Factors that influence scope-of-practice decisions of early-career family physicians

Focus group study in Canada

Monica Aggarwal MPA PhD Kristina Kokorelias MSc PhD Reham Abdelhalim MD PhD CPHQ

Abstract

Objective To explore perceptions of early-career family physicians on the personal, educational, organizational, community, and system factors that had influenced their scope-of-practice decisions and to compare the similarities and differences among these factors across all 13 Canadian jurisdictions.

Design Qualitative descriptive study.

Setting Canada.

Participants Fifty-nine early-career family physicians who were 2 to 5 years into independent practice.

Methods Data were collected using focus groups and were analyzed using deductive and inductive analysis techniques to identify patterns in the data within and across jurisdictions.

Main findings Participants across all jurisdictions highlighted that personal factors (ie, interest, work-life balance and family life, financial considerations, and self-perceived competence and confidence) were most influential on scope-of-practice decisions. Educational (ie, exposure during training, mentorship), organizational (ie, collegial support), community (ie, needs), and system (ie, payment models, funding for team-based care, governance) factors also influenced decisions about scope of practice. Experiences were similar across all jurisdictions for personal factors. Differences in experiences were reported across jurisdictions for educational, organizational, community, and system factors.

Conclusion Decisions about scope of practice by early-career family physicians are highly influenced by personal factors followed by organizational, educational, community, and system factors. These findings suggest numerous strategies are needed to increase individuals' interest in providing comprehensive care in Canada. Educators should cultivate interest in comprehensive care among learners, strategically recruit trainees, provide targeted exposure and experiences, ensure competence and confidence are evaluated throughout and at the end of training, and introduce formal mentorship programs. Policy-makers should invest in the spread of effective team models and alternative payment models. Together, these strategies could broaden the scopes of practice of family physicians and their capacity to deliver accessible and comprehensive care to Canadians.

Facteurs qui influent sur les décisions liées à la portée de la pratique chez les médecins de famille en début de carrière

Étude à l'aide de groupes témoins au Canada

Monica Aggarwal MPA PhD Kristina Kokorelias MSc PhD Reham Abdelhalim MD PhD CPHQ

Résumé

Objectif Explorer les perceptions des médecins de famille en début de carrière quant aux facteurs personnels, éducationnels, organisationnels, communautaires et systémiques qui ont influé sur leurs décisions entourant la portée de la pratique, et comparer les similitudes et les différences parmi ces facteurs dans les 13 provinces et territoires au Canada.

Type d'étude Une étude qualitative descriptive.

Contexte Le Canada.

Participants Cinquante-neuf médecins de famille en début de carrière qui étaient en pratique autonome depuis 2 à 5 ans.

Méthodes Des données ont été recueillies au moyen de groupes témoins et ont été analysées à l'aide de techniques d'analyse déductives et inductives pour cerner des tendances dans les données, dans chaque région et entre les régions.

Principales constatations Les participants de toutes les régions ont indiqué que des facteurs personnels (p. ex. intérêts, équilibre travail-vie personnelle et vie familiale, considérations financières, et compétence et confiance telles que perçues par l'intéressé) avaient exercé le plus d'influence sur leurs décisions relatives à la portée de la pratique. Des facteurs éducationnels (p. ex. exposition durant la formation, mentorat), organisationnels (p. ex. soutien des collègues), communautaires (p. ex. besoins) et systémiques (p. ex. modes de rémunération, financement pour des soins en équipe, gouvernance) avaient aussi influé sur leurs décisions concernant la portée de la pratique. Les expériences étaient semblables dans toutes les régions concernant les facteurs personnels. Des différences dans les expériences ont été signalées d'une région à l'autre quant aux facteurs éducationnels, organisationnels, communautaires et systémiques.

Conclusion Les décisions au sujet de la portée de la pratique prises par les médecins de famille en début de carrière sont fortement influencées par des facteurs personnels, suivis par des facteurs organisationnels, éducationnels, communautaires et systémiques. Ces constatations révèlent que de nombreuses stratégies sont nécessaires pour accroître l'intérêt des médecins à dispenser des soins complets et globaux au Canada. Les enseignants devraient cultiver l'intérêt pour les soins complets chez leurs apprenants, recruter les stagiaires de manière stratégique, offrir des expositions et des expériences ciblées, faire en sorte que la compétence et la confiance soient évaluées tout au long de la formation et, à la fin, instaurer des programmes formels de mentorat. Les décideurs devraient investir dans le déploiement de modèles efficaces en équipe et dans d'autres modes de rémunération. Ensemble, ces stratégies pourraient élargir la portée de la pratique des médecins de famille, et accroître leur capacité de fournir des soins accessibles, complets et globaux aux Canadiens.

