ORIGINAL ARTICLE

Family medicine resident-led clinics in northern Saskatchewan: A programme evaluation

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Abstract

Introduction: Family medicine residents at the University of Saskatchewan's La Ronge Family Medicine Residency Training Programme provide resident-led clinics, based on community-identified needs, to serve patients who might experience barriers to care. Learners are challenged to advance their independent clinical decision-making while gaining experience providing culturally informed and sensitive care. This study aimed to determine how the La Ronge resident-led clinics could be further optimised for both resident training and healthcare delivery.

Methods: We interviewed La Ronge Residency Training Programme graduates over the past 6 years (2018–2023). Interviews were conversational, with a semi-structured guide. Questions inquired about the impact the clinics had on participants, benefits, drawbacks and suggestions for change. Following the interviews, an inductive, reflective, thematic analysis was undertaken.

Results: Response rate was 100% (n = 15). Six themes emerged: building skills for practice with distant supervision; overcoming barriers and resource limitations; awareness of inequities; building culturally respectful relationships; optimising clinic utilisation; and ways of implementing change. Participants felt resident-led clinics encouraged their growth like no other opportunity in the Residency Training Programme. The level of independence in resident-led clinics came with a trade-off in supervision, as there was a desire to balance these aspects.

Conclusions: Resident-led clinics promoted professional and personal development. Additional community collaboration, along with optimising clinic utilisation, such as improved translational and booking services, could benefit patients, communities and residents.

Keywords: Community medicine, health services, Indigenous, internship and residency, rural health

Résumé

Introduction: Les résidents en médecine familiale du programme de résidence en médecine familiale de La Ronge, de l'Université de la Saskatchewan, offrent des cliniques dirigées par des résidents, en fonction des besoins identifiés par la communauté, afin de servir les patients qui pourraient rencontrer des obstacles à

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l'accès aux soins. Les apprenants sont appelés à développer leur autonomie dans la prise de décisions cliniques tout en acquérant de l'expérience dans la prestation de soins culturellement adaptés et sensibles. Cette étude avait pour objectif de déterminer comment les cliniques dirigées par les résidents de La Ronge pourraient être encore mieux optimisées, tant pour la formation des résidents que pour l'amélioration de l'offre de soins.

Méthodes: Nous avons interviewé les diplômés du programme de résidence en médecine familiale de La Ronge au cours des six dernières années (2018-2023). Les entretiens se sont déroulés sous forme de conversations guidées de manière semi-structurée. Les questions portaient sur l'impact des cliniques dirigées par les résidents, les avantages et les inconvénients perçus, ainsi que sur les suggestions d'amélioration. À la suite des entretiens, une analyse thématique inductive et réflexive a été réalisée.

Résultats: Le taux de réponse a été de 100% (n = 15). Six thèmes se sont dégagés: le développement des compétences cliniques avec une supervision à distance; le dépassement des obstacles et des limites en ressources; la prise de conscience des inégalités; l'établissement de relations respectueuses sur le plan culturel; l'optimisation de l'utilisation des cliniques; et les façons de mettre en œuvre des changements. Les participants ont estimé que les cliniques dirigées par les résidents avaient favorisé leur croissance professionnelle d'une manière unique dans le cadre du programme de résidence. Le degré d'indépendance associé à ces cliniques s'accompagnait toutefois d'un compromis au niveau de la supervision, certains exprimant le besoin de trouver un meilleur équilibre entre ces deux dimensions.

Conclusions: Les cliniques dirigées par les résidents ont contribué à leur développement professionnel et personnel. Un renforcement de la collaboration communautaire, jumelé à une optimisation de l'utilisation des cliniques — par exemple, grâce à de meilleurs services de traduction et de prise de rendez-vous — pourrait profiter aux patients, aux communautés et aux résidents.

Mots-clés: Internat et résidence; médecine communautaire; santé rurale; services de santé, autochtones

INTRODUCTION

While Canada struggles with a lack of primary care providers, rural and remote communities are particularly challenged in meeting this need. Nineteen percent of Canadians live rurally, with 12% of the Canadian population living in moderately-, more-, or most-remote municipalities.[1] However, very few specialists and only 14% of family physicians practise in rural and remote settings.[2] Consequently, medical educators and researchers have made great efforts to identify factors that support the entry and retention of both medical learners and established physicians in rural and remote practices. Amongst these influences, long-term, immersive training experiences and community integration have been recognised as impacting the willingness of family physicians to remain in these communities.[3-7] Rural family practice additionally requires a particularly broad skill set, coupled with 'clinical courage' to manage presentations that, at times, may be at the margins of physician confidence.[8] As such, it is important that all of these elements be introduced in rural and remote Family Medicine Residency Training Sites. One educational avenue offering an opportunity to do so is that of community-based, resident-led primary care clinics.

