Early career family physician perspectives on their residency experience and practice choices in Canada: a qualitative study Perspectives des médecins de famille en début de carrière sur leur expérience de résidence et leurs choix de pratique au Canada: une étude qualitative

Catherine Moravac,¹ Agnes Grudniewicz,² Ian Scott,³ Ellen Randall,² Laurie J Goldsmith,⁴ Emily G Marshall,¹ Lori Jones,⁵ M Ruth Lavergne¹

¹Department of Family Medicine, Dalhousie University, Nova Scotia, Canada; ²Telfer School of Management, University of Ottawa, Ontario, Canada; ³Department of Family Practice, University of British Columbia, British Columbia, Canada; ⁴Faculty of Health Sciences, Simon Fraser University, British Columbia, Canada; ⁵Department of History, Carleton University, Ontario, Canada Correspondence to: M. Ruth Lavergne, 1465 Brenton Street, Suite 402, Halifax NS B3J 3T4; email: ruth.lavergne@dal.ca
Published ahead of issue: Jun 26, 2024; published: Nov 13, 2024. CMEJ 2024, 15(5) Available at https://doi.org/10.36834/cmei.78363
© 2024 Moravac, Grudniewicz, Scott, Randall, Goldsmith, Marshall, Jones, Lavergne; licensee Synergies Partners. This is an Open Journal Systems article distributed under the terms of the Creative Commons Attribution License. (https://creativecommons.org/licenses/by-nc-nd/4.0) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is cited.

Abstract

Background: Though there are more family physicians in Canada than ever before, and residency programs are expanding, gaps in access to comprehensive care remain. This study aimed to describe and understand the role residency training experiences played in shaping practice choices, including the provision of comprehensive community-based care, among early career family physicians.

Methods: A secondary analysis of sixty-three (63) qualitative interviews was conducted on data from a larger mixed method study on practice patterns and choices of early career Canadian family physicians. We utilized Braun and Clarke's six phases of reflexive thematic analysis on portions of transcripts concerning residency training experiences.

Results: Participants described positive residency training experiences that shaped practice choice with respect to preceptors and mentorship, experiences of longitudinal care, breadth of exposure, and preparedness for comprehensive clinical practice. Woven through these four domains were "points of tension" and "hidden truths". Points of tension included: i) the promotion of an idealized professional identity and practice that was difficult to uphold, ii) lack of representation among faculty/preceptors with respect to age and gender, at some sites, and iii) frustration about the lack of opportunities for interprofessional collaborative practices that reflected training experiences. Hidden truths included: i) lack of preparation to run a business, ii) high administrative workload, iii) realities of payment models, and iv) the range of roles available for family physicians beyond the provision of comprehensive care.

Conclusions: Findings highlight opportunities for educational reform supporting the transition from residency to practice alongside the importance of addressing systemic factors beyond training which impact physicians' choices regarding comprehensive care.

Résumé

Contexte: Bien qu'il y ait plus de médecins de famille au Canada que jamais auparavant et que les programmes de résidence continuent de se développer, des lacunes subsistent dans l'accès aux soins globaux. Cette étude visait à décrire et à comprendre le rôle que les expériences de formation en résidence ont joué dans l'orientation des choix de pratique, incluant la prestation de soins communautaires complets, parmi les médecins de famille en début de carrière.

Méthodes: Une analyse secondaire de soixante-trois (63) entrevues qualitatives a été effectuée sur les données d'une étude plus vaste à méthodes mixtes sur les modes et les choix de pratique des médecins de famille canadiens en début de carrière. Nous avons utilisé les six phases de l'analyse thématique réflexive de Braun et Clarke pour analyser les sections des transcriptions portant sur les expériences de formation en résidence.

Résultats: Les participants ont décrit des expériences positives de formation en résidence qui ont façonné leur choix de pratique en ce qui concerne les précepteurs et le mentorat, les expériences de soins longitudinaux, l'étendue de l'exposition et la préparation à la pratique clinique globale. Des « points de tension » et des « vérités cachées » sont apparus dans ces quatre domaines. Les points de tension comprenaient: i) la promotion d'une identité et d'une pratique professionnelles idéalisées qui étaient difficiles à maintenir, ii) le manque de représentation parmi les professeurs/précepteurs en ce qui concerne l'âge et le sexe, dans certains lieux, et iii) la frustration concernant le manque d'occasions de pratiques de collaboration interprofessionnelle qui reflétaient les expériences de formation. Les vérités cachées comprenaient : i) le manque de préparation à la gestion d'une entreprise, ii) la charge de travail administrative élevée, iii) les réalités des modèles de paiement, et iv) l'éventail des rôles disponibles pour les médecins de famille au-delà de la prestation de soins globaux.

Conclusions: Les résultats mettent en évidence les possibilités de réforme de l'enseignement pour soutenir la transition entre la résidence et la pratique, ainsi que l'importance d'aborder les facteurs systémiques au-delà de la formation qui ont un impact sur les choix des médecins en matière de soins globaux.

