

If we [family physicians] are to fill our place, it is crucial that our commitment be unconditional; patients should feel confident that they will never be told 'This is not my field.

**99**—Dr. lan McWhinney<sup>1</sup>

The College of Family Physicians of Canada 2630 Skymark Avenue Mississauga, ON L4W 5A4

Telephone: 905-629-0900 Toll-free: 1-800-387-6197 Email: academicfm@cfpc.ca

© 2022 The College of Family Physicians of Canada

All rights reserved. This material may be reproduced in full for educational, personal, and non-commercial use only, with attribution provided according to the citation information below. For all other uses permission must be acquired from the College of Family Physicians of Canada.

#### How to cite this document

Fowler N, Oandasan I, Wyman R, eds. *Preparing Our Future Family Physicians. An educational prescription for strengthening health care in changing times.* Mississauga, ON: College of Family Physicians of Canada; 2022.

#### **Author affiliations**

Nancy Fowler, MD, CCFP, FCFP; Executive Director, Academic Family Medicine; Outcomes of Training Project Lead, CFPC

Ivy Oandasan, MD, CCFP, MHSc, FCFP; Director, Education; Co-Lead, Education Evaluation and Research Unit; Outcomes of Training Project Evaluation Lead, CFPC

Roy Wyman, MD, CCFP, FCFP; Director, Certificates of Added Competence; Outcomes of Training Project Enhanced Skills Lead, CFPC

#### **Project Sponsor**

The College of Family Physicians of Canada Family Medicine Specialty Committee

#### Acknowledgements

The College of Family Physicians of Canada (CFPC) acknowledges all those who contributed their expertise and resources to the development of this report. We would also like to thank the key informants, expert panels, and partner organizations who provided important information and critical perspectives to support the work of the Outcomes of Training Project.

#### Individual contributors

Patricia Nicholson, BA, MJ; Outcomes of Training Project Report Writer and Editor

Michelle Mayne, BEd, MEd; Manager Academic Family Medicine Administration, CFPC

#### Organizational contributors

College of Family Physicians of Canada, Academic Family Medicine Division

College of Family Physicians of Canada, Education Evaluation and Research Unit

College of Family Physicians of Canada, Library Services

College of Family Physicians of Canada, Communications, Creative and Production Services, and French Language Services

- Josette Castel, French Language Reviewer, Laval University
- Alain Papineau, French Language Reviewer, University of Montreal

College of Family Physicians of Canada Committees

- Board of Directors
- Family Medicine Specialty Committee
- Outcomes of Training Project Advisory Group
- Section of Teachers Council
- Postgraduate Education Committee
- Faculty Development Education Committee
- Undergraduate Education Committee
- Certification Process and Assessment Committee
- Section of Residents Council
- Program Evaluation Advisory Committee
- First Five Years in Family Practice Committee
- Section of Medical Students
- Section of Researchers Council
- Indigenous Health Committee
- Social Accountability Working Group
- Member Interest Groups Section
- Advisory Committee on Family Practice

Departments of family medicine residency program leadership

Explaining the work of family physicians writing workshop participants

Practice-based focus group early-career family physician participants

## Table of contents

A Letter from our CEO and Executive Director	1
Executive Summary	3
Full Report	8
What is the Outcomes of Training Project?	8
Why is this project necessary?	10
Responding to a sense of urgency	11
Building on the past	
New skills for a changing society	12
What are we aiming for? Defining outcomes	13
Defining social accountability in family medicine	13
Defining comprehensiveness in training – The Residency Training Profile	14
Getting a reality check	16
How are we doing?	17
Examining the current state of training in family medicine	17
What we learned	18
An Educational Prescription	
Outcomes of Training Project Recommendations	24
Charting a course for the future	27
References	20



# A Letter from our CEO and Executive Director

## The status quo is no longer an option for us

With the release of this report and recommendations by the College of Family Physicians of Canada (CFPC)'s Outcomes of Training Project, we aim to take stock of where we are 10 years following the implementation of the Triple C Competency-Based Curriculum (Triple C), Canada's first model of competency-based medical education. In this report we clarify what we mean by comprehensiveness of care, and set the stage for a proactive, collective transformation of family medicine postgraduate education as a key ingredient to enhance access and quality care to the people of Canada, in a dynamic environment.

We want to be clear: Canada is producing competent family doctors, in the shortest postgraduate residency program around the world. We have learned two things from our evaluation of the Triple C. First, it enabled an earlier identification of family medicine residents in difficulty, resulting in remediation and support provided sooner. Second, it revealed significant variations in the understanding of the meaning of comprehensive care in family medicine, and how it was addressed in our residency programs. The Family Medicine Professional Profile,\* released in 2018, reaffirmed our collective commitment to service to Canadians and to the provision of quality continuing comprehensive care close to home.

Through a robust literature review, analysis of scope of practice from various sources, and key informant interviews we learned that family physicians today are not practising as comprehensively as physicians were 10 years ago. Reasons for this are multifactorial. Although family physicians are competent when they finish residency, their educational and clinical experiences are not always sufficient to make them feel confident and prepared to take on work in certain clinical areas. Some family physicians never intended to include those areas in the scope of their work when they entered residency, while some wanted a broad scope of practice but felt unsupported in doing so due to local/regional issues in the organization of health care. Finally, personal factors such as practice location, and spousal and family issues also play a role. In May 2021 we released the Residency Training Profile,† which describes the Core Professional Activities (CPAs) of family physicians and defines expectations for core family medicine and enhanced skills residency training.

The Outcomes of Training Project recommendations have been approved by the CFPC's Board of Directors. We have listened to educators who tell us that the curriculum is full, and that the recommendation of a longer duration of training should not be "just more of the same." Rather, it should offer some flexibility and a real opportunity for consolidating skills in areas such as acute care, long-term and home care, as well as emerging areas such as culturally safe care to diverse populations and virtual care.

We recognize that education is only one ingredient to achieving our goal. Our health care systems must be organized in a way that support family physicians doing their best work, providing complex care, in team-based models of care as described in the Patient's Medical Home vision. Promising such models across the country demonstrates positive intermediate outcomes such as decreased visits to the emergency department and hospital readmissions, better adherence to preventive health measures, and increased patient and provider satisfaction. Expansion of teaching sites in the community under such models would go a long way in supporting a favourable practice environment and a commitment to service, paying particular attention to access in the context of an ongoing therapeutic relationship, and resulting in favourable patient, learner, and provider experiences and outcomes. The clinical environment is the learning environment in residency.

Participants in our consultations have raised questions about the future of Certificates of Added Competence (CACs) and enhanced skills training. The CFPC continues to support enhanced skills training and CACs, acknowledging interest in particular clinical areas with meeting specific community needs. An educational task force will be created to assist with implementation of the recommendations. As part of this work the group will consider the acquisition and consolidation of enhanced skills relative to the proposed expanded residency, including the influence of the creation of a practice-eligible route to CACs.

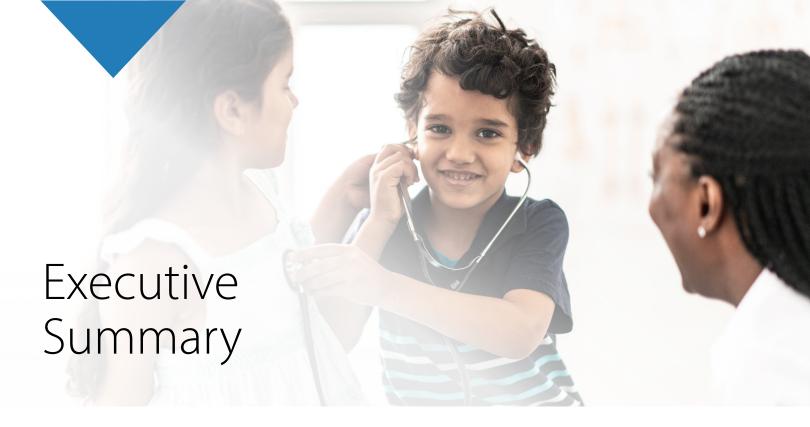
We anticipate this work evolving over the next several years. The status quo is no longer an option for us. The Outcomes of Training Project report is "the end of the beginning." We hope that you will agree and be prepared to collaborate in this work with us.

