



THE UNIVERSITY OF BRITISH COLUMBIA

Faculty of Pharmaceutical Sciences



A White Paper on Team-Based Primary Health Care in British Columbia - Context and Opportunities for Pharmacists

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Executive Summary

For the past 20 years, the profession of pharmacy in BC and across Canada has been in a state of change to align pharmacist roles and scope with the growing needs of patients and society.

Primary care, the foundation of Canada's health care system, is facing unprecedented pressure as the health care needs of Canadians increase. Chronic disease rates are rising, people are living longer with more complex health conditions, and drug therapy is playing an increasingly important role in treatment plans.

Pharmacists have an integral role in the team-based primary care strategy being implemented in British Columbia (BC). Within this strategy, models for patient care service delivery are being developed for health care professionals to work in collaborative and complementary roles within family medical practice settings (called Patient Medical Homes (PMH)) and within geographic areas (called Primary Care Networks (PCN)). The BC government has approved new funding for the first three years of a Pharmacists in PCN Program (the Program) that will see an initial cohort of 50 Primary Care Clinical Pharmacists (PCCP) added to team-based primary care practices around the province. This is in addition to existing funding for pharmacist services in community pharmacies, hospitals and specialty clinics. Other countries and Canadian provinces already have practice models for pharmacists to be part of team-based primary care, and now BC pharmacists will have a similar opportunity.

For the past 20 years, the profession of pharmacy in BC and across Canada has been in a state of change to align pharmacist roles and scope with the growing needs of patients and society. Pharmacists today have the training, skills and abilities to meet these needs through the provision of Comprehensive Medication Management (CMM), which includes: 1) patient assessment; 2) identification and prioritization of drug therapy problems (DTPs); 3) collaborative care plans; and 4) follow up to resolve DTPs and optimize drug therapy outcomes for patients.

Pharmacists face a number of challenges in these rapidly changing times, regardless of where they currently practice. With challenges also come opportunities, and individual pharmacists can position themselves for future success by focusing on three key areas in their current practice: 1) maintaining a collaborative mind-set; 2) understanding what patients want and need; and 3) practicing to their fullest possible scope to meet patient needs in their current practice. Practical strategies for these three key areas are presented in this paper and include: 1) having a clear professional identity; 2) maintaining mutual respect; 3) using medication risk assessment tools; 4) adopting a shared decision-making approach; 5) ensuring rational prescribing; 6) leveraging technical and administrative support; 7) using a patient panel approach to organize pharmacist care; 8) aligning pharmacist services with patient needs; and 9) connecting and communicating with local care teams.

Pharmacists in BC also have access to resources for practice change from the Faculty of Pharmaceutical Sciences (the Faculty) at the University of British Columbia (UBC). As the only training program for pharmacists in the province, the Faculty plays a leadership role as a catalyst for pharmacist practice change. The Pharmacists Clinic, located at UBC, is the living lab that developed and prototyped the service model being used for the program.

The integration of pharmacists is one part of a large and complex process within the BC health care system to enhance the way team-based primary care is delivered across the province. Work is on-going with UBC, the Ministry of Health and the provincial Health Authorities to achieve high-level objectives of: 1) increased pharmacist input in drug-therapy decision-making for complex patients; 2) reduced number and severity of drug-related problems in patients; 3) reduced unnecessary and negative drug therapy consequences for patients; 4) increased patient, family, caregiver, physician, pharmacist and health care team satisfaction; and 5) increased information sharing and collaboration between pharmacists and other members of the patient care team.

Operational objectives for pharmacists in team-based primary care are to: 1) identify and prepare 50 licensed BC pharmacists to provide CMM to complex patients; 2) expand existing systems and workflows for successful integration of these pharmacists across the province; 3) provide training resources and support to increase collaboration between all pharmacists across the care continuum; 4) collect quantitative and qualitative data to evaluate the structure and function of the practice model; and 5) evaluate the impact of the practice model on patient outcomes.

This funding provides a significant opportunity for interested and pro-active pharmacists to take on new roles in team-based primary care and improve the drug therapy outcomes for British Columbians.

1 Introduction - New Team-Based Practices for Pharmacists

The BC government has approved new funding for a program that will see new roles for 50 pharmacists in team-based primary care practices across the province.

Pharmacists have an integral role in the team-based primary care strategy introduced by the BC government.¹ This strategy is part of on-going health care transformation that recognizes the need to involve all health care professionals across the care continuum, including pharmacists.

The BC government has approved funding for the first three years of a new Pharmacists in Primary Care Network (PCN) Program. This Program will see new roles for 50 Primary Care Clinical Pharmacists (PCCP) in team-based practices across the province.² This funding is in addition to existing PharmaCare funding for pharmacist services in community pharmacies, and Health Authority funding for pharmacist services in hospitals and specialty clinics.

The Faculty of Pharmaceutical Sciences (the Faculty) at the University of British Columbia (UBC) is collaborating with pharmacy stakeholders within BC health authorities and leading the first three years of this program including centralized training, and operational and logistical support for the 50 PCCPs. The PCCPs will focus on identifying and resolving drug therapy problems for complex patients in collaboration with other members of the patient's care team, including physicians, nurses, social workers, and pharmacists working in community pharmacies and health authorities.

This White Paper explains the story behind the strategy, describes how changes in the profession of pharmacy and the evolving health care system are aligned, and highlights opportunities for pharmacists across the care continuum to use their skills in new and collaborative ways to improve the health of British Columbians.

2 Background - Why Change is Needed

In Canada, drug therapy accounts for 15.3% of spending per capita in 2019, and that amount is growing.

Primary health care is the foundation of Canada's health care system and refers to the basic services required to meet everyday health care needs.³ The health care system is facing unprecedented pressure as the health care needs of Canadians increase.

Chronic disease rates are rising 14% annually in Canada with almost 40% of British Columbians living with one or more chronic health conditions and accounting for almost 50% of all health system expenditures in BC.^{4,5} High health care service users, who are growing in number, typically have multiple chronic conditions, see multiple prescribers and specialists, and take multiple medications. By the year 2036 it is estimated that the number of British Columbians with complex chronic health conditions will increase by over 70%.⁶

In Canada, drug therapy accounts for 15.3% of spending per capita in 2019, and that amount is growing.⁷ At any given time, up to 23% of people taking drug therapy are experiencing an adverse drug event.^{8,9,10,11,12} Using a cost-of-illness model, it is estimated that for every \$1 spent on drug therapy, an additional \$2-3 is needed to manage the consequences of drug therapy problems (DTPs).¹³

Elderly and frail populations are particularly at high risk of experiencing DTPs due to the greater number of medications taken, chronic conditions, and age-related physical changes.¹⁴ Approximately 20% of people over the age of 70 are taking at least five medications and 16% are taking 10 or more.¹⁵ Moreover, 4% of British Columbians are age 85 or older and 30% of these individuals take at least five medications.¹⁶

The growing burden of chronic disease has made it more challenging for traditional family physicians to manage the primary care needs of their patients on their own.^{17,18} Studies have demonstrated that complex patients require care that is integrated, addresses the whole person, and enables patients to receive care from teams of health care providers.¹⁹ For patients with complex drug therapies, the team of most suitable health care providers needs to include a pharmacist.

2.1 A BRIEF HISTORY OF PRIMARY CARE PLANNING IN BRITISH COLUMBIA

It is well established that a team-based approach to primary health care results in better patient health outcomes, improved patient access to services, more efficient use of resources and greater satisfaction for both patients and providers.^{19,20}

British Columbia adopted a Primary Health Care Charter in 2007, built collaboratively with nearly 30 stakeholder groups, including pharmacy stakeholders.⁴ The Charter laid the foundation and set the direction, targets, and outcomes for primary health care transformation in BC. Subsequently, the Ministry of Health, regardless of the government in power, has identified primary health care and health care transformation as priorities.²¹

In 2015, a strategic policy framework was released to enhance connections between primary care (usually provided by family physicians) and home and community care (usually provided by local health authorities) in BC.⁴ The combined resources of primary and home and community care are recognized as a major component of the BC health care system, delivering over 30 million health care services each year to BC's 4.5 million residents. The total expenditure for this part of the health care system was approximately \$5.4 billion in 2015.⁴

In September 2017, the BC Ministry of Health released a policy direction for the province to standardize health care delivery, coordination and integration with a large focus on primary health care services.^{22,23,24} Two priority areas were identified: 1) transforming front-line medical care from individual family medical practices to team-based primary health care practices, and 2) establishing networks of health services within communities.