Introduction

Primary care is central to the equity and efficiency of health systems, but around the world primary care systems are under stress.¹⁻⁴ Despite efforts to build primary care capacity⁵⁻⁸ and encourage choice of family medicine as a specialty, ⁹⁻¹¹ substantial gaps in patient access to such care remain. In Canada, many patients are unable to find a regular family physician or to access timely primary care services.^{12,13}

Lack of access to comprehensive, community-based primary care is a complex problem. Topics of ongoing concern include a trend in declining scope of family practice and a concurrent increase in the number of family physicians choosing to work in walk-in clinics, hospitals, or other areas of focused practice. 14-16 Accompanying these concerns are questions about family physicians' level of preparation as they exit residency. In North America, some research suggests that early-career physicians may be choosing options other than community-based primary care because they either are not prepared for full-scope family medicine or are not confident taking on this form of practice. 17-21 This coincides with consideration of reforms to postgraduate medical education in both the U.S. and Canada. The College of Family Physicians of Canada (CFPC) published a report in 2022 outlining the need for residency programs to emphasize social accountability and associated reforms, including consolidation of skills in acute care, long-term, and home care, with the aim of 'top of scope' practice among physicians capable of working in any community in Canada.20 The report indicated that while family medicine graduates may be competent, some are not confident or sufficiently prepared to work in particular clinical areas.20

At this point, it is unclear whether fewer physicians are entering comprehensive practice as a consequence of educational issues, practice environment issues, or other reasons. By increasing our understanding of the residency experiences shaping choice of practice we can better inform educators and health and policy managers/leaders.

In the context of ongoing reforms to postgraduate family medicine training, our study aimed to describe and understand the role of residency training experiences of early career family physicians in shaping practice choices, including comprehensive community-based primary care. Participants retrospectively reflected on their readiness for practice at the time of graduation as well as through the

lens of their professional practice experience of up to ten years post graduation.

Methods

This study is part of a larger mixed method study that analyzed changing practice patterns over time and explored factors shaping practice intentions and choices among early career family physicians. ²²⁻²⁴ Semi-structured interview data from the larger project involving 63 family physicians from British Columbia (BC), Ontario (ON) and Nova Scotia (NS) were analyzed for the current study. "Early career" is defined as ten years or less since graduation from residency. The interview guide did not include questions specifically about educational reform; questions addressed the influence of residency on initial plans for family practice and subsequent practice choices. There were also questions about the impact of the policy environment on practice opportunities. See Appendix A.

Recruitment was conducted through professional associations, departments of family medicine, and social media. Three hundred and sixty (360) potential participants completed an online questionnaire. Participants were purposively selected for diverse personal and practice characteristics such as gender, relationship status, dependents, time since graduation from medical school, practice location, practice model, practice type, and payment model(s).

Interviews were conducted via phone or video between April and October 2019; each interview lasted between 45 and 60 minutes, was audio recorded, professionally transcribed, and quality checked. Written consent was obtained. Interviews were conducted by three research associates with qualitative research training and experience; they prepared field notes after each interview and shared reflections during team meetings.

Study setting

In Canada, 24-month family medicine residency programs offer training experiences in family practice settings (urban, rural, and/or remote) including emergency medicine, general surgery, internal medicine, obstetrics/gynecology, pediatrics, and psychiatry. Residents have the option to complete an additional year of enhanced skill training in areas such as palliative care, addiction medicine, emergency medicine, and surgical skills. Family physicians provide comprehensive care in community-based clinic settings, long-term care facilities, and patient homes. They can also work as hospitalists, have focused practices (e.g., addictions, mental health, sexual and reproductive health) or blended practices. Remuneration is by fee for service (FFS) or blended models with base funding that is either FFS, capitated, or salaried.

Analysis

We used a critical qualitative approach to the analysis. The epistemological frame guiding the interpretive process is a blend of relativism and social constructivism. 25,26 This reflects a point of view that people use language to create meaning, and that meaning is context-specific and influenced by culture and history. Knowledge is understood as being produced through relationships and social interactions, and therefore may change at different points in time and in different contexts. We chose reflexive thematic analysis (RTA) as espoused by Braun and Clarke (2022),²⁷ as it aligned with our ontological and epistemological perspectives and provided a fluid multiphase approach to answering the research question. Research team members included individuals with several years of qualitative research experience and professionals with expertise in health policy and medical education.

All previously coded data related to residency training experiences from the primary study were reviewed (CM). Each full interview transcript was then reviewed for contextual information. All qualitative data related to residency training experiences collected for the secondary analysis was then coded (CM). Data saturation was deemed to be achieved when no new codes were identified. Analysis and preparation of the initial manuscript was conducted by CM. Co-authors collaborated during analysis by attending meetings and discussions, reviewing data, and providing feedback throughout. Prior knowledge of the full transcripts by members of the research team increased rigor and sensitivity of the analysis and interpretation of residency training data. Agreements were ultimately reached, ensuring that interpretation was acceptable to all team members. Research Ethics Board approval was provided by Simon Fraser University (H18-03291) and researcher-affiliated ethics boards.

Results

Respondent demographics

Sixty-five (65) family physicians were invited to an interview. Sixty-three (63) participated. One family physician was unable to participate due to scheduling challenges and another withdrew without explanation. Slightly more than half (57%) of the participants were female. Approximately half (49%) of the participants were

within their first three years of practice. There was relatively equal distribution of participants across the three study provinces. Additional demographic information is listed in Table 1.

Table 1. Participant demographics

Province (current practice)	n (%)
British Columbia (BC)	23 (36.5%)
Ontario (ON)	18 (28.5%)
Nova Scotia (NS)	22 (35%)
Gender	n (%)
Female	36 (57%)
Male	26 (41%)
Prefer not to answer	1 (2%)
Relationship status	n (%)
Single/Divorced/Separated/Widowed	22 (35%)
Married/Common-law/Life Partner	39 (62%)
Other	1 (1.5%)
Prefer not to answer	1 (1.5%)
Dependents	n (%)
Child(ren)	34 (53%)
Adult(s)	2 (3%)
Both	1 (2%)
No	26 (41%)
Location of medical school	n (%)
Canada	48 (76%)
Outside of Canada	15 (24%)
Years since graduation from residency	n (%)
1-3	31 (49%)
4-6	20 (32%)
7-9	12 (19%)

Findings

Participants described having had primarily positive residency training experiences with respect to four key domains: (i) preceptors and mentorship; (ii) experiences of comprehensive longitudinal care; (iii) breadth of learning opportunities related to clinical issues, patient populations, and geographic settings; and (iv) preparedness for practice. Participants interpreted 'preparedness for practice' as an overall feeling of being clinically ready to begin their careers, while acknowledging that ongoing learning would occur in the early years of practice. Preparedness for practice also included participant comments regarding non-clinical aspects of their future work. Importantly, points of tension and hidden truths were themes that appeared across these four domains, with one or both themes present in each domain.