France Lemes

**Francine Lemire**, MD CM, CCFP, FCFP, CAE, ICD.D Executive Director and Chief Executive Officer The College of Family Physicians of Canada

\*College of Family Physicians of Canada. Family Medicine Professional Profile. Mississauga, ON: College of Family Physicians of Canada; 2018. Available from: https://www.cfpc.ca/CFPC/media/Resources/Education/FM-Professional-Profile.pdf. Accessed August 9, 2021.

<sup>†</sup>Fowler N, Wyman R, eds. *Residency Training Profile for Family Medicine and Enhanced Skills Programs Leading to Certificates of Added Competence.* Mississauga, ON: College of Family Physicians of Canada; 2021. Available from: http://www.cfpc.ca/rtp. Accessed August 9, 2021



#### **Project overview**

Access to high-quality comprehensive continuous primary care close to home is a foundational component of an effective health care system. Family practices play a crucial role in providing such care in Canada. Patients value their family physicians and consistently report a strong preference for seeing them for their health needs. Evidence tells us that access done right includes access to a family doctor and a team who knows the patient and can provide compassionate, coordinated, and personalized care.

The College of Family Physicians of Canada (CFPC) has a commitment to lead family medicine to improve the health of all people in Canada by setting standards for education, certifying and supporting family physicians, championing advocacy and research, and honouring the patient-physician relationship as being core to our profession.

The CFPC's Outcomes of Training Project is a critical reflection on the training of family physicians in dynamically changing times applying a social accountability lens with an ultimate goal of improved patient access to comprehensive care close to home. Defining and enabling comprehensive care and preparing family

physicians for emerging and complex societal health care needs are the goals of this project and the basis of the education recommendations.

Recommendations address priorities for skill enhancement and emphasize the need for improved trainee exposure and transition into Patient's Medical Home type practices. Linking education and health reform is critical to improving patient access (**Figure 1**) as well as family physician recruitment and retention; modelling effective and sustainable practice and providing a career pathway that attracts students to family medicine.

Although some decision makers prefer to think of community needs as primary, secondary, or tertiary care, we prefer to position our contribution in terms of proximity and comprehensiveness—we commit to a person and to meeting their needs wherever they are, using all means available to us, including collaboration and innovative technologies.

Used frequently throughout this report, the term 'comprehensiveness' refers to the breadth, depth, or scope of services offered as well as the holistic personcentred approach to patient care. We aim to enable family physicians to work to the furthest reach of their ability (sometimes referred to as top of scope).

This project offers a prescription for educational reform with **new residency training** expectations (Residency Training Profile) and **recommendations** guiding us into the future for core family medicine and enhanced skills training leading to Certificates of Added Competence (CACs). The project is sponsored by the CFPC Family Medicine Specialty Committee with recommendations approved by the CFPC Board of Directors.

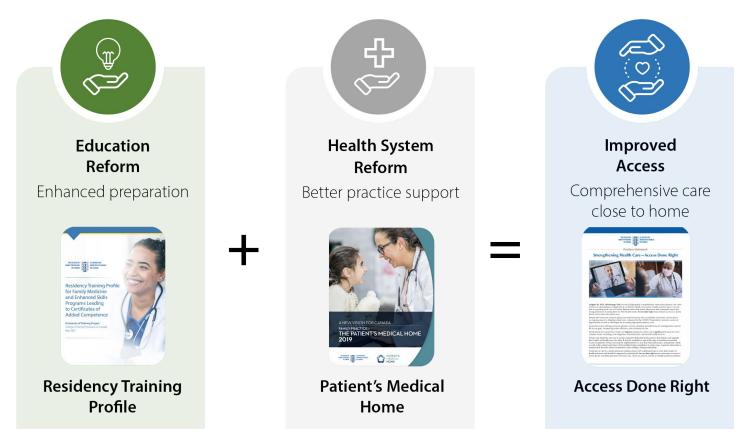


Figure 1: Linking education and health system reform to improve access

This report outlines project activities and provides evidence that supports the educational recommendations contained within. It is directed to a wide audience, given the broad implications and collaboration needed to bring about the necessary enhancements to residency training in family medicine.

#### Responding to a sense of urgency

Patients are encountering difficulties, too often not getting the care they need in an increasingly overwhelmed, complex, and fragmented health care system.

Family physicians are managing patients who are sicker and presenting with more complexity and comorbidity. This is occurring amid a pandemic and against a dynamic backdrop of an aging population, social upheaval, an opioid crisis, new technologies, medical advances, and health system changes, with high rates of physician burnout.

University-based residency programs play a critical role in recruiting and preparing the family physician workforce. The vast majority of graduates prefer interprofessional team practice models, yet are not always exposed to these models in training and are frustrated with their lack of ability to secure this type of practice on graduation. The observation is made that there is a high proportion of residents coming into our programs and graduating with intentions for focused

practice and the influences for this need to be better understood.

The pandemic has laid bare pre-existing vulnerabilities and inequities and brings us to a point of reflection. There is an urgent need for change—for an investment in family practice as a key element of health system transformation.

This project addresses the educational reform needed to support this change.

Within this dynamically changing environment, the Outcomes of Training Project (OTP) asks and answers a central question: What must we do to prepare and better support our future family physicians?

#### What are we aiming for?

#### What we already know

In 2018 the CFPC published the Family Medicine Professional Profile (FMPP), which describes the collective commitment of family physicians and family medicine to the provision of comprehensive care close to home. The FMPP built on earlier generations of work, including the CFPC's Triple C Competency-Based Curriculum, introduced nearly a decade earlier, by clarifying a definition of comprehensiveness in family practice and explaining the discipline of family medicine to external audiences.

### Development of the Residency Training Profile

The Residency Training Profile (RTP) elaborates on the FMPP, describing and detailing the work for which graduates are being prepared, including the skill enhancements and practice models required for future practice to support improved access. In this sense it is both aspirational and future oriented. The RTP clearly defines the scope of training required to prepare family physicians for comprehensive practice across all communities in Canada. It is important to recognize that residency training programs will require additional resources to fully meet these expectations, and this is a main rationale for extending the length of training in family medicine.

#### How are we doing now?

## The current state of family medicine residency training

To examine the current state of family medicine residency training we sourced evaluation data relevant to the expectations outlined in the RTP, and looked at graduates' perceptions of preparedness for practice, their practice intentions, and actual practice choices made three years post-completion of training. An international environmental scan and literature review looked at the optimal length of training and curricular design for family medicine residency in comparable countries.

Throughout the project we committed to evidence-informed approaches, using qualitative and quantitative methods of analysis. These included field research, survey data, administrative databases, key informant interviews, focus group interviews, and rapid literature review, as well as input from specific CFPC committees and expert panel group consultations.



#### What we learned - the bottom line

A synthesis of the evidence assembled throughout the project tells us that:

- 1. Family medicine is more than primary care. Our field research with family physicians tells us that primary care remains the foundation of family practice. However, the scope of residency training must extend beyond this to include hospital, emergency, and intrapartum care to support and enable family physicians providing comprehensive health care delivery across diverse communities.
- **2.** Current data are inadequate to properly evaluate the impact of our graduates in the health care system. Our data source review tells us that the available data characterizing the work of family physicians in Canada are incomplete, terminology is inconsistent, and there are significant limitations related to its utility and comparability. Collaboration at national and provincial levels is required to improve the state of data regarding training outcomes and family physician practice patterns.
- 3. The comprehensiveness of early-career family physician practices is decreasing, and this is multi-factorial. Our multi-method review tells us that personal interest, educational exposure, and self-confidence are all important factors influencing career intentions for comprehensive care. Many graduates face barriers to delivering comprehensive care because they lack opportunity to work within advanced practice visions such as the Patient's Medical Home.

- 4. Early-career practice choices are linked to training location, educational exposures, and the availability of supportive practices/models. Our multi-method review tells us that graduate career choices are influenced by the location of training and the quality of their educational exposures. In order to foster physician ability and commitment to work with underserved populations, improvements in training experiences and supportive practice models are essential.
- **5. Competence is necessary but insufficient for graduate preparedness.** Our rapid review of the literature and focus groups with early-career physicians tell us that being deemed competent by external assessment measures does not equate to being ready for practice, and this influences career choices. Further educational research and development is needed to better understand and support preparedness for practice.
- **6.** There are training gaps and areas for educational enhancement requiring priority attention. An analysis of current training suggests priority curricular attention is needed in home and long-term care, addiction and mental health, Indigenous health, health equity and anti-racism, virtual care, and health informatics. Residency program leaders and residents affirm the need for additional training time to consolidate skills in acute care and procedural domains.
- 7. Family medicine training programs are underresourced, necessitating a longer training period. Canada has the shortest length and broadest scope of training among comparator countries. Extra time is required to enhance practice preparedness for comprehensive care, and to deliver on necessary curricular enhancements.

