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Extolling the Profession

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Extolling the profession is not without risk. Recently, one of our rural colleagues on the RURALMED listserv lamented that 85,000 patients were on a wait list for a family doctor despite there being more MDs (and now NPs) than ever before. His criticisms of FP training and the limited scope of practice and efficiency of new graduates were not well received, as he himself predicted.

This lamentation is evergreen. When I went into rural generalist practice, I was limited in scope ('What? You don't pour ether, or do appendectomies? Peter, they trained you twice as long for family practice as I got as a GP. What did you learn?') Back then, I took 15 min to see a patient (while my older colleagues would double book every 10). Furthermore, the passage of time did not reduce the gaps.

My scope has diminished (feeding an ever-present guilt), and now, I only see a dozen patients a day, despite the promised 'efficiency' of electronic medical records. My panel of active patients was over 2000 strong early in my career, and I now struggle to keep up to the increasing age and morbidity of half that number.

Some of this is beyond my control. And yet... are we so entitled to our cynosure of exalted position as to be allowed the self-deceit of complacency?

We can point to the COVID epidemic (and point away from our fears for ourselves). We can defer to the responsibility of the ministry (and away from ours to make? do with what we have). We can rail at the medical associations and how specialised medicine is disproportionately rewarded (and not acknowledge that we are paid well enough for our needs). When asked about helping out, we can assert our need to say 'No' (and be quiet about our responsibility to sometimes say 'Yes'). We can lament that the curricula written and unwritten are designed to infantilise family medicine (and not celebrate that rural practice has more input in medical training than ever before).

The enemy is not the burnt-out old farts or the snowflakes who cannot cope. We are both the same, in it together, travelling through time trying to do good through the art. Each of us has had to come to terms between our aspirations and ideals, and the dysfunctional systems in which we work. Complacency is the enemy for the goal to move the needle from the imperfect compromises of today to better ways for tomorrow.

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Vanter la profession

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Vanter la profession n'est pas sans risque. Récemment, un de nos collègues en milieu rural a déploré sur le listserv RURALMED que 85 000 patients attendaient d'être vus par un médecin de famille malgré le fait qu'il y ait maintenant plus de médecins (et maintenant d'infirmières praticiennes) que jamais. Ses critiques de la formation des médecins de famille, de la portée limitée de la pratique et de l'efficacité des nouveaux diplômés ont été mal reçues, comme il l'avait lui-même prédit.

Cette lamentation est toujours d'actualité. Lorsque je suis entré en pratique générale, mon domaine était limité ("Quoi? On ne verse pas de l'éther et on ne fait pas d'appendicectomies? Peter, ils t'ont formé deux fois plus longtemps pour la pratique familiale que pour la pratique générale. Et tu n'as rien appris?"). Dans ce temps-là, je voyais un patient en 15 minutes (alors que mes collègues plus âgés prenaient deux rendez-vous toutes les 10 minutes). En outre, le passage du temps n'a pas réduit l'écart.

Mon domaine s'est circonscrit (ce qui nourrit une culpabilité sans fin), et je ne vois aujourd'hui qu'une douzaine de patients par jour, malgré qu'on nous eût promis que les dossiers médicaux électroniques nous rendraient plus "efficaces". En début de carrière, ma clientèle active comptait plus de 2000 patients, j'ai maintenant du mal à m'adapter au vieillissement et à l'augmentation de la morbidité de la moitié d'entre eux.

Quelque part, c'est un peu hors de mon contrôle. Et encore… croyons-nous tellement avoir droit à notre position exaltée pour nous autoriser le mensonge de la complaisance?

