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INNOVATION IN PRIMARY CARE:

Integration of Pharmacists Into Interprofessional Teams

APRIL 2019



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INTRODUCTION

Innovative Family Physician-Pharmacist Collaborations for Optimal Patient Care

The College of Family Physicians of Canada (CFPC) is pleased to release the third issue in its [Innovation in Primary Care](#) series. The series aims to foster collaboration, sharing, and learning among family physicians in different provinces and territories.

For this issue the CFPC has partnered with the [Canadian Pharmacists Association](#) (CPhA) to highlight exemplary instances of interaction and engagement involving family physicians and pharmacists across Canada.

Cases from Alberta, British Columbia, Newfoundland and Labrador, and Ontario demonstrate how family physicians and pharmacists can work together and share resources to address challenges such as fragmented care; access to timely and reliable drug information and management; safe prescribing; coordination of community services; and more to provide high-quality patient care and improve patient satisfaction.

The overarching theme of this issue—interprofessional collaboration—is a central tenet of the Patient’s Medical Home (PMH) vision for family practice in Canada. Team-based care and other supporting principles are vital to the organization of family practices and the delivery of effective primary care. More information on the PMH vision can be found at [patientsmedicalhome.ca](#).

The cases presented here highlight some impressive gains achieved through collaboration:

- Integrating a pharmacist into the Sylvan Family Health Centre in Alberta led to an increase in the number of patients served as well as better patient engagement in the self-management of medication regimens due to the clinic’s enhanced capacity for education and assistance
- Integrating pharmacist team members into the St. Albert and Sturgeon Primary Care Network in Alberta led to measurable improvements in patient care and in patient and provider satisfaction; 90 per cent of patients rated integrated pharmacist care in this case as “excellent”
- Placing a co-located pharmacist at the Fraser Northwest Division of Family Practice in British Columbia enhanced patient knowledge of complex medication plans and reduced time and energy demands on the lead family physicians
- Establishing home-based medication assessments in the Abbotsford Division of Family Practice in British Columbia reduced emergency room visits by frail older adults, among other benefits
- Introducing a team-based focus on opioid harm reduction at a community health centre in Newfoundland and Labrador has fostered reductions in the doses of opioids and the number of new opioid prescriptions; a quantitative evaluation is under way to measure the impact of this approach on patients’ opioid and health care use
- Recruiting a pharmacist to a family health team in Ontario allowed for physician-pharmacist collaboration that led to a decrease in inappropriate medication use among older adults with cognitive impairment

Integrating a Pharmacist Into a Patient's Medical Home Clinic to Serve More Patients

What needed improvement?

With an aging population, increasing polypharmacy rates, gaps in care transitions between hospital and home, and the relatively untapped clinical potential of pharmacists in primary care, the physicians of the Sylvan Family Health Centre in Sylvan Lake, Alberta, sought to add a pharmacist to their team to help alleviate these systemic pressures. Their vision was to enhance the prescribing expertise of family physicians and have the pharmacist take on certain clinical duties normally performed by the family physician as part of collaborative, team-based care.

What was done?

The Sylvan Family Health Centre undertook a pilot project of a new blended capitation payment model. The staff saw this model as an opportunity to increase the population they served and expand the multidisciplinary team to accommodate this larger patient panel. When they decided to add a pharmacist to their team, they met to identify where this new staff member would best be able to integrate into their clinic and on what responsibilities and clinical areas they should focus. Initially the team wanted the pharmacist role to focus on conducting medication reviews of patients with complex needs and comorbidities, and to look at the initiation of hypertension medications.

The physician team approached a pharmacist who had been working in the community for 20 years and was well-known to both patients and staff in the clinic. The pharmacist was able to integrate into the team quickly because of the established relationship and helped create the role.

While hypertension was one focus of the pharmacist's role, the collaborative model within the clinic allowed the position to evolve and include new areas of responsibility as everyone became more comfortable. Gradually, over a few months at the clinic, the pharmacist took on additional duties (including pain management/opioid therapy optimization) and worked with the physicians to develop a patient transfer process. The team was also comfortable enough to identify responsibilities that may not have been the best fit for a clinical pharmacist. The critical idea here was that the team needed to be open to reshaping the role of the clinical pharmacist.

What was gained?

Aside from increasing the patient population served, the most important gain has been the ability to provide dedicated time to address polypharmacy in patients and conduct medication reviews. Patients receiving medications are better educated about what they are taking and their role in managing their health and well-being. While a physician may not be able to spend large amounts of time discussing medications and drug interactions with a patient, the pharmacist can schedule these dedicated appointments and take the necessary time for them.

This relationship has benefited the physicians, pharmacist, and patients. Having a pharmacist in the clinic has helped the physicians enhance their knowledge of prescribing and drug interactions and has given them a resource to go to with questions that come up with their patients.

Being part of the clinic has also allowed the pharmacist to expand her comfort zone and use her knowledge in different ways to help patients; her perspective has shifted from a narrow focus on the patient and their medication to a broader view of the diagnosis and how the medication is part of the patient's overall health.

Patients have responded positively to this addition to the team and are now more engaged in managing their medications. Drug-tapering programs have seen increased success and many clients with hypertension have been able to focus on lifestyle interventions and reduce their use of medications thanks to the in-house pharmacist.