We define 'points of tension' as instances in which participants described conflicted feelings or conflicted situations which were concerning or problematic to them. The theme 'hidden truths' pertains to topics of concern which frequently arose from the interviews about the realities of practising family medicine that interviewees were not fully aware of at the end of residency training. In some cases, earlier knowledge of a 'hidden truth' would

have impacted practice choices. We interpreted hidden or unknown information as being 'truths' for participants given the frequency and consistency of shared experiences among this particular group of interviewees at the time the interviews were conducted. The theme 'hidden truths' reflects what interviewees said about their lived experiences. We are not presenting these findings as absolute or universal truths. We are sharing the results of the analysis we conducted through the lens of social constructivism.

Domain 1: Preceptors and mentorship

Participants from all residency programs shared that they admired, respected, and deeply appreciated their preceptors. Interviewees acknowledged their preceptor's impact on their appreciation of comprehensive primary care, generalism, advocacy work, and responsiveness to community needs.

And then just my own primary preceptor, he is like an absolutely amazing human being. And I was so, so lucky to have been matched with him. Just to see how much his patients absolutely adored him and how much of a difference he made in their lives ... it was really phenomenal to see that as a resident, and just see, you know, this can be me in 30 years. (Female, BC)

I got to train with preceptors who really believed in providing all-encompassing care and really advocating for patients. And so my preceptors would sit there, you know, late at night after our 8:30 clinic to fill out forms so that someone can get something that they need that they can't afford. And I really saw them modelling the kind of doctor that I hope to be. (Female, ON)

The role of mentorship, whether formal or informal, was a supportive aspect of the training experience for many. Mentors helped with decisions about enhanced training opportunities, discussed strategies for maintaining worklife balance, and at times demonstrated values that resonated with and inspired residents.

...I was surrounded by mentors who embodied really what I thought family medicine was to me and what I wanted my practice to look like in terms of values. Not in terms of the nuts and bolts. I mean the nuts and bolts look different for everybody. But in terms of values and approach to care, I was so lucky that I found that pretty much I'd say across the board all of my mentors ... (Female, ON)

...my preceptor during residency influenced me in positive but also in what I didn't want as well because she works like 24 hours a day ... And she was on call for obstetrics, you know, and every day for her own patients and stuff. And I was like ... I love her and I love what she taught me but I knew I didn't want that. (Female, NS)

In contrast, a point of tension was articulated by some participants that residency taught them how they *did not* want to practice. While many preceptors were described as admirable for their devotion to their practices, their personal and professional sacrifices demonstrated a lifestyle contrary to what learners were willing to take on in their future careers. Messaging in residency about achieving work-life balance were frequently juxtaposed with examples of very long work hours in learning settings.

Some interviewees commented on the difficulties they had learning from individuals who were "so different" from themselves. These observations primarily concerned generational differences, however some participants also spoke about lack of gender representation in some training settings:

...it's just sometimes hard when in a lot of communities all the doctors are like older, white men in their 60s. And I think as like a young female in my 20s, it's oftentimes hard to relate. You know, it's like they have a wife at home who sort of runs their household for them. And that's just how their life works. Which there's nothing wrong with it. But I just knew that that's not what my life was going to be like. (Female, BC)

Many participants spoke about the challenge of balancing multiple roles and responsibilities in their lives and the lack of time for self care both during residency and once in practice. The tension between what is perceived to be expected of family doctors by educational institutions and their professional colleges and what early career family physicians are prepared to do is important:

I think it's the entire sort of paradigm of the leadership generation in medicine right now is holding onto something that doesn't exist anymore. (Male, BC)

This statement, echoed by other interviewees reflects an expectation and a need for the current idealized model of comprehensive family medicine to adapt to changing practice and health system realities, including meaningful support for work-life balance.

Domain 2: Experiences of comprehensive, longitudinal care

Participants frequently highlighted the value and importance of developing trusting relationships with patients in support of longitudinal care as being personally important and integral to the profession. Some participants emphasized the value of residency programs in which they were able to follow their own patients over time to practice developing essential provider-patient relationships during placements.

I wanted to be someone's family doctor. I want to follow someone through their lifespan. I want to be there with them with the ups and the downs. I don't want to do intermittent care for people.... You know, I wanted to develop those relationships that I saw those family doctors that I did electives with have with their patients. (Male, NS)

The interviews demonstrated a fluidity of ideas about future practice when life changes and role changes occurred. Some interviewees recalled thinking during residency that they would not want to provide comprehensive community-based primary care only to realize later as parents wanting flexibility, that comprehensive practice was a good fit. This highlights that for some, the decision to practice comprehensive community-based primary care was not fixed during residency but rather was shaped by evolving personal context, alongside available opportunities for practice.

