

Starting out rural: a qualitative study of the experiences of family physician graduates transitioning to practice in rural Ontario

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Abstract

Background: New family medicine graduates are a promising group to recruit to underserved rural areas. This study aimed to understand the experiences of this group as they transitioned to practice in rural Ontario.

Methods: We used a hermeneutic phenomenology approach. Purposive sampling was used to recruit participants who graduated from a Canadian family medicine residency program and worked in a rural community in Ontario (Rurality Index for Ontario score ≥ 40) for at least 1 year within the past 5 years. Participants completed an online demographic survey followed by a virtual semistructured interview (May–August 2022). Interviews were video recorded and transcribed. Two researchers reviewed transcripts for codes, and then codes were reviewed in an iterative process to create themes. Transcripts, codes and themes were reviewed by an independent researcher, and final themes were shared with participants to ensure reliability.

Results: We included 18 family physicians in the study. We identified 8 themes and 18 subthemes. The themes identified as important to the experience of new graduates were as follows: choosing rural practice, preparedness for practice, navigating work–life balance, navigating transition to practice, challenges during transition to practice, successes during transition to practice, locuming and emergency medicine as part of rural generalist practice.

Interpretation: Most physicians interviewed felt prepared for rural practice and enjoyed their work; however, they faced unique challenges associated with being an early-career physician in rural practice. This study identifies opportunities for improvements, which can guide medical educators, rural communities and their recruiters, new graduates and policy-makers.

Rural Canada has had difficulty recruiting and retaining physicians for decades.^{1–4} There is a known maldistribution of Canadian physicians, with 17.8% of Canadians residing in rural areas⁵ and 8% of physicians practising in rural communities.⁶ In Ontario, at least 2.2 million individuals do not have a family doctor, and the shortage is especially acute in northern and rural areas.⁷ To address the shortage, there have been policies and educational strategies to train and recruit rural physicians.^{8–10} Yet, many rural communities remain underserved. Addressing the family physician workforce crisis in rural Ontario requires both retention of current family physicians and the recruitment of new family physicians to meet the needs of rural communities.

The transition from residency to independent rural family practice is not well explored in the literature. The results of the limited studies show that new physicians experience unique challenges during the transition to practice across locations and specialties,^{11,12} and periods of transition, such as entry into practice, may increase the risk of burnout.¹³ In general, some sources suggest that early-career physicians may have higher levels of burnout than physicians later in their

careers.^{14,15} Factors associated with early-career burnout include poor career fit, and dissatisfaction with collegial relationships, quality of care provided and control over the work environment.¹⁴ The objective of this study was to understand the experiences of family physicians in rural Ontario during their first years of practice and reveal ways to prepare and support family physician graduates in rural areas, ultimately improving recruitment and retention for rural communities.

Competing interests: Sarah Newbery is an assistant professor and the associate dean of Physician Workforce Strategy for Northern Ontario School of Medicine University (NOSM). Kara Passi reports receiving the 2022 NOSM Summer Medical Student Research Award. No other competing interests were declared.

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Methods

Hermeneutic phenomenology was chosen in this study to explore the experiences of family physicians transitioning to rural practice.¹⁶ Phenomenology is an approach to understanding “the essence of a phenomenon by exploring it from the perspective of those who have experienced it,”¹⁶ and hermeneutic phenomenology incorporates the researcher’s prior knowledge of the phenomena into this exploration.^{16,17} Our methods reflected those described by van Manen. In essence, hermeneutic phenomenology is based on the belief that everybody is as unique as their life stories. This method was chosen to examine the phenomenon of transition to rural practice in a way that would both incorporate current literature and capture varied experiences of participants, such that we may uncover new and unique findings.

Participants

Purposive sampling was used to recruit family physicians. We included participants who had graduated from a Canadian family medicine residency program between May 2017 and May 2021, and who had practised for a minimum of 1 year in rural Ontario between May 2017 and May 2022. We defined rural by a Rurality Index for Ontario (RIO) score of 40 or greater.¹⁸ A RIO score less than 40 is typically not eligible for government rural incentive programs.^{19,20} Participants were screened for eligibility by responding either yes or no to eligibility criteria at the beginning of the demographic survey and the interview. While this was not listed as an inclusion criterion, all interviews were conducted in English and would thus exclude unilingual Francophone physicians.