Since the establishment of the University of Saskatchewan's La Ronge Family Medicine Residency Training Programme in 2012, family medicine residents have been providing medical care in network agencies, high schools and Lac La Ronge Indian Band First Nation communities through resident-led clinics. The initiative was born out of community-identified needs for bringing healthcare services directly to the community, as remote Indigenous communities often face disproportionate barriers to health and well-being due to the interaction of social and structural determinants of health.[9-13] The resident-led clinics serve the intention to bridge the gap by having medical residents travel to various community settings to offer primary care to patients who otherwise might experience significant barriers to accessing health care. These settings include community clinics, private homes, shelters, high schools and outreach centres, hosted in three remote First Nation communities of the Lac La Ronge Indian Band. One or two learners travel to each community at a time, accompanied by the local community health nurse. Resident physicians are supported by a supervising

physician remotely, who is available by phone if time-sensitive questions arise. All clinic visit notes entered into the electronic medical record are reviewed by the supervising physician. This parallels the expectations and standards held for resident clinic visits even if the supervisor was on-site.

The CanMEDS-FM Indigenous Health Supplement discusses the importance of physicians practising in a relationship-based manner, developing an understanding of the influence of colonisation, demonstrating role flexibility and practising self-reflection to understand one's biases.[14] Resident-led clinics seek to instill this and were created to facilitate the opportunity for residents to work with Indigenous patients and communities providing culturally safe care. However, a formal evaluation has never been conducted to assess how well the programme supports residents in developing independent clinical decision-making skills and delivering culturally informed, sensitive care. In understanding past resident experiences, we aimed to optimise healthcare services and training opportunities provided in these clinics. As such, our objective was to determine the impact that participation in resident-led clinics has had on learners at the La Ronge Family Medicine Residency Training Programme.

METHODS

Our study originated from conversations between members of the Lac La Ronge Indian Band Health Services Department and the resident researchers, with a desire by the First Nation to receive more insight into the healthcare needs of their outpost community members. In discussions around that goal, it was thought that the perspective from the side of the medical resident as a quality improvement initiative would also be important. The strong partnership between the First Nation and the family medicine residency programme has been developed over many years of respectful interagency coordination, with research collaborations ensuring cultural safety and self-determination. Leadership from Lac La Ronge Indian Band Health Services has approved the final report for dissemination in this journal.

The project design was deemed exempt from ethical review by the University of Saskatchewan Research Ethics Board (ID E*473*) as a quality improvement study, as covered by the TCPS2 (2022).[15]

Names and E-mail addresses of the 6 most recent years (2018–2023) of graduates from the La Ronge Residency Training Programme were provided by the programme. Recorded virtual discussions were offered to the graduates. Interviews took place between fall of 2023 and spring of 2024. The interviewers were current family medicine residents at the La Ronge Site of the Family Medicine Residency Training Programme. Interviews were conducted in a conversational manner with a semistructured interview guide. Open-ended questions inquired about the impact the clinics had on participants, benefits and drawbacks of these resident-led clinics, and any suggestions for change. Other topics were probed as they evolved during the interview. Since the resident interviewers were themselves currently participating in the resident-led clinics, researcher reflexivity was used not only to modify the interview as needed, but it also encouraged the interviewer to reflect on what positive characteristics they could bring to the interview.[16] Some participants may have had professional relationships with the interviewers, in the form of current faculty advisors and supervisors. As such, rigor was improved by member checking during data collection, and keeping an audit trail throughout the analysis. Interviews were transcribed using the Zoom Video Communications, Inc. transcription service. Transcriptions and audio data files were reviewed (by JF, KG, DF) to ensure accuracy, and identifying information was removed to improve confidentiality.

Braun and Clarke's framework was used to facilitate a reflective thematic analysis of the de-identified transcribed data.[17,18] This method allowed researchers to draw upon their own experiences and pre-existing knowledge, as well as critically interrogate how these aspects influenced and contributed to the research process and insights. Each transcript was coded twice into key topics by independent reviewers. Coded data were then reviewed jointly by the researchers (JF, KG, DF) identifying and interpreting unifying themes from topics with shared meaning and concepts. These themes underwent multiple iterations to ensure meaningful connections to the original

data. Quotes were chosen to represent key ideas across multiple interviews. All participants had approved, during their interview, any potential de-identified use of their words for this means.