Family physicians are trained to provide comprehensive and continuous care to patients and populations.[1,2] A *comprehensive practice* has been defined as the delivery of a broad scope of practice (SOP) throughout the life cycle of a patient in multiple care settings.[3] Canada is facing a primary care crisis, in which approximately 14.5% of Canadians are without a regular health care provider.[4] There are growing concerns that fewer FPs work in full-service comprehensive practices,[3,5,6] which is not considered in workforce planning. These trends raise important questions for educators and policy-makers about the factors influencing SOP decisions of early-career FPs in Canada. Jurisdiction-specific studies indicate various personal, organizational, system, educational, and community factors influence FPs' decisions about providing a broader SOP[7,8] (**Table 1**).[8,9]

To date, Canadian studies have focused on single[7] or specific jurisdictions[9] and have not represented national perspectives of FPs on factors that influence SOP decisions and how these factors are similar or different across jurisdictions, which vary in the design and delivery of primary care services. Thus, this study explores the similarities and differences in personal, educational, organizational, community, and system factors that influence the SOP decisions of early-career FPs across the 13 Canadian jurisdictions.

Methods

A qualitative descriptive study design was selected to describe a phenomenon from the perspectives of those with lived experience.[10,11] We report our findings using the COREQ (Consolidated Criteria for Reporting Qualitative Research).[12] Research ethics approval was obtained from the University of Toronto Health Sciences Research Ethics Board.

Participants and recruitment

Purposive and convenience sampling were used. Eligible participants were early-career FPs who had completed family medicine (FM) residency training in Canada and had been in independent practice for 2 to 5 years. Recruitment methods included posting study information on social media, contacting physician working groups, and using snowball sampling.[13] A maximum variability technique was used to ensure diversity in participant characteristics such as sex; training university; practice location, model, and type; and involvement in different practice and academic activities.[14] A research assistant (R.A.) screened participants for eligibility and obtained written informed consent before data collection.

Table 1. Factors that influence scope-of-practice decisions as reported in the literature

CATEGORY	FACTOR
Personal	Preferences,[8,9] family,[8,9] desired residence,[9] work-life balance,[8,9] career aspirations,[8] practice experiences[8]
Organizational	Practice type[8], patients,[8] time spent on clinical and nonclinical activities, practice requirements,[8] labour mobility,[8] location,[8] culture,[9] administration,[8,9] staff competencies,[9] cost of practice, compensation[9]
System	Regional economics[9] and policies[9]
Educational	Training,[8,9] mentors[8,9]
Community	Demographic characteristics,[9] community needs[8,9]

Data collection

Data collection took place between November 2020 and June 2021. Each participant received an information letter, signed a consent form via email, and completed a demographic characteristic questionnaire. Twelve virtual focus groups were conducted using a semistructured guide (provided as supplementary material, available from **CFPlus***). Building on our methodologic approach, participants were provided with the *Family Medicine Professional Profile*[15] before engaging in focus group discussions, ensuring a contextually informed dialogue on the SOP construct. The focus groups explored factors related to preparedness for practice, practice intentions, and practice choices. Each jurisdiction was involved in at least 1 focus group. Alberta, British Columbia, Manitoba, Newfoundland and Labrador, and Saskatchewan had 1 focus group each. Ontario, Quebec, and the territories (Yukon, Northwest Territories, and Nunavut) had 2 focus groups each. Participants from New Brunswick, Nova Scotia, and Prince Edward Island were combined into 1 focus group (Maritimes). Each focus group had 6 to 8 FPs. Videoconferencing systems were used for 90- to 110-minute focus group sessions facilitated by the principal investigator (M.A.), a qualitative woman researcher with a PhD; field notes were taken by the research assistant (R.A.). The research team had no prior relationships with participants. Data collection ended when no new relevant information was identified.[16] Research team debriefings occurred after each focus group.[17] The focus group discussions were audiorecorded, professionally transcribed, and reviewed for accuracy.