Another point of tension described by some participants were residency programs and preceptors' conceptualization of an ideal family practice. This was commonly referred to as the provision of cradle to grave continuity of care in multiple settings, including patient access after hours. Those who practiced focused care or mixed models of comprehensive practice complemented by focused care were perceived to be characterized as not true family physicians or as practising in 'the wrong way'. Some participants reported that this messaging caused them to try to uphold the prescribed ideal, only to burn out and experience shame. As one participant recounted, she had a tremendous amount of gratitude and respect for the training she received but felt pressured to work in a way that wasn't healthy for her.

So, my residency made me really want to be the type of family doctor that I don't work as. Because it was still a community where family docs did most stuff. Like a lot of them had given up obstetrics but not all of

them. You know, a lot of them still did all their own deliveries. A lot of them still took care of all their own hospitalized patients...And I felt a lot of pressure to practice that way because that was certainly the message from our residency program that that was the right way to be a family physician. You know, it's people who have been just hospitalist or just emerg....who were doing it the wrong way. And that pressured me into tackling my own work in a way that wasn't wise for me probably, especially the first year of my career. (Female, BC)

Another spoke about not wanting to disappoint her preceptors, but ultimately found that she was unable to practice in the way her teachers had espoused. This reality has implications for professional identity formation, physician wellbeing, and retention of family physicians.

Domain 3: Breadth of learning opportunities related to clinical issues, patient populations, and geographic settings For many, the residency experience reaffirmed their choice of primary care and influenced the way that they wanted to practice. Learning opportunities in a wide variety of learning environments helped with future practice planning. Participants shared that they were strategic when choosing specific training experiences and appreciated that their residency programs supported this individually tailored approach:

...I was in an urban program. So having gone to working mostly in rural areas was maybe a little bit unusual in that sense. But there was enough flexibility and a lot of encouragement from the program to do what I thought I needed in order to do that. So extra rural electives, extra emergency, anesthesia, and stuff like that, I was encouraged to do all of that. (Female, BC)

Many interviewees spoke about the impact of rural training experiences during medical school as being influential to their choice of family medicine. Rotations in rural settings and interactions with rural preceptors during residency significantly influencing breadth of clinical training and subsequent practice choices. Some described the impact and importance of continuity of care across different settings: from the clinic to the ER, and to the hospital. Others spoke about gaining obstetrical skills, and being exposed to inpatient medicine, geriatric and palliative care, and Indigenous health. Exposure to the personal side of practice also had impact as many interviewees spoke about being impressed by their rural preceptors' apparent

happiness, low levels of stress, and balanced family lives. Multi-month placements were described as particularly high value.

Most participants expressed satisfaction with the range of clinical learning experiences provided by their residency programs in both urban and rural settings. Exceptions to this were varied accounts of training in obstetrical care and procedures-, and low or no experience with home visits and management of patients residing in long term care facilities.

Although participants primarily described their residency program's breadth of educational experiences in positive terms, there were also points of tension and disappointment. Most participants had residency placements in team-based practices with alternative payment models (i.e., not FFS). However, upon graduation, there were very limited opportunities for them to secure a position within one of these practice models. Therefore, while the quality of the training experiences provided in academic clinics was valued, several interviewees remarked that they did not represent 'real world' practice. Post-graduation, working in a FFS model without collaborative interprofessional teams and having to rush through patient appointments were disappointing realities of practice. Many participants, once in practice, particularly missed having access to allied health professionals.

...my residency, I was in a rural setting but the rural site was a family health team...I did think that that was beneficial. Where you could make referrals to other allied health professionals within your group, which was...I think that was very nice that that was available. So I do miss that a little bit in my current practice. Because when I make a referral like for counselling or whatever, I don't really know everybody out there. (Female, ON)

Lacking such supports also impacted family physicians' volume of work. This misalignment of training with real world practice was a point of tension, while the high volume of administrative tasks was a hidden truth within residency programs. As one participant explained, during residency she 'never did any paperwork other than charts.'

"Like she [preceptor] protected me so much from the paperwork that she had to do ... I was completely shielded from like that side of family medicine. (Female, ON)

While this individual originally planned to provide comprehensive care, once she graduated and started taking locum positions, the amount of administrative work ultimately drove her decision to change her practice plans. Interviewees spoke about awareness of administrative tasks, but not the high volume. Residency training experiences were focused primarily on the acquisition of clinical skills. Others reported that the volume of afterrequired in community-based paperwork longitudinal care ultimately led to their transition from full to part time clinic work. Some reduced their clinic hours and devoted the remainder of the work week to emergency room shifts, school health programs, locum work, the provision of MAID, or other services in an effort to reduce administrative burden. The majority of participants had not foreseen that administrative work would drive their practice choices in this way.

Domain 4: Preparedness for practice

Most participants shared that they felt ready for comprehensive practice upon graduation. One interviewee explained that they chose a community health centre for training to "ensure that I would feel competent to support the populations that I wanted to work with. And I do. And so that's [community health centre] where I still am" (Female, ON). Providing care to patients experiencing poverty or living in low-income neighbourhoods was also mentioned as essential preparation for managing a variety of patient needs after graduation. Others described their readiness for practice in the following ways:

...I knew I wanted to do full scope family practice. And I knew this residency was full scale family practice. And so I was lucky enough to get my first choice. But it was the best choice for me. I felt prepared. When I left residency, I felt very prepared for the role I'm in now. And I still think I was prepared. (Male, NS)

A significant hidden truth, however, was highlighted by several interviewees who revealed a sense of dismay at not having been prepared during residency to run a business.

And then the reality is hardly any of us are salaried when we get out. And then just that structure around like managing your finances and running your business, we get none of that in residency. (Female, NS)

While a minority of participants expressed an interest in opening their own community-based practices, reasons provided by others for not pursing this practice choice included: high overhead costs, dissatisfaction with FFS, lack

of funds due to heavy student debt, inability to secure coverage for leave, and being 'locked' in for years to come.