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WHAT WAS LEARNED?

The team has learned many lessons from integrating a pharmacist into the clinic:

- Choosing the right person is essential. The pharmacist who was recruited had been working in the community for 20 years before joining the clinic and had established a solid relationship with the physicians and many of the patients. This eased the transition and allowed clinic staff to trust her with responsibilities that fit her comfort level and training.
- Everyone needs to be adaptable. While the other clinic staff and the pharmacist both had ideas about what responsibilities the pharmacist could take on, it was important to be open to changing them as needed. Respect for each other's professions and experience is key.
- Having a pharmacist as part of the team really does help physicians provide better care to their patients. Having pharmacists in-house allows the patient to have direct access to their expertise and reduces potential gaps in communication or patient care.
- This level of change can occur from the ground up. The clinic was able to invest in developing this role because physicians at the Sylvan Family Health Centre have moved to a blended capitation payment model—which is not the norm in Alberta—instead of fee-for-service as part of a provincial pilot of an alternative funding model.

Improvements in Care Resulting From Pharmacist Integration at the St. Albert and Sturgeon Primary Care Network

What needed improvement?

Historically, demands placed on family physicians to do more with fewer resources have generally led to brief patient visits, fragmented care, greater workloads, and challenges in achieving a healthy work/life balance. Keeping up with timely and reliable drug information is one of many tasks physicians in primary care have to include in their busy schedules.

Traditional roles of pharmacists have been centred in hospital-based practices or community-based roles, resulting in a knowledge gap regarding pharmacists' potential roles in family practice.

Pharmacists and family physicians were unaware of the clinical services that could be enhanced through their collaboration. Having the opportunity for pharmacists to co-locate with physicians was seen as a way to facilitate this learning process.

What was done?

Pharmacist integration into Primary Care Networks (PCNs) in Alberta began in 2007 as a pilot project. The St. Albert and Sturgeon PCN (SASPCN) hired its first pharmacist in 2007 and now employs five pharmacists who represent 3.7 full-time equivalent pharmacists. The 2007/08 SASPCN budget allocated funding for this pilot model and its success has led to regular, ongoing funding to add positions and expand the program.

The benefits of having a primary care team pharmacist were demonstrated by positive interprofessional team experiences, expressed patient satisfaction, and improved patient outcomes. Effective communication has been key to fostering this relationship, and collaboration among team members has resulted in high-quality patient care.

SASPCN pharmacists are co-located in physician clinics and offer centralized services such as the Anticoagulation Program and the Geriatric Evaluation and Management (GEM) Program. The pharmacists work to the full scope of practice using additional prescribing authorization to prescribe medications for initial access and ongoing management, thereby increasing efficiency and improving access to care.*

The SASPCN pharmacist program is composed of three care streams: Health Coordination and Collaborative Transitions; Chronic Disease and Complex Health Management; and Medication Expert Knowledge Transfer, as described in Table 1.

*Alberta College of Pharmacy. Additional prescribing authorization web page. 2018. abpharmacy.ca/additional-prescribing-authorization. Accessed 2019 Jan 9.

Table 1. Primary care pharmacist description of three streams of care (SASPCN June 2018)

Stream 1: Care Coordination	Stream 2: Chronic Disease Management	Stream 3: Evidence-Based Reviews and Education
<p>Collaborate with physicians and other health care providers to coordinate the care of mutual patients</p> <p>Provide medication reconciliation as patients transition through the health care system</p> <p>Complete applications and facilitate discussions with private insurers, advise on formulary alternatives, and obtain compassionate supply medications for patients in need</p>	<p>Assist patients with the effective self-management of chronic health conditions by:</p> <ul style="list-style-type: none"> • Establishing patient-centred goals • Performing comprehensive reviews of medical and medication histories to identify drug-related problems • Initiating and managing medications • Developing care plans with monitoring and follow-up parameters • Providing patient education and support 	<p>Provide evidence-based reviews of new medications</p> <p>Provide consultative services for physicians, the GEM geriatrician, and other SASPCN health professionals</p> <p>Provide input on medication-related patient education for SASPCN public education sessions</p> <p>Serve as preceptors of pharmacy students, medical residents, and nursing students to promote future interprofessional teamwork in primary care</p>

What was gained?

Patient care improvements: Improvements included timely access to anticoagulation therapy upon diagnosis; optimized medication therapy through medication reviews, medication management, and education of patients and care team members; enhanced patient self-management through coordinated care (e.g., better system navigation and confidence); and improved patient adherence to medications by providing education, using insurance coverage, and accessing compassionate use programs. Patient outcome data in these areas are being studied at the time of publication, though an anecdotal review supports these conclusions.

Patient satisfaction improvements: The response from patients has been overwhelmingly positive. In the SASPCN patient satisfaction survey for 2017/18, 90 per cent of patients rated their care from the PCN pharmacist as excellent and nearly all patients were very satisfied with the PCN pharmacist. Patients gave high ratings for the interactions they had with the pharmacist, including: the amount of time provided, feeling they were heard, understandable explanations of tests and treatments, and opportunities for involvement in care decisions. All patients surveyed had discussed their main health goals or priorities with their pharmacists.

