposes.	Short-ongoing

5.3 Financial Viability and Sustainability

Overall objectives

- Financially viable and sustainable pharmacy services that optimize medication use, promote wellness and prevent disease;
- Delivery of, and compensation for, new pharmacy services that positively contribute to patients' health outcomes; and
- Reimbursement models that recognize the complexity and demonstrated value of the service provided, as well as the time required from the pharmacist.

3. Financial Viability and Sustainability			
Actions	**Potential Lead Orgs**	**Deliverables**	**Time Frame**
3.1 Identify, define, pilot and evaluate emerging and innovative professional pharmacy services (i.e., services offered by pharmacists and pharmacy technicians) to determine their feasibility, impact on the quality of care, and cost-effectiveness (linked to 1.13.1).	CPPRG (CPhA)	3.1.1 Overview of international and Canadian research evidence on each pharmacy service (linked to 2.1).	Short
	CPhA	3.1.2 List of new and current services that pharmacists and pharmacy technicians could provide (linked to 2.1, 3.2.1, 3.2.2).	Short
	CPPRG (CPhA)	3.1.3 List of research priorities (linked to 2.11.1).	Short
	CPPRG (CPhA)	3.1.4 Studies on pharmacy services to determine the feasibility, cost-effectiveness, and impact to inform business models (linked to 2.1).	Med.–ongoing
	CPhA	3.1.5 Knowledge transfer activities to translate research into policy.	Med.–ongoing
	NCO	3.1.6 Clearinghouse for current and new pharmacy services research, share information on gaps in research.	Med.–ongoing
	CPhA	3.1.7 Innovative pharmacy services and research awards.	Med.–ongoing
3.2 Develop a framework for professional pharmacy services to provide a method and rationale for establishing fees for different categories of services and at varying levels of service.	CACDS & PPAs	3.2.1 A framework for professional pharmacy services (and one for each emerging service) to provide a method and rationale for establishing fees for different categories of services and at varying levels of service to inform business models (linked to 3.1.2).	Med.–ongoing
	CACDS & PPAs	3.2.2 Compensation models to support the services in the framework, and emerging services (linked to 3.1.2).	Med.–ongoing
	CACDS & PPAs	3.2.3 Mechanism for ongoing feedback regarding validity of services framework.	Med.–ongoing
3.3 Gain acceptance from pharmacy stakeholders on implementation of professional pharmacy services.	CACDS & PPAs	3.3.1 Marketing plan for pharmacy stakeholders and tools for promoting professional pharmacy services.	Med.–ongoing
3.4 Engage with governments, third-party insurers, and with other payers to seek compensation for services that meet the health care needs of their populations (linked to 3.3).	CACDS & PPAs	3.4.1 Coordinated engagement strategies (see notes section at the end of this table for description of strategies) (using plan and tools 3.3.1).	Med.–ongoing
3.5 Develop transition strategies that address the resources and requirements to operationalize new professional pharmacy services.	CACDS & PPAs & CSHP	3.5.1 Strategy for each pharmacy service (see notes section at the end of this table for description of strategies).	Short
	CACDS & PPAs & CSHP	3.5.2 Toolkit for each new service (see notes section at the end of this table for description of toolkits).	Short

3. Financial Viability and Sustainability			
Actions	**Potential Lead Orgs**	**Deliverables**	**Time Frame**
3.6 Conduct strategic research to evaluate the impact of health care policies on pharmacy practice and on the financial viability and sustainability of pharmacies and the consequences of those pharmacy impacts on patient outcomes (linked to 4.7).	CPPRG (CPhA) & CSHP	3.6.1 List and priorities of research needed (linked to 3.1.3; 2.11.1).	Short-ongoing
	CPPRG (CPhA)	3.6.2 Research on the impact of health care policies (linked to 2.1; 3.1).	Med.-ongoing
3.7 Develop a national consumer (i.e., patient, caregiver, and other health care providers) marketing strategy to create awareness of and increase the demand for professional pharmacy services.	CACDS & PPAs	3.7.1 Consumer market research.	Med.
	CACDS & PPAs	3.7.2 National marketing campaign.	Med.