Some participants spoke about not having known what to expect in terms of remuneration and/or not having learned about the different payment models in place across the country. Participants shared that they had received vague answers when asking about remuneration during their residencies:

I think that what happens is many physicians, it's really hard to get firm numbers on how much you're paid and what the expenses are and the taxes, and how it all breaks down. And you don't really learn that knowledge until you're working ... and people are pretty vague with telling you how much they make like because they have different income streams or it's a taboo subject, whatever it may be. (Female, NS)

Some participants also shared that they did not fully appreciate the breadth of opportunities available in family medicine until they began locum work after graduation:

Like I never would have thought that I could be doing what I was doing. I sort of thought buying into a practice was sort of like your only option. (Female, BC)

Discussion

The vast majority of participants in this study did not report feeling unprepared for the clinical aspects of practice or lacking confidence in their skills to provide comprehensive care. They did, however, recount their lack of preparation for the non-clinical aspects of practice, including the establishment of clinic operations and business-related skills. When asked about the contrast between their ideal practice and current practice, conversations focused on system issues related to the lack of availability of teambased and/or interprofessional practice settings, lack of availability of alternative payment models, paperwork burden, and the inability to arrange coverage for time away from work. The majority valued flexible work environments that allowed a blend of community-based comprehensive practice with other areas of interest. Work setting variety was said to be appealing for intellectual stimulation while also providing a break from administrative tasks related to the provision of comprehensive care. Many spoke about social accountability and responding to community needs. Interviewees in this study placed greater emphasis on the need for policy reform than on educational reform.

Idealized professional identity and practice

Our finding that a point of tension exists between idealized professional identity and actual practice is echoed in other studies. In their qualitative study exploring factors impacting the formation of professional identity in The Netherlands, Barnhoorn et al. 2022²⁸ also found that values differed between residents and supervisors with respect to balancing professional and personal roles. In that study, general practice residents did not accept the idealized practice norms presented to them during training and sought to operationalize professional practice values in a different way. Other studies^{29,30} have reported similar points of tension concerning expectations 'to do it all' which did not align with trainees' conceptualization of their future careers. Beaulieu et al.'s 2006²⁹ study with residents from France, Belgium, and Canada noted that Canadian trainees felt the pressure of scope of practice expectations more strongly than their peers elsewhere.

There is a large body of literature on the hidden curriculum in medical education³⁰⁻³⁷ and in family medicine in particular.³⁸⁻⁴¹ The hidden curriculum often includes subtle messaging that undermines and discourages family medicine as a career choice.⁴²⁻⁴⁷ In the context of our interviews, comments about what constitutes an ideal or 'proper' family physician represented an additional aspect of the hidden curriculum, one that caused harm to some interviewees who tried to achieve the stated expectations but were unable to do so. The insidious nature of this aspect of the hidden curriculum, as shown in our data, can lead to burnout, alienation from the profession, and/or early loss of family physicians from the healthcare system.

Generation gap and representation of gender

As previously reported in the literature, trainees in our study described feeling judged by older physicians and professors, and having concerns about disappointing them.^{28,47} Manor & Hollan⁴⁷ noted the complexity of relationships between learners and teachers characterized by residents' admiration and respect for faculty on one hand, and a rejection of faculty members' practice norms and professional identity on the other. Our study findings further highlight the harms that can arise among some trainees as a consequence of these fraught relationships and this aspect of the training culture.

Perhaps to ease the tensions caused by generational differences, our interview participants indicated they would have appreciated greater representation of younger preceptors among faculty. Further research is needed to

explore the reasons underpinning a reported lack of representation of female gender among preceptors in some settings, although systemic and individual factors have been described elsewhere.⁴⁸

Lack of preparation to run a business

The CFPC routinely surveys early career physicians within their first five years of practice. Results from 2010 and 2013 indicated that physicians did not feel prepared for the business aspects of family practice; in 2016, 90% reported feeling this way.⁴⁹ In response, the CFPC developed an online practice management tool. Lack of practice management readiness has been previously reported in Canada.^{50,51} Given the expectation that new graduates provide comprehensive community-based primary care, this is a critical non-medical aspect of training that requires further attention. While the need for system-level reforms is described below, even as payment and practice models evolve, efforts to support transition to practice and awareness of available payment and practice models remain important.

Systemic barriers

In addition to strengths and weaknesses in their training, interviewees also reported systemic barriers as obstacles to practising in the way that they had been trained. Available practice structures and existing payment models, for example, did not align with participants' idealized ways of practising or their values; instead, they negatively impacted both practice choices and job satisfaction. These systemic factors were described by participants as the primary drivers for fewer family physicians choosing to provide comprehensive community-based primary care.

Limitations

Interviewees in this study, while diverse, may not provide a fulsome picture of early career family physicians across Canada. However, this was not the intent. The findings presented are context-specific and are intended to highlight the impact of residency experiences on practice choices, including the provision of community-based comprehensive care. Further information about the screening and selection process of participants is reported elsewhere. ^{22,52}

In addition, our analysis focuses on aspects of training identified by participants as shaping their practice choices. Gaps in training identified elsewhere, including addiction and mental health, Indigenous health, health equity, antiracism, virtual care, and health informatics were not

identified as shaping choice, but that does not take away from the importance of addressing them. The ways in which lack of necessary knowledge about equity-oriented care (including cultural safety, anti-racism, trauma- and violence informed care) shapes practice and practice choice requires ongoing attention.⁵³

Conclusion

This study of 63 family physicians highlighted many positive experiences during their Canadian residencies with respect to preceptors and mentorship, experiences of longitudinal care, breadth of educational experiences, and preparedness for comprehensive clinical practice. Findings nevertheless illuminated tensions with respect to values and ideology about the profession of family medicine. Efforts to fit learners into professional identities that do not match learners' values and points of view are unlikely to be successful. Themes concerning points of tension and hidden truths shed light on opportunities for educational reform. Our study reinforces that lack of access to comprehensive community-based primary care is a multifaceted challenge requiring evidence-based educational reform and thoughtful system-level interventions.