Family physicians were recruited through social media (i.e., Twitter and Facebook groups), educational institution email lists (i.e., medical school alumni networks) and physician group email lists (i.e., Society of Rural Physicians of Canada listserv, Ontario Medical Association district chairs and secretaries, and College of Family Physicians of Canada First Five Years in Family Practice group). Interested individuals contacted the research team by a designated email and received a standard reply with the letter of information, consent and interview questions. If individuals were interested and met the eligibility criteria, they completed an online demographic survey (Appendix 1, available at www.cmajopen.ca/content/11/5/E948/suppl/DC1), and a one-on-one interview was arranged.

Data collection

Interviews took place during the months of May–August 2022 and were conducted in English using the Webex video conferencing platform. Interviews were conducted by 2 investigators from the Northern Ontario School of Medicine (NOSM) University — a family medicine resident (K.W.) and a medical student (K.P.). Interviews were initially conducted by K.W. When K.P. joined the team, several interviews were conducted together to ensure consistency. Most of the subsequent interviews were conducted by individual interviewers to better accommodate the schedules of participants. K.W. had

experience with rural communities through lived experience and clinical placements. K.P. had experience with rural medicine through clinical placements within medical training. This might have influenced the interpretation of the data. Neither had any relationships with study participants before the interviews.

A semistructured interview format was used with 13 questions (Appendix 2, available at www.cmajopen.ca/content/11/5/E948/suppl/DC1), which focused on physicians’ experiences before, during and after the transition to rural practice. Questions aimed to elicit discussion on topics such as education, support systems, business management, work–life balance and finances. Additional probes were used to clarify thoughts and enrich the conversation. The interview guide was created by researchers (K.W., S.N. and K.R.) based on the experiences of the authors with rural practice and medical education, and common challenges identified in the literature. S.N. is an educator and rural family physician, and is the associate dean of Physician Workforce Strategy for the NOSM University. K.R. is also an educator and family physician in a medium-sized community and has extensive research experience. The guide is more structured than usually seen in hermeneutic phenomenology, and only 1 round of interviews was conducted owing to time constraints.

Interviews were digitally video recorded so they could later be transcribed verbatim. Limitations of the video conferencing platform did not allow audio recording alone. All data were deidentified to maintain confidentiality. Physicians received a \$100 honorarium for participating in the study. All data were stored on the NOSM University Google Drive.

Data analysis

Transcripts were independently reviewed by K.W. and K.P. using NVivo 11 Pro (QSR International). In keeping with hermeneutic phenomenology, codes were identified first within each transcript, and then across all transcripts. Codes reflected groups of phrases with common meanings. Through an iterative process that involved reviewing the transcripts and discussions among investigators (K.W. and K.P.), codes were grouped into subthemes and then narrowed to final themes. Thematic saturation was felt to be reached when no other unique themes were identified. Throughout data collection and analysis, researchers maintained written reflections. To ensure reliability, an independent qualitative researcher with extensive training in research methods (N.S.) reviewed all transcripts and codes against the final themes. Final themes and supporting quotes were shared with study participants via email and they were given the opportunity to provide feedback. A list of suggestions was created based on the authors’ interpretation of the themes. They were inspired by examples provided by interviewees and current knowledge of communities and curriculums. Suggestions were directed to interested parties connected to early-career rural family physicians.

Ethics approval

This study was approved by the Laurentian University Research Ethics Board (REB 6021099 approval).

Results

A total of 20 physicians were interviewed, and 18 were included in the study. Two participants were excluded: one recording was lost during uploading, and another participant did not meet the study criteria. After the interview, it was revealed that the participant had misinterpreted the criteria and that their community did not have an RIO score of 40 or greater. Demographic information is reported in Table 1. Interviews averaged 48 minutes.

Based on the interviews, we identified 8 themes with 18 subthemes (Table 2). Details are listed below. A list of suggestions directed toward interested parties was also created and can be found in Table 3.

Theme 1: Choosing rural practice

Most participants had some experience with rural medicine before practice through upbringing and educational placements. They also had a specific interest in rural medicine and/or rural lifestyle. These were influential in choosing to start their careers in rural areas. As described by Participant 17, familiarity with a specific community sometimes influenced the community they chose to work in as it was perceived as easing the transition:

It was very helpful to be in the same community where I trained because there was very little of a learning curve ... you know, we refer to when, what's available, what's not, and what needs to be done by the family doctor.