RESULTS

All 15 previous residents in the La Ronge Family Medicine programme agreed to participate in an interview. Respondents were all Canadian citizens, originally from communities ranging from remote to metropolitan across 5 provinces before entering residency. Six themes evolved from the participant interviews: building skills for practice with distant supervision; overcoming barriers and resource limitations; awareness of inequities; building culturally respectful relationships; optimising clinic utilisation; and ways of implementing change.

Theme 1: Building skills for practice with distant supervision

'If you're just physically removed from the preceptor by a hundred kilometers or so, it's easier to just take that extra breath. In those extra minutes you recognize that there's actually not an emergency, but just a difficulty in front of you, and begin to solve it on your own. That's just a tremendously important exercise'.

Remote supervision facilitated relevant personal and professional development for the residents. By providing residents with the autonomy to make decisions while safely managing uncertainty, the programme fostered growth that was distinct and significantly profound for the participants. Compared to other aspects of the residency training programme, participants reported that this experience enhanced their skills in history taking, conducting thorough physical exams, formulating improved differential diagnoses and developing specific patient plans across various patient settings. In addition, it contributed to an increased sense of responsibility, accountability and a general sense of connection to the community. However, the trade-off was fewer opportunities for direct and immediate feedback from an attending physician, requiring a balance between the learning advantages of autonomy versus supervision.

'It's such a tricky balance because part of the benefit and opportunity for growth and learning as a practitioner is the independence that you're given. But obviously it needs to be balanced with mentorship and feeling supported'.

Theme 2: Overcoming barriers and resource limitations

'I remember one gentleman (...) he just wouldn't have gotten medical care if we weren't there. And that was the case for Elders, like the home care patients who were you know, in the last stages of their lives. Like we palliated people through our resident clinic'.

Participants believed that resident-led clinics decreased barriers to care, which fortified the learner's drive to continue providing this service. The clinics also facilitated the identification of resource gaps in remote areas, including the lack of medical supplies, inadequate translation services and limited technology.

'We always had somebody to translate but it was usually family members, or one of the staff folks at the clinic... We always had somebody to translate but the appropriateness of the translators wasn't great'.

Theme 3: Awareness of inequities

'...the resident-led clinics are unforgettable mostly because of home visits. You see how people live. You see what the social inequities are doing to whole communities. You see the impact of long-standing trauma and inequality, live. You see people's homes (...) and you see what medical comorbidities arise from a kind of social economic standing'.

Visiting the communities allowed participants to witness and encounter patients' social determinants of health, especially during the home visits. It was one thing to read about non-medical factors that influenced health outcomes, but something else completely to see how it affects daily lives. Reflecting on these led participants to confront their personal privilege.

'If I didn't do those home visits… I wouldn't even know what the… housing is like out there'.

'.makes you have a reality check of your privilege and the privilege that other places have when it comes to health care access and just like living circumstances'.

Theme 4: Building culturally respectful relationships

'…some of the biggest growth in residency was sitting

down with someone in their house, seeing their traditional medicine, or gaining a better sense of how they understand their own health'.

Participants identified that resident-led clinics provided an avenue to build trust and meaningful relationships. This was not only between the learners and patients, but also in the provision of a connection between learners, communities and traditional medical systems. Many participants identified this as being invaluable.

'...there was a relationship made there, because we were able to talk about other things that mattered first, and she was able to sense that she wasn't going to get shamed. The whole thing is about building a better relationship and trying to have more trust between the community and the medical establishment'.

Theme 5: Optimising clinic utilisation

'...if ever there was a reason to sacrifice volume as an opportunity cost it would be for something like that. You know, to get 10 [regular] clinic visits are probably worth two or three home visits where you get not just an opportunity to care for somebody who might not otherwise receive care but also just to have this little glimpse of what life … in a house with 12 people in it and 2 bedrooms is like'.

Patient scheduling was identified as being particularly difficult in remote clinics, with poor road conditions, home visits, complex medical conditions and limited cell phone service to contact patients. It was identified that slightly lower patient volumes were preferable in these settings to provide beneficial learning experiences. There was no formalised booking process, which participants suggested could be created and optimised. This would depend on community input for their needs and preferences as to how this could best be achieved.

'To me that was not an area where I would have wanted to specifically push myself efficiency wise. It was more about gaining independence and confidence'.

Theme 6: Ways of implementing change

'It would be very nice to get the opinions of patients and staff in the communities. We're just kinda guessing their needs currently'.