As one patient stated in the survey: “The time spent with the PCN pharmacist has greatly increased my understanding of how my medication works and of the long-term goals in adjusting my pain medications. My overall health has improved dramatically.”

Physician satisfaction improvements: Family physicians reported that less time was required of them for responding to requests from community pharmacies regarding changes in therapy and prescription clarifications and for assisting with the management of complex medical needs (including anticoagulation initiation and peri-procedural management, chronic pain, and medication reconciliation at care transitions). Physicians often delegate the drug therapy management of osteoporosis, iron-deficiency

anemia, hypothyroidism, and other conditions to the primary care pharmacist. Physicians reported enhanced knowledge of medications based on education they received from the pharmacists.

The 2017/18 SASPCN physician satisfaction survey reported all physicians were confident the Anticoagulation Program is meeting patients' needs, and 95 per cent of physicians were satisfied with the program.

Pharmacist satisfaction: Pharmacists said they felt rewarded by being able to work to the full scope of practice, helping patients achieve their health-related goals, and feeling valued as key team members.

Participants expressed mutual appreciation for the respective roles and responsibilities of physicians and pharmacists.

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SASPCN pharmacist team members (from left): Lisa Tate, Melissa Dechaine, Corey Jefferies, Tara Grimstead, and Andrea Pickett.
Photo courtesy of the St. Albert and Sturgeon Primary Care Network.

WHAT WAS LEARNED?

Collaborative relationships require effort and develop with time. Providers need to view overlapping scopes of practice and teamwork as opportunities to improve their practices. Well-functioning teams focus on maximizing the unique skills of each provider and optimizing each provider's role. Providers need to view communication as an equally important part of their roles and focus on building relationships and trust with each other.

Face-to-face interactions foster good communication. Pharmacists co-located in physician clinics are more likely to be consulted by their physician colleagues compared with pharmacists providing services from a centralized location.

SASPCN pharmacists are valued members of the health care team who work collaboratively with family physicians and other health care providers, including primary care nurses, dietitians, mental health nurses, and social workers. The pharmacists help strengthen and optimize patient-centred care and nurture interdisciplinary collaboration.

The Co-Located Pharmacist Model Prototype: Working together to address drug therapy challenges

What needed improvement?

At least 36 per cent of British Columbians live with one or more chronic conditions, according to a 2005 report, and on average those with high levels of comorbidity use health care services at a notably higher rate.[†] Other reports have shown that Canada in general is seeing an increase in the number of people living with multiple chronic conditions, and it is generally known that the complexity of these patients' conditions often creates challenges for family physicians.[‡]

The CFPC's PMH vision for family practice was designed to be adapted to various settings and needs. The CFPC's British Columbia Chapter is collaborating with the General Practice Services Committee PMH Implementation and Design Team to establish its version of a patient medical home for front-line medical practice that includes team-based care.[§] (The General Practice Services Committee is a partnership between the provincial government and Doctors of BC that works to strengthen full-service family practice and patient care in British Columbia.)

Since 2014 the UBC Pharmacists Clinic in Vancouver and four Divisions of Family Practice—collectives of family physicians from defined geographic regions in British Columbia who collaborate to improve care—have been examining how to integrate pharmacists into medical practices in the province. These pharmacists contribute to the care of patients with complex conditions such as frailty, polypharmacy issues, opioid use issues, and other drug therapy challenges.

The expectation was that adding a co-located pharmacist to a patient medical home practice would:

- Improve patients' health outcomes through timely access to pharmacists who have expertise in optimizing drug therapies
- Relieve pressure on family physicians by having a pharmacist help manage patients with complex conditions
- Reduce strain on the health care system by providing proactive care to patients with complex conditions

[†]Broemeling A, Watson D, Black C. *Chronic conditions and co-morbidity among residents of British Columbia*. Vancouver, BC: Centre for Health Services and Policy Research, University of British Columbia; 2005. Available from: www.researchgate.net/publication/255585868_Chronic_conditions_and_co-morbidity_among_residents_of_British_Columbia. Accessed 2019 Jan 30.

[‡]Nasmith L, Ballem P, Baxter R, Bergman H, Colin-Thomé D, Herbert C, et al. *Transforming care for Canadians with chronic health conditions: Put people first, expect the best, manage for results*. Ottawa, ON: Canadian Academy of Health Sciences; 2010. Available from: www.caahs-acss.ca/wp-content/uploads/2011/09/cdm-final-English.pdf. Accessed 2019 Feb 6.

[§]General Practice Services Committee. *Patient Medical Home in BC*. Vancouver, BC: General Practice Services Committee; 2016. Available from: www.gpsc.bc.ca/sites/default/files/PMH%20graphic%20%2020160920.pdf. Accessed 2019 Jan 10.