Many participants also received incentives to practise in rural communities (i.e., loan forgiveness programs, housing and grants). Individuals benefited from incentives to various amounts. Overall, participants felt it was important they were appropriately compensated for the skill and responsibility of working in rural areas, but financial incentives were not a primary driving force. Either the incentives were not enough to make them specifically choose a specific community or, as described by Participant 10, they would choose to practise in rural areas for factors other than the incentives:

It's nice to know that I can get a chunk of money when I set up my own practice here, but if that weren't the case, I would still do it.

Theme 2: Preparedness for practice

Regarding feeling prepared to practise, most felt they had an adequate knowledge base for clinical practice. There was an expected learning curve associated with entry into practice. As Participant 11 described,

In terms of knowledge, I felt pretty prepared from my residency program. I don't think anyone is ever going to feel 100% comfortable, but I felt well supported in the community that I was at.

Participants who worked in emergency departments had mixed opinions as to whether training specific to emergency medicine would be beneficial before practice. Overwhelmingly,

Table 1 (part 1 of 2): Participant characteristics

Characteristic	No. of participants n = 18
General characteristics	
Age during interview, yr	
20–30	1
31–40	16
41–50	0
> 50	1
Gender	
Female	10
Male	7
Nonbinary	1
No. of years in independent rural practice	
1	2
1–2	3
2–3	8
3–4	3
4–5	2
Educational experiences	
Medical school	
Dalhousie University	1
NOSM University	3
University of Toronto	2
McMaster University	2
University of Ottawa	1
University of British Columbia	1
University of Saskatchewan	1
University of Montreal	1
Western University	4
Attended medical school internationally	2
Residency program	
McGill University	1
McMaster University	2
NOSM University	7
University of Ottawa	2
University of Saskatchewan	1
University of Toronto	5
Rural exposure in medical school	
1–4 wk	3
5 wk–3 mo	10
4–8 mo	2
> 8 mo	3
Rural exposure in residency	
0 wk	1
5 wk–3 mo	7
4–8 mo	4
> 8 mo	0
Rural program	6
Optional third year of residency training (a.k.a. “plus one”)	
Completed	0*

Table 1 (part 2 of 2): Participant characteristics

Characteristic	No. of participants <i>n</i> = 18
Features of first year of practice	
Partner when transitioning to practice	
Yes	11
No	7
Children when transitioning to practice	
Yes	4
No	14
Community population	
< 5000	9
5000–10 000	6
10 000–30 000	2
> 75 000	1†
Local Health Integration Network	
Northwest	9
Northeast	4
Toronto Central	1
Southwest	2
Waterloo Wellington	1
North Simcoe Muskoka	2
Champlain	1
Central East	1
None listed	1
> 1 LHIN	3
Returned to rural community where they grew up to practise	
Yes	2‡
No	16
Practice format	
Locum	8
Part-time	3
Full-time	10
Combination locum and full-time or part-time	4
Areas of practice (no. of areas of practice ranged from 1 to 7)	
Primary care office	18
Hospitalist	15
Emergency department	14
Surgical assist	8
Palliative care	5
Addiction medicine	5
Long-term care	1
Obstetric care (clinic and delivery)	3
Teaching	9
Research	1
Hours per week	
Average	47
Range	30–80§
No. of days per month on call	
Average	8
Range	0–20+
Note: NOSM = Northern Ontario School of Medicine. *2 participants completed a 3-month supplementary emergency medicine experience program. †Individual practised in a larger centre for first year, but practised in a rural community within first 5 years. ‡Not necessarily in first year of practice. §1 worked only half of the year, and others worked a range.	

participants expressed feeling unprepared for the business aspect of medicine, including billing, staff management and patient scheduling. As Participant 5 expressed,

I had no idea coming into practice ... the amount of paperwork stuff that comes across when you're in family medicine. I didn't really see it as much when I was in residency.

Theme 3: Navigating work–life balance

Participants all struggled to various degrees with a balance between work and home life. Some with partners or children struggled to find spousal employment or child care opportunities. Distance to familial support was also consistently identified as a challenge and factor that could limit their time in a community. As Participant 2 said,

It's unfortunate, because I think that's just one of the biggest burdens with rural communities, retaining people. Keeping them away from their friends and family for so long is a hard sell.