Nous pouvons pointer du doigt l'épidémie de COVID (et fermer les yeux sur nos craintes pour nous-mêmes). Nous pouvons nous en remettre à la responsabilité du ministère (et non à la nôtre? faire avec). Nous pouvons nous en prendre aux associations médicales et à la façon dont la médecine spécialisée est disproportionnellement récompensée (et ne pas reconnaître que nous sommes suffisamment bien rémunérés pour subvenir à nos besoins). Lorsqu'on nous demande de mettre la main à la pâte, nous pouvons revendiquer notre droit de dire "non" (et de rester coi sur notre responsabilité de parfois dire "oui"). Nous pouvons déplorer que les programmes d'études écrits et non écrits soient conçus pour infantiliser la médecine familiale (et non pour célébrer le fait que la pratique rurale a plus son mot à dire que jamais dans la formation médicale).

En pratique générale rurale, il y a des défis systémiques à relever, qui sont des occasions personnelles et institutionnelles de grandir.

L'ennemi n'est pas les vieux grincheux ou les petits rois qui sont incapables de s'adapter. Nous sommes tous pareils, dans le même bateau, naviguant dans le temps en tentant de faire du bien à l'aide de l'art. Nous avons dû tout un chacun faire la part des choses entre nos aspirations et nos idéaux et le système dysfonctionnel dans lequel nous évoluons. La complaisance est l'ennemi de l'objectif visant à faire avancer les choses pour les faire passer des compromis imparfaits d'aujourd'hui aux meilleures façons de demain.

President's message

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The SRPC held its first in-person conference since 2019 this past April. As may be the case for many of you, Rural and Remote (R&R) was my introduction to the SRPC. At my first 'R&R', I immediately felt at home. The conference, and the SRPC, provided something lacking in those first few years of practice in Nunavut, Labrador and the Yukon: a sense of wider community, camaraderie and fellowship with like-minded rural generalists across the country. Now, over 2 years into this pandemic, rural physicians find themselves part of wounded, tired and sometimes fractured teams. We have lost much of that sense of community, and as we face critical staffing shortages, the health human resource crisis facing rural Canada has been starkly exposed. Challenges with transfer, licensure and access to speciality services compound our ability to provide care.

Many have experienced a profound loss in various ways over the past 2 years and feel acutely the threats to the resilience of our rural health systems. At this juncture, we all are seeking ways to reconnect, heal and rebuild. I hope that for those who attended R&R, it will have been a part of the process.

Through our ongoing work outside of the conference, the SRPC focusses on the needs for sustainable rural healthcare. Over the past months, we have taken a leadership role, with partners, including the Canadian Medical Association, in conversations aimed at achieving national physician licensure. We have seen progress and engagement with federal and provincial partners, and momentum seems to be building for the establishment of these standards.

As health systems rebuild, the SRPC continues to advocate for high-quality training of future rural generalists. In January 2022, the College of Family Physicians of Canada (CFPC) published the Final Report and Recommendations of the Outcomes of Training Project. [1] This described a need for a robust, generalist workforce, including with the skillset to serve rural communities. The Report proposes training changes to enhance preparedness, via extension of programme duration to 3 years, and exposure to specific skills. As the CFPC navigates this transition, the SRPC has voiced that additional training must reflect the true needs and context of rural practice and our concerns regarding potential unintended consequences on rural health human resources. We have shared a desire to play an active role in this transition and feel that our strong network of rural educators has a great deal of experience, knowledge and skills to offer.

Moving forward, out of the ashes, we rebuild, heal and reconnect. Moreover, the SRPC will continue its work on your behalf, championing rural generalist medical care through education, collaboration, advocacy and research.

REFERENCE

1. Available from: https://www.cfpc.ca/CFPC/media/Resources/Education/AFM-OTP-Report.pdf. [Last accessed on 2022 Apr 03].

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Message de la Présidente

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En avril dernier, la SMRC a tenu son premier congrès en personne depuis 2019. Comme c'est peut-être le cas pour beaucoup d'entre vous, *Rural & Remote* était ma première expérience avec la SMRC. Dès mon premier congrès " R&R ", je me suis immédiatement sentie chez moi. Le congrès et la SMRC m'ont apporté quelque chose qui m'avait manqué durant mes premières années de pratique au Nunavut, au Labrador et au Yukon: Un sens de communauté, de camaraderie et d'appartenance avec des généralistes en milieu rural qui voient les choses comme moi. Aujourd'hui, plus de 2 ans après le début de la pandémie, les médecins en milieu rural SE retrouvent au sein d'équipes mal en point, fatiguées et parfois décimées. Nous avons perdu beaucoup de ce sens de communauté, et la crise de ressources humaines en santé à laquelle font face les régions rurales du Canada nous a éclaté au visage. Les complications liées aux transferts, au permis national d'exercer et à l'accès aux services spécialisés exacerbent les difficultés à dispenser des soins.