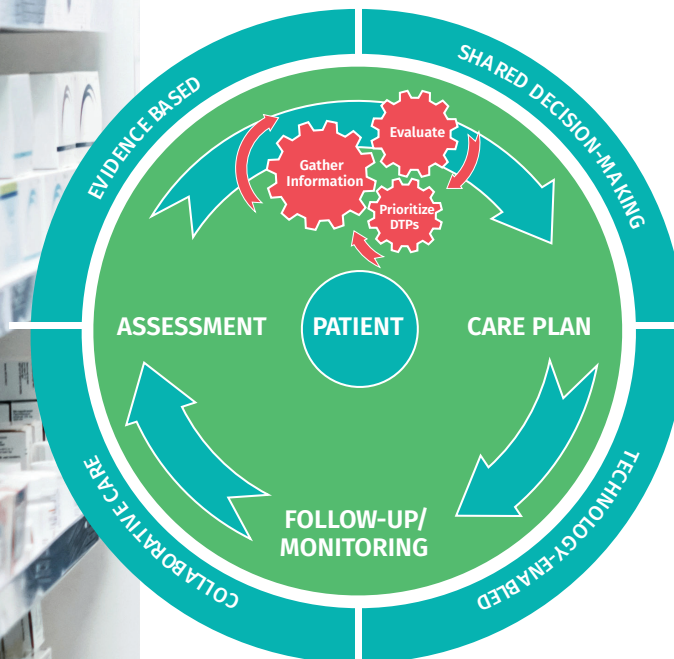
What was done?

In fall 2014 a pharmacist from the UBC Pharmacists Clinic started working twice a month with the Fraser Northwest Division of Family Practice to develop an interdisciplinary model for the care of high-risk patients with complex needs. This model has since been expanded to support more than 65 physicians in their care of more than 3,000 patients with complex needs in sites across the Vancouver, Richmond, Fraser Northwest, and North Shore Divisions of Family Practice.

In this model patients have one-on-one appointments with the co-located pharmacist, who provides comprehensive medication management in collaboration with the rest of the care team.** The comprehensive medication management services (see Figure 1) include a full medication assessment; identification and prioritization of drug therapy problems; a best-possible medication history; evidence-based recommendations; detailed care plans; and follow-up plans. In some practices physicians case conference with the pharmacist and patient to review recommendations and implement care plans.

The streamlined approach and workflow have been well-received by patients. Physicians also indicated a high level of satisfaction with the quality of patient care and saw the added benefit of enhancing their own knowledge through interactions with pharmacists.

Figure 1. The comprehensive medication management patient care process



© UBC Pharmacists Clinic. Reprinted with permission.
Source: Comprehensive Medication Management Service Model. Vancouver, BC: University of British Columbia.

**Pharmacists Clinic. *Comprehensive Medication Management Service Model*. Vancouver, BC: University of British Columbia; 2018. Available from: pharmsci.ubc.ca/sites/pharmsci.ubc.ca/files/webform/Comprehensive%20Medication%20Management%20Service%20Model%202018%2007%2024.pdf. Accessed 2019 Jan 22.

What was gained?

An analysis of 1,872 patient appointments that took place between October 1, 2014, and August 31, 2018, revealed that patients were taking 10 or more medications on average, and drug therapy problems were most often related to unnecessary prescriptions or adverse drug reactions (see Table 2).

Table 2. Medication use and common drug therapy problems among patients with complex needs in three Divisions of Family Practice in British Columbia

			MOST COMMON DRUG THERAPY PROBLEMS
Richmond	662	10.5	<ul style="list-style-type: none"> • Taking drug unnecessarily 20% • Adverse drug reactions 21%
Fraser Northwest	540	10.8	<ul style="list-style-type: none"> • New/specific drug needed 18% • Adverse drug reactions 17% • Dose too high 15% • Taking drug unnecessarily 15%
Vancouver	670	10.0	<ul style="list-style-type: none"> • Taking drug unnecessarily 21% • New/specific drug needed 18%

In a series of exit interviews with seven patients who received care from the pharmacist on the same day in 2017, respondents indicated increased knowledge, confidence, motivation, and engagement in their health care after receiving comprehensive medication management services. Patients also reported greater adherence, satisfaction with their health care team, and satisfaction from less unnecessary medication use. Examples of patient comments from the survey are:

- “I feel like it is a better medication profile for my condition. I feel more informed and more confident in my medications and how to take them.”
- “With the doctor and the pharmacist teaming up in overall care, it’s made my health a partnership and made me feel like a part of that team.”
- “I felt heard, talked about different options, very informative, answered questions thoroughly, applied no pressure whatsoever.”
- “It was very encouraging. They helped me set a direction as far as meds ... went away feeling better than coming in.”

Family physicians received help from pharmacists in managing patients with the most complex needs. Physicians reported reductions in demands on their time, energy expended, and stress, which allowed them to focus on other patients and still have energy left at the end of the workday.

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Based on this pilot work, in June 2018 the British Columbia Ministry of Health announced it would provide \$23 million over three years to fund the development phase of a program to place 50 full-time pharmacists in medical practices around the province as part of significant primary care transformation to help more patients with complex needs.^{††} Foundational planning is under way and the first stages of implementation are expected in 2019. A comprehensive evaluation is included in the plan to measure quantitative, qualitative, and system outcomes.

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WHAT WAS LEARNED?

Critical success factors for the co-located pharmacist model are:

- » Having the leaders in the medical practice support the co-located pharmacist model
- » Having a clinical champion (family physician or nurse practitioner) ready to work with a co-located pharmacist
- » Ensuring adequate space, Wi-Fi Internet access, and (ideally) a printer are available
- » Giving the pharmacist remote access to the medical practice's electronic medical record (EMR)
- » Having the medical practice identify patients suitable for pharmacist services (using strategies that include asking patients for their input and running EMR reports to identify at-risk groups)

Lessons learned from this experience with co-located pharmacists can be applied to the addition of other health professionals to the care team within the patient medical home model being developed in British Columbia.