Read the full report for more information about the evidence base for the Outcomes of Training Project. To access full evidence summaries by inquiry topic and related scholarship, visit https://www.cfpc.ca/futurefp.

#### Where are we going next?

## Educational recommendations to guide future training

In this report, the CFPC presents evidence-informed educational recommendations directed internally to guide CFPC advocacy and standard-setting efforts, and externally to guide university partners in the future delivery of family medicine residency training.

The recommendations focus on the RTP as a shared vision of our future family physicians, outlining the resources and measures required for implementation.

They call for a greater investment in the training of family physicians as well as a strengthened ability to evaluate educational outcomes taking a continuous improvement approach toward our goal of social accountability.

Of significant interest is the recommendation to increase the length of training in family medicine to three years (from the current two years). More time enables programs to expand and enhance the curriculum guided by the RTP and to strengthen preparedness for comprehensive, top of scope practice.

There will be no immediate change to either the CFPC's accreditation or certification requirements regarding length of training for at least five years. This recommendation has substantial resource implications and potential ripple effects. It requires a careful change management approach and cross-sectoral collaboration, including the mobilization of resources to support this change, sufficient notice to early-stage medical students considering a career in family medicine, and planning to maintain a stable flow of graduates into the health care system.

This is a call to action for a greater investment of resources in the training of family physicians to improve access to comprehensive care for people in Canada. As a next step, the CFPC will pursue and support innovations that combine education and health reform and that are targeted to improve access and health equity.



The College of Family Physicians of Canada (CFPC) established the Outcomes of Training Project (OTP) in 2018 as a critical review of and reflection on the future of family medicine residency training in Canada.

Our residency programs do an excellent job of developing highly competent family physicians. A major reason for this success is our national commitment to standard setting coupled with rigorous evaluation, which includes residency program accreditation.

The OTP comes at a time of dynamic change.

We want to ensure that training, supported by our standards, keeps pace with these changes and evolves to address societal health care needs and trends—often referred to as social accountability.

The OTP examines:

- A definition of social accountability in family medicine residency training
- A definition of comprehensiveness and the expected scope of residency training in family medicine
- Curriculum content, including new or emerging topics of importance

- The current state of family medicine residency training
- A comparison of international jurisdictions and training trends in family medicine
- Available evidence regarding the optimal length and design of training in family medicine

The major outputs of the project include the new CFPC Residency Training Profile for Family Medicine and Enhanced Skills Programs Leading to Certificates of Added Competence<sup>2</sup> (Residency Training Profile; RTP) and a set of educational recommendations which, taken together, establish expectations for training into the future.

Ultimately, our aim is to better support family physicians in working to the top of their scope through educational enhancements.

There is an emphasis in this project on enabling a broad scope of family practice within practice models that support family physicians to provide comprehensive care close to home.

The project was organized into three interconnected workstreams (**Figure 2**) that form the organizing structure for this report.



#### The Outcomes of Training Project





#### What are we aiming for?

Develop the **Residency Training Profile** as a guide to the expected scope and outcomes of training.

2



#### How are we doing?

Examine the current state of residency training including a look at international trends and sourcing available data about our graduates practice patterns.

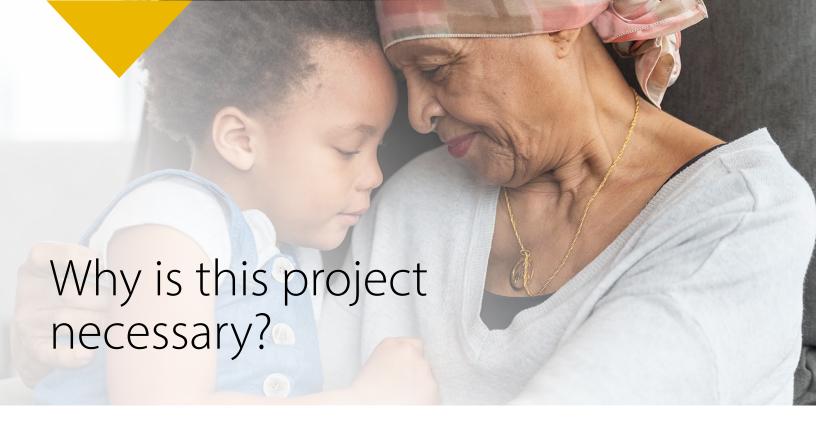
〔3〕



#### Where are we going?

Establish
evidence-informed
educational
recommendations to
guide the future of family
medicine residency
training.

Figure 2: Overview of the Outcomes of Training Project



Access to high-quality, comprehensive, continuous care close to home is a foundational component of an effective health care system. Family practices play a crucial role in providing such care in Canada. Patients value their family physicians and consistently report a strong preference for seeing them for their health needs. Evidence tells us that **access done right** includes a family doctor and a team who knows the patient and can provide compassionate, coordinated, and personalized care.<sup>3</sup>

Although some decision makers prefer to think of community needs as primary, secondary, or tertiary care, we prefer to position our contribution in terms of proximity and comprehensiveness—we commit to a person and to meeting their needs wherever they are, using all means available to us, including collaboration and innovative technologies.<sup>4</sup>

The CFPC has a commitment to lead family medicine to improve the health of all people in Canada by setting standards for education, certifying and supporting family physicians, championing advocacy and research, and honouring the patient-physician relationship as being core to our profession.<sup>5</sup>

The residency training of physicians plays an important role in health workforce preparation.

It has been more than 10 years since the last full-scale educational review and reform of family medicine, with the Triple C Competency-Based Curriculum (Triple C)<sup>6</sup> introduced in 2010 along with a corresponding improvement-oriented national program evaluation process.<sup>7</sup>

As the national educational standard-setting body for family medicine in Canada, the CFPC initiated this project to ensure that the training of family physicians evolves in response to national program evaluation findings and changing societal needs, and to support improvements in the delivery of health care for the people of Canada.

#### Responding to a sense of urgency

People in Canada are encountering difficulties, too often not getting the care they need in an increasingly overwhelmed, complex, and fragmented health care system. The 2015 Truth and Reconciliation Commission Report,<sup>8</sup> along with the tragic deaths of Joyce Echaquan<sup>9</sup> and George Floyd<sup>10</sup> in 2020, make urgent our recognition of the impact of colonization, slavery, and racism in Canada.

Family physicians committed to comprehensive care are key to improving access, coordination, and care delivery for our most pressing societal health issues. Yet evidence tells us that family physicians' comprehensive scope of practice is narrowing, and despite increased numbers of family physicians in Canada distribution still skews toward urban-based practices.

Family physicians are managing patients who are sicker and presenting with more complexity and comorbidity.

This is occurring against a dynamic backdrop of a pandemic, social upheaval, new technologies, medical advances, health system changes, and high rates of physician burnout.

Through educational enhancements we are preparing family physicians who will challenge racism and address health inequities.

#### **Building on the past**

This project builds on earlier generations of work and is but a next step in our educational improvement journey.

Since its establishment in 1954, the CFPC has been persistent in trying to address the challenge of defining family medicine as a unique specialty with expertise in generalism.<sup>11</sup> The first behaviour-based educational objectives for family medicine were defined in 1960. They supported the creation of two-year training programs across Canada and provided the foundation for the role of the Certification Examination in Family Medicine in attesting to standard qualifications and competence.<sup>12</sup> In the mid-1980s the CFPC published the Four Principles of Family Medicine,<sup>13</sup> which further shaped family medicine education, articulating the values that underpin our professional identity.

In 2010 the CFPC revolutionized training, as the first discipline to advance competency-based medical education (CBME) at a national level through the introduction of Triple C.<sup>6</sup>

With competencies defined for the discipline<sup>14</sup> and an approach to training that emphasized acquisition of those competencies through programmatic assessment,<sup>15,16</sup> family medicine has been an innovation leader in medical education.