Depuis 2 ans, beaucoup ont subi de diverses façons des pertes profondes, et sentent vivement que la résilience de nos systèmes ruraux de santé vacille. À cette croisée des chemins, nous cherchons tous des moyens de renouer, de guérir et de reconstruire. J'espère que pour ceux d'entre vous qui participeront à *Rural & Remote*, cela fera partie du processus.

Par l'entremise de notre travail hors conférence continu, la SMRC se concentre sur les besoins en soins de santé ruraux viables. Depuis quelques mois, nous avons pris les devants, avec des partenaires tels que l'Association médicale canadienne, pour tenir des conversations visant à établir le permis national d'exercer. Des progrès ont été réalisés, et les partenaires fédéral et provinciaux se sont engagés, l'établissement de ces normes semble avoir pris son élan.

À mesure que les systèmes de santé se relèvent de la crise, la SMRC continue de préconiser la formation de grande qualité à l'intention des futurs généralistes en milieu rural. En janvier 2022, le Collège des médecins de famille du Canada (CMFC) a publié le Rapport final et recommandations du Projet sur les finalités d'apprentissage[1] Il appelle à une force de travail robuste constituée de généralistes, qui ont les compétences pour servir les communautés rurales. Le rapport propose de modifier la formation de manière à rehausser la préparation, en prolongeant le programme à 3 ans, et en exposant les apprenants à des compétences précises. Alors que le CMFC navigue dans les eaux tumultueuses de cette transition, la SMRC a dit haut et fort que la formation supplémentaire doit refléter les besoins et le contexte réels de la pratique rurale, et nous avons exprimé nos inquiétudes à l'égard des conséquences involontaires sur les ressources humaines de santé en milieu rural. Nous avons dit vouloir participer à cette transition, et nous sommes d'avis que notre robuste réseau d'éducateurs ruraux possède beaucoup d'expérience, de connaissances et de compétences.

Nous allons rebâtir, guérir, renouer et renaître de nos cendres. Et la SMRC poursuivra son travail en votre nom, à titre d'ambassadeur des soins médicaux dispensés par les généralistes en milieu rural par l'entremise de la formation, la défense des droits et la recherche.

REFERENCE

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ORIGINAL ARTICLE

Systemic challenges and resiliency in rural family practice

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Abstract

Introduction: The objective of our study was to understand how Canadian rural family physicians (RFPs) define and use resilience strategies to maintain their roles as generalists and resist burnout, while also understanding how organisational supports and systems may play a role.

Methods: This was a qualitative study of RFPs with at least 1 year of experience working in rural Canada. Data were collected via semi-structured, in-depth interviews using a grounded theory approach. The participant recruitment process involved purposive and theoretical sampling, and was stopped when theoretical saturation was reached.

Results: RFPs identified the following five themes related to resilience: (1) powerlessness, (2) strained work/life balance, (3) colleagues as supportive or straining, (4) living under the microscope and (5) compassion fatigue or empathy. Strategies to enhance resilience were identified at personal, community and organisational levels by participants.

Conclusion: Enhancing RFPs' awareness of the specific individual and organisational strategies, as well as system-oriented solutions to maintain resilience, is of benefit to RFPs and rural and remote communities across Canada.

Keywords: Burnout, generalism, resilience, rural family practice

Résumé

Introduction: Notre étude avait pour objectif de comprendre comment les médecins de famille en milieu rural canadien définissent et utilisent les stratégies de résilience afin de maintenir leur rôle de généraliste, et de résister à l'épuisement professionnel, tout en comprenant le rôle des systèmes de soutien et organisationnels.