In May 2018, the BC government announced new opportunities for nurses in team-based care and officially announced their new primary health care strategy to the general public.^{25,26,27} In June 2018, the BC government announced the funding for 50 new pharmacists as part of primary care teams around the province.² Since then, announcements of funding for new urgent care centres, primary health care physicians and primary care networks (PCNs - see below) around the province have been made.³

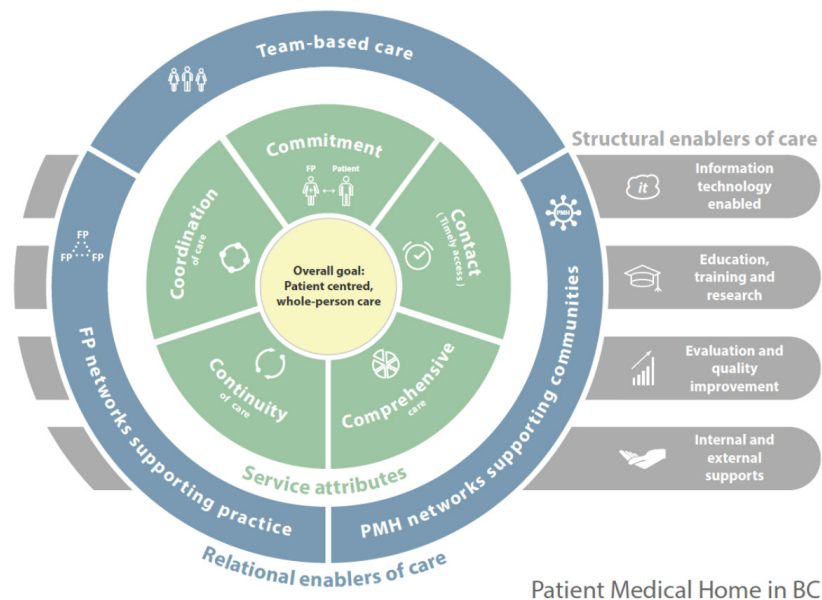
These announcements represent the culmination of years of work and preparation to bring new models of primary care to British Columbians, which in turn opens up exciting new opportunities for pharmacists to add even more value to the health care system.

2.2 NEW MODELS FOR PATIENT CARE SERVICE DELIVERY

A large number of systems and stakeholders are required for effective primary health care. In BC's vision, health care professionals work in collaborative and complementary roles within family medical practice settings (called Patient Medical Homes) and within geographic areas (called Primary Care Networks).

The Patient Medical Home (PMH) is a team-based family practice where patients get the majority of their care and their primary care providers focus on diagnoses, patient relationships and longitudinal care.²⁸ The PMH model is being implemented and tested around the world, and the BC model is adapted from a framework developed by the College of Family Physicians of Canada.²⁹ The BC PMH model has 12 service attributes that represent the ideal characteristics of a care environment, and is illustrated in **Figure 1**.

Figure 1 - Goal and Attributes* of the Patient Medical Home (PMH) in BC²⁸

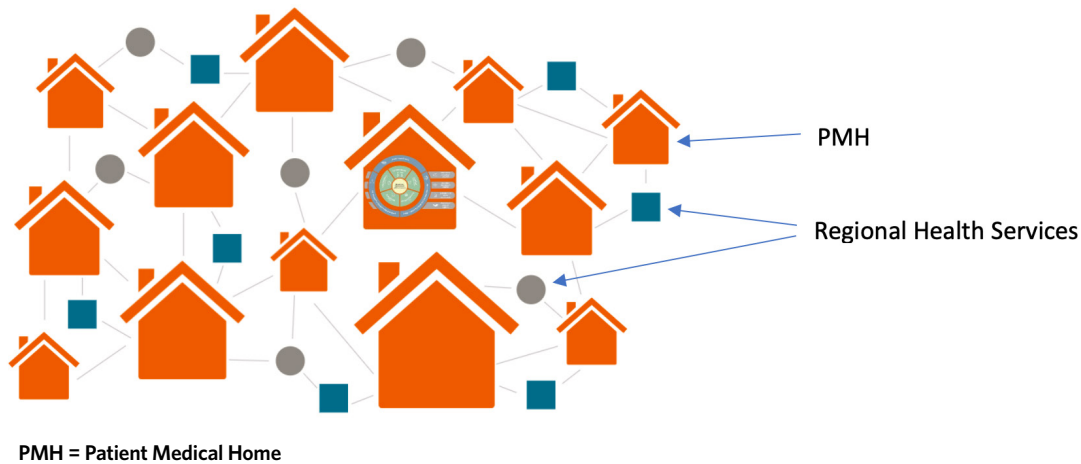


*Green = five service attributes at the practice level
 Blue = three relational enablers of care
 Grey = four structural enablers of care

³BC Ministry Of Health. BC Government News [accessed July 16, 2019]. <https://news.gov.bc.ca/ministries/health>

The Primary Care Network (PCN) is a service model that connects and integrates patient care within a geographic area, including PMHs, regional services (hospitals, specialized community services programs, home and community care) and the broader health system.³⁰ A schematic representation of a PCN is provided in **Figure 2**.

Figure 2 - Schematic Representation of a Primary Care Network (PCN) in BC³¹



A PMH represents the work in the traditional doctor's office, while the PCN represents a system change in the community. Each PCN is governed and supported by a local Collaborative Services Committee (CSC) made up of representatives from the community, the local health authority and local health care professionals.^{31,32}

2.3 PHARMACIST ROLES IN TEAM-BASED PRIMARY HEALTH CARE

Pharmacists are already integrated into primary health care teams elsewhere in the world, including the United Kingdom, Australia, the United States.^{32,33} Canada also has pharmacists in care teams and the level of integration varies considerably by province. For example, Ontario Family Health Teams have included pharmacists since 2006, largely led by the IMPACT (Integrating Family Medicine and Pharmacy to Advance Primary Care Therapeutics) program.³⁴ In Alberta, over 50 pharmacists practice in primary care teams and conduct medication reviews, provide medication management for patients with chronic conditions, and provide drug education.³⁵ In Quebec, most residents receive primary care from a Family Medicine Group that includes a pharmacist.^{36,37}

In contrast, British Columbians have not had regular access to pharmacists in primary care teams, although they have benefitted from the efforts of a small number of pharmacists who have pioneered ways to work in team-based primary health care settings. These pioneers have worked either on their own, as part of a health authority prototype, or as part of a small-scale regional program.^{38,39,40,41}

Studies have shown that pharmacist integration in primary health care teams improves patient health outcomes and provides favorable economic impacts.^{7,42,43,44,45} Pharmacist efforts to manage drug therapies and chronic diseases, and to minimize adverse drug events lead to fewer hospitalizations and improved patient safety, health outcomes, medication adherence and patient quality of life.^{46,47}

Patients are also clear that they want pharmacists on their health care teams. A 2018 survey of Abacus Data showed that 85% of Canadians (n=4023) felt that allowing pharmacists to be more involved in their health care would reduce health costs and improve their health outcomes.⁴⁸

3 The Current State of the Profession of Pharmacy in BC - Foundations for Practice Change

Over the past 20 years, the profession of pharmacy in BC and across Canada has been in a continuous state of change as it moves into more patient care-focused roles.

As of January 2019, a total of 6,260 pharmacists have full registration and are eligible to practice the profession of pharmacy in BC. Of these, 4,002 (63.9%) are practicing in community pharmacy settings and 994 (15.9%) practice in hospital or health authority (HA) settings. The remaining 1,264 (20.2%) practice in a variety of other settings such as academia, administration and the pharmaceutical industry.⁴⁹

In comparison, a total of 12,960 physicians (including 6,616 general practitioners and 6,344 specialists), 38,408 registered nurses and 498 nurse practitioners are registered as professionally active in BC.^{50,51} Pharmacists are a scarce and valuable health human resource, with one pharmacist for every two physicians and six nurses in the province.

Over the past 20 years, the profession of pharmacy in BC and across Canada has been in a continuous state of change as it moves into more patient care-focused roles.⁵² These changes are multifactorial and include: 1) regulation and scope; 2) education and training; and 3) how and where pharmacists practice.

3.1 REGULATION AND SCOPE

The BC Health Professions Act, *Pharmacists Regulation*, defines pharmacy as the health profession responsible for: 1) identifying and assessing drug-related and device-related problems then acting to prevent or resolve those problems; 2) promoting health and preventing diseases, disorders and conditions through drug therapy; 3) monitoring drug therapy and advising on therapeutic values, contents and hazards of drugs and devices; and 4) compounding and dispensing drugs and devices.⁵³

As part of their role in patient care, pharmacists in BC have the authority to adapt/renew prescriptions, provide emergency prescriptions, prescribe Schedule II drugs, and administer immunizations by injection.⁵³ Pharmacists are also responsible for providing information, education and advice about drug therapy to patients and other health care professionals.