Analysis

Data collection and analysis were conducted iteratively and concurrently, aligning with established models in qualitative analysis applied post hoc to interpret participant responses.[18] NVivo software, version 12, was used to organize data.[19] Data were analyzed thematically using a directed content-analysis approach.[20-24] Upon data review, we deliberately applied a deductive analytic approach, selecting a framework that encompassed

*__Supplementary Material__ is available from **https://www.cfp.ca**. Go to the full text of the article online and click on the **CFPlus** tab.

personal, educational, organizational, community, and system factors.[25] This framework was derived from participant responses and guided our analysis. Thus, after reading each transcript and discussing initial thoughts with the research team, we employed deductive (ie, using the previously identified personal, educational, organizational, community, and system factors) and inductive approaches (ie, using content that was identified from the data).[25] Data were coded independently by the principal investigator (M.A.) and research assistants (R.A. and K.K.). We started the analysis by reading the transcripts several times to understand the whole data set. Sentences and phrases with content relevant to the aim, known as *meaning units*, were highlighted. The meaning units were organized under codes.[22,24] The team iteratively added codes through a series of meetings and then grouped similar contexts to form categories. Through a series of meetings, the team identified the most salient emerging themes and subthemes[20] and similarities and differences among comments based on the provinces and territories of participants. Alternative interpretations of the data were also discussed.[24] Memos were written throughout the analysis.[17,26] Member checking was done with 2 female participants who were 3 and 4 years into independent practice and had academic affiliations. For member checking we selected individuals who provided diverse perspectives on their experiences and those of colleagues (anecdotally) on the factors that had shaped their SOPs. We provided participants with a summary of findings and an opportunity to provide feedback on the results and to comment on whether the themes aligned with their experiences.[27,28]

Results

Fifty-nine early-career FPs participated in the study. Participants were from 10 provinces (n=53) and 3 territories (n=6) across Canada. Sixteen people who had initially responded ended up not participating due to pandemic response duties or personal responsibilities. The mean age of participants across the provinces and territories ranged from 32.1 to 35.0 years. Most participants were female (44 of 59; 75%) and had been in independent practice for 2 to 3 years (37 of 59; 63%) (**Table 2**).

Below we identify the personal, educational, organizational, community, and system factors (themes) that had influenced SOP decisions and highlight the subthemes that were similar or different across jurisdictions as derived from our analysis. In **Table 3** we present illustrative quotes related to each subtheme.

Personal factors

Personal factors (ie, personal interest, work-life balance and family life, financial considerations, and self-perceived competence and confidence) were described by participants as being highly influential factors affecting SOP decisions across all jurisdictions.

Personal interest. The personal interests of FPs represent a major theme that appeared in the data in the context of pursuing a full-service comprehensive care practice with a broader SOP. Family physicians indicated their desire to have ongoing patient-provider relationships and to deliver care across an individual's lifespan influenced their interest in comprehensive care. One participant from British Columbia shared, "I just really wanted those relationships. And I felt like as a locum, I couldn't develop those long-term relationships." As such, these FPs ensured that they obtained the exposure and experience needed to work in a full-service practice, including working in rural settings to broaden their skills, knowledge, and capabilities.

Work-life balance and family life. Across all jurisdictions, work-life balance was mentioned by participants, particularly among those with partners and children. Consequently, when FPs decided to narrow their SOPs to office-based or focused practices it was related to the lack of desire to work around the clock or concerns about the burnout experienced in a full-service comprehensive care practice.

Financial considerations. A desire to obtain a certain income level influenced decisions in all jurisdictions. Some FPs had chosen to work in full-service comprehensive rural settings or focused practices (eg, hospitals or emergency departments) due to higher compensation.

Perceived self-competence and confidence. The possession of competence and self-confidence to practise independently was a major point of discussion among participants from all jurisdictions. Participants from all jurisdictions noted that they were more likely to select and practise in areas they felt more confident in and to avoid areas in which they felt less experienced. This included emergency medicine, obstetrics, hospital care, and rural practice. One participant from Alberta noted,

> I think for me, the thing I felt least comfortable with was probably emergency care. I didn't realize that I wasn't ready for emergency care. That was actually what I planned on my entire practice being until I tried it. I did electives and extra rotations in [the intensive care unit] and emergency [department]. And then as soon as the support is taken away and you're on your own, it feels very different. And I didn't feel comfortable managing that.