^{††}Ministry of Health. *Government adds pharmacists into primary and community care* [news release]. Vancouver, BC: Government of British Columbia; 2018. Available from: news.gov.bc.ca/releases/2018HLTH0055-001118. Accessed 2019 Jan 11.

Developing Professional Connections to Optimize Home-Based Medication Assessments for Frail Older Adults

What needed improvement?

Successfully implementing clinical pharmacy services in family medicine practices to optimize medication regimens was identified as one goal to improve the management of the health care needs of frail older adults in Abbotsford, British Columbia. A secondary goal was to explore a different approach to professional collaboration between the health authority and individual family physicians.

What was done?

A collaborative partnership established between the Abbotsford Division of Family Practice, individual physicians, and the Fraser Health (FH) Authority led to piloting a team-based care model. The model entails an FH pharmacist providing home-based medication assessments for primarily frail patients (e.g., those with multiple medications, comorbidities, and low health literacy) referred by their family physician. Within one week of the assessment the pharmacist and physician meet to discuss the findings and the therapeutic/monitoring plan. The pharmacist accesses both the FH and family practice EMRs to review clinical details and document new information.

Since November 2016 five implementation cycles lasting three months each and involving 10 physicians from four practices have occurred. The pharmacist dedicates one day weekly to each practice, focusing on:

- Developing a rapport with the medical office assistants
- Taking referrals
- Building connections to other FH services
- Charting in the clinic's EMR

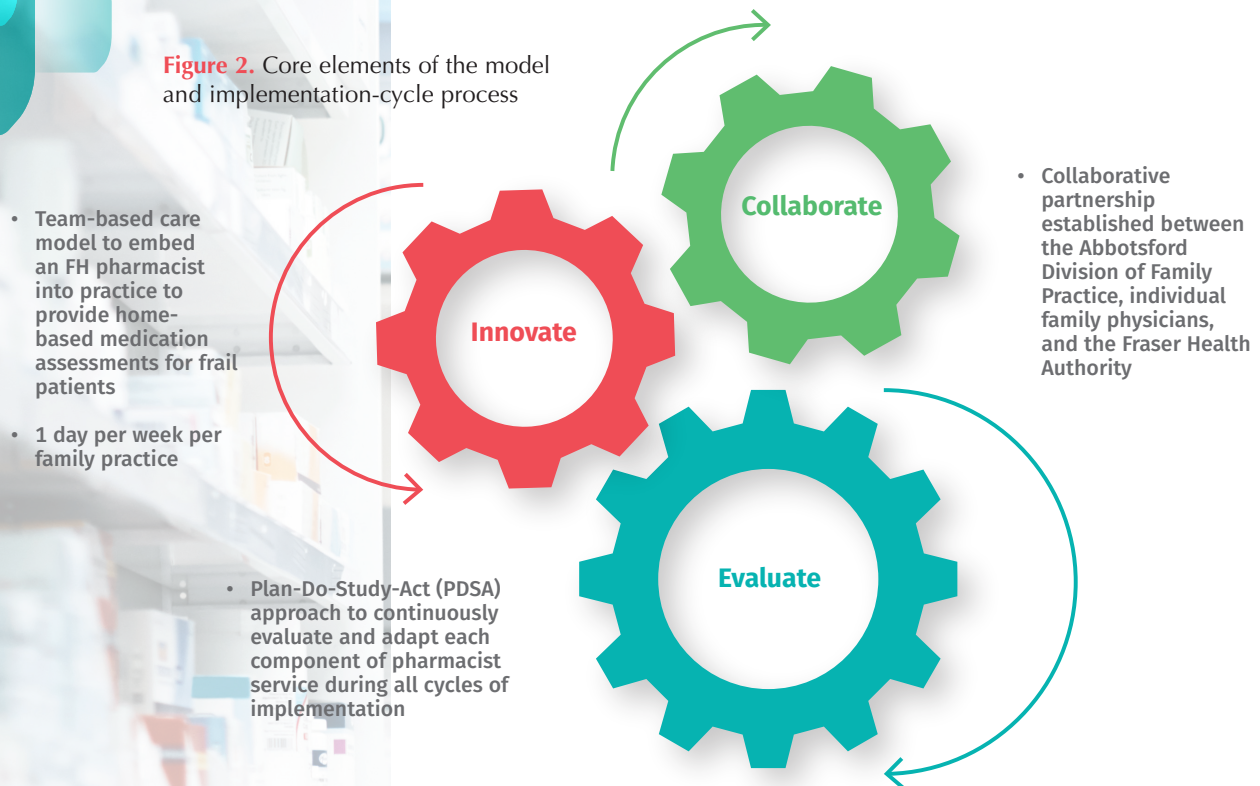
Each cycle was supported by a memorandum of understanding between the family physician and FH. Following each implementation cycle physicians continue to refer patients while the pharmacist also monitors previously known patients, if required. Throughout each cycle new processes are tested, resulting in improved remote access to EMRs, appointment booking, use of interpreters, and documentation.