Méthodes: Il s'agissait d'une étude qualitative menée auprès de médecins de famille en milieu rural ayant au moins une année d'expérience dans les régions rurales du Canada. Les données ont été recueillies dans le cadre d'entrevues approfondies semi-structurées à l'aide de l'approche de théorisation ancrée. Le recrutement des participants comprenait un échantillonnage dirigé et théorique, et a pris fin lorsque la saturation théorique a été atteinte.

Résultats: Les médecins de famille ruraux ont identifié les 5 thèmes suivants reliés à la résilience: 1. Impuissance, 2. Équilibre tendu entre la vie professionnelle et la vie personnelle, 3. Collègues qui soutiennent ou causent du stress, 4. Une vie à la loupe, 5. Fatigue de compassion et empathie. Les stratégies visant à rehausser la résilience

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ont été identifiées comme personnelles, communautaires et organisationnelles par les participants.
Conclusion: Il est bénéfique aux médecins de famille en régions rurales et dans les communautés éloignées du Canada de rehausser leur prise de conscience quant aux stratégies individuelles et organisationnelles, et aux solutions axées sur le système pour maintenir la résilience.

Mots-clés: Résilience, généraliste, épuisement professionnel, pratique familiale rurale

INTRODUCTION

Rural family physicians (RFPs) play a crucial role in providing healthcare to 6 million Canadians living in rural areas. To serve the needs of rural Canadians, and provide care closer to home, practitioners often embrace a generalist philosophy of broad-based medical care, which typically involves a greater scope of practice, services and procedures that may be found in urban family medicine.[1,2] However, RFPs often work in resource-limited areas and are susceptible to burnout (defined as feeling stressed, exhausted and unhappy). This can be caused by factors including work overload, isolation, high-stress loads or work dissatisfaction, among others, and results in the intent to leave rural practices.[3-5] While burnout is common among medical professionals, those working in rural communities are likely at a higher risk.[4,6] Consequently, RFPs may resort to restricting their scope of practice or leaving their practice altogether, exacerbating physician shortages in these communities.[6,7] The current demands on RFPs related to COVID-19 have caused an additional strain on an at-risk group of providers, increasing the urgency of understanding factors that may prevent burnout.

One of the key elements in preventing burnout in medical practice is resilience.[8] Resilience is 'the dynamic and evolving process of developing positive attitudes and effective coping strategies that enable physicians to rebound from adversity and overcome challenging circumstances'.[9,10] Studies have previously assessed the relationship between resilience and burnout in different countries globally;[11-26] however, the interplay between resilience and scope of practice has not been studied in detail. Our study aimed to further the understanding of how RFPs in Canada define and use resilience to maintain their generalist scope of practice. As rural practice offers unique challenges and opportunities, we hypothesised that these may uniquely influence the resilience strategies used, as well as the challenges faced by RFPs in maintaining their resilience.

METHODS

RFPs with at least 1 year of experience working in four regions across Canada (Atlantic, Central, Western and the Northern Territories) were recruited via e-mail. A recruitment e-mail was sent through the Society of Rural Physicians of Canada's RuralMed listserv. In our study, two sampling strategies were used. Purposive sampling[27] was used to select participants from a variety of rural and/or remote settings, with a different range of experiences, administrative systems or workplace structure, age and gender in order to reach the deepest understanding of resilience strategies and barriers. The second sampling strategy was theoretical sampling, which is based on 'a way of collecting data, and deciding what data to collect based on the theory and categories that emerge from your data'.[28] Such sampling ended once theoretical saturation was reached.