Notes:

Coordinated engagement strategies
Description of strategy:

- Include common message
- Define who needs to be engaged
- Outlined engagement process for each group
- Include a payer map to understand negotiation
- Adapt strategy for each audience

Strategy for each pharmacy service
Strategy for each pharmacy service should:

- Provide evidence to support implementing the service for pharmacists and pharmacy owners
- List required training, equipment, and staff
- Provide the overall costs estimated, including both start-up and operational to inform the business model
- Include inventory of best practices
- Link or network to people who have implemented similar services
- Provide guidance on development of a work system for the new service and how to integrate

5.4 Legislation, Regulation and Liability

Overall objectives

- Legislation and regulation that enables pharmacists and pharmacy technicians to practice to the full extent of their knowledge and skills to provide quality health care;
- Clarity about responsibilities and accountabilities when caring for or transferring the care of patients, so as to minimize potential risks towards patients, pharmacists and pharmacy technicians; and
- Support from the federal/provincial/territorial governments and pharmacy regulatory and advocacy organizations, to review and amend policies and legislation important to enabling change.

4. Legislation Regulation and Liability			
Actions	**Potential Lead Orgs**	**Deliverables**	**Time Frame**
4.1 Create an enabling regulatory framework to authorize pharmacists to deliver expanded pharmacy services in new pharmacy practice models, including but not limited to: initiating, modifying, monitoring, and continuing drug therapy; ordering laboratory tests and having access to laboratory results; administering drugs and vaccines including by injection, in both collaborative and independent practice.	NAPRA	4.1.1 Pan-Canadian guiding principles about initiating, modifying, monitoring and continuing drug therapy; laboratory tests and results, and administering drugs and vaccines.	Short
	NAPRA	4.1.2 Status report from each province on regulatory changes, updated on a regular basis.	Short-ongoing
	NAPRA	4.1.3 Application to the federal government for the pharmacist to be included as a "practitioner" under the Controlled Drugs and Substances Act.	Short
4.2 Develop a model regulatory framework to grant more authority, responsibility and accountability to pharmacy technicians (linked to 1.9; 2.2).	NAPRA	4.2.1 A common role statement for pharmacy technicians.	Short
	NAPRA	4.2.2 Competency-based standards of practice for pharmacy technicians.	Short
	PEBC	4.2.3 Standardized entry-to-practice exam as evidence of a regulated pharmacy technician's competency to practise.	Short
4.3 Create nationally accepted definitions for prescribing, compounding, dispensing, and administering drugs, to facilitate improved communication with consumers and government, and to contribute to the discussion regarding pharmacy services and compensation.	NAPRA	4.3.1 A glossary of nationally accepted definitions to support an enabling regulatory framework for prescribing, compounding, dispensing, and administering drugs.	Short
4.4 Perform ongoing reconciliation of professional pharmacists practice and performance assessment, which is done in parallel with broadening scopes of practice to accommodate quality improvement, exercise accountability and to protect the public.	PRAs	4.4.1 A quality assurance model that addresses pharmacist competence (inputs), pharmacy systems and practice environments (processes), and pharmacist performance/patient outcomes (outputs).	Long
4.5 Establish an understanding about how responsibility and accountability is shared and transferred between practitioners (including pharmacy technicians) working in collaborative practice relationships and clarify liability for practitioners.	NCO	4.5.1 A review of the literature to understand best practices of team-based care.	Med.
	NCO	4.5.2 A document/guidelines (including definition description) that will lead to an understanding of how responsibilities and accountabilities are shared and transferred.	Med.
	NCO	4.5.3 Strategy to disseminate documents/guidelines from 4.5.2 to pharmacy workforce.	Med.
4.6 Develop a national Code of Ethics for pharmacists and pharmacy technicians to guide them in making patient-centred decisions.	NAPRA	4.6.1 Evaluation (gap analysis) of current codes of ethics for pharmacists with other select health professions, pharmacy in other countries with similar scopes of practice, including interrelationships with the pharmaceutical industry.	Long
	NAPRA	4.6.2 Ethical principles that are agreed to nationally for pharmacists and pharmacy technicians that can be incorporated in all Codes of Ethics.	Long