Educational factors

Exposure during FM training and mentorship were identified across all jurisdictions as factors that had influenced SOP decisions. Family physicians in Manitoba, Ontario, Quebec, and Saskatchewan highlighted specific experiences with their FM programs.

Table 2. Participant characteristics across jurisdictions

CHARACTERISTIC	VALUE
No. of participants per jurisdiction	
• Alberta	6
• British Columbia	7
• Manitoba	6
• Maritimes*	6
• Newfoundland and Labrador	7
• Ontario	8
• Quebec	7
• Saskatchewan	6
• Territories†	6
Mean age range across jurisdictions, y	32.1-35.0
Sex	
• Female	44
• Male	14
• Prefer not to answer	1
Years in independent practice	
• 2	6
• 3	31
• 4	14
• 5	7
• Unreported	1
Residency training	
• University of British Columbia	6
• University of Calgary	4
• University of Alberta	4
• University of Saskatchewan	6
• University of Manitoba	6
• Western University	1
• McMaster University	2
• University of Toronto	5
• NOSM University	1
• University of Ottawa	2
• Queen's University	2
• University of Sherbrooke	2
• University of Montréal	1
• Laval University	3
• Dalhousie University	4
• Memorial University of Newfoundland	9
• Other (partial international)	1
Practice location	
• Inner city	4
• Urban or suburban	22
• Small town	7
• Rural	7
• Remote or isolated	2
• Mixture of environments	17
Practice model	
• Solo practice	3
• Physician group practice	22
• Interprofessional team-based practice	22
• Mixed practice	6
• Other	6
Practice type	
• Comprehensive in 1 setting	9
• Comprehensive in multiple settings	25
• Comprehensive with a special interest	9
• Focused	7
• Other	9
Academic affiliation	
• Yes	44

Table 2 *continued on next column*

Table 2 *continued from previous column*

*The Maritimes group includes participants from New Brunswick, Nova Scotia, and Prince Edward Island.
†The territories group includes participants from Yukon, Northwest Territories, and Nunavut.

Exposure during FM training. Family physicians from across all jurisdictions commented on how the lack of exposure to specific practice areas (eg, emergency medicine, obstetrics, hospital care), types of practice (eg, comprehensive practice), or practice locations negatively impacted their preparedness for independent practice. In contrast, early-career FPs who had spent more extensive time in rural settings reported feeling more prepared, which broadened their SOP.

Participants from Manitoba and Saskatchewan indicated their training experience had sometimes been driven by the needs of the community and less by their learning needs. Participants described doing "grunt work" or running errands for supervisors since no one else had been available to assume these duties. Participants from Ontario and Quebec indicated their training experiences had been based on the context (ie, within specific practice models or urban areas).

Mentorship. Family physicians from all jurisdictions described experiences where mentors had positively influenced decisions to pursue broader SOPs, while others described experiences where lack of mentorship had reduced their interest in specific clinical practice areas.

Organizational factors

Collegial support was identified as having broadened SOPs by participants in Alberta, British Columbia, Ontario, and the territories. In Alberta and Ontario, it was noted that access to team-based models and sharing work with colleagues had allowed FPs to provide a comprehensive array of services and to work in different settings (see system factors below).

Community factors

Community needs were identified as a factor that had influenced the SOP decisions of FPs. We found similar perspectives among participants in Manitoba, the Maritimes, Newfoundland and Labrador, Quebec, Saskatchewan, and the territories. In some cases, this factor had broadened SOP. In other cases it had led to SOP narrowing, with FPs choosing hospital care or focused practice (eg, addiction medicine). In these jurisdictions there were challenges with health human resource shortages. Some participants described how the abundance of obstetricians in Ontario had reduced the need for FPs to participate in this area of care. On the other hand, the lack of specialists was reported to have resulted in SOP broadening in Alberta, the Maritimes, Newfoundland and Labrador, and the territories.