The *Bylaws* to the BC Health Professions Act define the role of the regulated pharmacy technician (RPT) as being to prepare, process and compound prescriptions, do the final check, and take responsibility for the accuracy, authenticity and completeness of a prescription in community and hospital pharmacy settings.^{54,55} The RPT enables pharmacists to focus their time and expertise more on clinical patient care roles, and less on technical roles.

3.2 EDUCATION AND TRAINING

All registered pharmacists in BC have an entry-to-practice pharmacy degree and some have additional post-graduate training.^{56,57} Educational outcomes for the entry-to-practice pharmacy degree are aligned across Canada with the overall goal of graduating pharmacists who are medication therapy experts and fill clinical patient care roles in the health care system.⁵⁸

The Faculty of Pharmaceutical Sciences at UBC is the only post-secondary institution in the province for pharmacy education. Most pharmacists in BC receive some or all of their professional education here.⁵⁹ The current UBC pharmacy curriculum was implemented in 2015, and all graduates from 2019 onward receive the Entry-to-Practice

Doctor of Pharmacy (PharmD) degree.⁶⁰ Length of study requirements for this degree include a minimum of two pre-requisite years and then four years in the pharmacy program.

Pharmacists are required to maintain a commitment to lifelong learning and continued professional development, including the completion of a minimum number of continuing education credits annually as a requirement of licensure.⁶¹

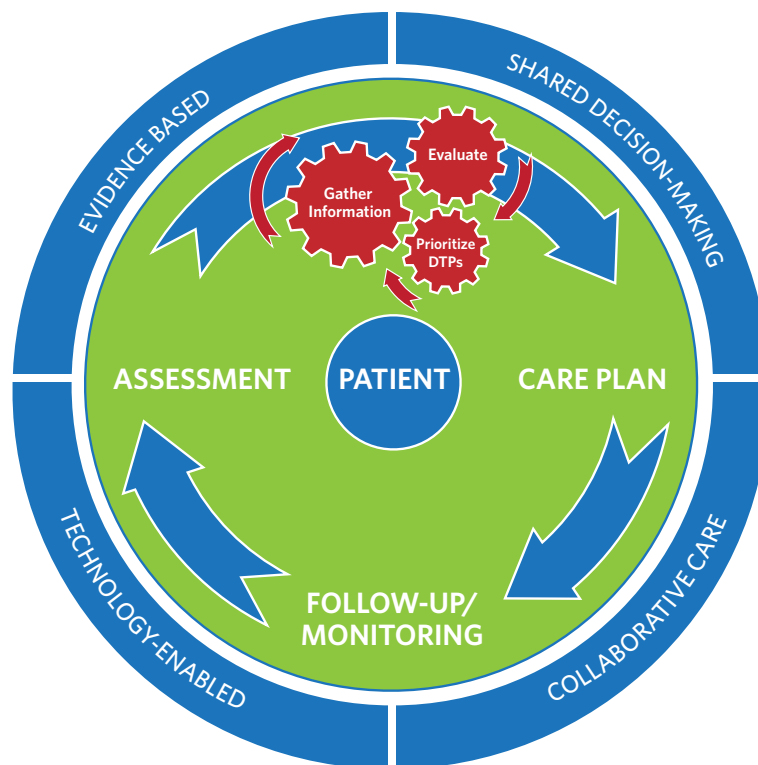
3.3 PHARMACISTS AND PATIENT CARE PRACTICE

As outlined by the National Association of Pharmacy Regulatory Authorities (NAPRA), the goal for all Canadian pharmacists is to provide Comprehensive Medication Management (CMM).⁶² CMM (see **Figure 3**) requires pharmacists to routinely assess a patient's medications (prescription, non-prescription, supplements and traditional or alternative medicines) to determine if each medication is necessary, effective, safe, and realistic for the patient to take.⁶³ It also involves an assessment of the safety of all drugs taken together, with the aim to minimize adverse effects and complexity wherever possible.

Patients benefit when their pharmacist establishes care plans and provides follow-up services, particularly those patients with chronic conditions, co-morbidities and complex medication regimens. This is because pharmacists are the only health care professionals trained to focus on the identification, management, and monitoring of DTPs.⁶⁴

The challenge is that most pharmacists, particularly in community pharmacy settings, have had limited success making CMM their usual standard of care for meeting patient needs.⁶⁵ Some pharmacists provide components of CMM while others may provide CMM in support of one part of a patient's care. Reasons for this relate to where pharmacists currently practice (see Section 3.4), limited access to information, and other practice-related challenges (see Section 3.5).

Figure 3 - Schematic Representation of Comprehensive Medication Management



DTPs = Drug Therapy Problems

3.4 WHERE PHARMACISTS PRACTICE

Pharmacists providing direct patient care generally practice in one or more of five health care settings: 1) community pharmacy; 2) team-based primary health care practice; 3) out-patient, ambulatory or specialty clinic; 4) in-patient acute care hospital; and 5) long-term residential or continuing care facility.

3.4.1 Community Pharmacy

Two out of every three pharmacists in BC currently practice in one or more of BC's 1,358 licensed community pharmacies.⁴⁹ Most community pharmacists are paid a salary or hourly wage by the pharmacy, which generates revenue from fees for dispensing and clinical services, and the sale of other services and products.⁶⁶ Pharmacies are located in most BC communities, open extended hours (evenings, weekends and holidays), and do not generally require a patient to book an appointment to speak to a pharmacist. As a result, pharmacists in community pharmacy settings are generally considered the most accessible health care provider.⁶⁷

Full scope pharmacist practice includes opportunities for remuneration of pharmacist services in the community pharmacy setting. Pharmacies can submit a claim to PharmaCare for payment when a pharmacist provides services such as adapting a prescription, administering a publicly funded vaccine, or completing a medication review for an eligible BC resident.⁶⁸ Pharmacists can only submit service claims to PharmaCare through a licensed community pharmacy. Pharmacies also occasionally charge fees to private third-party payers or directly to patients.⁶⁹

Specific medication review services payable by BC PharmaCare align with components of the CMM model: a Medication Review – Standard (MR-S) is part of the Assessment step in CMM; a Medication Review – Pharmacist Consultation (MR-PC) represents a CMM Care Plan for one or more DTP; and a Medication Review – Follow Up (MR-F) represents the CMM Monitoring/ Follow-up step.⁷⁰ Despite the availability of payment models for CMM, 84% of all medication review claims paid by BC PharmaCare in 2018/19 were for a MR-S and only 16% were for the more in-depth MR-PC or MR-F.⁷¹

Pharmacists working in community pharmacies are increasingly challenged to balance their clinical responsibilities with the technical and business requirements of their employer.⁷²

3.4.2 Team-based Primary Health Care Practice

A small number of BC pharmacists currently provide CMM services to patients alongside family physicians in primary health care practices. These pharmacists either volunteer their time, arrange existing medical and pharmacy practice service fees to cover some costs, are funded as part of a local project, or as part of a health authority initiative to address a specific unmet need in the community.⁷³ Lack of technical, administrative and systems support can create barriers to optimal patient care in these settings.³²

3.4.3 Out-Patient, Ambulatory or Specialty Clinic

Pharmacists are increasingly being integrated in out-patient, urgent care, ambulatory care and specialty clinics (e.g., hepatitis, heart failure, frail seniors) as salaried employees within a health authority. These pharmacists provide CMM services to complex patients, usually with a focus on a specific health need.⁷³ They also have unique clinical roles as part of the care team involving communication with the community pharmacist, initiation of some prescription medications through delegated authority, participation in team-based care conferences and participation in drug therapy education of the health care team.