4. Legislation Regulation and Liability			
Actions	**Potential Lead Orgs**	**Deliverables**	**Time Frame**
4.7 Monitor and affect current and future federal legislation on drug product licensing and its impact on patient care, pharmacy practice, and the integrity of the drug distribution system, to ensure patients' safe, effective, comprehensive and accessible drug therapy (linked to 3.6; 2.12).	NAPRA	4.7.1 Mechanism to monitor proposed changes in legislation that may impact patient access to safe and effective drug therapy.	Short-ongoing
	NAPRA	4.7.2 Position statements that propose changes to legislations that impact patient access to safe and effective drug therapy.	Short-ongoing
	NAPRA	4.7.3 Document that identifies the role of pharmacists in both detecting and decreasing the use of counterfeit drugs in Canada.	Med.
4.8 Develop national consensus on what constitutes a pharmacist-patient relationship to support quality patient care.	NCO	4.8.1 Literature review to determine qualities of effective health professional-patient relationships.	Med.
	NCO	4.8.2 National consensus on the standards of practice and/or minimum requirements for acceptable pharmacist-patient relationships.	Med.
	NCO	4.8.3 Communication with and education of patients, pharmacists, and other stakeholders about the minimum care requirements for a pharmacist-patient relationship.	Med.
4.9 Develop a national regulatory framework/ model to facilitate the inter-provincial movement of pharmacists, pharmacy technicians, and professional goods and services, and to clarify the roles, responsibilities and accountabilities of both service providers and regulatory authorities.	NAPRA	4.9.1 Agreements among regulatory authorities that recognize commonalities and differences in registration and practice requirements of pharmacists and pharmacy technicians, and where differences exist, mechanisms to resolve them.	Med.
	NAPRA	4.9.2 Agreements that clarify the roles, responsibilities, and accountabilities of regulatory authorities in cooperating to ensure public protection and recourse when services cross one or more provincial boundaries.	Med.
4.10 Monitor and affect legislation on the roles and scopes of practice of other health professionals and its impact on patient care, pharmacist practice, and the integrity of the drug distribution system to ensure patients' safe, effective, comprehensive and accessible drug therapy.	NAPRA	4.10.1 Mechanism to monitor proposed legislation on the roles and scopes of practice of other health professionals and its impact on patient care, pharmacist practice, and the integrity of the drug distribution system.	Short-ongoing
	NAPRA	4.10.2 Position statements that propose changes to legislations that facilitates the optimal use of the knowledge and skills of all regulated health professionals that improves patient access to safe, effective, and comprehensive drug therapy.	Short-ongoing
4.11 Monitor and affect privacy legislation to ensure access to, use of, and disclosure of personal health information for clinical and quality assurance purposes, while protecting the confidentiality and security of patients' information.	NAPRA	4.11.1 Mechanism to monitor privacy legislation to ensure access to, use of, and disclosure of personal health information for clinical and quality assurance purposes, while protecting the confidentiality and security of patient' information.	Short-ongoing
	NAPRA	4.11.2 Position statements that propose changes to privacy legislations to ensure access to, use of, and disclosure of personal health information for clinical and quality assurance purposes, while protecting the confidentiality and security of patients' information.	Short-ongoing

5.5 Information and Communication Technology

Overall objectives

- The use of information and communication technology to better optimize drug therapy for patient care;
- A consistent and coordinated approach to implementing new information and communication technology in pharmacy; and
- Safe, efficient drug distribution through enhanced use of technology.