A grounded theory approach involving theoretical sampling, developed by Strauss and Corbin,[28] was used to explore the challenges and strategies to develop resilience among RFPs. Grounded theory involves the derivation of theories based on collected data, rather than starting with a hypothesis. Data were collected via semi-structured, in-depth interviews. Interviews lasted approximately 45 min and were recorded digitally. The interview guide included questions on the definition of resilience, challenging experiences, health well-being, coping strategies and background. Data were analysed based on three coding strategies of grounded theory, namely open, axial and selective coding.[28] In our study,

participant validation was conducted by involving participants in the process of theory construction to enhance the credibility of our results.

The study was reviewed and approved by the Health Research Ethics Board of the Memorial University of Newfoundland.

RESULTS

Theoretical saturation sampling was reached after the inclusion of 12 participants; however, data collection continued for a total of 14 participants to confirm no further data collection was necessary. Participants ranged in age from 35 to 75 years, with 50% identifying as women. There was a range of 1–30 years of experience in rural practice.

Rural physicians' definitions of resilience

Study participants' understanding and definition of 'resilience' in the workplace ranged from the ability to bounce back and survive, to creating strategies for getting through stressful circumstances [Table 1].

Resilience factors influencing the scope of rural practice for rural family physicians

From the interviews, the following five themes were extracted, which relate to RFPs' resilience: (1) powerlessness, (2) strained work–life balance, (3) colleagues as supportive or straining, (4) living under a microscope and (5) compassion fatigue or empathy.

Powerlessness

Almost all participants viewed their respective administrative systems as barriers which, instead of facilitating workplace processes, created challenges for RFPs. Participants felt that their deep understanding of patients' issues and needs was not considered by the system, when issuing policies and rules, and was harmful to their resilience. Consequently, the only options participants felt they had was to 'choose to accept it or choose to walk away'. Most physicians felt valueless and powerless; one of the participants described a 'moral outrage' due to a lack of consultation by the administration regarding hospital issues.

'I worked extremely hard to try and be included in the loop and try to find out what's going on, and the decisions keep getting made without any of us …. I would say those things are the kinds of things that hurt my resilience'.

Providing equipment in remote areas was one of the principal challenges for all rural physicians; however, issues were amplified for participants working in Indigenous communities. The ongoing impact of colonialism resulted in a wide range of difficulties for participants serving in these regions.

'Trying to advocate and find services for Indigenous people in remote areas with really ongoing colonialist practices is the biggest challenge. It's everything from equipment to staffing to properly trained nurses to proper space in which to work and to bring learners'.

Powerlessness occurs not only from being forced to obey strict rules that have already been put in place without consulting physicians but also by being surrounded by a lack of rules. Rural physicians also have additional duties (e.g., mentorship, teaching and committee membership), most of which involve unpaid work.

'It seems like every hospital committee needs a physician representative, and there's only a limited pool of physicians. So, all of us have to wear a hat, whether it be leading the family health team, being the chief of emerg, being the chief of obstetrics, being the chief of palliative care, being the clinic lead, the family practice in town, the utilisation committee, the informatics committee, the lab committee, and the vast majority of that is all unpaid work'.

Strained work/life balance

Some participants felt that resilience could be built and practised through engaging in different challenges, specifically in the workplace. In addition, some believed that being a rural

Table 1: Resilience definitions by rural family physicians

'The ability to continue ahead in the face of adversity'
'The ability to return to whatever situation they were doing before and still have the energy to do the work'
'The ability to work long term in a chronically underserviced area and finding that work-life balance despite pressure to always work more'
'The ability to survive and your ability to bounce back'
'Having coping strategies to live through stressful and challenging situations well'
'The ability to sort of bounce back from stressors or difficulty'
'Toughing things out without killing yourself in the process'

physician provided them with the opportunity *'To understand people and humanity. In a lot of ways, it affords me the opportunity to experience kinds of events and trials that a lot of people will never have to experience'*. However, rural physicians are usually forced to manage a broad array of duties and night shifts due to a lack of staff and supplies. This traps them in a blurred zone between life and their job or, as one of the participants states: *'I think this job will completely devour a person if they let it'*, or, as another participant states, *'time can be your time in medicine but can be stolen completely'*. Most participants believed they experienced more guilt compared to their urban counterparts.