Conflicts of Interest: Dr. Ian Scott is a committee chair at the College of Family Physicians of Canada. All other authors have no conflicts of interest due to financial and/or personal relationships that could potentially bias this work.

Funding: This research was supported by funding from the Canadian Institutes of Health Research, Project Reference: R-PJT-155965. M Ruth Lavergne holds a Tier II Canada Research Chair in Primary Care.

Acknowledgements: We would like to acknowledge that this study was a component of a larger team-based research project. The current study would not have been possible without the contributions of the following team members: Megan Ahuja, Doug Blackie, Kevin Brown, Jess Bossert, Fred Burge, Lynn Edwards, Rick Gibson, Rick Glazier, Stephen Hawrylyshy, Lindsay Hedden, Jacalynne Hernandez-Lee, Kathleen Horrey, Mike Joyce, Alan Katz, Monisha Kabir, Claire Kendall, Tara Kiran, Adrian MacKenzie, Laura MacKinnon, Kimberlyn McGrail, Rita McCracken, Madeleine McKay, Charmaine McPherson, Maria Mathews, Goldis Mitra, Carole Taylor, Gail Tomblin Murphy, Sandra Peterson, Kamila Premji, David Rudoler, Tara Sampalli, David Snadden, David Stock, Kath Stringer, and Sabrina Wong. We are also grateful to all the individuals who participated in interviews for the study.

Edited by: Lawrence Grierson (section editor); Christina St-Onge (senior section editor); Marcel D'Eon (editor-in-chief)

References

- Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Millbank Quarterly*. 2005;83(3):457-502. https://doi.org/10.1111/j.1468-0009.2005.00409.x
- Macinko J, Starfield B, Shi L. The contribution of primary care systems to health outcomes within Organization for Economic Cooperation and Development (OECD) countries, 1970–1998.
 Health Services Res. 2003;38:831-65.
 https://doi.org/10.1111/1475-6773.00149
- Kringos D. The strength of primary care in Europe [thesis].
 Utrecht (The Netherlands): Nivel; 2012. Available from www.nivel.nl/sites/default/files/bestanden/Proefschrift-Dionne-Kringos-The-strength-of-primary-care.pdf
 [Accessed May 1, 2022].
- Starfield B. Primary care: an increasingly important contributor to effectiveness, equity, and efficiency of health services.
 SESPAS report 2012. Gaceta Sanitaria. 2012;26(S):20–26. https://doi.org/10.1016/j.gaceta.2011.10.009
- Peckham A, Ho J, Marchildon GP. Policy innovations in primary care across Canada. Toronto: North American observatory on health systems and policies. *Rapid review* (No. 1), 2018. https://www.researchgate.net/publication/326210991
- Aggarwal M, Hutchison B. Toward a primary care strategy for Canada. CFHI. 2012. Available at www.cfhi-fcass.ca [Accessed Oct 18, 2022].
- 7. Federal/Provincial/Territorial advisory committee on health delivery and human resources a framework for collaborative pan-Canadian human health resources planning. 2007.
- Strumpf E, Levesque JF, Coyle N, Hutchinson B, Barnes M, Wedel RJ. Innovative and diverse strategies toward primary health care reform: lessons learned from the Canadian experience. J Amer Board Fam Med. 2012;25:S27-31. https://doi.og/10.3122/jabfm.2012.02.110215
- College of Family Physicians of Canada. Family medicine interest groups. Strengthening the future of family medicine.
 Available from https://www.cfpc.ca/CFPC/media/Resources/Membership/FMI G-Future-fam-medicine-booklet-ENG.PDF. [Accessed Oct 18, 2022].
- Phillips JP, Wendling AL, Prunuske J, et al. Medical school characteristics, policies, and practices that support primary care specialty choice: a scoping review of five decades of research. Fam Med. 2022;54(7):542-54. https://doi.org/10.22454/FamMed.2022.440132
- McKee ND, McKague MA. Ramsden VR, Poole RE. Cultivating interest in family medicine. Family medicine interest group reaches undergraduate medical students. *Can Fam Phys*. 2007;53:661-5.
- Pham T-N, Kiran T. More than 6.5 million adults in Canada lack access to primary care. *Healthy Debate*. Mar 14, 2023. https://healthydebate.ca/2023/01/topic/ourcare-survey-primary-care/.
- Kiran T. Keeping the front door open: ensuring access to primary care for all in Canada. CMAJ. 2022;194(48):E1655-E1656. https://doi.org/10.1503/cmaj.221563
- 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.
- https://www.cfpc.ca/CFPC/media/Resources/Education/AFM-OTP-Summary7-Scope-of-Practice.pdf
- Hedden L, Banihosseini S, Strydom N, McCracken R. Modern work patterns of "classic" versus millennial family doctors and their effect on workforce planning for community-based primary care: a cross-sectional survey. *Human Resources for Health*, 2020;18:67. https://doi.org/10.1186/s12960-020-00508-5
- Kabir M, Randall E, Mitra G, et al. Factors influencing focused practice: A qualitative study of resident and early-career family physician practice choices. *Brit J Gen Pract*.
 2022; BJGP.2021.0512. https://doi.org/10.3399/BJGP.2021.05
- Peterson LE, Fang, B, Puffer, JC, Bazemore, AW. Wide gap between preparation and scope of practice of early career family physicians. J Amer Board Fam Med. 2018;31(2):181-182. https://doi.org/10.3122/jabfm.2018.02.170359
- Coutinho AJ, Cochrane A, Stelter K, Phillips RL Jr., Peterson LE. Comparison of intended scope of practice for family medicine residents with reported scope of practice among practicing family physicians. *JAMA*. 2015;314(22):2364-2372. https://doi.org/10.1001/jama.2015.13734
- Ringdahl, E, Delzell, JE Jr., Kruse, RL. Changing practice patterns of family medicine graduates: a comparison of alumni surveys from 1998 to 2004. J Am Board Fam Med. 2006;19(4):404-412. https://doi.org/10.3122/jabfm.19.4.404
- Fowler, N, Oandasan, I, Wyman, R, eds. Preparing our future family physicians. An educational prescription for strengthening health care in changing times. A final report and recommendations of the Outcomes in Training Project. Mississauga, Ontario. College of Family Physicians of Canada. 2022.
 - https://www.cfpc.ca/CFPC/media/Resources/Education/AFM-OTP-Report.pdf
- 21. Aggarwal M, Holtby A, Slade S. Comparing Practice Intentions and Patterns of Family Physicians in Canada. Fam Med. 2023;55(9):591-597.
 - https://doi.org/10.22454/FamMed.2023.996183
- Lavergne MR, Goldsmith LJ, Grudniewicz A, et al. Practice patterns among early-career primary care (ECPC) physicians and workforce planning implications: protocol for a mixed methods study. *BMJ Open*, 2019;9(9):e030477. https://doi.org/10.1136/bmjopen-2019-030477
- Rudoler D, Peterson S, Stock D, et al. Do recent family
 physician graduates practice differently? A longitudinal study
 of primary care visits and continuity in four Canadian provinces.