5. Information and Communication Technology

Actions	Potential Lead Org(s)	Deliverables	Time Frame
5.1 Engage pharmacy in the development and implementation of ICT programs across Canada so that the interests of pharmacists and patients are represented.	CPhA	5.1.1 Environmental scan of pharmacy jurisdictions on the status of ICT programs.	Short-ongoing
	CPhA	5.1.2 Communications strategy and tools for pharmacy stakeholders on the status of ICT programs across the country.	Short-ongoing
	CPhA & NAPRA	5.1.3 Pharmacy representation on the CHI Standards Collaborative Strategic Committee and Coordinating Committee (linked to 5.3.1).	COM-PLETE
	CPhA & CACDS	5.1.4 List of Chronic Disease Management projects related to technology.	Short
	NCO	5.1.5 Communications strategy to encourage pharmacies to become involved with ICT.	Short
5.2 Research and utilize a Canadian pharmacy business case(s) to inform and promote adequate funding for implementation and maintenance of ICT.	CACDS & CSHP	5.2.1 Pan-Canadian environmental Scan of evaluations and cost-analysis of implementation and maintenance of ICT.	Short
	CACDS	5.2.2 Canadian Pharmacy business case, based on evidence, to support funding for implementation and maintenance of ICT.	Short
5.3 Recommend that the pan-Canadian e-health standards are implemented by jurisdictions in a coordinated, phased approach and that pan-Canadian messages are sustained on a national level to support integration and facilitate information exchange across health care domains.	CPhA & NAPRA	5.3.1 Pharmacy representation on the CHI Standards Collaborative Strategic Committee and Coordinating Committee (linked to 5.1.3).	COM-PLETE
	CACDS & CPhA	5.3.2 Forum for pharmacy personnel involved in the development and use of e-health standards to share information.	Med.
5.4 Enable pharmacists and pharmacy technicians access to the various domains of the EHR for interaction within their scope of practice.	NAPRA	5.4.1 Environmental scan to determine jurisdictional scope of practice for pharmacists and pharmacy technicians within EHRs (linked to 4.2; 1.9; 2.2).	Short
5.5 Identify the management software needs of professional pharmacy services to support the evolving roles of pharmacists and pharmacy technicians to maximize the usefulness of ICT.	CACDS & CPhA	5.5.1 Gap analysis of software needs.	Short
5.6 Monitor and affect policy issues identified through the work of CHI, provincial governments, and other organizations on EHR to identify and find solutions to policy issues.	CPhA & NAPRA	5.6.1 Mechanism to monitor policy issues at jurisdictional level to promote knowledge transfer and sharing of solutions.	Short-ongoing
5.7 Develop, influence, and implement policies and practices relevant to electronic transfer of prescriptions, electronic signature, and electronic prescribing to support the role of pharmacists in medication management.	CPhA & NAPRA	5.7.1 e-Prescribing pilot, in a jurisdiction, including software vendor programs that adhere to the e-prescribing principles.	Short
	CACDS	5.7.2 Position statement on e-Prescribing, using 2003 recommendations as a base.	Short
5.8 Provide input into the development and implementation of secure ICT in hospital, community, primary care, and long-term care settings to optimize patient safety.	NCO	5.8.1 Environmental scan on ICT in areas where implementations have occurred to effectively measure patient safety (linked to 5.2).	Short

5. Information and Communication Technology

Actions	Potential Lead Org(s)	Deliverables	Time Frame
5.9 Advocate for consistent ICT communication strategies amongst stakeholders to provide timely and relevant messages to the pharmacy community.	NCO	5.9.1 Communications strategy and tools to disseminate common message across jurisdictions to pharmacy stakeholders that are timely and relevant (linked to 5.2; 5.8).	Short
5.10 Evaluate how the use of ICT by pharmacy affects health care services and outcomes to demonstrate how patient care and pharmacy practice is influenced by ICT (linked to 5.2).	NCO	5.10.1 Cost-benefit analysis of implementation of ICT and outcome benefits of patient care.	Med.

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APPENDIX I: LIST OF ACRONYMS

ADPC	Association of Deans of Pharmacy of Canada
AFPC	Association of Faculties of Pharmacy of Canada
CACDS	Canadian Association of Chain Drug Stores
CAPSI	Canadian Association of Pharmacy Students and Interns
CAPT	Canadian Association of Pharmacy Technicians
CCAPP	Canadian Council for Accreditation of Pharmacy Programs
CCCEP	Canadian Council on Continuing Education in Pharmacy
CeRx	Canadian Electronic Drug Messaging Standard
CHI	Canada Health Infoway
CIHI	Canadian Institute of Health Information
CHPRB	Canadian Hospital Pharmacy Residency Board
COMPRIS	Centre for Community Pharmacy Research and Interdisciplinary Strategies
CPD	Continuing Professional Development
CPhA	Canadian Pharmacists Association
CPOE	Computerized prescriber order entry
CPPRG	Canadian Pharmacy Practice Research Group
CPTEA	Canadian Pharmacy Technician Educators Association
CSHP	Canadian Society of Hospital Pharmacists
DIS	Drug information systems
DRPs	Drug-related problems
E&CPD	Education and Continuing Professional Development
EHR	Electronic health record
EICP	Enhancing Interdisciplinary Collaboration in Primary Health Care
FPT	Federal/Provincial/Territorial
FVS	Financial Viability and Sustainability
HHR	Health human resources
HR	Human resources
ICT	Information and Communication Technology
IMPART	Integrated Mentor Program in Addictions Research Training
IPG	International pharmacy graduate
LRL	Legislation Regulation and Liability
LTC	Long term care