Triple C represents an enhanced commitment to social accountability, with the established goal of training graduates who are able and willing to provide comprehensive care to everyone, anywhere in Canada.<sup>17</sup>

At this time the CFPC implemented an improvement-oriented evaluation process to study Triple C's implementation and impact.<sup>7</sup> This includes the development and implementation of a national Family Medicine Longitudinal Survey (FMLS). At three intervals through training and into practice, the FMLS surveys learners about their educational experiences, career intentions, and actual practice choices.

The OTP uses the Triple C program evaluation as a jumping-off point, following up on findings and bringing them forward as part of current recommendations.

Our evaluation taught us that Triple C improved workplace-based assessments. Focusing on direct observation with feedback and guided reflection has resulted in timelier, more learner-centred educational remediation. Triple C cultivated a sense of educational ownership, professional identity, purpose, and enthusiasm within the family medicine teaching community.

Despite successes, Triple C does not appear to have moved the needle on our social accountability goals. Rural, Indigenous, and inner-city populations remain underserved, with a maldistribution of family physicians and the scopes of practice and career intentions of our graduates continuing to narrow.<sup>21</sup>

We also learned that when Triple C was introduced, residency programs did not have a clear understanding of how comprehensive care was being defined, specifically what graduates were

expected to be able to do across the broad scope of family medicine by the end of residency. This led to some inconsistencies across programs. <sup>20,22,23</sup>

The OTP clarifies our social accountability goals, defines comprehensiveness in training, and reaffirms our mandate to prepare family physicians committed to the delivery of comprehensive care.

#### New skills for a changing society

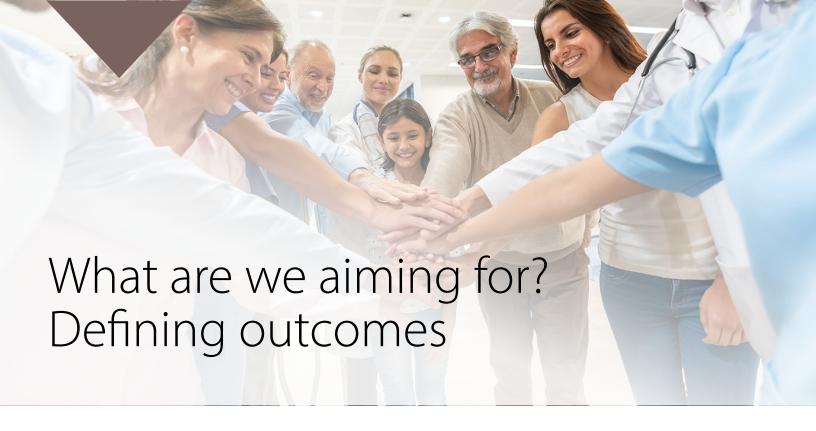
Emerging technologies, medical advances, and a host of societal changes prompt the need for new and enhanced skills for family physicians.

We have identified the following trends, all with educational implications and concordant with the reported experience of comparator countries:<sup>24,25</sup>

- Transition of secondary care into the community sometimes referred to as hospital-in-the-home or intermediate care
- An aging population, with more comorbidity and chronic diseases, and an increased need for palliative care, care in the home, and long-termcare settings

- High prevalence of mental health and substance use disorders
- Increased cancer survival rates, with survivorship as a more common condition to be managed in primary care
- Expanded roles in population health and prevention
- Expanded roles in care coordination, service design and improvement, research, and education
- Reduction in trainee duty hours with an enhanced focus on fatigue risk management and physician well-being

The OTP enhances residency training to meet new and evolving societal health care needs.



## Defining social accountability in family medicine

The current CBME paradigm emphasizes social accountability, originally defined by the World Health Organization in 1995 as "the obligation to direct education, research, and service activities toward addressing the priority health concerns of the community, region and/or nation they have a mandate to serve." <sup>26</sup>

### The OTP prioritizes social accountability as a desirable outcome of training in family medicine.

What does social accountability look like for family medicine training in the Canadian context?

As part of this project, a logic model (**Figure 3**) was developed to assist our thinking on this question. It maps the educational pathway and identifies the desired outcomes at each stage. The collective practice patterns of family physicians impact patient access, population health, health system efficiency/effectiveness, and physician well-being, which are ultimate outcomes of interest.

This logic model illustrates the respective roles and synergy required between the CFPC and university partners in achieving desired outcomes.

## We have identified the importance of a graduate's **preparedness** for practice to promote the uptake of comprehensive and more complex care roles.

This project conceptualizes **preparedness** for practice as a combination of competence, adaptability, capability, self-concept, confidence, and self-efficacy. We are interested in exploring how education can be designed to better support resident preparedness and transition into practice to fulfill their exceptional potential in serving community needs.

The logic model reminds us of the many steps and factors influencing family physicians' career choices. Residency education is an important influence, particularly in the early and formative stage of career decision making. Increasingly, we recognize the practice environment during training and at graduation as a key influence on career choices.

Ensuring we design and implement the right kind of training that better links education with practice improvement is a primary interest of the Outcomes of Training Project.

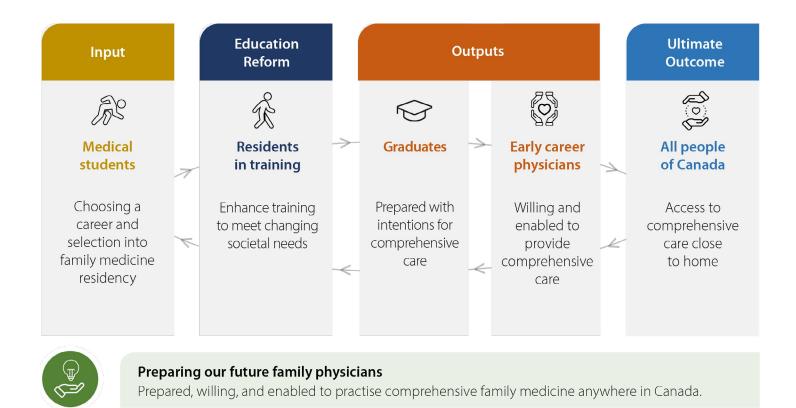


Figure 3: Logic model for change – Education as a prescription for strengthening health care outcomes

#### Defining comprehensiveness in training – The Residency Training Profile

In 2017 the CFPC's Board of Directors determined that a clearer definition of family medicine, in particular comprehensiveness, was required to better support advocacy efforts. This led to the development of the Family Medicine Professional Profile (FMPP).<sup>27</sup> Released in 2018 it outlines the collective contributions, capabilities, and commitments of family physicians to the provision of comprehensive, broad-scope care to the people of Canada. The FMPP affirms that comprehensiveness is achieved in collaborative practice arrangements as described in the CFPC's Patient's Medical Home<sup>28</sup> vision.

The FMPP is the basis of the Residency Training Profile,<sup>2</sup> developed through the OTP and released in May 2021.

It provides a detailed snapshot of the practice for which residents are being prepared—now and into the future—with an emphasis on adaptability and an ability to challenge racism and improve health equity.

Taken together, the FMPP and RTP communicate what we do as family physicians and the expected scope of training and practice in family medicine.

The RTP was developed using field research methods and extensive consultation with key stakeholders and expert panel groups. A variety of lenses were applied to this work including social accountability, health equity, and emerging health trends.

Leaders in education, medical students, and residents were consulted throughout the development of the RTP to assess defined expectations and to understand the implications for residency programs. We wanted to balance realistic and aspirational perspectives on the goals of training.

#### The sources of evidence and methods of inquiry that informed the development of the RTP included:

- Field research about and analysis of the work of family physicians to generate the practice narratives that form the basis of the RTP
  - Purposive lead sampling
  - Forty writing workshops with a total of 346 participants
- Development and content validation through expert panel consultations
  - More than 70 consultations with physician, educator, and learner groups, committees, and external partners
- Development, triangulation, and alignment of Core Professional Activities in the RTP with secondary sources
  - Mapping and alignment with existing frameworks
  - Targeted validation activities with CFPC committees, partner organizations, and evaluation and health system experts
  - o Revalidation of the Procedure Skills in Family Medicine<sup>2</sup>
- Environmental scanning and consultation with family medicine chairs and postgraduate program directors regarding the current state of training and capacity for what is defined in the RTP
  - Multiple stakeholder activities, including a 200-person leadership retreat with university partners and CFPC committees

#### **Getting a reality check**

The OTP undertook extensive consultations with program directors, family physicians, and residents to gain insight into the current state of family medicine residency education. These consultations yielded a wealth of valuable real-world observations, aspirations, critiques, and suggestions. While a full accounting of these consultations is beyond the scope of this report, some of the insights gathered are reflected in this section.