'In a big city hospital, patients die? If somebody dies, they die on the whole team. The blame gets spread out. In rural practice, people will come in critically ill at night, and they will die on you alone and feelings of guilt can be overwhelming'.

Lifetime trauma exposure in rural areas pushed some participants to restrict their scope of practice.

'I stopped doing a big part of my practice, which was maternity care, and in actual fact, this coming fall I am closing my practice. I'm burnt… you just cannot do it anymore'.

Colleagues as supportive or straining

Most participants considered talking to and debriefing with their colleagues as a supportive strategy when facing a challenging and stressful workplace. This was a factor that reduced emotional exhaustion, particularly when there was a lack of judgement on the part of those asking questions or looking for assistance. Even in circumstances where a physician may have to go through a legal process because of allegations of medical error, they may keep working in the same hospital, and with ongoing support of colleagues during the process, before any resolution.

'We all support each other and have created a team kind of environment where there's no hesitation to go to one of the colleagues and say 'you know what, I don't know what to do in this situation, or even to say 'I don't know if I have made a mistake here, can you help me with that', there's no judgment'.

Unfortunately, others indicated that colleagues may be a source of stigmatisation and exclusion. Questioning medical decision-making through the professional review of cases may strain the support network for RFPs.

'I've had a couple times where I've had my medical decision making questioned…at the end of the day they agreed with my management. But just the fact that they pulled my file and went through that case …made me a lot more concerned about what my colleagues are thinking about my medical practice… so now I'm probably a lot more aware that my colleagues are watching me'.

Beyond this, the daily life of physicians gets more complicated when the physician is a victim of workplace violence, or, as one of the participants calls it, the 'toxic environment'. This situation may worsen if the health system does not intervene.

'Some colleagues are the source of the bad experiences, where I've been targeted by colleagues for financial purposes, I've been targeted by the spouse of colleagues because she's the manager of the office. Where other physicians were being bullies, and the hospital absolutely backed them up, and I was the victim of institutional bullying'.

Living under a microscope

Working as a physician in a small community and being known by almost everyone left participants with nearly nowhere to go without crossing paths with patients and their families. Some indicated that counselling services played a critical role in relieving stress and anxiety. However, using such services was stigmatised since, in small communities, citizens might recognise and gossip about them.

'Where there's even just that much more stigma that maybe you're willing to accept the counselling services, but you don't want your friends or your patients or other people seeing you access those services'.

In addition, some participants stated that they avoided seeing a counsellor since they were part of the same care team.

'If I was looking for a counsellor, it's a little bit awkward. I find most people in town go to the family health team, but that's not an option for me because I work with them'.

On the other hand, some participants found local medical associations and counselling services significantly helpful and supportive.

Compassion fatigue or empathy

Demonstrating empathetic care requires physicians to listen, understand and communicate

with patients to show respect and support. However, most RFPs, specifically those who serve in Indigenous communities, continuously deal with compassion fatigue and emotional exhaustion due to limited skills in emotional regulation and boundary setting.

'Moral fatigue and moral insults that they take in the medical profession just affect them that much, they're not as able to …detach themselves'.

Almost all participants believed that *'empathy means I have to carry your burden all the time'.* They contested and struggled to fit into two different worlds: one with a high degree of resilience and the second with a high degree of clinical empathy.

'Having compassion and having empathy allows me to keep my resilience. I know I have burnout, or if I'm feeling overwhelmed, when I lose my compassion for other people, and therefore los(e) my resilience to practise the way that I think is ethically and morally sound'.

One participant compared the process of recruiting rural physicians with special forces, to illustrate the importance of training during medical education to prepare RFPs for serving in remote areas.

'… If you look at some other high-intensity things. they're pretty extreme, [such as] the training of … elite soldiers …one of the first things they do is they try and break them mentally….. they actually intentionally structure their application process and their whole training process to look for that moral resolve and that's certainly not something that's even thought of or discussed in medical education applications'.