In cycle 3 a strategy was tested to allow more formal collaboration with community pharmacists. Community pharmacists are included in some case discussions between the FH pharmacist and the physician. This has been proven to sustain and support patients with medication changes and follow-up monitoring by their usual community pharmacist. As well as maintaining the role of the community pharmacist as the "primary" pharmacist, it has provided an opportunity for unique collaborative patient care. If the community pharmacist is unable to attend case discussions, the FH pharmacist later shares essential components of the care plan when required.

Figure 2 demonstrates elements of the model and cycle implementation steps.

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Figure 2. Core elements of the model and implementation-cycle process



Implementation-Cycle Process

1. Identify suitable practices
2. Develop referral criteria
3. Establish a memorandum of understanding between family physicians and FH
4. Family physician identifies patients for referral to pharmacist
5. Patient home appointments are booked by the family physician's medical office assistant and communicated to pharmacist
6. Pharmacist reviews FH's and the family physician's EMRs to prepare for visit
7. Pharmacist completes in-home medication assessment
8. Family physician and pharmacist have in-person case discussion within one week of the pharmacist's home visit to discuss findings and adjustments to the therapeutic plan
9. Documentation by pharmacist in the family practice's and FH's EMRs
10. Ad hoc collaborations with other health care professionals as needed (e.g., Home Health, other FH services, other physicians, community pharmacist)
11. Follow-up and ongoing family physician-pharmacist discussions, as needed

Reproduced with permission.

Source: Blain L, Flanagan P, Fraser J, Favero M. Developing Connections with Family Physicians to Optimize Medications in Frail Seniors [poster presentation]. CSHP-BC Branch Annual General Meeting; November 2017.

What was gained?

This model of team-based care demonstrates innovation and produced positive results, such as:

- Improving the patient experience of care (including quality and satisfaction):
 - 97 per cent of 141 patients (cycles 1 to 4) reported the initial visit helped them better understand their medications
- Improving the health of populations (improved patient outcomes):
 - Identifying proactively any frail or vulnerable older adults with the potential for medication-related issues due to their medical and medication complexity
 - Connecting frail or vulnerable older adults with other relevant health care providers and/or services

- Reducing the per capita costs of health care:
 - o Improving system-level measures, such as the avoidance of 0.8 emergency department visits and 3.9 acute care bed days per patient over a nine-month period. Data were analyzed for the 12 patients—out of 21 known to the pharmacist for nine months at the time of analysis—who had previously had at least one emergency department visit or one hospital bed-day prior to the pharmacist’s assessment.
- Improving the work life of health care providers, including clinicians and staff:
 - o Enhancing relationships between:
 - Physicians and their patients
 - Physicians and the health authority
 - Pharmacists in different practice settings
 - Patients and the health authority
 - o Connecting physicians with the FH pharmacist and enabling them to access pertinent information from the home visits within their EMR, which physicians reported valuing
 - o Providing an avenue for case discussions involving the FH pharmacist, physician, and community pharmacist (when applicable):
 - Pharmacists gained a better understanding of individual physician prescribing; this will guide the selection of relevant resources to support future prescribing
 - Physicians agreed to making medication changes for 95 per cent of the patients discussed with the pharmacist
 - Physicians responded favourably to attendance by community pharmacist

WHAT WAS LEARNED?

Having other members of the interdisciplinary team—in this case pharmacists—working in family practices has produced positive results but requires major support for them to be integrated and have the potential benefits realized fully.

Key lessons include:

- Having extensive and ongoing information management/information technology support is required for remote access to the health authority’s and physicians’ EMRs to facilitate shared care planning and documentation in both
- Providing skillful administrative support (at both the physician’s office and the health authority) is required for the effective coordination of schedules (e.g., home visits, case discussions, and follow-up appointments)
- Establishing a supportive project team with key players (Abbotsford Division of Family Practice, FH) is essential
- Building a referral framework (proactive client finding) up front to develop new practice patterns and adequate resource allocation is key
- Having access to other support services—such as dedicated translators, community pharmacists, and FH services—is needed to ensure the focus is on client needs and whole-person care
- Having the health authority pharmacist serve as a link between the physician and the community pharmacist can help sustain the patient care plan; a further exploration of logistics is required to facilitate the participation of community pharmacists



Dr. John Chan (family physician) and Lori Blain (FH pharmacist) meet to discuss findings of home-based medical assessments and therapeutic/monitoring plans for patients.

Photo courtesy of the Abbotsford Division of Family Practice.

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It Takes a Team: Caring for patients taking opioids for chronic non-cancer pain

What needed improvement?

Canadians are the second-highest per capita users of opioids in the world,** with the rates of opioid prescribing^{§§} and apparent opioid-related deaths rising in the country.*** The Shea Heights Community Health Centre is an interdisciplinary family practice clinic in St. John's, Newfoundland and Labrador, with a substantial number of patients with chronic non-cancer pain who have been prescribed opioids. The health care team recognized that more could be done to reduce the prescribing of opioids and the harms associated with their use.

What was done?

The family physicians and pharmacist at the Shea Heights Community Health Centre identified reducing opioid prescribing as a priority and developed a team-based process for managing their patients with chronic pain. The recommendations and tools in the 2017 **Canadian Guideline for Opioids for Chronic Non-Cancer Pain** were used to develop a more structured process for initiating, monitoring, and tapering opioid use.^{†††} Collaboratively the team developed procedures and processes to optimize patients' pain management and monitor opioids more closely to ensure these medications are used safely and effectively.