Table 3. Illustrative comments related to factors that had influenced scope-of-practice decisions

THEME	ILLUSTRATIVE COMMENTS
Personal factors	
Personal interest	• I really loved the idea of just walking a patient through life, and being there from, you know, like birth until the end. And just I saw that more in medical school when I shadowed family doctors, and I saw their relationships with their patients. And that's what I wanted. So I suppose people who don't necessarily like that would do something more like hospitalist or ER [emergency room] medicine. (Quebec) • Even as a medical student, I always knew I wanted to be a family doctor. You can't exactly choose what you want to see, especially for doing primary care family medicine like I do. Like your patients can have any problem, and that's for you to help them with. (Quebec) • I like this idea of doing clinic, and I like ... this idea of doing all this stuff. That was what made me want to go into medicine to begin with. So ... I'm exactly where I thought I would be. (Newfoundland and Labrador) • I am actually doing what I had hoped and thought I would do after residency and training. (Territories) • I have a lot of diverse interests. (Saskatchewan) • I chose to start my own practice because with locuming, I didn't get the relationships. Family medicine is so much about relationships. And I really wanted to be a family doctor for a group of people. (British Columbia)
Work-life balance and family life	• And it's not just about the medicine and where your values are in your practice in day-to-day but also what's outside of that and who's around to support you when you get home, and where you are physically, geographically as well, and whether you feel satisfied from that perspective, too. (Ontario) • I wanted like more stability in my life, proximity to family. And I thought that having a practice would be more of that. Like I think I've done enough night shifts in almost 6 years of residency total, and med school. So it was definitely more kind of a quality of life. (Maritimes) • We're part of a very business-minded, efficiency, work-life balance generation in medicine. (Saskatchewan) • Again, it's lifestyle choices. So, my children are older. And so especially [providing] virtual care and teaching and stuff, a lot of the work ... I work from home. So, I can pick my kids up after school or do other activities and stuff with them, spend evenings with them. So I've changed my practice a lot around the lifestyle choices for my kids. (Territories)
Financial considerations	• I think coming out of residency, certainly, and the decisions that I made in the first few years, I definitely ... I was interested in rural medicine all along. But certainly the fact that it was more lucrative compared with urban medicine was also an attraction because the [training] process is expensive. You've got some lost time to make up for. And that's absolutely a part of the decision-making process. (Alberta) • So when I was able to kind of form that team of people that I really care about and they care about me, that made a huge difference. And that's what really lured me in. I would say a plus that I found [was] the financial incentive of being able to work 24-hour [emergency department shifts] for days and days in a row. Like because the volumes are low enough that you sleep most nights. That financially was a big incentive as well to come to an area where I do work. (Ontario) • And now there's this sense of, like, you need to think about, like "I'm going to do this" but there's also like a financial part of it, and I need to now have to think about my retirement and my finances, and like take vacation, and the insurances. (Quebec)
Perceived competence and confidence	• And also the one thing that I did not feel I had adequate preparedness was [obstetrics]. So that, even though I probably could have asked for more support, I just made the decision to not incorporate that into any part of my practice, and I just gave that up right away. (Maritimes) • The first thing that comes to mind for me is like feeling well equipped to provide the care that you need to [care for] the full spectrum of patients that might be presented to you in your particular practice, and feeling competent in the skills that you have. (Alberta) • And then a big part for me would be the system as well. So knowing the system and knowing the people within the system, and, you know, how to access certain specialists, who to call when you need what done. And I think that when you.... For me, doing my residency here is what prepared me well for that in that sense. (Maritimes)