 CMAJ. 2022;194:E1639-46.
 https://doi.org/10.1503/cmaj.220439
- Grudniewicz A, Randall E, Lavergne MR, et al. Factors influencing practice choices of early-career family physicians in Canada: a qualitative interview study. *Human Res Health*, 2023;21(84). https://doi.org/10.1186/s12960-023-00867-9
- Boyland, JR. A social constructivist approach to the gathering of empirical data. *Austral Counselling Res J* 2019;13(2). ISSN1832-1135 www.acrjournal.com.au

- Mann K, MacLeod A. Constructivism: learning theories and approaches to research in researching medical education, (eds.) Jennifer Cleland, Steven J. Durning. 2015. https://doi.org/10.1002/9781118838983
- Braun V, Clarke V. Thematic analysis A practical guide. SAGE Publications Ltd. 2022.
- Barnhoorn PC, Nierkens V, Numas ME, Steinert Y, Kramer AWM, van Mook WNKA. General practice residents' perspectives on their professional identity formation: a qualitative study. *BMJ Open*. 2022;12:e059691. https://doi.org/10.1136/bmjopen-2021-059691
- Beaulieu M-D, Dory V, Pestiaux D, et al. General practice as seen through the eyes of general practice trainees: a qualitative study. *Scand J Prim Health Care* 2006;24:174–180. http://doi.org/10.1080/02813430600795498
- Beaulieu M-D, Rioux M, Rocher G, Sampson L, Boucher L.
 Family practice: professional identity in transition. A case study of family medicine in Canada. Soc Sci Med. 2008;67:1153-1163. https://doi.org/10.1016/j.socscimed.2008.06.019
- Hafferty FW, Franks R. The hidden curriculum, ethics teaching, and the structure of medical education. *Acad Med*. 1994;69(11):861–871.https://doi.org/10.1097/00001888-199411000-00001
- Hafferty FW. Beyond curricular reform: confronting medicine's hidden curriculum. Acad Med. 1998;73(4):403-7. https://doi.org/10.1097/00001888-199804000-00013
- Doja A, Bould MD, Clarkin C, Eady K, Sutherland S, Writer H.
 The hidden and informal curriculum across the continuum of training: a cross-sectional qualitative study. *Med Teach* 2016;38(4):410–8.

 https://doi.org/10.3109/0142159x.2015.1073241
- Philibert I, Elsey E, Fleming S, Razack S. Learning and professional acculturation through work: examining the clinical learning environment through the sociocultural lens. *Med Teach*. 2019;41(4):398-402. https://doi.org/10.1080/0142159X.2019.1567912
- Mulder H, ter Braak E, Chen HC, ten Cate O. Addressing the hidden curriculum in the clinical workplace: a practical tool for trainees and faculty. *Med Teach*. 2019;41(1):36-43. https://doi.org/10.1080/0142159X.2018.1436760
- 36. Pourbairamia G, Bigdeli S, Kamran S, et al. Hidden curriculum in residency programs: a scoping review. *J Advan Med Educ Profess*. 2022;10(2):69-
 - 82.<u>https://doi.org/10.30476/JAMP.2021.92478.1486</u>
- Murakami M, Kawabata H, Maezawa M. The perception of the hidden curriculum on medical education: an exploratory study. Asia Pacific Med. 2009;8(1):9. https://doi.org/10.1186/1447-056X-8-9
- Rothlind E, Fors U, Salminen H, Wändell P, Ekblad S. The informal curriculum of family medicine what does it entail and how is it taught to residents? A systematic review. BMC Fam Pract. 2020;21(1):49. https://doi.org/10.1186/s12875-020-01120-1