The degree of incorporation into the local community was important, and physicians appreciated feeling cared for by community members outside their roles as physicians. Members of the health care team, such as physician recruiters, were sometimes facilitators for this. Overscheduling was specifically identified as a barrier to achieving a work–life balance. Physicians cited a combination of reasons for this, including the needs of the community, difficulty setting personal boundaries, and being unaware of the time required for administrative tasks and learning their new roles. Participant 20 describes how overscheduling led to their burnout:

I burned out really early on for sure. I took on a lot. I also didn't know my own boundaries ... I think I should have been a bit more judicious in how much time I needed with each patient.

Theme 4: Navigating transition to practice

Developing confidence and learning how to manage uncertainty were key experiences of transitioning to rural practice. Participant 13 described this process of their transition to practice:

I learned when you're forced to make decisions and you don't have any backup, at first, you're second-guessing yourself constantly, which makes you slow and makes it tough to sleep at night sometimes. But then as you get more confident in your decision-making and get more experience, then it gets easier.

Physicians used both local colleagues as mentors and other early-career physicians for knowledge and for debriefing on difficult cases. The mentorship was often informal, but many participants used formal emergency medicine mentorship programs with various levels of success. The use of early-career physicians (i.e., spouses, peers from medical school or residency, or social media groups) was unique in that new graduates felt a sense of safety asking questions that they were embarrassed to ask local experienced colleagues. This was reflected by Participant 11, whose partner was also an early-career physician:

Just having someone that you can bounce things off of even if you think it's something you wouldn't necessarily ask a colleague but, something that you're, like, am I being stupid, like, is this totally dumb. That threshold for asking is a lot lower.

Theme 5: Challenges during transition to practice

Participants described rural-specific challenges (i.e., transferring sick patients in poor weather, staffing shortages, lower socio-economic status populations and fewer local resources) and learning how to manage them, as summarized by Participant 8:

Things you don't even think are, were big issues. There have been so many things that [large urban southern Ontario] has no idea what's going on.

Some also expressed difficulty navigating the expectations of communities. Participant 6 describes how this related to the volume of patients they were able to manage as compared with a senior physician:

The 3 physicians who retired here had a cumulative number of patients exceeding almost 4000 patients. I don't know of any new doctor who's ready to take 1500 patients on ... So, if communities think they're going to replace their 3 retired doctors with 3 new doctors out there, they've lost their minds.

Some physicians experienced challenges taking over practices with different prescribing practices (e.g., opioid and benzodiazepine prescriptions). These aspects added stress to the transition to the practice period.

Theme 6: Successes during transition to practice

Overall, physicians describe feeling fulfilled in their roles as rural practitioners despite the challenges of their role. This was described by Participant 15:

It can be super hard and gruelling and really will test all of the facets of who you are as a human being. But it's super rewarding to create those relationships with people and to know that they rely on you and that you're a fixture in the community and you're recognized as someone that everybody trusts and can come to you.

Collegiality among both physicians and allied health members eased the transition to practice as described by Participant 8:

Nobody bats an eye, even if you're a little bit, like, "Maybe that was an over-call" but "I'd rather you call me and be safest for the patient than to call and it to be too late." So I think the collegiality and the support from my colleagues hands down made it so easy to transition.

Theme 7: Locuming

Both locum and nonlocum physicians reflected on the value of locuming in the early career phase to explore different practice styles, physician teams and community setups. This was described by Participant 19:

I think locuming is the best place to start off, but because it has really little strings attached. You can just go where you'd like, see whether or not just rural practice is for you, but to see if certain communities are for you.

Most physicians relied on word of mouth to find locum roles that fit their needs.