3.4.4 In-Patient Acute Care Hospital

The majority of pharmacists employed by a health authority are salaried and work in hospitals. They provide CMM services for acute management of a specific health problem as part of a clinical team while a patient is in hospital. These pharmacists have expertise in specialty acute care areas such as cardiology, psychiatry and critical care.⁷⁴ They also have roles in medication reconciliation, formulary management, initiation of some prescription orders, participation in team-based patient consultations, preparation of discharge prescriptions, discharge patient counseling, antibiotic/opioid stewardship, accreditation, drug supply management and drug therapy education of the health care team.⁷⁵

3.4.5 Long-Term Residential or Continuing Care

Pharmacist services to long-term residential or continuing care facilities are either contracted to a community pharmacy or provided by pharmacists employed by a health authority. When provided by community pharmacies, most services are reimbursed by BC PharmaCare. Some non-insured services are funded by private payers, the patient, or the patient's family. Pharmacists usually monitor and assess prescriptions, provide drug information and advice to the health care team, and participate in semi-annual patient case conferences on-site in the care facility.⁷⁶

3.5 PHARMACIST PRACTICE CHALLENGES

Pharmacists face a number of challenges in these rapidly changing times including:

- Change fatigue and the need for effective change management
- Need for role clarity within the profession and between professions
- Need for relationship-building, common understanding and common language to enable the development and functioning of effective teams
- Need for timely access to useful information and information sharing
- Need for new leadership approaches
- Shifts in economic models and remuneration structures
- Need for effective technical, administrative workflow, workspace and clinical support infrastructure⁷⁷

Pharmacists have traditionally had different roles in different practice settings and sometimes even within the same practice setting, which has created inconsistencies in expectations from patients and other health care team members. Pharmacists in community pharmacies practice primarily in a business context that is under ever increasing financial pressure from public drug plan policies and payment models. According to a recent survey by Penm et al, 85% of pharmacists face challenges with the workplace and community pharmacy culture when looking to advance their professional role.⁷² Pharmacists struggle with competing patient care and business interests, insufficient time and resources to implement CMM, and lack of business models that support patient care roles compared to traditional technical roles.⁷⁸ As a result, some pharmacists have difficulty undertaking any activities beyond those related to dispensing.^{79,80,81,82}

Similarly, pharmacists in hospital settings typically provide intense care to inpatients for short periods of time and can also have a limited opportunity for CMM, including follow-up care before a patient is discharged or moved to another ward in the hospital.⁸³ Drug therapy changes made in hospitals may be difficult for patients and care teams to sustain once the patient's care resumes in the primary and community care setting.⁸⁴

Another challenge is that pharmacists generally are inconsistent in communicating relevant clinical information with each other, have inadequate systems for storing and retrieving clinical information, and have limited options for the timely sharing of clinical information.⁸⁵ When pharmacists want to collaborate, they are challenged to figure out how to share the right information in a format that health professional colleagues can easily use.⁸⁶

Even when they have time, some pharmacists report having difficulty identifying issues and optimizing drug therapy when reviewing a patient and medication list.⁸⁷ Common problems with drug doses, schedules, interactions and adverse effects are relatively straightforward. However, some pharmacists may not have the time, skills or experience to ask the right questions and dig deeper to fully explore and identify other important issues.

The challenges faced by pharmacists working in team-based primary health care in other jurisdictions have been well documented.^{32,88} They include: 1) lack of clarity on the needs and priorities of the care team and patients; 2) lack of understanding of the pharmacist role leading to underutilization within a team; 3) lack of infrastructure support for the pharmacist; and 4) lack of skills within team members around collaboration and professional relationships.

Most pharmacists want to use their education, training and full scope of practice in their clinical and patient care roles. Despite the challenges, pharmacists continue to believe that clinical practice change is worth the effort as it will result in improved patient health outcomes and increased personal job satisfaction.⁸⁹

4 Pharmacist Readiness In An Evolving Health Care System

Change always brings opportunity, and individual pharmacists can position themselves for future success by focusing on three key areas.

Health and pharmacy stakeholders continue their efforts to shift pharmacists from technical to patient care roles, and pharmacists in all practice settings are being impacted.⁹⁰ Change always brings opportunity, and individual pharmacists can position themselves for future success by focusing on three key areas: 1) maintaining a collaborative mindset; 2) asking patients what they want and need; and 3) optimizing the pharmacist role in current practice settings to meet patient needs.

4.1 MAINTAINING A COLLABORATIVE MINDSET

A collaborative mindset is how pharmacists in BC demonstrate their commitment to patients, society, colleagues and the profession as articulated in the College of Pharmacists of BC Code of Ethics.⁹¹

Key attributes of a collaborative mindset for pharmacists are:^{92,93,94,95}

- Professional identity – As a scarce health care resource, pharmacists have a societal responsibility to focus their time and skills on providing services that optimize drug therapy outcomes for patients.
- Awareness – All members of a patient’s health care team, including the patient and pharmacist, are interconnected, and likely have information about the patient that others need and do not have.⁹⁶ Each action by a pharmacist has the potential to impact the current and future care of a patient so it is critical that team members seek and share information with others.
- Mutual respect – Each health care professional has explicit roles, responsibilities, scope of practice and is accountable for their own competency and licensure.⁹⁷ Pharmacists have a responsibility to respect the regulatory process, the abilities of colleagues, and the intentions of patients. This also applies to how pharmacists treat each other.
- Curiosity - When some aspect of a patient’s care does not make sense, pharmacists are encouraged to resist making assumptions or judgements, and instead ask questions to obtain accurate information and increase understanding of the situation.

Maintaining a collaborative mindset, regardless of pressures and challenges that arise, is the foundation that will enable pharmacists to work optimally within health care teams for the benefit of patients.

4.2 DETERMINING WHAT PATIENTS WANT AND NEED

Patients are experts on their own values, home routines, beliefs and lives. Patients are an integral member of their own care team and the phrase, “nothing about me without me” clearly delivers this message.⁹⁸ A number of practical strategies exist to help pharmacists take the important first step of asking patients what they want and need, and then align CMM services accordingly. Several strategies are described here.

4.2.1 Medication Risk Assessment

The Medication Risk Assessment Questionnaire (MRAQ) is a validated, self-administered questionnaire for patients to disclose information about their medications, their questions and their concerns.⁹⁹ Patients who answer yes to three or more questions are at an increased risk of experiencing DTPs and may benefit from a medication review or CMM. The MRAQ tool can be used in any patient care setting where pharmacists practice, including a clinic or community pharmacy.¹⁰⁰ The questions included in the modified MRAQ tool used at the UBC Pharmacists Clinic are summarized in **Figure 4**.

Figure 4. Questions in the Medication Risk Assessment Questionnaire (MRAQ)

	NO	YES
Do you take 5 or more different medications? <i>(including prescription, non-prescription, vitamins, and herbal therapies)</i>	<input type="checkbox"/>	<input type="checkbox"/>
Do you take 12 or more pills each day? <i>(including prescription, non-prescription, vitamins, and herbal therapies)</i>	<input type="checkbox"/>	<input type="checkbox"/>
Do you take any medications for:		
Nerves, stress, anxiety, or depression	<input type="checkbox"/>	<input type="checkbox"/>
Blood pressure or heart disease	<input type="checkbox"/>	<input type="checkbox"/>
Arthritis or pain	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>
Lung Disease	<input type="checkbox"/>	<input type="checkbox"/>
Does more than 1 physician or nurse practitioner prescribe medications for you on a regular basis?	<input type="checkbox"/>	<input type="checkbox"/>
Are you taking medications for 3 or more medical conditions?	<input type="checkbox"/>	<input type="checkbox"/>
Do you get your prescriptions filled at more than 1 pharmacy ?	<input type="checkbox"/>	<input type="checkbox"/>
Have your medications, or the instructions on how to take them, changed 4 or more times in the past year?	<input type="checkbox"/>	<input type="checkbox"/>
Do you have difficulties taking your medications as prescribed?	<input type="checkbox"/>	<input type="checkbox"/>
Do you sometimes worry about the long-term effects of your medications?	<input type="checkbox"/>	<input type="checkbox"/>
Do you have any unanswered questions about your medications?	<input type="checkbox"/>	<input type="checkbox"/>

4.2.2 Shared Decision-Making

A shared decision-making approach is an important way for pharmacists and patients to collaborate and create treatment plans that are best suited for patients and their families.^{101,102} To make informed decisions, patients need their pharmacist to provide them with the best available evidence and guidance so they can consider their treatment options. Patients will consider this information along with other factors when making decisions. These other factors include patient values, personal circumstances, culture, previous medication experiences, other people’s opinions, and patient relationships with health care providers.¹⁰¹