There is good support—in principle—from educational leaders for the expectations outlined in the RTP.<sup>2</sup>

However, throughout project consultations we heard serious concerns about educational capacity in family medicine residency training. Respondents feel the curriuculum is already full with everincreasing demands to keep pace with medical advances and emerging priority health topics.

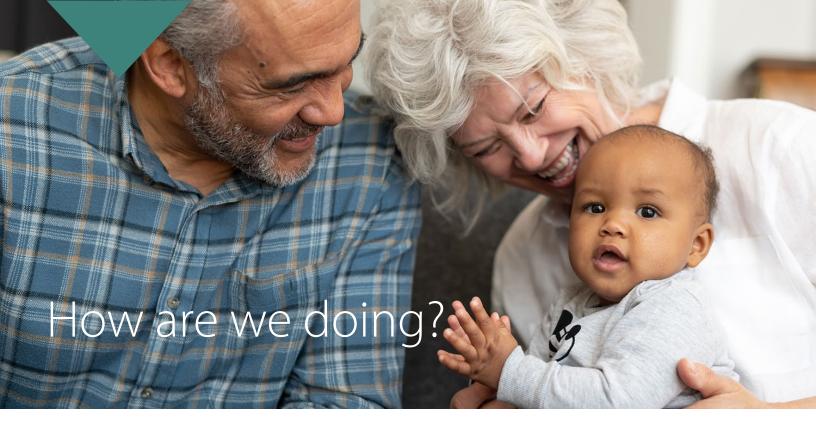
Programs are challenged to consistently enable both competence **and** confidence for the full scope of comprehensive practice, and both residents and program directors talked about the need for more training time to consolidate skills in certain areas. Our educational capacity and resources have already been stressed by the expansion in the numbers of residency positions across the country.

Program directors report chronic challenges in teaching home, long-term, and palliative care in regions where family physicians do not include this in their scope of practice and/or where practice models do not support these dimensions of comprehensive care. In thinking about an enhanced curriculum, we were encouraged to prioritize support for preceptors' practices and health system reform efforts as an educational strategy.

We heard from enhanced skills program directors that they want assistance in adapting their programs to CBME and to the expectations of the RTP. They have some resources locally but are requesting assistance from the CEPC.

The Residency Training Profile for Enhanced Skill Programs emphasizes the importance of family physician CAC holders in health system leadership responding to community needs in priority areas.

This brings to the fore the importance of practice-eligible routes for physicians to acquire enhanced skills after entry to practice, when they have had a chance to learn the needs of their community. A key challenge is the availability of more in-depth training once in practice. An informal survey with family medicine residency programs of re-entry training opportunities by province/territory shows no universal approach across the country, limiting our ability to be truly community adaptive in the delivery of family medicine care.



## Examining the current state of training in family medicine

Taking a critical look at current training does **not** call into question the current quality of residency programs. It is done in the spirit of continual improvement and learning in educational practice and to inform CFPC educational standard setting.

We sourced evaluation data relevant to the desired outcomes identified in the RTP and looked at graduates' perceptions of preparedness, practice intentions, and actual practice choices made three years post-completion of training. An international environmental scan and literature review examined the optimal length and design of family medicine residency training in comparable countries. We reviewed data sources describing the number, distribution, and scope of practice of family physicians in Canada. Through focus group interviews we explored the perceptions, intentions, and choices of graduates recently in practice. Finally, we conducted a rapid literature review to understand the early impacts of COVID-19 on family medicine competencies and the implications for curriculum.

A full list of inquiry topics with evidence summaries includes:<sup>24,25,29-36</sup>

- **1.** Current State of Quantitative Data Available for Examining the Work of Family Physicians in Canada
- **2.** A Rapid Review of Defining Preparedness for Practice
- **3.** Insights on Preparedness for Practice From Family Medicine Longitudinal Survey Data
- **4.** Comparing Intentions Related to Family Medicine Comprehensiveness With Actual Practice
- **5.** Review of the Numbers of Family Physicians and Family Medicine Graduates Reported in Canada
- **6.** Understanding the Distribution and Mobility Patterns of Family Physicians
- **7.** Scope of Practice of Family Physicians in Canada
- **8.** Factors That Influence Practice Choices of Early-Career Family Physicians
- **9.** International Review Comparing the Length, Scope, and Design of Training for Family Medicine Residency

- **10.** The Impact of COVID-19 on Family Medicine Competencies and Educational Design
- **11.** Optimal Length of Training for Family Medicine Residency

To access full evidence summaries by inquiry topic and related scholarship, visit https://www.cfpc.ca/futurefp.

#### What we learned

Summarized here are the highlights of what we learned through our inquiry process about the current state of family medicine residency training in Canada, including an international comparison.

#### Defining preparedness for practice<sup>6,15,30,31,36</sup>

When Triple C was introduced in 2010 it was assumed that the achievement of competence equated to graduate preparedness for practice. Assessment objectives were developed to define competence for certification, establishing competence as the primary goal of residency training.

However, 10 years after the introduction of CBME we observed that, while competent, residents were increasingly pursuing enhanced skills training, citing a lack of confidence and a need to consolidate skills as a common reason for seeking extra training.

And so, through the OTP we have re-examined the concept of **preparedness** to help us understand how we can better encourage a sense of readiness and support graduates in the transition to full-scope comprehensive practice.

A rapid review of the literature revealed that preparedness for practice can be understood as a combination of competence, adaptability, and capability, together with interrelated concepts of self-confidence, self-concept, and self-efficacy.

Confidence is the subjective perception or individual belief in one's ability to perform a specific task.

Self-concept refers to the ability to draw conclusions about one's own skills or knowledge, and self-efficacy is the belief that one can be successful in carrying out a task. Adaptability is seen as the ability to apply one's competence in new and/or uncertain situations or contexts.

### This evidence introduces the idea that competence alone may not equate to being prepared for practice.

If preparedness is a desired outcome, then residency education should be designed to achieve that goal.

#### Graduate practice patterns<sup>27,29,31-35</sup>

#### > Data limitations

Data characterizing the work of family physicians in Canada are incomplete, terminology is inconsistent, and there are significant limitations related to its utility and comparability. The FMPP describes the comprehensive scope of what family physicians do in practice and provides an opportunity to help standardize the descriptors used to define the work of family physicians. Going forward, if we want to analyze family medicine practice patterns and impacts there needs to be an investment and an effort to enhance the availability of relevant data. We provide our findings with these limitations in mind.

## **>** Graduate number, distribution, and scope of practice

The number, distribution, and scope of work of new graduates are outcomes of interest not only to the CFPC but to physician workforce planners, university partners, governments, and the public at large.

Data from the Canadian Institute for Health Information show that the total number of family medicine graduates has increased steadily over the last 15 years as the result of residency program expansion. An important observation is that up to 61 per cent of rural family medicine graduates are working in a rural setting, providing evidence for and supporting the importance of distributed medical education.



Figure 4: Defining preparedness for family practice

The FMLS data show that only about 50 per cent of early-career family physicians report providing comprehensive care in two or more clinical settings (e.g., office, hospital, other). Fewer than 50 per cent report providing intrapartum care, in-hospital procedures, and/or care to marginalized and disadvantaged populations. Just over 25 per cent report working in a focused practice. Based on Canadian Medical Protective Association (CMPA) data, the proportion of physicians working in family medicine or general practice who include obstetrics, anesthesia, surgery, and work in emergency departments has been decreasing over the past 12 years.

CMPA data show that between 20 per cent and 30 per cent of those who identify as rural family physicians/general practitioners provide a broader range of services (including obstetrics, emergency care, surgery, anesthesia) as part of their work.