Theme 8: Rural emergency department practice

Participants who worked in the emergency department highlighted challenges that differed from office practice. Managing the broad knowledge and skill set was both enticing and challenging for early-year physicians. Physicians described stress in anticipating emergency department shifts (i.e., "call fear"). Participant 15 specifically describes how challenges were exacerbated by current nursing shortages:

Table 2: Themes and subthemes	
Theme	Subthemes
1. Choosing rural practice	<ul style="list-style-type: none"> • Baseline interest in what rural has to offer • Familiarity and comfort with a community • Influence of practice incentives
2. Preparedness for practice	<ul style="list-style-type: none"> • Lack of business knowledge for medical practice • Adequacy of knowledge base for full-scope practice
3. Navigating work–life balance	<ul style="list-style-type: none"> • Impact of overscheduling • Distance to friends and family • Conflict between career and family • Importance of being integrated into the broader community
4. Navigating transition to practice	<ul style="list-style-type: none"> • Developing confidence and managing uncertainty • Role of mentorship • Using other early-year physicians to bridge knowledge gaps
5. Challenges during transition to practice	<ul style="list-style-type: none"> • Navigating community expectations and generational changes in practice styles • Experiencing rural-specific challenges
6. Successes during transition to practice	<ul style="list-style-type: none"> • Rewarding experiences and feeling fulfilled • Collegiality
7. Locuming	<ul style="list-style-type: none"> • Value of locuming
8. Rural emergency department practice	<ul style="list-style-type: none"> • Unique challenges of emergency department practice • Emergency department support and backup

I haven't done emerg in probably the last fourish months ... It was just becoming very difficult for me to work in the emerg and not have those nurses that I knew and trusted in the environment that was just so high acuity and high intensity.

Some physicians cited lack of backup in a community, especially in single-coverage emergency departments, as a reason why they chose not to locum in an area, as highlighted by Participant 4:

I very quickly stopped working in places where people don't come in when called ... You can tell when you go to workplaces where they're used to having new grads.

Others who had backup were fearful of overburdening backup colleagues, and conversely, when they were back up, they found it difficult to relax due to fear of being called in. Some used emergency department mentorship programs with varying benefits.

Interpretation

This study provided insights into early-career physicians' experiences and supported much of the current literature. Interviewees were interested in rural medicine, described feeling prepared for rural practice and found their careers fulfilling. Prior familiarity and lived experience influenced their choice of community, while financial incentives were less important. Challenges included unpreparedness for business aspects, difficulty managing uncertainty, overscheduling, navigating community expectations, living far from loved ones, and balancing roles as a physician and community member. Mentors and connections with other early-career physicians, as well as community and collegial support, helped them overcome challenges. Working alone in "single-coverage" emergency departments was a specific challenge. Support from colleagues in a readily available

Table 3: Suggestions for interested parties

Group	Suggestions*
Learners	<ul style="list-style-type: none"> • Seek exposure to rural opportunities and especially any community one would considering practising in before committing • Ask questions and seek training on billing and practice management • Start planning for rural practice early and attempt to gain a broad skill set • Make and maintain connections with other early-year physicians to support each other in both clinical and nonclinical contexts
Early-year physicians	<ul style="list-style-type: none"> • Consider locuming before committing to a single practice or community • Be conservative when planning your schedule in your first year and be cautious not to overschedule • Work with the local physicians and the community to establish reasonable workload expectations early on • Actively engage in the community outside of practice through social events and activities
Physician recruiters and rural communities	<ul style="list-style-type: none"> • Consider nonfinancial incentives (e.g., nonfinancial logistical supports such as housing, child care and roles for spouses) • Support physicians visiting their families with extended vacation periods and funding to travel or to bring family for key holiday dates • Help physicians get connected with the local community by inviting them to events • Manage workload expectations to support new graduates in terms of practice sizes and style • Make your community attractive to locums as a pathway to future recruits • Provide support for both children and spouses during transition to practice (including child care, job opportunities)
Medical education	<ul style="list-style-type: none"> • Incorporate rural communities into curriculum and placements in medical school and residency • Incorporate billing and practice management into curriculum and consider strategic continuing professional development to support practice management once in practice • Allow residents flexibility in their training to tailor their skills for rural practice
Government	<ul style="list-style-type: none"> • Invest in continuing education programs for skills development and maintenance beyond residency to increase confidence in broad generalist clinical practice, especially emergency medicine • Provide funding such that new graduates can work in rural communities as a team to formalize the collegial support that benefits successful transition to practice • Invest in rural health care systems and partner with communities to find solutions to local health care challenges • Establish a user-friendly website for locuming opportunities that includes community profiles and what skills are expected
Clinicians in practice	<ul style="list-style-type: none"> • Provide mentorship for new graduates • Manage expectations for new graduates. Be mindful they may be unable to work at the same pace or style as a more experienced clinician • Provide committed, easily accessible emergency department backup to early-year physicians
<p>*Suggestions were created based on the authors' interpretation of the themes discussed in the paper. They were inspired by examples provided by interviewees, and current knowledge of rural communities and medical school and postgraduate curricula.</p>	

“clinical backup” capacity and mentorship mitigated these challenges. Locums and nonlocums found starting their careers in a locum capacity beneficial.