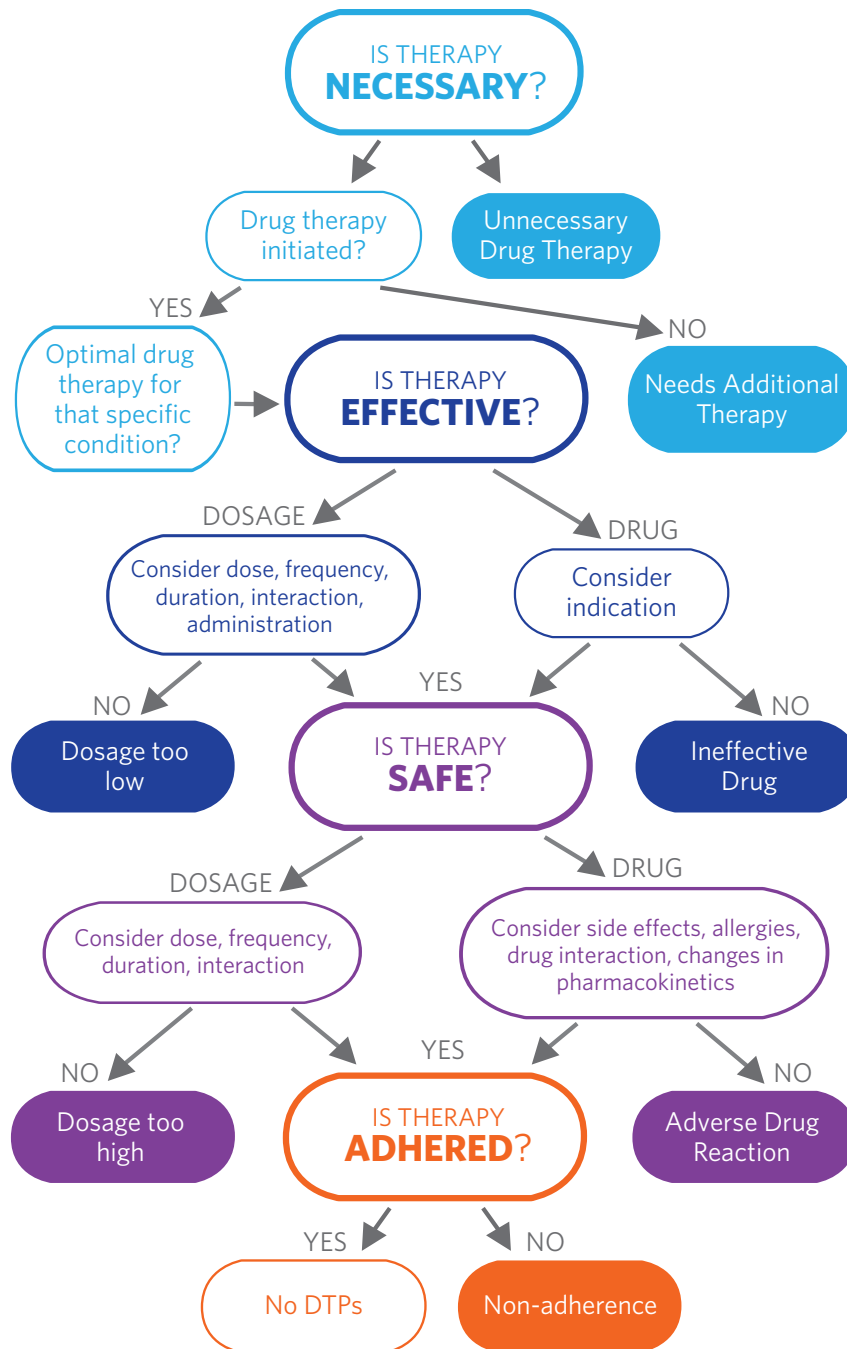
The Connect and Care Model is a Canadian resource that includes a variety of practical tools to help pharmacists provide best-practice engagement of patients in patient-centered care services, particularly in the community pharmacy setting.¹⁰³

4.2.3 Rational Prescribing

Rational prescribing is also a fundamental practice for all pharmacists working in all patient care settings and is described schematically in **Figure 5**.⁶² The four questions all pharmacists are encouraged to consider for every potential, new or repeat prescription are: 1) Is drug therapy necessary, 2) Is drug therapy effective, 3) Is drug therapy safe, and 4) Is the patient able to adhere to drug therapy.

Pharmacists working in community pharmacies are well positioned to reaffirm the rationale for continuing drug therapy by asking these four questions when patients refill their prescriptions.^{104,105,106} This check is particularly important when a patient is taking a medication over the long-term.

Figure 5 - Pharmacist Thought Process to Support Rational Prescribing



4.3 OPTIMIZING CURRENT PATIENT CARE ROLES

Whenever possible, pharmacists need to delegate non-clinical tasks to technicians, assistants and administrative support, and use technology to increase efficiencies. In most care settings, pharmacists already use technology to facilitate record keeping, manage accounting and track administrative functions, however some pharmacists, particularly in the community pharmacy setting, still spend too much time on technical tasks.¹⁰⁷

Pharmacists need to be supported by their managers and employers so they can dedicate their time to providing CMM for the benefit of patients.

4.3.1 Regulated Pharmacy Technicians and Pharmacy Assistants

RPTs, pharmacy assistants (PAs) and other support personnel take on technical and administrative tasks within a variety of pharmacy practice settings. RPTs are graduates of accredited training programs, complete structured practical training and pass regulatory exams prior to having the authority to practice. In BC, RPTs have independent authority and accountability for specific supervisory, sign off and technical duties associated with dispensing prescriptions, while PAs have delegated authority under an RPT or licensed pharmacist.^{54,55,108,109} Other support personnel include clerks, bookkeepers, account managers, inventory managers and front-store managers, who all have roles to support the pharmacist and patient care team.

4.3.2 Administrative Support

Pharmacists can benefit from hiring administrative staff with medical office assistant (MOA) training, or tasking existing support staff to provide MOA support. MOA professionals have skills and expertise in the management of clinical communication, record-keeping, medical terminology, billing and service scheduling.^{110,111} In a pharmacy or clinic setting, the MOA plays a critical role managing the pharmacist's time, optimizing billings, collecting information from the patient, receiving patient information from others, adding information to the patient record, distributing information from the patient record to others, reconciling information, transcribing information, and archiving information.

4.3.3 Patient Panels

A panel (sometimes also referred to as a case load) is a list of patients assigned to a specific care team or individual within a health care practice. Patients within a panel receive care from the same health care professionals over time, which has benefits in terms of relationships, trust, consistency and continuity of care.^{112,113}

Pharmacists working in a community pharmacy practice may have more regular and frequent contact with some patients than other health care professionals. The panel approach can be adopted with a sub-set of these regular patients with complex needs or specific medical conditions. In this model, each pharmacist provides the on-going clinical services (e.g., CMM and medication review) and is the main point of communication (information in and out) for their panel of patients, and is known to these patients as *their* pharmacist. Other pharmacists may provide information, dispensing, self-care and other services within the work schedule, but each pharmacist is always informed and follows up on any clinical interventions involving the patients in their panels. When a patient is attached to their pharmacist within the community pharmacy practice, this pharmacist can be explicitly identified by other health care team members as an integral part of the patient's circle of care, which facilitates stronger relationships, trust and smoother care transitions.^{81, 114}