Table 3 *continued on page 265*

Table 3 *continued from page 264*

THEME	ILLUSTRATIVE COMMENTS
Education factors	
Exposure	• We had a preterm breech delivery that I got to do. I know that's not the scope of a family physician. I'm sure that those [who] do obstetrics more than I do may be involved or have more kind of wherewithal of how to manage it. I think part of our residency training was how to manage some of these emergencies, particularly if you are more rural. (Territories) • I mean virtual [care] I think is something that probably most programs ... or people [who] are now out in practice for a little while probably weren't really prepared for. Or not, I guess, in a clinical sense. Because it wasn't something that most people could bill for here. So, it wasn't something that was modelled. I think we were all kind of more familiar with it in more a personal sense. And so the technology part maybe didn't surprise us as much. But in terms of actually changing our practice to incorporate it, was probably a new experience for most people. (Saskatchewan) • [D]ue to my lack of exposure or experience for useful time in the [emergency department], I did a rotation as an elective in second year. And just to be like if someone was having an anaphylactic reaction in my office, I could [administer an epinephrine injection], type thing. And that was ... I still didn't enjoy it, but at least I got better exposure and a better time in residency that I was like, okay, like I know some stuff now. I'm in my fourth or fifth month of second year of residency, and it's not something I enjoy. (British Columbia) • Because we were rural, we didn't get a lot of obstetrical stuff. So low-risk obstetrics, which may be really comfortable for [trainees in] some of the urban centres, I didn't feel as comfortable with that. (Saskatchewan) • And so definitely, having been in a rural-focused residency program, too, there's definitely some aspects ... not a lot but some aspects of urban care that are a bit different just in terms of getting people connected to resources. (British Columbia)
Mentorship	• Basically I worked with somebody who was a phenomenal mentor to me, who made me realize that family medicine was actually everything I was looking for in a job. Going from what I thought I really didn't want to do, to being everything I wanted to do. Basically, I was the person who liked everything. I liked internal medicine, I liked [emergency medicine], I liked pediatrics, I liked geriatrics, I liked psychiatry. So there was nothing I didn't want to do. And I realized that if I did family medicine with some rural locums, that would give me the opportunity to kind of practise full-scope everything. So that's kind of what I decided to do there. (Saskatchewan) • We have really good support systems in Alberta—[such as] the COVID Collaborative Mentorship Network—that specifically helps with things like, you know, helping physicians talk to other physicians who have more experience on how to manage certain complicated patients and things like that. (Alberta)
Organizational factors	
Collegial support	• I was very fortunate to fall into a practice that's quite large and has a lot of very supportive colleagues. And I think it definitely makes a difference to have people [who] you enjoy working with. But from the actual practice perspective, I knew I had wanted to do a focus in women's health, but I didn't actually imagine proceeding with organizing something like our IUD clinic, which has been quite successful, and having a fairly flexible lifestyle and being able to have an area of special interest in my practice. I think I've been very fortunate to have a supportive work environment where I can have that. (Alberta) • So despite not having those experiences, I was kind of willing to go to communities to do other work as long as I knew that there was somebody to back me up. So to this day, I will go to a community to do [emergency medicine] only if there's someone else who I know can intubate on my behalf if I need to call somebody in. You know, now since I've been in practice, I actually do surgical assisting. Which again is funny because I didn't do any surgery rotations as a resident. I just kind of fell into it. And I didn't feel comfortable at the beginning. But I only did it because my colleagues encouraged me and said, "Don't worry, it's okay if you don't have any experience. We'll teach you on the job." (Territories)
Community factors	
Community needs	• I guess in my case, the reason I did hospital work or started doing it was because of need. They just weren't ... able to staff the unit well. And so, the potential of having to shut down [was looming], and that sort of thing. So, I jumped in and tried to help out. So, I think that shaped the hospital aspect of my practice, for sure. (Manitoba) • So when my husband and I came here, we found that there [were] actually a lot of gaps in what was available here. So we've had to adapt what our goals are to what the community needed. And starting an after-hours clinic and starting an addictions therapy clinic and starting a palliative care program, those were 3 things that the community didn't have. And they weren't necessarily our passions to start with but they were things that our community needed. And our role as family physicians is to be community-minded and to think about what the community needs and be proactive in providing that. (Newfoundland and Labrador)