This interdisciplinary collaboration was especially helpful for patients who were receiving higher than recommended doses of opioids and were experiencing challenges in tapering. A team-based approach to monitoring patients on chronic opioid therapy facilitated unity in decisions related to patient care, which allowed physicians to feel less isolated and more empowered in their work lives.

The following guiding principles were adopted:

- Apply universal precautions, as identifying those who may develop an addiction or divert a medication is not always possible
- Optimize the use of non-pharmacological and non-opioid therapies for all patients
- Aim to lower the opioid to the minimum effective dose and discontinue where possible
- Minimize the use of other central nervous system depressants
- Evaluate the risk for addiction and overdose on an ongoing basis

** International Narcotics Control Board. *Narcotic Drugs: Estimated World Requirements for 2018 - Statistics for 2016*. New York, NY: United Nations; 2018. Available from: www.incb.org/documents/Narcotic-Drugs/Technical-Publications/2017/Narcotic_drugs_technical_publication_2017.pdf. Accessed 2019 Jan 11.

§§ Health Canada. Infographic: Opioid-Related Harms in Canada – December 2018. Government of Canada website. 2018. www.canada.ca/en/health-canada/services/publications/healthy-living/infographic-opioid-related-harms-december-2018.html. Accessed 2019 Jan 11.

*** Canadian Institute for Health Information. *Pan-Canadian Trends in the Prescribing of Opioids, 2012 to 2016*. Ottawa, ON: CIHI; 2017. Available from: secure.cihi.ca/free_products/pan-canadian-trends-opioid-prescribing-2017-en-web.pdf. Accessed 2019 Jan 11.

††† Busse JW, Craigie S, Juurlink DN, Buckley N, Wang L, Couban RJ, et al. Guideline for opioid therapy and chronic noncancer pain. *CMAJ*. 2017;189(18):E659-E666. Available from www.cmaj.ca/content/189/18/E659. Accessed 2019 Jan 14.

The team uses several approaches:

An **opioid treatment agreement** is provided to each new and existing patient. It outlines the expectations of the prescriber and the responsibilities of the patient.

Urine drug screens are randomly requested from all patients prescribed opioids. This helps identify the potential diversion of opioids and detect the presence of other non-prescribed substances.

The **Opioid Manager** is a point-of-care tool that summarizes the Canadian guideline described above.^{***} This tool provides structure for monitoring and assessing opioid use, with the goals of reassessing the patient's pain management frequently and reducing potential harms of the opioid. The Opioid Manager tool is used with each patient prescribed an opioid for chronic use and is updated on each visit.

Monthly **interdisciplinary opioid review rounds** are used as the main forum for reviewing all patients prescribed opioids. The monthly reviews include the pharmacist, family physicians, and family medicine residents. All members of the team identify patients with the highest needs for review and present these cases during the meeting. The pharmacist takes the lead in providing suggestions to modify therapy, which typically involves optimizing non-pharmacological and non-opioid therapies and deprescribing opioids. Higher-risk patients are identified and discussed as a priority among the group. This discussion forum gives the opportunity for the pharmacist and physicians to create patient-specific options for pain management. A structured form was created to guide the discussion and includes information such as opioid dosage, non-opioid and non-pharmacological therapies, functional status, pain score, adverse effects, aberrant drug-related behaviours, and urine screen results. Many patients' doses have been successfully tapered to meet the target of less than 90 mg of morphine equivalent per day. Clinic staff now feel patients are receiving more evidence-based care for pain management and it is easier to limit dosing in new patients initiating a trial of opioids. While the clinic staff's goals are to minimize the use of opioids and improve patients' quality of life, they continue to prescribe opioids for those patients who need them for pain management in accordance with current evidence.

Family physicians and the pharmacist at the clinic report they are happy to collaborate and share their expertise to optimize pain management in patients. The physicians say they feel more supported and confident that they are prescribing in a safe and effective manner.



WHAT WAS LEARNED?

Collaboration between family physicians and pharmacists working in primary health care enhances patient care. Interdisciplinary collaboration using standardized processes makes opioid prescribing safer and more manageable. This model demonstrates that pharmacists and physicians can work together to optimize patients' pain therapy and reduce the potential harms associated with opioid prescribing. This interdisciplinary approach can be used as a model for other family practice clinics to support their opioid prescribing and optimize patient outcomes.

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^{***} Centre for Effective Practice and the University Health Network. Opioid Manager website. 2017. cep.health/clinical-products/opioid-manager. Accessed 2019 Feb 6.

Enhancing the Care of Older Adults With Cognitive Impairment Through a Pharmacist-Physician Collaboration

What needed improvement?

Older adults with cognitive impairment often have numerous medication-related problems that can contribute to memory symptoms and medical management challenges. These can include drug-induced cognitive impairment, issues with medication management and adherence, and drug–drug and drug–disease interactions. A comprehensive medication review is necessary to uncover and address these drug-related problems. However, it is often not possible to conduct a comprehensive medication review within a typical family practice office visit.

What was done?