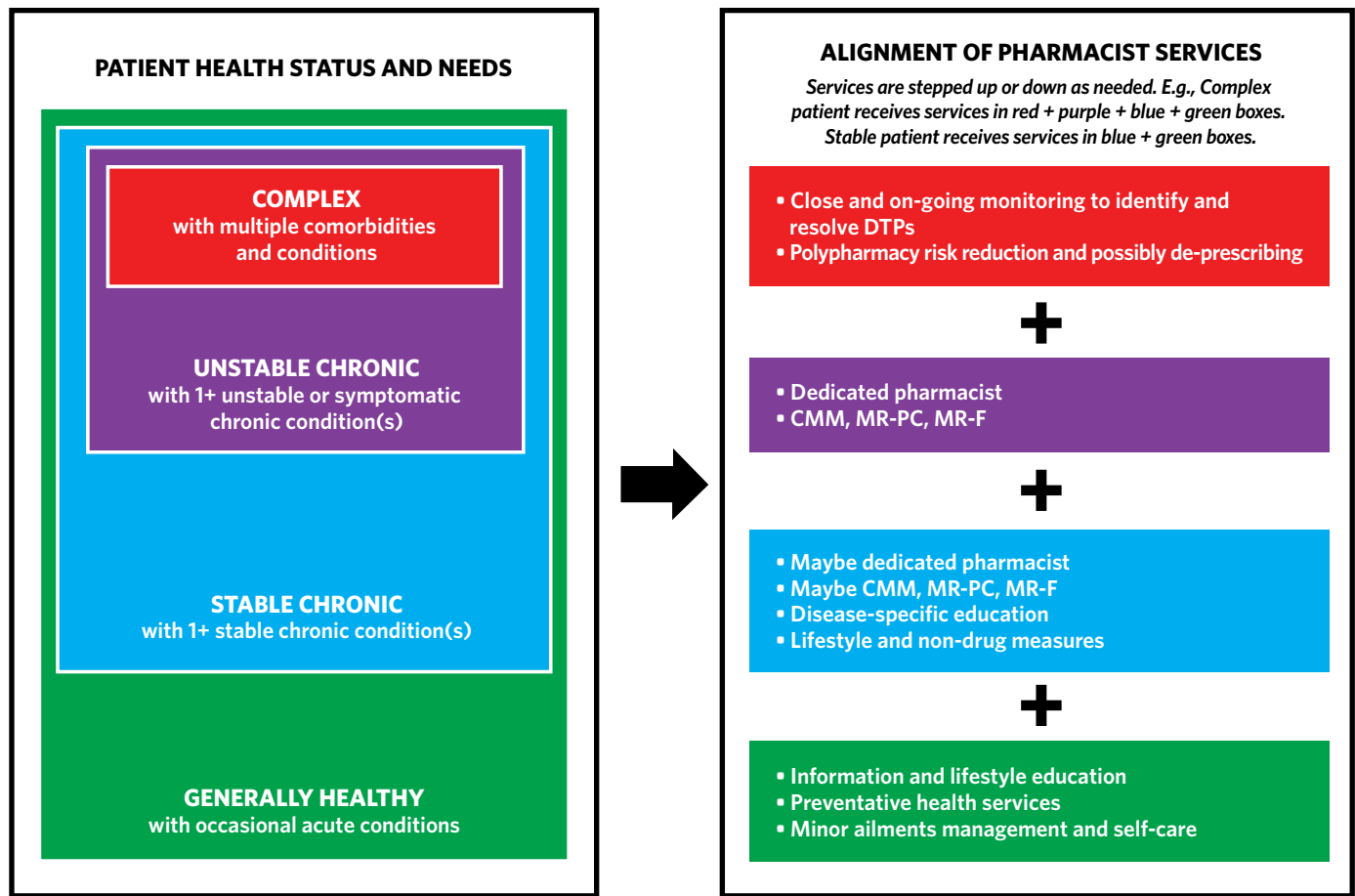
The patient panel concept is not new to pharmacy. Pharmacists working in hospitals or clinics already care for patients on assigned wards or services. Pharmacists with particular training (e.g., diabetes educator) or interest (e.g., women's health) also already have informal panels of patients in their community pharmacy practice.

Successful implementation of patient panels requires administrative support that includes tagging a pharmacist to the records of each patient in their panel, and running reports to help pharmacists track their patients (e.g., who is due for a follow-up). Working with patient panels also requires small adjustments to workflow to ensure timely information-sharing within the community pharmacy team.

4.3.4 Aligning Pharmacist Services with the Needs of Patients

Pharmacists are encouraged to align their services with the needs of patients so they receive the right services at the right time from their pharmacist. **Figure 6** provides a schematic representation of how pharmacists adapt their care approach based on the changing health and drug therapy needs of patients.

Figure 6 – Aligning Pharmacist Services with Patient Health Status and Needs



DTP = Drug Therapy Problem
MR-PC = Medication Review - Pharmacist Consultation

CMM = Comprehensive Medication Management
MR-F = Medication Review - Follow Up

The majority of British Columbians (Figure 6 - green box) are, in general, healthy for most of their lives, with an occasional acute, time-limited illness (e.g., muscle sprain or viral infection). Their main health care needs relate to education, awareness, lifestyle issues and preventative services to avoid future disease. Pharmacist services that meet the needs of the general population include: 1) counselling on drug therapies, self-care, over-the-counter and natural health products; 2) smoking cessation; 3) assessment and administration of vaccinations; 4) education and disease prevention; 5) health awareness and screening; 6) management of occasional acute conditions; and 7) therapeutic decisions about the use of Schedule II (pharmacist access only) medications.

The sub-set of people (Figure 6 - blue box) living with one or more chronic health conditions (e.g., asthma, diabetes, hypertension or hypercholesterolemia) may be more engaged in lifestyle and health programs and desire information about health issues and potential complications. They may be early in their treatment, without symptoms or at their treatment target. The majority of patients with a single chronic disease can be effectively treated to minimize or delay disease progression and the development of complications.⁴ They generally need more services and support, and may benefit from having a pharmacist who provides CMM^b to identify and resolve any actual or potential drug therapy problems. Pharmacists may also provide more focused, disease-specific education about their condition(s).

The next sub-set of people (Figure 6 - purple box) live with one or more unstable chronic health conditions (e.g., post-myocardial infarction, chronic pain or mental health issues) and may be with or without symptoms. These patients tend to have a higher acuity and need more support and services from their health care team, including

^bWhen provided by a pharmacist in a community pharmacy setting, CMM may result in submission of a MR-PC or MR-F service claim to PharmaCare.

pharmacists. They are at a higher risk of drug therapy problems and adverse drug events due to their increased drug therapy load and co-morbidities. They should have a usual pharmacist to help them in their community pharmacy and receive varying degrees of CMM from all pharmacists across the care continuum.¹⁰¹

The most medically complex British Columbians (Figure 6 - red box) account for about 12% of the BC population. They include high risk, complex elderly and frail patients with multiple co-morbidities and chronic conditions requiring medication therapy.¹⁵ Pharmacists have a prominent role in the care of people with complex needs.¹ Complex patients should have a dedicated pharmacist and receive CMM with regular monitoring and follow-up to ensure medication safety and treatment results. Reducing the number and complexity of medications (referred to as polypharmacy risk reduction and de-prescribing) are two specific roles for pharmacists in the care of complex patients.^{115,116}

Pharmacists in community pharmacy settings generally provide care to patients at all levels of acuity at some point in time. Pharmacists in team-based primary health care may also see patients at all levels of acuity, with a focus on longitudinal care of patients with chronic conditions and complexity. Pharmacists in out-patient, ambulatory care and specialty clinics may focus on patients with specific chronic conditions and complexity, while pharmacists in acute care hospitals generally care for the most acutely unstable and complex patients for short periods of time. All pharmacists have opportunities to optimize the current level of care for patients across the care continuum.

4.3.5 Connecting and Communicating within the Care Team

Collaboration and communication between pharmacists and amongst other members of the care team are foundational requirements of patient-centered care.^{92,93,94,95}

Pharmacists need processes for organizing, sharing and using information within the care team. This includes identifying and having a record of the names, roles and contact information for the people within a patient's circle of care, and then ensuring that information is consistently shared and used within the care team.¹¹⁷ Although in-person or telephone communication are the most direct, they are not always possible in practice.

Integrating other communication tools such as fax, e-fax, secure e-mail, file transfer sites and electronic medical record integrators can facilitate sharing of information within a patient's circle of care.¹¹⁸ Work is underway to improve connectivity between electronic record-keeping systems (pharmacy software systems, electronic medical records, hospital e-charts) so electronic sharing of information can occur more easily.

In the interim, pharmacists can incorporate communication best-practices in their current workflow so they become accustomed to sharing and using patient information effectively:

- **Timeliness** - Information needs to be shared in a timely manner so other team members and the patient have the pharmacist insights and recommendations in hand at the time of patient contact. Pharmacists can ask patients when they have their next health appointments and then use this as a timeline to ensure information is shared prior to these encounters.
- **Style of Language** - Health team members work with information presented using clinical language, while patients may prefer receiving information in lay terms. Pharmacists need to be able to switch between clinical and lay language easily depending on their audience, and avoid pharmacy acronyms or jargon.
- **Formatting** - Most people will not read more than a few lines of information so pharmacists need to become comfortable presenting information in a succinct way that is most useful to the reader.
- **Content** - Routine information pharmacists communicate about their CMM findings and recommendations to the care team include: 1) the list of health team members receiving the information; 2) pharmacist contact information; 3) relevant patient demographic and clinical information; 4) a summary of current and relevant past medications; 5) clinical impressions and findings (drug therapy problems and prioritization); 6) specific care plan recommendations that are easily to act on; 7) clear rationale; and 7) practical follow-up plans.

5 New Opportunities for BC Pharmacists

The Faculty of Pharmaceutical Sciences at UBC has made a long-term commitment to the profession as a catalyst for change in pharmacy practice and the pharmaceutical sciences.

The June 5, 2018 announcement of new funding for the Pharmacists in PCN program represents the latest investment in pharmacists taking on more clinical roles in the care of complex patients and team-based care in BC.² This announcement includes an expanded commitment from the Faculty to provide training and practice supports to BC pharmacists in all patient care settings. It also includes comprehensive data collection, evaluation and reporting of results to inform how the program evolves over time.

5.1 CATALYST FOR PHARMACIST PRACTICE CHANGE

The Faculty of Pharmaceutical Sciences at UBC has made a long-term commitment to the profession as a catalyst for change in pharmacy practice and the pharmaceutical sciences.¹¹⁹ This commitment includes initiatives across the academic, research and practice innovation portfolios.