#### Understanding influences on graduate practice choices<sup>31,32,36</sup>

Comparing the practice intentions of family medicine graduates at time of exit of residency with those of graduates three years into practice, the FMLS reveals significant declines in actual practice choices made for working in long-term care facilities, rural communities, emergency departments, intrapartum care, and with Indigenous populations. Lack of personal interest was identified as the most common reason. Not feeling competent and/or confident also contributed to not practising intrapartum care, emergency care, in-hospital clinical procedures, and hospital care.

Systemic, organizational, and personal factors appear to have significant influence on these choices. Our FMLS data show that our graduates have a strong preference for interprofessional group practice.

However, early reports from focus groups with early-career family physicians indicate frustration that these practice models are often not available, potentially limiting the provision of comprehensiveness, particularly in caring for those with chronic and more complex health issues.

#### > Medical student career interests

An important factor in understanding the trend toward decreasing scopes of practice relates to the career interests of medical students entering residency. Findings from the FMLS indicate that approximately 30 per cent of medical students entering family medicine residency are intent on focused practice. This prompts a renewed interest in residency selection as well as in the need to address undergraduate influences and family medicine educational exposures that impact medical student interest in comprehensive or generalist family practice.

#### **>** Graduate perceptions of preparedness

While most residents and early-career physicians report feeling prepared to provide comprehensive office-based primary care, most consistently report little to minimal residency exposure to in-hospital procedures, home and long-term care, or to Indigenous and other underserved populations.

Corresponding to this, fewer than half report being likely to provide in-hospital clinical procedures, intrapartum and long-term-facility care, or a primary intention to care for Indigenous people and other underserved populations.

This speaks to potential training gaps and areas for improvement, particularly if we hope to address health equity, antiracism, and the needs of an aging population.

Focus groups with early-career family physicians affirm that acute care and procedural medicine are dimensions of practice where graduates often feel less confident and for which they welcome opportunities for skills consolidation.

#### Length of training in family medicine<sup>2,24,25,37</sup>

The OTP undertook extensive qualitative field research, which included writing workshops with family physicians on the theme of explaining their work and practice-based focus groups with early-career family physicians. While



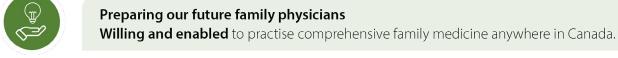


Figure 5: Factors influencing family medicine practice choices

it's not possible to include all the insights offered in these workshops and focus groups in this report, that information was considered in compiling the observations in this section.

The length of training in family medicine has always been a hot topic in Canada and around the world, and the OTP reactivates the discussion. The optimal length of training was examined from several perspectives, including a literature review and an international environmental scan of comparable countries, and through consultation with educational stakeholders in the Canadian context.

In a CBME paradigm, the length of training (time) is considered a resource and not a determinant of competence, and so it is with this perspective that we approached the issue.

## ➤ Optimal length of family medicine residency training – literature review

There is limited empirical evidence to inform a conclusion about optimal length of training. Most of the research that exists comes from the American Preparing the Personal Physician for Practice (P4) Project. Overall, the study design limited the conclusions about optimal length of training. Graduates exposed to lengthened training, compared with standard training, did show somewhat higher scope of practice scores, with a greater likelihood of including acute/hospital and procedural care in their practices. An interesting finding for us in Canada is that the P4 programs that already trained to a broader scope, even without increasing to four years, produce graduates who are more likely to provide adult in-patient, intrapartum, and long-term-facility care. Despite early concerns that lengthened training might harm student interest and/or match rates, they observed the opposite effect, with increased applications and fill rates for participating programs. Medical students motivated to participate in longer training reported career intentions for a broader scope of practice that includes hospital care and other dimensions of practice, such as academics and leadership.

## ➤ International comparison of residency training in family medicine

Among the family medicine programs of the countries reviewed, Canada's two-year family medicine residency training is the shortest by one to two years.

All other countries reviewed have three- or four-year programs, and some have been actively exploring extending their current program length.

Australia, Ireland, the United Kingdom, and the United States were chosen for this review as these four countries have been deemed comparable and have opted to participate in the CFPC's international route to certification in family medicine, based on an assessment conducted in 2010. New Zealand opted not to participate in the certification stream but was deemed comparable and so was included in this review. Australia has two certifying colleges—the Australian Medical Council and the Australian College of Rural and Remote Medicine—which is relevant when looking at scope and length of training. Regarding additional training beyond the core residency curriculum, Ireland and New Zealand do not currently offer enhanced certification programs (**Table 1**).

The length-of-training comparison is more meaningful when placed in context with the stated scope of training using clinical domains in the RTP (**Table 2**). Across comparison countries, there is most variability in training scope related to emergency care, hospital care, and intrapartum care. As in many jurisdictions, these domains are not within the purview of family physicians' scopes of practice. Canada's broad scope of training is matched only by that of the United States and Australia's rural stream.

## ➤ Optimal length of family medicine residency training in Canada – stakeholder reactions

The length of family medicine residency training is one of the most significant issues studied in the OTP. As such, it was a crucial topic for consultation with program directors, family physicians, and

Table 1. International comparison of family medicine training length and pathways

Country	Accreditation Body	Certification Body	Entry Level	Core Family Medicine Program Length	Enhanced Training
Canada	College of Family Physicians of Canada (CFPC)	CFPC	Postgraduate Year 1 (PGY1)	2 years	Yes: Enhanced skills third year, Certificates of Added Competence
Australia (general practice)	Australian Medical Council	Royal Australian College of General Practitioners (RACGP)	Postgraduate Year 2 (PGY2)	3 years	Yes: Advanced Rural Skills Training
Australia (rural practice)	Australian Medical Council	Australian College of Rural and Remote Medicine (ACRRM)	PGY2	4 years	Yes: Advanced Specialized Training
Ireland	Irish Medical Council	Irish College of General Practitioners	PGY1	4 years	No
New Zealand	Royal New Zealand College of General Practitioners	Royal New Zealand College of General Practitioners	PGY2	3 years	No
United Kingdom	General Medicine Council	Royal College of General Practitioners	PGY2	3 years	Yes: General Practitioners with Extended Roles
United States	Accreditation Council for Graduate Medical Education	American Board of Family Medicine	PGY1	3 years	Yes: Certificate of Added Qualifications

Table 2. International comparison of clinical scope of training in family medicine

Country	Primary Care	Emergency Care	Home and Long-term Care	Hospital Care	Maternal and Newborn Care	Intrapartum Care
Canada	Yes	Yes	Yes	Yes	Yes	Yes
Australia (general practice)	Yes	No	Yes	No	Yes	No
Australia (rural practice)	Yes	Yes	Yes	Yes	Yes	Yes
Ireland	Yes	No	Yes	No	Yes	No
New Zealand	Yes	No	Yes	No	Yes	No
United Kingdom	Yes	No	Yes	No	Yes	No
United States	Yes	Yes	Yes	Yes	Yes	Yes

residents. Given the volume of comments, ideas, and observations gleaned through these consultations, much of these data remain unpublished. However, these consultations are part of the body of evidence considered in this section.

Consultation with university-based family medicine leadership revealed an understanding of the need for increased training time, qualified by concerns about resources, change fatigue, opportunity costs, and the need to prioritize generalism over the focused practice interests of many residents. While flexible and customized training extensions are popular with residents and early-career physicians, and hold educational appeal in a CBME paradigm, program directors questioned the administrative feasibility and the ability to maintain curricular rigour and control. We also heard concerns about the potential risk that more time will further exacerbate the current trend toward focused practice, depending on how the extra time is used.

Learner groups were mixed in their reaction, with residents and early-career physicians favouring flexible and customized training extensions and medical students favouring the status quo, with concern about debt loads. Many medical students with whom we consulted are still keen on the "plus one" enhanced skills training year, which seems to contradict their hesitation about longer training. This is consistent with findings that a significant proportion of medical students enter family medicine residency with more focused intentions. Many students and residents we spoke with do not perceive core training as sufficient preparation for a full scope of practice beyond office-based primary care.

Discussions with other senior university leaders on the OTP, and to gauge initial reaction to the prospect of longer training, revealed overriding concerns about resource implications. We were advised that the social accountability mandate is paramount and changes to training must clearly address community access and health equity concerns.



## Outcomes of Training Project Recommendations

The CFPC presents these evidence-informed recommendations to guide and enable family medicine residency training enhancements contributing to an end goal of improved access and equity, and an ability to adapt to changing societal needs and health system roles.