This study supports literature showing that rural upbringing and familiarity with rural areas through placement are important for new graduates when choosing to work in a rural area.^{21–24} Factors such as proximity to family were also important to study participants and reflect a Health Force Ontario resident exit survey in which 80% of second-year residents ranked proximity to family as important or very important.²⁵ The benefits of financial incentives in the literature are mixed. Many studies show success for short-term recruitment but not long-term retention.^{26,27} Some Canadian studies emphasize the importance of community characteristics (e.g., collegiality, team-based culture and mentorship availability) over financial incentives to retain physicians,^{28,29} which were affirmed in this study.

Overall, this study showed that the experiences of new family physician graduates reflect literature pertaining to the experiences of rural practitioners at all career stages. For example, there was overlap with other studies for the reasons physicians leave rural communities, such as distance to extended family, the career of a partner, community integration, burnout, lack of resources and lack of opportunities.^{30,31} The importance of physician belonging has also been highlighted in the Canadian context,³² and community integration has been shown to highly influence spousal contentment.³³

In this study, new graduates expressed feeling competent to work in rural areas, but still experienced learning curves, struggled with clinical uncertainty, and desired local support and mentorship. These reflect the perspectives of established physicians who felt newer physicians were competent for rural practice but required on-site support and connectivity to develop confidence.²⁹ This is also reflective of data from the The College of Family Physicians of Canada (CFPC), which showed early-career physicians desired mentorship.³⁴ Other Ontario studies showed a learning curve early in practice and identified that mentorship was perceived as helpful.³⁵ Surprisingly, there is little literature that reflects the unique use of other early-career physicians during the transition to practice. The concept that early-career physicians may prefer and/or utilize other early-career colleagues rather than senior colleagues appears to be a novel finding that warrants further exploration in future studies.

Participants in this study highlighted differences in generational practice styles, including patient volumes. This is supported by Canadian data showing that early-career physicians see fewer patients in a year than physicians several decades into practice.³⁶ This could be attributed to the learning curves associated with clinical and administrative tasks in early practice. Thus, it would be expected that early-career physicians would require more time for these items and, as a result, have smaller practice sizes. There is also evidence that new graduates are limiting their comprehensive practice in favour of focused practice (including emergency department and hospitalist), as a form of self-preservation from burnout.³⁷ Finally, the practice area in which most study participants described feeling unprepared was the business aspect of medicine. This

reflects data from the CFPC, which shows that more than 90% of those surveyed did not feel prepared for the business side of family practice,³⁸ and a Scottish study that showed early-career physicians lacked confidence in the business aspect of medicine.³⁹

This study identified that there are many things that Canadian medical educational institutions, rural communities and senior physicians are doing well to support early-career physicians (e.g., adequate training opportunities, support for community integration and mentorship). However, there are opportunities for improvement.

Limitations

This study has limitations, including possible response bias. The timing of the COVID-19 pandemic corresponded with the transition to practice of some participants. It is unclear how the pandemic affected transition, but it is possible some experiences were negatively affected (i.e., lack of social events and staffing shortages). As noted in the methods, interviews were not connected with demographic surveys to maintain the confidentiality of participants. Thus, we are not able to attribute quotations to specific participant characteristics unless they arose within the interview, and therefore, we cannot comment on the role of age or gender. Personal attributes such as race and sexual orientation were not collected and did not arise organically. Future research could explore these factors. Phenomenological study results are typically not generalizable, but this study suggests common experiences among our early-career interviewees that may inform better preparation and support for physicians transitioning to rural practice.

Conclusion

The early-career family physicians interviewed described feeling prepared clinically for rural practice and feeling fulfilled by their work. There were both modifiable (such as lack of practice management knowledge) and nonmodifiable factors (such as distance to friends and family) that physicians identified as challenges during the transition to practice. This study identifies areas in which various groups can better support new family medicine graduates, with the goal of better recruitment and retention in rural communities.

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