In 2013, the Faculty established the Pharmacists Clinic (the Clinic) to: 1) demonstrate the contributions pharmacists can make to patient care in a real-life patient care setting, 2) provide skill development opportunities for student and pharmacist learners, and 3) be a living lab that supports pharmacists in all settings in practicing to their full scope for the benefit of patients.¹²⁰ The Clinic developed and prototyped the service model being used to place the initial cohort of PCCPs in family medical practices to model team-based primary care.

5.2 PHARMACISTS IN PCN PROGRAM

The Pharmacists in PCN program is part of a large and complex process within the BC health care system to enhance the way team-based primary care is delivered across the province. Work is on-going with UBC, the Ministry of Health and the provincial Health Authorities to prepare for implementation and more communication about this program.

The high-level objectives for the first three years of the program are:

- Increased pharmacist input in drug-therapy decision-making for complex patients
- Reduced number and severity of drug-related problems in patients receiving care from the pharmacist
- Improved adherence to necessary medications by patients receiving on-going care from a pharmacist
- Reduced use of unnecessary or potentially harmful medications by patients receiving on-going care from a pharmacist (including polypharmacy risk reduction and de-prescribing)
- Increased patient, family and caregiver satisfaction for patients receiving on-going care from a pharmacist
- Reduced number of physician, emergency room, and hospital visits by patients receiving on-going care from a pharmacist
- Reduced unnecessary PharmaCare and Medical Services Plan costs for patients receiving on-going care from a pharmacist
- Increased information sharing and collaboration between pharmacists and other members of the patient care team
- Increased information sharing and collaboration between pharmacists across the care continuum (including community pharmacists and health authority pharmacists)
- Reduced family physician time required for drug-therapy decision-making for complex patients
- Increased pharmacist and family physician job satisfaction

Operational objectives for the first three years are:

- Identify and prepare 50 licensed BC pharmacists to take on the role of PCCP and provide CMM to complex patients
- Expand existing systems and workflows for successful integration of these pharmacists in family medical practices and care teams across the province
- Provide training resources and support to increase pharmacist collaboration across the care continuum
- Collect quantitative and qualitative data to evaluate the structure and function of this practice model, and to evaluate the impact of this practice model on patient outcomes and inform decisions about future expansion

5.3 PHARMACIST TRAINING AND PRACTICE SUPPORT

Almost 20% of pharmacists currently practicing in BC are practice educators and clinical instructors in UBC undergraduate pharmacy programs.¹²¹ These pharmacists have on-going access to training and resources from the Faculty at UBC. The Faculty also shares, at no cost, the pharmacy practice resources developed and used at the Clinic with any pharmacist providing care to patients.¹²² These resources include service models, intake forms, documentation templates, communication templates and practice strategies developed through direct patient care practice. Pharmacists are welcome and encouraged to explore these open-source resources.^b

An innovative on-line, open access, interactive, self-directed UBC program called IPC On The Run is a training initiative for health care professionals, including pharmacists, to develop competencies necessary for interprofessional collaborative practice.¹²³ Each of the six modules focuses on one of the domains identified in the National Interprofessional Competency Framework: 1) interprofessional communication; 2) patient-centered care; 3) role clarification; 4) team functioning; 5) conflict management; and 6) collaborative leadership. All students being trained in the health disciplines at UBC receive interprofessional education on these domains, and pharmacists in practice are encouraged to develop skills in these areas as well.^c

The Clinic team is developing a clinical training program for for PCCPs. These materials aim not only to impart practical, process-based information and a systematic approach, but to also help cultivate the pharmacist's clinical mindset. Although initially being developed for PCCPs, these materials have will have broad applicability and use by pharmacists across the patient care continuum.

5.4 INTRA-PROFESSIONAL PHARMACIST COLLABORATION

By adding pharmacists to team-based primary care, the expectation is that pharmacist involvement will be maximized across patient care settings.⁹⁶ Those pharmacists caring for patients in an acute care in-patient hospital or out-patient ambulatory care clinic setting will have a counterpart working in the primary care clinic or a community pharmacy who can receive the transfer of care plans, follow-up notes and prescriptions for patients in their care. Similarly, PCCPs will need to share care plans, monitoring parameters and follow-up plans with the pharmacist in the patient's chosen community pharmacy. The PCCP is a direct connection with other pharmacists to ensure information is shared and patients receive integrated pharmacy care in the setting that best meets their current needs, whether it is a community pharmacy, primary care clinic, ambulatory care clinic, or acute care hospital.

5.5 EVALUATION FRAMEWORK

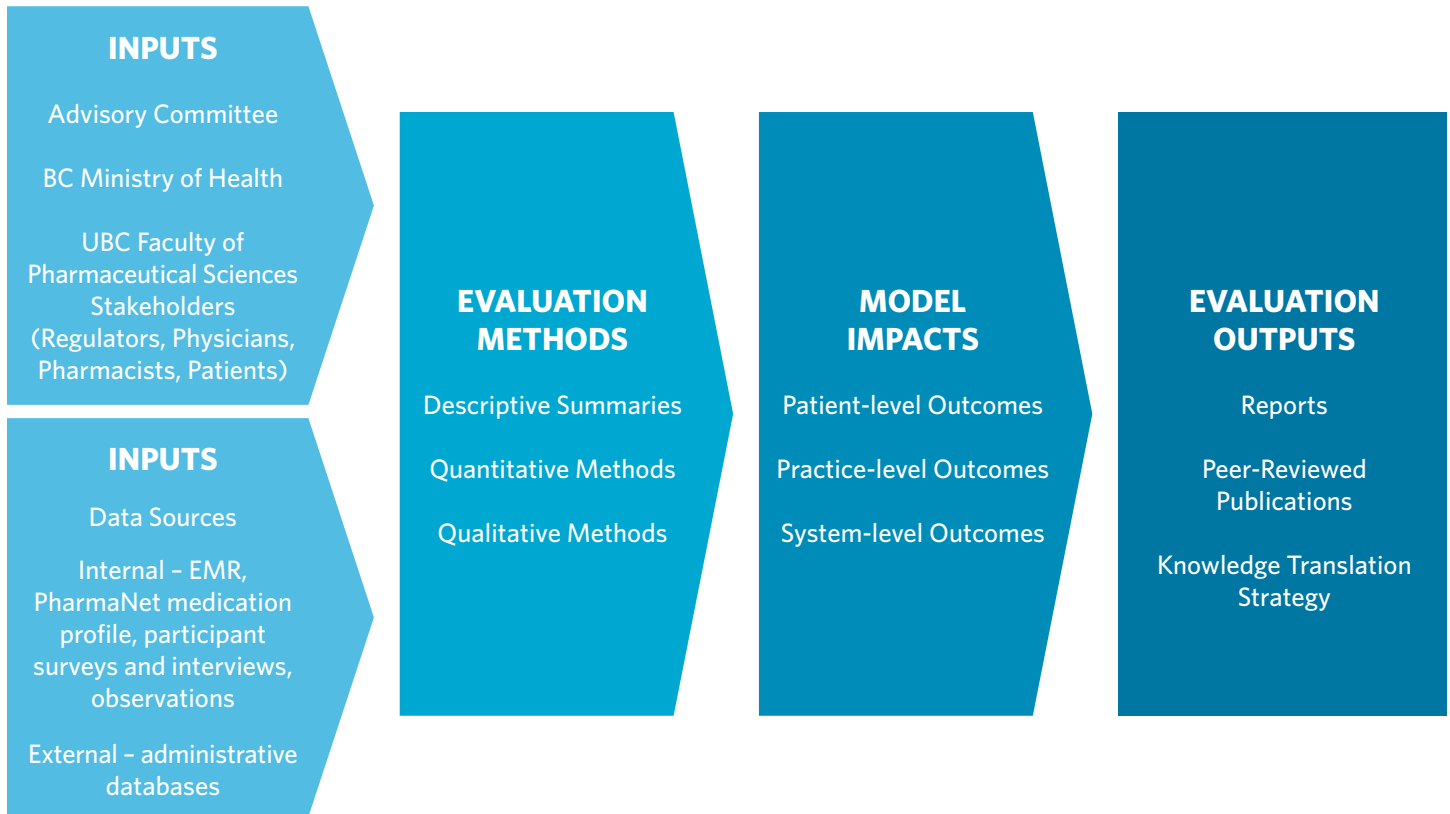
A robust evaluation framework has also been developed to focus on two key areas: 1) the structure and function of the Pharmacists in PCN program (at the patient, practice and system levels) and 2) the impact of the practice model on patient outcomes.