To address medication-related problems among persons who present with cognitive complaints, a pharmacist was recruited to join the flagship Primary Care Collaborative Memory Clinic (PCCMC) at the Centre for Family Medicine Family Health Team in Kitchener, Ontario, in 2009. The PCCMC is an innovative model designed to enable comprehensive dementia care within primary care practices.⁵⁵⁵ As a member of this team the pharmacist conducts comprehensive medication reviews with all patients and with caregivers of patients who present to the PCCMC. Components of the medication review include:

- Assessing the older adult's ability to manage medications
- Evaluating potentially inappropriate medication use
- Determining the safety and effectiveness of medications
- Ensuring appropriate targets are established for the treatment of comorbid conditions such as hypertension and diabetes

The pharmacist and physician team members collaborate to develop an appropriate pharmacotherapeutic treatment plan for every patient assessed through this clinic. This includes deprescribing inappropriate medications, with an emphasis on eliminating the use of anticholinergics and benzodiazepines; minimizing, if possible, the use of antipsychotic medications; and ensuring the rational use of cholinesterase inhibitors and memantine and appropriate monitoring.

What was gained?

The collaboration to address medication-related problems among older adults has resulted in several beneficial outcomes. Patients and caregivers have communicated the benefits of a thorough assessment of medications. Medications are continually optimized for patients who present to the PCCMC, with resulting decreases in inappropriate medication use; optimization of blood pressure and diabetes management

⁵⁵⁵ Lee L, Hillier LM, Molnar F, Borrie MJ. Primary Care Collaborative Memory Clinics: Building capacity for optimized dementia care. *Healthc Q.* 2017;19(4):55-62.

among frail older adults with cognitive complaints; and minimization of the use of antipsychotics for the treatment of behavioural and psychiatric symptoms of dementia.

Since the PCCMC's establishment in 2006 the team has trained other interdisciplinary teams to provide a similar service to patients at 107 other primary care settings across Ontario. The recognition of the role of a pharmacist within such teams and the need for a comprehensive medication review among patients with cognitive impairment has resulted in the training of more than 100 pharmacists who participate as integrated team members of these clinics. These pharmacists serve as active members of the team, collaborating with physician leads and other interprofessional team members to address medication-related problems identified in patients with cognitive impairment and dementia.

The opportunity to work together on these teams has strengthened the mutual recognition of the knowledge, skills, and abilities of both the physicians and pharmacists. These teams have also fostered the ability to practise collaboratively to better address the needs of older adults with memory difficulties. Care plans are individualized and based on the patient's preferences; provided by an interprofessional team with active coordination and continual information sharing; and provided through one point of contact. These are all essential elements of person-centred care, which is considered the gold standard for the health care of older adults.^{****}

To find out more about this case, contact:

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WHAT WAS LEARNED?

The collaboration between the PCCMC's Provincial Lead and Pharmacy Lead has demonstrated that a team-based partnership between family physicians and pharmacists has the potential not only to optimize medication use in vulnerable populations but also to provide an opportunity to learn from and rely on one another. Family physicians and pharmacists in this setting draw on one another's knowledge, skills, and strengths to better meet the individualized care needs of older adults with memory difficulties.

^{****}American Geriatrics Society Expert Panel on Person-Centered Care. Person-centred care: A definition and essential elements. *J Am Geriatr Soc.* 2016;64(1):15-18.

CONCLUSION

These cases provide invaluable opportunities for interprofessional learning and demonstrate how family physicians and pharmacists can work together to address challenges in providing high-quality, patient-centred care.

Key lessons learned include:

- Having family physicians and pharmacists collaborate in primary health care enhances clinical services and patient care
- Building relationships and trust among providers, including facilitated shared care planning and documentation (EMRs, personal health records), requires effective communication
- Establishing leadership support for innovative practices is required for new models of care to be fully integrated and realized
- Providing funding to explore and adopt innovative practices is an essential element of leadership support
- Optimizing each provider's role according to their unique skills while being accountable, adaptable, and respectful of colleagues' expertise and experience results in a well-functioning team

Integrating pharmacists into the family practice environment not only improves patient care, education, and satisfaction but also increases satisfaction among physicians and pharmacists in their work lives and in their patients' outcomes. Learning from one another and drawing on one another's knowledge, skills, and strengths to enhance the individualized care of patients creates a win-win situation.

In a larger sense, the cases highlighted in this edition of the Innovation in Primary Care series put the value of collaborative, interprofessional, team-based care in clear relief. These cases illustrate how innovative applications of physician-pharmacist partnerships benefit patients, practitioners, and the health care system. This interprofessional interaction is just one example of the PMH's overall vision of collaborative, team-based care. More on the PMH can be found at: patientsmedicalhome.ca.

CALL TO ACTION

Are you doing something innovative in primary care that aligns with the **Quadruple Aim** approach to optimize health system performance? If so, we would like to hear about it!

The goals of the Quadruple Aim approach are:

- **Improving the patient experience of care (including quality and satisfaction)**
- **Improving the health of populations (improved patient outcomes)**
- **Reducing the per capita cost of health care**
- **Improving the work life of health care providers, including clinicians and staff**

If you have an innovative model or practice that you would like to share in our Innovation in Primary Care series, please email the CFPC's Health Policy and Government Relations team at healthpolicy@cfpc.ca.

We welcome your case submissions and ideas for future publications of the series.