Table 3 *continued on page 266*

Table 3 *continued from page 265*

THEME	ILLUSTRATIVE COMMENTS
System factors	
Funding and payment models	• So, I'm currently in a contract model, which is an independent contractor, which is an hourly rate. Which takes a lot of the pressure off from fee-for-service–type billing. And so, getting the gig that I'm in right now early after graduation kind of made me see the benefits of that, and is part of the reason why I stayed in it for a few years. (Manitoba) • I have coverage because I'm in a group practice. And I'm salaried. And when I want to take vacation, yeah, I have to ask my manager, and I have to get somebody to sign off on it.... But I've got somebody to cover my patients when I'm gone so I can take a break when I need to have a break. And I get benefits as part of my job. So those things all factored in quite heavily [as] to why I chose to practise there. (Manitoba) • So, for me personally, choosing a type of practice was based on freedom, you know, of my free time, when can I choose to be off. So that's why being a locum before COVID was very efficient for me. Usually, you're salaried. So, you're not, you know, trying to see 60 patients in the whole day. You can take a little more time with the patients in the clinics. Or if it's [emergency medicine] or hospital work, you know, it's a set amount. So, it's kind of reassuring in the way of income. (Maritimes) • I did not pay attention to that because I had no intention [of] working fee-for-service. I don't like that. I wanted a salary. (Maritimes)
Investments in team-based care	• [I am] part of a PCN. And that mattered to me, too, because there's a lot of extra resources that we can tap into that you would otherwise not have if the clinic was not a part of a PCN. I don't know how difficult it is for individual clinics to become part of a PCN.... But a lot of what they provide us with, they provide us with a lot of really useful data, they found nursing staff and things like that for us. (Alberta) • So, for example, you know, if you know that you have your support system and your network in a large urban centre like Toronto or London or Ottawa, but the opportunities to join those multidisciplinary practices are few and far between. Or, you know, we have policy barriers like the government preventing entry into areas like FHOs in Toronto and the greater Toronto area. It's going to be a huge barrier for you, and it's going to clash with your values of where you envision yourself in your practice versus where you feel your personal support system is and your quality of care outside of family medicine is, too. So, I think that that definitely plays a role. (Ontario)
Governance and policies for FP workforce	• There's a lot of these rules here and there with the Quebec government. (Quebec) • I wanted a PREM like I have now. Well, there wasn't any. So, I would have chosen ... I would have chosen between either a targeted practice in palliative care, but which would have been in Montréal or maybe in Québec, or my desire to go [to] a rural area. But both were not a possibility ... and it's not because there wasn't a need in rural areas. It's more that with the number of PREMs, well, you have to make hard choices. So, what? I finally got it, but it took a lot of work. (Quebec) • But Quebec is very funny, and they sort of move back and forth with what they want family doctors to do. And it just happened to be the year I was graduating was the year they decided family doctors should be in the family medicine clinic. No family doctor should be in the hospital. And no family doctor should be in long-term care facilities. And they were starting to punish family doctors.... I'm talking about punishing them financially for doing those things. So I just happened to be doing the thing they wanted me to be doing that year. And so that's why it worked out so fortunately for me. (Quebec)

FHO—family health organization, IUD—intrauterine device, PCN—primary care network, PREM—plans régionaux d'effectifs médicaux (regional physician resource plans).

System factors

System factors (ie, funding and payment models, investment in team-based care, and governance and policies for the FP workforce) were commonly identified factors in SOP decisions. We found differences in perspectives in Alberta, Manitoba, Ontario, Quebec, and Saskatchewan, compared with other jurisdictions.

Funding and payment models. Early-career FPs indicated that the type of remuneration model available was crucial in deciding SOP. In Ontario, FPs indicated that access to salaried or blended capitation models allowed them to participate in comprehensive practice. Participants in Alberta, Manitoba, the Maritimes, and Saskatchewan said they believed models other than fee-for-service would foster work-life balance and comprehensive care: "The salaried positions that I worked with ... all had good work-life balance and good self-care." (Maritimes)

Investments in team-based care. Participants in Alberta and Ontario indicated that government investments in implementing team-based models allowed them to provide comprehensive care. In Ontario, participants had access to family health teams and community health centres; in Alberta, physicians had access to primary care networks. However, participants in Ontario noted there were barriers to joining models: "[O]pportunities to join those multidisciplinary practices are few and far between."

Governance and policies for the FP workforce. Quebec's approach to regional workforce planning contrasts with jurisdictions across Canada and influences SOP decisions.

In Quebec, policies on workforce planning and recruitment were described as the most important factor determining FPs' SOP choices. The regional physician resource plans (plans régionaux d'effectifs médicaux) of each regional department of general medicine (département régional de médecine générale) in 18 administrative regions require physicians to apply for positions based on their preferences. As such, these placements had narrowed or broadened their SOPs, as the government determined the number of available positions for FPs. Quebec was described as unique, as regional physician resource plans use a centralized system for physician resource allocation whereas no other jurisdictions have this model.

Discussion

This study builds on existing literature by identifying and comparing the factors that shape SOP decisions of FPs across 13 jurisdictions in Canada. Our study extends the existing literature by finding that personal factors are highly influential on practice decisions made by early-career FPs. These perspectives were similar across all Canadian jurisdictions. In alignment with the literature, we also found that educational, organizational, community, and system factors influence SOP decisions of FPs.[7,8] However, these findings contrast with a US study that found workplace, environmental, and population factors were most influential on the actual SOP.[8] Differences in results may be due to the substantial differences between the 2 countries' funding, organization, and delivery of health care.