^cAccessible at <https://pharmsci.ubc.ca/pharmacists-clinic/practice-resources/pharmacist-resources>

^dAvailable at <http://www.ipcontherun.ca/>

Much has been learned from prototype work done at the Clinic over the past six years and these learnings have been included in the evaluation framework. Specific additional areas of study will include strategies to effectively integrate a pharmacist (or other health care provider) into any team-based care setting, and how to optimize the time and contributions of health care professionals working in teams. The evaluation framework involves multiple inputs including internal data (collected within the project), external data (administrative data sets), and stakeholder advice to inform evaluation methods, which thereby provide measures of model impacts and evaluation outputs as outlined in **Figure 7**.

Figure 7 - Framework to Evaluate Pharmacist Impacts in Team-based Primary Care



5.6 PHARMACIST SUPPORT

Since the Ministry announcement, pharmacists have been signaling significant interest in expanding their patient care practices to work in team-based primary care.¹²⁴ With insights from the successes and challenges of programs in other jurisdictions, several additional support elements have been integrated for PCCPs in the program. A communications manager is being hired to ensure relevant information about the program is clearly communicated to patients, pharmacists, health care professionals, health system stakeholders and the public. A team of site coordinators and administrative support people will also be working behind the scenes to enable smooth integration of PCCPs in care teams, optimizing the use of PCCP time in patient care roles and facilitating connections with other pharmacists across the patient care continuum.

6 Summary

Primary care reform has created an environment ripe for pharmacists to make the turn and focus the majority of their time and efforts on patient care opportunities available to them.

This White Paper provides a check-point for pharmacists to consolidate their understanding and start positioning themselves for the future. As work continues behind the scenes on the Pharmacists in PCN program, more information will be made available to pharmacists via the Ministry, local Health Authorities and the Faculty.

The pharmacist profession in BC is at a turning point. Years of preparation include evolving scope of practice, training and skill development, new practice tools and resources, new revenue models, and increasing access to technicians and technology for traditional tasks. At the same time, years of increasing pressure on traditional retail business models have strained practicing pharmacists and frustrated a society that demands pharmacists do more to care for their health.

Primary care reform has created an environment ripe for pharmacists to make the turn and focus the majority of their time and efforts on patient care opportunities available to them, for the benefit of patients, the health care system, and society as a whole.

7 List of Acronyms

BC - British Columbia

The Clinic - UBC Pharmacists Clinic

CMM - Comprehensive Medication Management (sometimes referred to as Medication Therapy Management or MTM in the United States of America)

CSC - Collaborative Services Committee

DTPs - Drug Therapy Problems

EMR - Electronic Medical Record

The Faculty - The Faculty of Pharmaceutical Sciences, University of British Columbia

HA - Health Authority

IPC - Interprofessional Collaboration

MOA - Medical Office Assistant

MRAQ - Medication Risk Assessment Questionnaire

MR-F - Medication Review Follow Up (PharmaCare billing code)

MR-PC - Medication Review Pharmacist Consultation (PharmaCare billing code)

MR-S - Medication Review Standard (PharmaCare billing code)

NAPRA - National Association of Pharmacy Regulatory Authorities

PA - Pharmacy Assistant

PCCP - Primary Care Clinical Pharmacist

PharmD - Doctor of Pharmacy professional degree

PMH - Patient Medical Home

RPT - Regulated Pharmacy Technician

UBC - The University of British Columbia

8 Glossary of Terms

This glossary provides definitions for terms used in this White Paper. This is not intended to be a definitive list of terminology for general use as multiple definitions can exist for terms in different contexts.

ADAPTING A PRESCRIPTION – The process of altering the dose, dosage form, regimen, or route of administration, renewal or therapeutic substitution of the original prescription to address patient-specific needs and circumstances, as a part of BC pharmacists’ scope of practice.

ADVERSE DRUG EVENT – An unintended and harmful event resulting from medication intervention such as medication error, adverse drug reaction, allergic reaction, or unintentional overdose.

CARE PLAN – The second step in the CMM process. A detailed schedule outlining the patient and pharmacist activities and responsibilities (including implementation, evaluation and follow-up), designed to achieve goals of therapy and resolve or prevent one or more drug therapy problem(s).

CLINICAL PHARMACIST – A licensed full pharmacist in good standing with the College of Pharmacists of British Columbia whose practice is focused on providing CMM services to optimize drug therapy outcomes for patients.

COLLEGE OF PHARMACISTS OF BRITISH COLUMBIA – The body with legislative authority and responsibility to protect public health by licensing and regulating pharmacists and pharmacy technicians and the pharmacies where they practice.

COMPREHENSIVE MEDICATION MANAGEMENT (CMM) – The standard of pharmacist care where all of the patient’s medications (prescription, non-prescription, supplements and traditional or alternative medicines) are assessed to determine that each is necessary for the patient, effective for the medical condition, safe given the co-morbidities and other medications being taken, and able to be taken by the patient as intended. CMM includes three components: patient assessment, care plan, and monitoring/follow-up. Sometimes referred to as Medication Therapy Management or MTM.

DEPRESCRIBING – The planned supervised process of dose reduction or stopping of medications that may no longer be of benefit or may be causing harm to a patient. It is part of good prescribing practices.

DIVISION OF FAMILY PRACTICE – Affiliations of family physicians with common health care goals and/or in the same geographic area of BC.

DRUG THERAPY PROBLEM (DTP) – An actual or potential undesirable event experienced by a patient that involves, or is suspected to involve, drug therapy and that interferes with achieving the desired goals of therapy.

FOLLOW-UP/MONITORING – The third step in the CMM process. Patient encounters at planned intervals to determine the outcome of drug therapy and to evaluate progress of the patient toward achieving goals of therapy.

MEDICAL OFFICE ASSISTANT (MOA) – An administrative professional trained to support the function and operation of a medical office or other health care environment.

MEDICATION RISK ASSESSMENT QUESTIONNAIRE (MRAQ) – A validated tool to identify patient risk based on known factors related to drug therapy.

MEDICATION RECONCILIATION – A step within the patient assessment step of CMM, where medication records are compared and updated to prevent medication errors as patients move between care settings.

MEDICATION REVIEW – A patient care service that involves gathering medication information from multiple sources, creating a current accurate medication list, and reviewing the list with the patients to improve their understanding of their medications.

MEDICATION REVIEW – STANDARD (MR-S) – Part of the patient assessment step in CMM and a term used by BC PharmaCare for a type of service claim that can be submitted by community pharmacies for payment after a pharmacist has completed specific required activities as described in PharmaCare policy.

MEDICATION REVIEW – PHARMACIST CONSULTATION (MR-PC) – Represents a CMM Care Plan for one or more DTPs, and a term used by BC PharmaCare for a type of service claim that can be submitted by community pharmacies for payment after a pharmacist has completed specific required activities as described in PharmaCare policy.

MEDICATION REVIEW – FOLLOW UP (MR-F) – Represents the CMM monitoring/ follow-up step, and a term used by BC PharmaCare for a type of service claim that can be submitted by community pharmacies for payment after a pharmacist has completed specific required activities as described in PharmaCare policy.

PATIENT ASSESSMENT – The first step in CMM that involves a systematic review and appraisal of the patient's medication, gathering information, learning about the patient's medication experiences, creating an accurate list of current medications, and identifying and prioritizing drug therapy problems.

PHARMACY ASSISTANT (PA) –

- In a community pharmacy, a person who can undertake technical functions related to the operation of a community pharmacy if a registrant of the College of Pharmacists of British Columbia provides direct supervision and implements procedures, checks and controls to ensure the accurate and safe delivery of pharmacy services.
- In a hospital pharmacy, a person who can perform specific technical functions in a hospital pharmacy or hospital pharmacy satellite after the pharmacy's manager has established written procedures for performing the functions.

POLYPHARMACY – The concurrent use of multiple medications by a patient.

POLYPHARMACY RISK REDUCTION – The process of reducing the risk of drug therapy problems in patients taking multiple medications through deprescribing, particularly for categories of drugs known to have increased incidence of adverse drug events.

PATIENT MEDICAL HOME (PMH) – A front-line medical practice model designed to operate at its full potential with teams of health care professionals providing longitudinal care for patients.

PRIMARY CARE NETWORKS (PCN) – A service model that connects and integrates patient care within a geographic area, including PMHs, regional services (hospitals, specialized community services programs, home and community care) and the broader health system.

REGULATED PHARMACY TECHNICIAN (RPT) – A person who has successfully completed an accredited program and assumes accountability, liability and regulatory responsibility for their actions related to the operations within a pharmacy, distinguishing them from a pharmacy assistant.

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