Resilience strategies to support maintaining the scope of rural practices

Throughout our study, participants suggested different strategies and interventions related to: (1) personal, (2) community and (3) organisational levels to support their rural practices [Figure 1].

Some participants described the strategies they applied while struggling with powerlessness, work/life balance, and living under a microscope [Figure 2].

DISCUSSION

In our study, several themes emerged which inform strategies to enhance resilience of RFPs.

Figure 1: Resilience strategies to support a broad scope of practice, as identified by rural physicians.

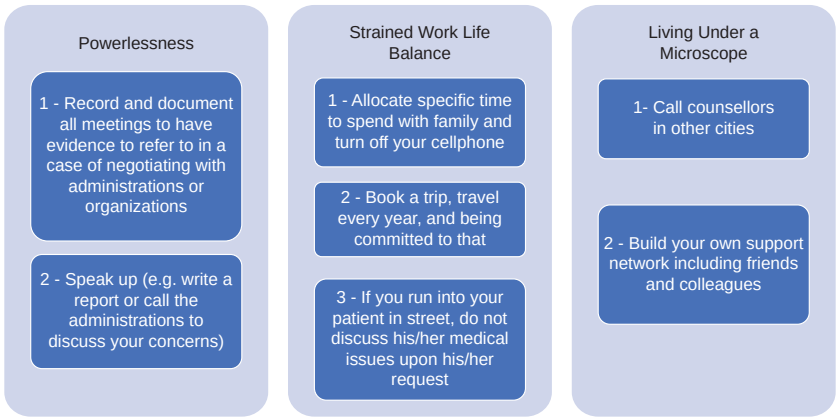

Figure 2: Burnout mitigation strategies related to administration, work-life balance and living under the microscope.

While there is commonality with themes found in the literature on factors influencing resilience, our study demonstrates ways in which these manifest that may be unique to RFPs. Interestingly, most physicians offered individual solutions to enhance their resilience, whereas factors of most concern involved an interplay of the physician and their organisation, their colleagues and their community. The results of our study are consistent with other studies that reveal the critical role of health-care organisations on the well-being of physicians.[29-33]

Addressing powerlessness, in the face of rules that do not consider the physician's experience or, in environments lacking clarity and direction, requires partnerships with RFPs. Expectations for RFPs to assume multiple leadership roles due to limited physician resources must be approached in a manner that allows them to provide expert guidance to various committees while allowing them to fulfil their clinical duties. It must also recognise the time commitments required. Such an approach would empower physicians and improve their resilience.

It should not be surprising that many participants identified a strained work-life balance as a challenge, and this issue has previously been noted in the literature.[30,34-38] While emigration and retirement have been mentioned as options for achieving a balanced lifestyle previously, participants in our study suggested a different approach by setting boundaries and expectations.

There is abundant literature supporting the critical role of physician peer support in mitigating professional challenges and decreasing burnout.[30,39-41] Our study highlights that successful teams, in which colleagues support each other, enhance the resilience of RFPs and help support generalist practice.

While there is existing literature on the stigma associated with seeking treatment,[31,42,43] 'living under the microscope' is a particularly unique challenge for RFPs. Virtual care or telemental health should be considered, and organisations may consider establishing partnerships that would facilitate the provision of primary and mental healthcare, even across jurisdictional boundaries.[43] Rural organisations and training programmes should consider incorporating elements that address the unique challenges of RFPs in maintaining resilience in their local communities, so physicians are well prepared for rural practice.

Finally, our study noted some of the challenges experienced by RFPs in delivering healthcare in Indigenous communities, through a system that is built on structures that have harmed and do not represent Indigenous peoples.[44] The impact of colonial structures and attitudes on the health system in Indigenous communities was a source of frustration and powerlessness for some participants, and echoes the experience of many Indigenous peoples in Canada.

Limitations

Even though the results of our study are based on the lived experiences of RFPs across Canada, the present study also has some limitations. Our study's small sample size, while adequate for thematic saturation, may limit the relevance to certain contexts. Specifically, hyperlocal factors, as may be found in many rural and remote communities, may not be captured through our thematic analysis. This limits the generalisability of the study's results.