At the personal level, interest, work-life balance and family, financial considerations, and self-confidence were key factors in SOP decisions across all jurisdictions. A novel finding from this research is that the self-perceived competence and confidence of FPs influenced SOP decisions. Similar to the literature, we found early-career FPs with broad SOPs were often motivated by wanting to have more patient contact, to treat patients with diverse profiles and problems, and to have more prevention responsibilities than others with different SOPs.[29] These findings highlight the crucial role of educators in medical schools and in residency programs in promoting a genuine interest in comprehensive practice. Medical schools and FM training programs should also consider establishing a method of assessment during entry that recruits individuals with personal interests in comprehensive care.[30,31] Since self-confidence influences SOP decisions, training programs should also assess trainees' self-confidence at the individual and program levels throughout and at the end of training.

At the educational level, we found potential differences among FM programs in adequately preparing residents for a comprehensive SOP. These findings suggest that further research is needed to identify strategies that may better prepare FPs for comprehensive care. Strategies for preparing FM residents for a broad SOP could include greater exposure to different clinical and nonclinical domains, exposure to rural environments, and access to a diverse range of faculty and preceptors.[32-34] In addition, existing literature emphasizes that a third year of enhanced skills training can direct career paths toward more specialized practice areas.[35,36] Thus, future education innovations must consider the impact on SOP and its implications for the primary care workforce.[35,36]

At the organizational and community levels, FPs make SOP decisions based on collegial support and community needs. Programs should also consider pairing early-career FPs with later-career FPs.[37-39] Further research is needed to understand jurisdictional differences. At the system level, provinces with team-based models enabled a broader SOP. Effective interprofessional and group models can alleviate financial strain and burnout and increase individuals' willingness to provide comprehensive care.[40] New graduates tend to prefer working in group or team practice settings.[41] Financial remuneration models that support team-based care can help increase engagement in comprehensive care.[40] Interestingly, Quebec's family medicine groups were not identified as a reason for pursuing a broader SOP, possibly due to legislative requirements and location factors influencing SOP decisions.

Limitations

While our study identified varying perspectives related to SOP in specific regions, it is imperative to acknowledge the limited participant representation from particular regions and educational programs, which may not comprehensively represent the diversity of training experiences across the identified jurisdictions. Most of our study participants were female and had been in academic practice for 2 to 5 years, limiting the representation of FPs with different experience levels. Gender disparities in medical education,[42] FM practice,[43,44] and academic FM[45] highlight nuanced differences in career trajectories, patient interactions, and approaches to comprehensive care, underscoring the importance of future research to understanding how diverse gender perspectives are shaping practice. We were unable to expand member checking to include more participants due to time constraints affecting participants during the height of the COVID-19 pandemic. Additionally, our findings capture a single point in time and lack longitudinal perspective, thus limiting their applicability to experiences over time. Social desirability and recall methodology are limitations of focus group methodology.[46]

Conclusion

Scope-of-practice decisions by early-career FPs are highly influenced by personal factors followed by organizational, educational, community, and system factors. These findings suggest numerous strategies are needed to increase individuals' interest in practising with a broad scope in

Canada. Educators should cultivate learners' interest in comprehensive care, strategically recruit trainees, provide targeted exposure and experiences, ensure competence and confidence are evaluated throughout and at the end of the training, and introduce formal mentorship programs. Policy-makers should invest in the spread of effective team models and alternative payment models. Together, these strategies could broaden the SOPs of FPs and their collective capacity to deliver accessible and comprehensive care to Canadians.

Dr Monica Aggarwal is Assistant Professor in the Dalla Lana School of Public Health at the University of Toronto in Ontario. **Dr Kristina Kokorelias** is Scientist at Sinai Health and Assistant Professor in the Rehabilitation Sciences Institute at the University of Toronto. **Dr Reham Abdelhalim** is Evaluation Lead for the Burlington Ontario Health Team.

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Contributors
Dr Monica Aggarwal contributed to conceptualizing and designing the study; collecting, analyzing, and interpreting the data; and preparing the manuscript for submission. **Dr Kristina Kokorelias** contributed to analyzing and interpreting the data and preparing the manuscript for submission. **Dr Reham Abdelhalim** contributed to collecting, analyzing, and interpreting the data and reviewing the manuscript.

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Correspondence
Dr Monica Aggarwal; email **monica.aggarwal@utoronto.ca**

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