The recommendations were developed weighing options for how best to achieve the goals of training outlined by the RTP,8 while identifying and mitigating possible risks. Most are directed internally to guide CFPC advocacy and standard-setting efforts, or externally to guide our university-based partners in the delivery of family medicine residency training.

Of significant interest is the recommendation to increase the length of training in family medicine from two to three years.

There will be no immediate change to either the CFPC's residency accreditation or certification standards for at least five years (2027).

We recognize that this recommendation has substantial resource implications and potential ripple effects, requiring a slow and careful change management approach and cross-sectoral collaboration with government, university, and regulatory partners. We want to provide sufficient notice to medical students and to mobilize the resources necessary for residency programs to meet these new requirements. We want to stimulate educational innovation linked with health system reform as a way forward in the change process.

#### Implement the Residency Training Profile

## RECOMMENDATION 1: THAT the CFPC approve the use of the family medicine Residency Training Profile (RTP) AND take the following supporting actions:

**1.1** Pursue a standard length of training of three years to enable improved preparedness for practice and to facilitate a broader scope of practice as defined in the RTP to better meet the needs of communities

This will be phased in over at least five years to allow for proper planning and attention to change management:

- **1.1.1** Convene a Length of Training Task Force, involving key stakeholders, to develop an implementation plan that addresses: feasibility, resources, and health system planning; residency program educational design and innovation; communication and advocacy
- **1.1.2** Stimulate the development and testing of extended training models, encouraging educational innovation in collaboration with university partners as part of the implementation plan
- **1.1.3** Develop an educational strategy focused on the transition to practice and mentorship of early-career physicians as part of the implementation plan
- **1.1.4** Adjust educational standards for certification and residency accreditation to reflect RTP expectations and a longer length of training in conjunction with the task force's implementation plan
- **1.2** Convene a scholarship series to further develop our understanding and definition of generalist expertise and preparedness for practice
- **1.3** Establish support for the national family medicine program directors' Selection Working Group and work in partnership to better attract and select individuals interested in and capable of comprehensive family medicine practice

## RECOMMENDATION 2: THAT the CFPC approve the use of the Residency Training Profile for Enhanced Skills Category 1 programs AND take the following supporting actions:

- **2.1** Assist enhanced skills program directors, in partnership with university programs, to support implementation (including faculty development) of the RTP in conjunction with the Triple C Competency-Based Curriculum
- **2.2** Work with residency programs and university departments of family medicine to build a focus on leadership and the role that family physicians with enhanced skills play to extend capacity for comprehensive care
- **2.3** Implement a practice-eligible route for CAC recognition in support of the development of advanced family medicine skills and leadership in practice
- **2.4** Develop and advocate for re-entry training opportunities that effectively support family physicians in practice to obtain enhanced skills training in response to their local community needs
- **2.5** Review and revise accreditation standards to reflect RTP goals of training, allowing for a reasonable initial period of uptake and faculty development

#### Strengthen capacity to study training outcomes

### RECOMMENDATION 3: THAT the CFPC establish a regular cycle of educational evaluation with a focus on outcomes, AND take the following supporting actions:

- **3.1** Commission the development of a program evaluation plan to assess uptake of the RTP and its influence on graduate practice patterns as a measure of social accountability
- **3.2** Convene an expert Program Evaluation Working Group to develop the measurement framework as well as to assist with an analysis of findings related to the output and outcomes of training
- **3.3** Collect relevant family physician practice data, via survey or other means, as part of a national commitment to support the study of family medicine in Canada
- **3.4** Develop a CFPC data warehouse that enables improved data stewardship, analysis, and linkage with other pan-Canadian data sources
- **3.5** Establish consensus on how to describe and study the work of family physicians in Canada with partner organizations and health service research institutes
- **3.6** Establish and support a CFPC-focused research agenda to explore educational and practice questions regarding the uptake and impact of family physicians' roles in the health care system

#### Address gaps and trends requiring educational attention

## RECOMMENDATION 4: THAT the CFPC establish a regular cycle of educational improvement and work in partnership with residency programs to address identified challenges, gaps, and important emerging topics, AND take the following supporting actions:

**4.1** Work with residency programs on strategies to improve education and practice on topics of emerging importance, and to address persistent educational challenges.

Current priorities, based on findings from the OTP and aligned with family medicine Core Professional Activities:

- Home and long-term care
- Addiction and mental health
- o Indigenous health
- Health equity and anti-racism
- Virtual care and health informatics
- **4.2** Promote faculty development that addresses the leadership, advocacy, and scholarship activities identified in the RTP for both core and enhanced skills programs



Educational reform in family medicine and health care reform are each complex endeavours. The time has come to combine efforts and this is a call to action. The CFPC has a vision for what this should look like that is based on evidence gained through the OTP and established evidence supporting the CFPC's Patient's Medical Home<sup>28</sup> as a set of principles for effective delivery of interprofessional team-based primary care.

This transformation cannot be achieved in isolation. It requires a shared vision, clear resolve, and a powerful coalition across many partner groups.

Responding to the recommendations, the CFPC will establish an **Education Task Force** to guide the development of a three-year curriculum and enhanced skills training based on the RTP, and to lead advocacy for the resources needed to extend

training. An assessment review and examination blueprint project has been constituted and will work in conjunction with the Education Task Force to integrate the RTP into existing and new assessment approaches, including the certification examinations in family medicine. The CFPC will initiate a crosscountry dialogue among stakeholders, building a coalition and a commitment to change (Figure 6). Funding will be sought to stimulate innovation and evaluation projects, providing a proof-of-concept for how education and health reform alignment can support improved access to care. The CFPC will function as a catalyst for this process.

The CFPC will begin planning with accreditation and **certification standard-setting committees** to explore the changes needed to support the goals expressed by the RTP.

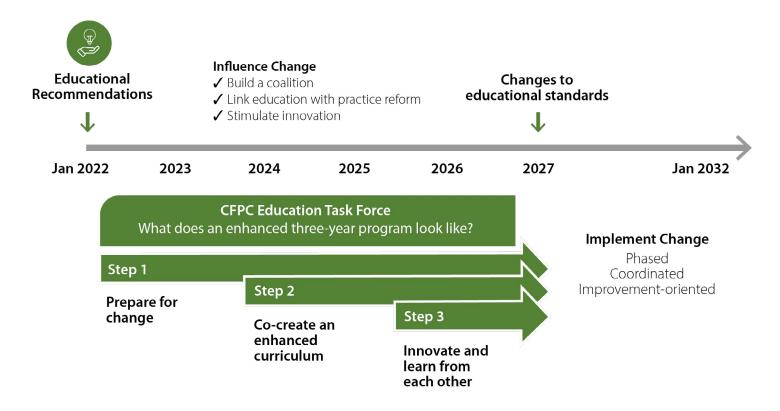


Figure 6. Creating the conditions for change

And so, the CFPC's next educational chapter focuses on the length, scope, and content of family medicine residency training in the larger pursuit of social accountability where all people in Canada have a relationship with a family physician in an interprofessional team providing access to comprehensive care close to home.

Ongoing medical education renewal is necessary but insufficient on its own to transform the delivery of health care in this country. It must be accompanied by policies and remuneration models that support comprehensiveness—broad-scope practices—rather than incentivized episodic care. This represents a big task, for which the time has come.