- Mahood, SC. Medical education. Beware the hidden curriculum. Commentary. Can Fam Phys. 2011;57(983-5).
- Beaulieu M, Dory V, Pestiaux D, et al. What does it mean to be a family physician? Exploratory study with family medicine residents from 3 countries. Can Fam Phys 2009;55:e14-20. http://www.cfp.ca/content/cfp/55/8/e14.full.pdf
- 41. Philipott, J, Sanfilipop, T, Schultz, K. What are we really telling our medical students? The story of the hidden curriculum. Dean's blog. Queen's University, Faculty of Health Sciences. March 11, 2021. https://healthsci.queensu.ca/stories/blog/what-are-we-really-telling-our-medical-students-story-hidden-curriculum
- 42. Woloschuk W, Wright B, McLaughlin K. Debiasing the hidden curriculum. Academic equality among medical specialties. *Can Fam Phys.* 2011;57(e26-30).
- Holmes D, Tumiel-Berhalter LM, Zayas LE, Watkins R. "Bashing" of medical specialties: students' experiences and recommendations. Fam Med. 2008;40(6):400-6.
- 44. Hearst N, Shore WB, Hudes ES, French L. Family practice bashing as perceived by students at a university medical center. *Fam Med*. 1995;27(6):366-70.
- Campos-Outcalt D, Senf J, Kutob R. Comments heard by US medical students about family practice. Fam Med 2003;35(8):573-8. PMID: 12947520
- Alston M, Cawse-Lucas J, Hughes LS, Wheeler T, Kost A. The persistence of specialty disrespect: student perspectives. PRIMER. 2019;3:1. https://doi.org/10.22454/PRIMER.2019.983128
- 47. Manor, S, Holland, R. Ageism and intergenerational gaps between senior physicians and young residents in the health care system. *J Intergenerational Rel.* 2023. https://doi.org/10.1080/15350770.2023.2166639
- 48. Bogler T, Lazare K, Rambihar V. Female family physicians and the first five years. In pursuit of gender equity, work-life integration, and wellness. *Can Fam Phys.* Aug 2019;585-88.
- 49. First five years family practice committee (website). College of Family Physicians of Canada. 2024. https://firstfiveyears.ca
- Jewell K, Newton C, Dharamsi S. Length of family medicine training and readiness for independent practice: residents' perspectives at one Canadian university. UBC Med J. 2015;15-19. https://med-fom-ubcmj.sites.olt.ubc.ca/files/2015/02/ubcmj 6 2 2015 15-19 pdf
- Resident Doctors of Canada. 2018 National resident survey.
 2018. https://residentdoctors.ca/areas-of-focus/career-planning/career-intention-and-practice-management/
- Grudniewicz A, Randall E, Lavergne MR, et al. Factors influencing practice choices of early-career family physicians in Canada: a qualitative interview study. MedRxiv preprint https://doi.org/10.1101/2023.05.07.23289626.
- 53. EQUIP Health Centre, University of British Columbia, Western University, University of Northern British Columbia. Equity Health Care Action Kit. 2023. https://equiphealthcare.ca/equity-action-kit/

Appendix A. Interview Guide: Early Career Physicians

Current & Future Practice Description

- 1. How did your career unfold out of residency?
- 2. Tell me briefly about your current practice.
 - How is your practice organized?
 - Who else do you work with?
 - How are you (and your team) <u>compensated</u>?
 - What does your work week look like?
- 3. Tell me about any <u>particular clinical interests</u> that you have as a <u>family physician</u>.
 - Which patient populations are you interested in?
 - How have you incorporated these interests into your practice?
 - Do you see this changing over time?
- 4. In what ways, if any, does your <u>current practice differ from your ideal type</u> of practice?
- 5. How do you see your practice changing over time?
 - If IMG with a return of service: how will your practice change after your return of service is satisfied?
- 6. [If participant mentions "comprehensive" probe: what does comprehensive mean for you?]

Priorities

- 7. When you think about your career, what is most important to you?
- 8. In what ways, if any, did your personal priorities or goals influence your career?
 - How did your <u>personal relationships</u> influence your career?
 - How did <u>parenthood or caregiving</u> influence your career?
 - How did <u>financial considerations</u> influence your career?
 - How did <u>your gender</u> influence your career?
 - How did your other personal characteristics influence your career plans?

- 9. (if no exogenous factors emerge in Q 4, 5, 6) What kinds of other influences have you experienced or anticipate that may influence your practice changes over time?
 - i. E.g., Community, professional, regulatory influences

Past Experiences

- 10. How did your medical school experience influence your career plans as a family physician?
- (Re-direct away from responses about why family medicine was chosen as a specialty)
 - Positive or negative experiences?
 - Did you have any experiences stand out in primary care during training?
 - Did any key people influence your plans?
 - 11. How did your residency influence your plans for family practice?
 - Positive or negative experiences?
 - Did you have any experiences in primary care stand out during training?
 - Did any key people influence your plans?
 - 12. Tell me about your CaRMs experience
 - Was family medicine your first choice?
 - Did you have to make <u>trade-offs between specialty and location of residency</u>?
 - 13. Tell me about any other life experiences you've had that influence your career plans as a family physician?

Why: Policy Environment and Practice Opportunities

- 14. At the start of the interview, you told me about how you practice now and what you would like your clinical practice to look like. Do you expect you will be able to achieve this ideal type of practice? Why / why not?
 - Are opportunities available for your preferred type of practice?
 - Are there restrictions or barriers to you having this ideal practice?
 - How will you populate your practice?
 - How do your gender or other personal characteristics impact your ability to achieve this type of practice?

Wrap up

- 15. If you were mentoring a new family medicine resident, what advice would you give them about planning their career in family medicine?
- 16. Anything else that you think is important for me to know?