MF	Moving Forward: Pharmacy Human Resources for the Future
NAPRA	National Association of Pharmacy Regulatory Authorities
NCO	National Coordinating Office
NeCST	National e-Claims Standard
NePTF	National e-Pharmacy Task Force
OCP	Ontario College of Pharmacists
PEBC	The Pharmacy Examining Board of Canada
PEP Canada	Pharmacy Experiential Programs of Canada
PharmD	Doctor of Pharmacy
PHR	Pharmacy human resources
PINs	Pharmacy information networks
PPA	Provincial pharmacy association
PRA	Pharmacy regulatory authority
SCCC	Standards Collaborative Coordinating Committee
SCSC	Standards Collaborative Strategic Committee
TDSPA	Transparent Drug System for Patient Act

APPENDIX II: GLOSSARY OF TERMS

In this implementation plan these terms mean the following:

A

Accreditation: the process whereby an association or agency grants public recognition to an organization, site or program that meets certain established qualifications or standards, as determined through initial and periodic evaluations.

Assessment: a test or measure of knowledge, skills, performance, or achievement for a specific area or process.

B

Bridging program: a program designed to fill the gap between [a student's] existing knowledge and skills and the assumed knowledge or skills required to meet specific professional requirements.

C

Certification: formal recognition granted to designate to the public that an individual has attained the requisite level of knowledge, skill, and/or experience in a well-defined, often specialized, area of the total discipline. Certification usually requires initial assessment and periodic reassessments of the individual's knowledge, skills and/or experience.

Clinical privileges: authorization to provide a specific range of patient care services.

Competency: the distinct set of knowledge, skills, attitudes and values that is essential to the practice of a profession.

Continuing education (CE): a structured process of education designed or intended to support the continuous development of pharmacists to maintain and enhance their professional competence.

Continuing professional development (CPD): a self-directed, ongoing, systematic and outcomes-focused approach to learning and professional development.

Credential: documented evidence of professional qualifications.

D

Dispensing: interpretation and evaluation of a prescription, selection and manipulation or compounding of a pharmaceutical product, labelling and supply of the product in an appropriate container according to legal and regulatory requirements, and the provision of information and instructions by a pharmacists, or under the supervision of a pharmacist, to ensure the safe and effective use by the patient.

E

E-dispensing: entering medication dispensing information and associated patient notes directly on the patients' profile within a secure provincial electronic health record (EHR). This information is accessible to all authorized health care providers.

E-prescribing: the use of an automated data entry system to generate a prescription, rather than writing it on paper. The process will draw upon medication information from within the data entry system as well as data from a centralized patient medication repository within a secure provincial electronic health record (EHR). Output of the prescription is directly entered on the patient's medication profile with the electronic health record and is accessible to all authorized health care providers.

E-transfer of prescriptions: sending prescriptions to the dispenser via electronic technology such as facsimile or email. This may not be within the secure provincial electronic health record.

Educational outcomes: the intended quantifiable and measurable results (such as knowledge or skills) that should be achieved on completion of a course or program of study.

Experiential education: a philosophy of education that focuses on the transactive process between teacher and student involved in direct experience with the learning environment and content.

Experiential learning: the process of making meaning from direct experience.

F

Fellowship: a directed, highly individualized postgraduate program designed to prepare a pharmacist to become an independent researcher.

G - H

I

Information and communication technology (ICT): improves patient care by enabling the pharmacy workforce to practise more efficiently and effectively in a collaborative environment. It encompasses software applications, hardware, and communications tools used in distributive and medication management services.

Interprofessional collaboration: when health professionals from different disciplines (for example, nurses, physicians, physiotherapists, psychologists, speech pathologists) work and learn together to provide patient care.

Interprofessional education (IPE): when two or more professions learn with, from and about each other in order to improve collaboration and the quality of care.

Intraprofessional: is the relationship between members of the same profession or professional area of practice.

J

K

Knowledge translation: is the exchange, synthesis and ethically-sound application of knowledge – within a complex system of interactions among researchers and users – to accelerate the capture of the benefits of research for Canadians through improved health, more effective services and products, and a strengthened health care system.