Woven throughout the interviews were examples of resident-driven change initiatives that supported the clinics. This included family medicine residents starting to offer phlebotomy in the communities, instead of asking community members to travel an hour or more to the local health centre laboratory. Learners were also able to advocate for nursing support in the communities, and for the initiation of a new clinic location. Participants expressed the desire for future changes to be more in collaboration with patients and community members, as it was felt that the ideas from the community had not yet been heard.

'If there's a better way to do it, it should be directed by the community and the people accessing the clinics'.

DISCUSSION

Resident-led clinics provided valuable professional and personal development, according to the study participants. They allowed for an environment to build independence, resourcefulness and a deeper sense of accountability to patients. This may lead to an easier transition to practice, a time often filled with uncertainty, high learning curves and increased risk of burnout in rural family medicine.[19,20] The unique clinic environments provided exposure to peoples that were not inherent in the residency training programme otherwise and allowed for exploration of career interests. Many studies identify rural training and exposure as an important factor associated with residents entering rural practice.[21,22] As per the World Health Organization, in rural training programmes, 'it is necessary to understand rural communities, their health service needs and the nature of rural practice'.[23] Resident-led clinics such as the one described in this study provided this desired insight.

A key component of residency training is feedback and mentorship. Face-to-face teaching time is affected by the distant supervision in this element of the training programme. This, however, does not necessarily reduce the effectiveness of the teaching, nor the safety of the patient interactions.[24,25] In the residency training programme, the supervisor role of the resident-led clinics was previously the responsibility of a sole physician. This has recently changed. This sole physician is no longer supervising outpost clinics and has instead seen the need for multiple other local faculty members to be involved. Now each individual resident has a separate supervisor,

allowing supervisors more time to teach as they are only responsible for one learner. This change happened after the participant interviews, so it is hoped this will address some of the drawbacks of the resident-led clinics that were identified. Perspectives previously described by remote supervisors providing primary care residency training in Australia and Canada have indicated the unique supervisor-resident relationships that facilitate effective longitudinal distance mentoring.[26]

Providing resident-led clinics decreases barriers involved in patients accessing care. Meeting patients in their home and community environments provides a more holistic sense of their context. This allows for relationship building and experiential learning by the family medicine residents about cultural practices, belief systems, patient homes and family contexts that affect medical outcomes. As over 80% of one's modifiable contributors to health are determined by their social determinants of health,[27] this collaboration as a teaching tool can help prepare learners to address these needs as they go into practice. It also encourages family medicine residents to reflect on their own personal perspectives and biases, as a form of behavioural change technique [28,29] to evoke empathy, respect, humility and broadened outlook on life.

In general, there is limited published literature with which to compare our results. The positive experiences described by the participants align with results from other school-based resident-led clinics from the literature,[30] although evidence of longitudinal residency training programmes using non-school-based resident-led clinics is minimal. Student-led clinics have been in existence for decades and offer medical students a degree of independent patient interaction, but supervisors generally are in close proximity.[31] Although greater preceptor distancing might be expected as post-graduate learners advance towards independent practice, in the relatively few available published descriptions of 'resident-led' clinics across medical disciplines, in-clinic supervision by attending physicians remains or is incompletely described.[30,32,33] Additional research is needed to further understand how the level of responsibility, independence and available resources offered by resident-led clinics such as ours relates to future rural/remote practice decisions.

Recommendations

1. Learn from community partners about their thoughts on the clinics and their healthcare needs to tailor services to the community
2. Optimise translational services for patient encounters to ensure appropriate, culturally safe care
3. Create standard procedures for booking so that the clinics are optimised both for volume and intended patients
4. Continue to offer resident-led clinics with communities as a valuable mutual learning opportunity for family medicine residents.

Limitations

A limitation of our study design is that participants were required to recall events that occurred up to 6 years prior. Topics were therefore subject to memory biases and attrition. In addition, our programme evaluation was limited to the perspectives of previously graduated residents only. Any thoughts of current residents based on any recent programme changes have not been captured, nor was the perspective of the supervising physician examined. Understanding the patient experience with resident-led clinics is essential, which was not a part of this study. Evaluation of this is currently being done by some of the authors, in partnership with the First Nation.

CONCLUSIONS

The resident-led clinics in the University of Saskatchewan's La Ronge Family Medicine Residency Training Programme are indispensable in providing primary care to remote communities, as well as professional and personal development for learners. A balance between autonomy and mentorship is required. Improved translational and booking services, as well as additional community collaboration, would further optimise benefits. This novel approach to remote community care may be useful in other rural jurisdictions.

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