## References

- 1 McWhinney IR. A call to heal. Reflections on a life in family medicine. Regina, SK: Benchmark Press; 2012.
- 2 Fowler N, Wyman R, eds. *Residency Training Profile for Family Medicine and Enhanced Skills Programs Leading to Certificates of Added Competence*. Mississauga, ON: College of Family Physicians of Canada; 2021. Available from: http://www.cfpc.ca/rtp. Accessed August 9, 2021.
- 3 College of Family Physicians of Canada. *Position Statement: Strengthening Health Care Access Done Right*. Mississauga, ON: College of Family Physicians of Canada; 2021. Available from: https://www.cfpc.ca/CFPC/media/Resources/Health-Care-Delivery/Access-Done-Right\_ENG\_Final.pdf. Accessed August 9, 2021.
- 4 Beaulieu MD. The perils and the promise of proximity: Dr Ian McWhinney Lecture. *Can Fam Physician*. 2016;62(12):964-968.
- 5 College of Family Physicians of Canada. *Refreshed CFPC Strategic Plan 2017–2022*. Mississauga, ON: College of Family Physicians of Canada; 2021. Available from: https://www.cfpc.ca/CFPC/media/Resources/CFPCStratPlan-RevJUNE2021-ENG.pdf. Accessed August 9, 2021.
- 6 College of Family Physicians of Canada. *Triple C Competency-Based Curriculum*; 2021. Available from: https://www.cfpc.ca/en/education-professional-development/educational-frameworks-and-reference-guides/triple-c-competency-based-curriculum. Accessed August 9, 2021.
- 7 Oandasan I, on behalf of the Triple C Competency Based Curriculum Task Force. A national program evaluation approach to study the impact of Triple C. In: Oandasan I, Saucier D, eds. *Triple C Competency-based Curriculum Report Part 2: Advancing Implementation*. Mississauga, ON: College of Family Physicians of Canada; 2013.
- 8 Truth and Reconciliation Commission of Canada. *Truth and Reconciliation Commission of Canada: Calls to Action*. 2015. Available from: https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls\_to\_Action\_English2.pdf. Accessed August 9, 2021.
- 9 College of Family Physicians of Canada. *CFPC Statement on Addressing Systemic Racism on Indigenous people*. Mississauga, ON: College of Family Physicians of Canada; 2020. Available from: https://www.cfpc.ca/CFPC/media/PDF/CFPC-Response-NatlEmergMtg-AddressSystemicRacism-202010-EN.pdf. Accessed August 9, 2021.
- 10 College of Family Physicians of Canada. *CFPC Statement Against Racism*. Mississauga, ON: College of Family Physicians of Canada; 2020. Available from: https://www.cfpc.ca/en/news-and-events/news-events/news-events/news-releases/2020/cfpc-statement-against-racism. Accessed August 9, 2021.
- Rainsberry P, Nasmith L, Weston W, Busing N, Fowler N, Goertzen J, et al. The times, are they a-changin'? [comment]. *Can Fam Physician*. 2018;64(11):798-800.
- 12 Rainsberry P. Family Medicine: The Canadian Heritage. Mississauga, ON: College of Family Physicians of Canada; 2014.
- 13 College of Family Physicians of Canada. *Four Principles of Family Medicine*; 2021. Available from: https://www.cfpc.ca/en/about-us/vision-mission-principles#four. Accessed August 9, 2021.
- 14 Shaw E, Oandasan I, Fowler N, eds. *CanMEDS-FM 2017: A competency framework for family physicians across the continuum.* Mississauga, ON: College of Family Physicians of Canada; 2017.
- 15 Crichton T, Schultz K, Lawrence K, Donoff M, Laughlin T, Brailovsky C, et al. *Assessment Objectives for Certification in Family Medicine*. Mississauga, ON: College of Family Physicians of Canada; 2020.
- 16 Lawrence K, van der Goes T, Crichton T, Bethune C, Brailovsky C, Donoff M, et al. *Continuous Reflective Assessment for Training (CRAFT): A national programmatic assessment model for family medicine*. Mississauga, ON: College of Family Physicians of Canada; 2018.
- 17 College of Family Physicians of Canada. *Standards of Accreditation for Residency Programs in Family Medicine*. Mississauga, ON: College of Family Physicians of Canada; 2020.

- 18 Ross S, Binczyk NM, Hamza DM, Schipper S, Humphries P, Nichols D, et al. Association of a competency-based assessment system with identification of and support for medical residents in difficulty. *JAMA Netw Open*. 2018;1(7):e184581.
- 19 Lawrence K, van der Goes T, Crichton T, Bethune C, Brailovsky C, Donoff M, et al. *Continuous Reflective Assessment for Training (CRAFT): A national programmatic assessment model for family medicine*. Mississauga, ON: College of Family Physicians of Canada; 2018.
- 20 Ellaway RH, Palacios Mackay M, Lee S, Hofmeister M, Malin G, Archibald G, Lawrence K, Dogba J, Côté L, Ross S. et al. The impact of a national competency-based medical education initiative in family medicine. *Acad Med.* 2018;93(12):1850-1857.
- Weidner AKH, Chen FM. Changes in preparation and practice patterns among new family physicians. *Ann Fam Med*. 2019;17(1):46-48.
- Hamza D, Oandasan I, on behalf of the Program Evaluation Advisory Group. *Triple C Competency-Based Curriculum: Findings Five Years Post-Implementation*. Mississauga, ON: College of Family Physicians of Canada; 2018.
- Oandasan I, Archibald D, Authier L, Lawrence K, McEwan LA, Mackay MP, et al. Future practice of comprehensive care: Practice intentions of exiting family medicine residents in Canada. *Can Fam Physician*. 2018;64(7):520-528.
- 24 Nasmith, G, Fowler, N, eds. *International Review Comparing the Length, Scope, and Design of Training for Family Medicine Residency: An Outcomes of Training Project evidence summary.* Mississauga, ON: College of Family Physicians of Canada; 2022.
- 25 Nasmith G, Fowler N, eds. *Optimal Length of Family Medicine Residency Training: An Outcomes of Training Project evidence summary.* Mississauga, ON: College of Family Physicians of Canada; 2022.
- Boelen C, Heck JE. *Defining and Measuring the Social Accountability of Medical Schools*. Geneva, Switzerland: World Health Organization; 2015. Available from: http://apps.who.int/iris/bitstream/10665/59441/1/WHO\_HRH\_95.7.pdf. Accessed February 20, 2021.
- 27 College of Family Physicians of Canada. *Family Medicine Professional Profile*. Mississauga, ON: College of Family Physicians of Canada; 2018. Available from: https://www.cfpc.ca/CFPC/media/Resources/Education/FM-Professional-Profile.pdf. Accessed August 9, 2021.
- 28 College of Family Physicians of Canada. *A New Vision for Canada: Family Practice The Patient's Medical Home 2019.*Mississauga, ON: College of Family Physicians of Canada; 2019. Available from: https://patientsmedicalhome.ca/vision/. Accessed August 9, 2021.
- 29 Aggarwal M, Katz A, Oandasan I, eds. *Current State of Quantitative Data Available for Examining the Work of Family Physicians in Canada: An Outcomes of Training Project evidence summary.* Mississauga, ON: College of Family Physicians of Canada; 2022.
- 30 Aggarwal M, Oandasan I, Abdelhalim R, Fowler N, eds. *A Rapid Review of Defining Preparedness for Practice: An Outcomes of Training Project evidence summary.* Mississauga, ON: College of Family Physicians of Canada; 2022.
- 31 Aggarwal M, Holtby A, Oandasan I, eds. *Insights on Preparedness for Practice From Family Medicine Longitudinal Survey Data: An Outcomes of Training Project evidence summary.* Mississauga, ON: College of Family Physicians of Canada; 2022.
- 32 Aggarwal M, Oandasan I, eds. *Comparing Intentions Related to Family Medicine Comprehensiveness With Actual Practice: An Outcomes of Training Project evidence summary.* Mississauga, ON: College of Family Physicians of Canada; 2022.
- 33 Aggarwal M, Holtby A, Oandasan I, eds. *Review of the Numbers of Family Physicians and Family Medicine Graduates Reported in Canada: An Outcomes of Training Project evidence summary.* Mississauga, ON: College of Family Physicians of Canada; 2022.
- 34 Aggarwal M, Oandasan I, eds. *Understanding the Distribution and Mobility Patterns of Family Physicians: An Outcomes of Training Project evidence summary.* Mississauga, ON: College of Family Physicians of Canada; 2022.
- 35 Aggarwal M, Oandasan I, eds. Scope of Practice of Family Physicians in Canada: An Outcomes of Training Project evidence summary. Mississauga, ON: College of Family Physicians of Canada; 2022.
- 36 Aggarwal M, Holtby A, Oandasan I, eds. Factors *That Influence Practice Choices of Early-Career Family Physicians: An Outcomes of Training Project evidence summary.* Mississauga, ON: College of Family Physicians of Canada; 2022.
- 37 Carney PA, Eiff MP, Waller E, Jones SM, Green LA. Redesigning Residency Training: Summary Findings From the Preparing the Personal Physician for Practice (P4) Project. *Fam Med*. 2018;50(7):503-517.