Licence: a credential issued by a government or regulatory body that indicates that the holder is in compliance with minimum mandatory requirements necessary to practise in a particular profession or occupation.

M

Medication management: the entire way that medicines are selected, procured, delivered, prescribed, administered and reviewed to optimize the contribution that medicines make to producing informed and desired outcomes of patient care.

Medication management services: services to provide medication management; including, but not limited to, prescription reviews, medication monitoring, management of repeat prescribing, services to nursing and residential homes and patient education.

N

Non-traditional PharmD: a program structured to provide pharmacy practitioners who have a Bachelor of Pharmacy with the opportunity to build their knowledge and skills to obtain a PharmD degree, thereby enhancing their ability to provide quality pharmaceutical care and to function as pharmacy practice role models.

O

Outcomes: consequences (results) of interventions made to meet therapeutic goals. Outcomes can have economic, social/behavioural or physiological characteristics.

P

Patient-focused care (also known as patient-centered): the merging of several models of health care practice including patient education, self-care, and evidence-based care into four broad areas of intervention: communication with patients, partnership with patients, health promotion, and delivery of care.

Pharmaceutical care: the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life.

Pharmacy business model: a description of the budget, revenue, expenses, and other costs associated with the delivery of the pharmacy service (based on the pharmacy service framework), the target audience, the compensation model, and the cost-effectiveness to determine financial viability and sustainability and return-on-investment of the pharmacy service.

Pharmacy practice: is the pharmacy practice model overlaid by professional ethics, values, regulations, and other macro level elements.

Pharmacy practice model: the combination of the professional pharmacy services offered as they are adapted to the population, the setting, and the available funding and compensation mechanisms. *Note: to avoid some repetition, these models are at times referred to "practice models".*

Pharmacy service framework: includes a description of how a pharmacy service is delivered; listing the HR, ICT, LRL, ECPD, and other requirements to deliver this service, the expected patient-outcomes, and any evidence to support this service.

Pharmacy technician (today): unregulated, with a limited scope of practice where all activities are under the supervision and responsibility of a pharmacist. An individual who, under the supervision of a licensed pharmacist, assists in pharmacy activities not requiring the professional judgment of the pharmacist.

Pharmacy technician (future, regulated): regulated, registered with an authoritative body in each province, will have a protected title and will have an expanded scope of practice that will assume responsibility for limited and defined functions.

Pharmacy workforce: the workforce involved in the delivery of pharmacy services. This can include students, interns, pharmacy assistants, pharmacy technicians and pharmacists.

Practice site: a health care delivery setting (such as a community pharmacy or hospital) in which students undertake practice experiences.

Preceptor: a practitioner who teaches (in a structured or semi-structured fashion) and supervises students in his or her professional practice setting.

Professional allowances: a benefit, in the form of currency, services or educational materials that is provided by a manufacturer for the purposes of direct patient care, and may include "Education days" provided by pharmacists that are targeted to the general public for health protection and promotion activities.

Professional pharmacy services: patient care services (including dispensing and clinical services) rendered by pharmacists and/or pharmacy technicians. *Note: to avoid some repetition, these services are at times referred to as "pharmacy services".*

Professional recognition: the formal acknowledgement of an individual's professional status and right to practise the profession in accordance with professional standards and subject to professional or regulatory controls.

Q

R

Registered: adjective used to describe a practitioner who has met requirements for licensure and whose name has been entered on a registry of practitioners who are licensed to practise in that jurisdiction.

Residency: an organized, directed, postgraduate training program in a defined area of pharmacy practice.

S

Scope of practice: the boundaries within which a health professional may practice. For pharmacists, the scope of practice is generally established by the regulators in the province in which he or she practises.

Services (pharmacy): see professional pharmacy services

Services (professional): see professional pharmacy services

Specialized residency: an organized, directed, accredited program that builds upon the competencies established in a pharmacy practice residency program or a pharmacy professional degree program beyond the entry level. The specialized pharmacy residency is focused in a specific area of practice.

Studentship: the initial level of in-service training required to become a pharmacist in Ontario.

T

Traineeship: a short, intensive, clinical and didactic postgraduate educational program intended to provide the pharmacist with knowledge and skills needed to provide a high level of care to patients with specific diseases or conditions.

U - V

W

Workforce – see pharmacy workforce

X – Z

APPENDIX III: LIST OF SIGNATORY ORGANIZATIONS

We, the undersigned organizations, support the Vision for Pharmacy described in the Blueprint for Pharmacy: The Vision for Pharmacy, and are committed to work collaboratively with the Task Force on a Blueprint for Pharmacy and working groups as they develop the implementation plan. To move the profession forward, we will refer to the Blueprint when developing our own strategic plans. We will take the lead or partner by implementing relevant actions that align with our organizational or jurisdictional mandates and priorities.

National Pharmacy Organizations:

Association of Deans of Pharmacy of Canada

Association of Faculties of Pharmacy of Canada

Canadian Academy of the History of Pharmacy

Canadian Association of Chain Drug Stores

Canadian Association of Pharmacy Students and Interns

Canadian Association of Pharmacy Technicians

Canadian College of Clinical Pharmacy

Canadian Council for Accreditation of Pharmacy Programs

Canadian Council on Continuing Education in Pharmacy

Canadian Foundation for Pharmacy

Canadian Pharmacists Association

Canadian Pharmacy Practice Research Group

Canadian Pharmacy Technician Educators Association

Canadian Society of Consultant Pharmacists

Canadian Society of Hospital Pharmacists

National Association of Pharmacy Regulatory Authorities

Pharmacy Examining Board of Canada

Provincial Pharmacy Associations:

Alberta Pharmacists' Association

Association des pharmaciens des établissements de santé du Québec

Association québécoise des pharmaciens propriétaires

British Columbia Pharmacy Association

Manitoba Society of Pharmacists

New Brunswick Pharmacists' Association

Ontario Pharmacists' Association

Pharmacists' Association of Saskatchewan

Pharmacists' Association of Newfoundland and Labrador

Pharmacy Association of Nova Scotia

Pharmacy Technician Society of Alberta

Prince Edward Island Pharmacists Association

Provincial Pharmacy Regulatory Authorities:

Alberta College of Pharmacists

College of Pharmacists of British Columbia

Manitoba Pharmaceutical Association

New Brunswick Pharmaceutical Society

Newfoundland and Labrador Pharmacy Board

Nova Scotia College of Pharmacists

Ontario College of Pharmacists

Ordre des pharmaciens du Québec

Prince Edward Island Pharmacy Board

Saskatchewan College of Pharmacists

Yukon Consumer Services (Pharmacy Regulatory Authority)

Chain Pharmacy:

Costco Pharmacy

Dell Pharmacy

Familiprix Inc.

Hbc Pharmacies

Katz Group Canada Ltd. / Rexall

Lawtons Drugs

Lovell Drugs Limited

Metro Ontario Inc.

PharmaChoice (Atlantic)

Pharmasave Drugs (National) Ltd.

Remedy Drug Store Company Inc.

Shoppers Drug Mart Inc.

Sobeys Pharmacy

The Jean Coutu Group (PJC) Inc.

UniPHARM Wholesale Drugs Ltd.

Uniprix Inc.

Value Drug Mart Associates Ltd.

Wal-Mart Canada Corp. (Wal-Mart Pharmacy)

Faculties of Pharmacy:

Dalhousie University College of Pharmacy

Faculté de pharmacie, Université de Montréal

Faculté de pharmacie, Université Laval

Memorial University School of Pharmacy

University of Alberta Faculty of Pharmacy and Pharmaceutical Sciences

University of British Columbia Faculty of Pharmaceutical Sciences

University of Manitoba Faculty of Pharmacy

University of Saskatchewan College of Pharmacy and Nutrition

University of Toronto Leslie Dan Faculty of Pharmacy

University of Waterloo School of Pharmacy

Pharmacy Student Associations:

Alberta Pharmacy Students' Association

Association des étudiants en pharmacie de l'Université de Montréal

Association générale des étudiants en pharmacie de l'Université Laval

Dalhousie Student Pharmacy Society

Memorial University Pharmacy Society

Saskatchewan Pharmacy and Nutrition Students' Society

University of British Columbia Pharmacy Undergraduate Society

University of Manitoba Pharmacy Students Association

University of Toronto Undergraduate Pharmacy Society

University of Waterloo Society of Pharmacy Students

For more information

BLUEPRINT FOR PHARMACY
Designing the Future Together

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