Future research

Several areas warranting greater exploration emerged as a result of this study. Participants identified challenges unique to working in Indigenous communities due to ongoing colonial health-care structures in place. The present study reinforces the need for implementation of the Truth and Reconciliation Commission Calls to Action on Health (18–24) to de-colonise health-care delivery to rural Indigenous communities, working with Indigenous peoples to ensure equitable and culturally appropriate approaches are embedded at all levels.[44] While previous research has highlighted Indigenous community experiences of fundamental systemic racism and a system that devalues First Nations health and wellness,[45] a more detailed exploration of provider and community perspectives, and solutions, is warranted. In addition, participants identified systemic challenges in maintaining resilience, while often relying on individual strategies to enhance resilience. An in-depth exploration of the systemic factors effective in enhancing resilience in rural areas would be of great value for administrators and health-care regions looking to support their

physician workforce. Finally, many residency programmes have started to integrate resiliency training into their curricula. However, it is not known how well they have linked these to the true challenges to resilience which RFPs face in practice; exploring resident preparedness would be of great value in enhancing the resilience of future RFPs.

CONCLUSION

Enhancing awareness of the individual and organisational tools that can be used to maintain resilience is likely to benefit RFPs, and thereby many rural and remote communities across Canada. RFPs, in comparison to previously studied groups of physicians, face some unique challenges with powerlessness, strained work/life balance, collegial support, living under the microscope and compassion fatigue. Although the strategies suggested by RFPs in our study are centred around physicians rather than the health-care system, system-oriented solutions are undeniable parts of effective improvement interventions. To strengthen ongoing generalist care to rural Canadians, training programmes, communities, and organisations must consider how they, too, can enhance the resilience of rural physicians.

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Stronger together: Interprofessional collaboration and sustainability of maternity services in a small northern Ontario hospital

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INTRODUCTION

Many small Canadian communities face challenges in maintaining intrapartum care services. This has been due to a variety of factors including retirement of family physicians (FPs) who have experience in maternity care, shortages of nurses with obstetrical training and experience, and barriers facing midwives working in communities with small and widely scattered populations.[1-4] Helpful factors have included offering rural and remote educational experiences for learners in the health professions, providing supports and incentives to health professionals working in Canada's rural and remote communities and the development of formal and informal regional networks between small hospitals and their local referral centres. In addition, there has been strong interprofessional support across Canada to keep birth as close to home as possible, recognising the importance to families and communities of having high quality local care which is an essential component of healthy communities.[5-8] Midwives can play a valuable role in this endeavour. With this in mind, a midwife approached the hospital maternity unit manager in Parry Sound, Ontario, as well as the Chair of the FP maternity group in 2012, to discuss the potential for a midwifery practice to open there. We explore here the genesis and the current ongoing collaboration among midwives and FPs in Parry Sound.

PARRY SOUND

Parry Sound, Ontario, has approximately 10,000 year-round residents in a catchment area that extends approximately one hour's drive to the north, east and south of the town and includes 5 First Nations' communities. In the summer, the population significantly increases due to an influx of tourists and cottagers. While that definitely increases the demands on the hospital emergency services and on maternity assessments, it does not contribute significantly to the overall

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annual birth numbers. Approximately 100 births take place in the West Parry Sound Health Centre (WPSHC) each year. We currently have 16 FPs providing care within a Family Health Team, 5 of whom provide maternity care, 4 midwives (MWs) and 6 registered nurses (RNs) who are obstetrically trained and available to work on the maternity unit in a full or part-time capacity. We have caesarean section capacity with 2 general surgeons and 4 anaesthetists sharing call. We acknowledge that we are relatively well resourced for a small community. However, the past 8 years have seen 5 retirements and 4 parental leaves in the FP maternity group, along with the addition of 4 new FPs. The MWs have had 1 resignation, 1 retirement, and 4 additions, and the maternity RNs have had 2 retirements, 3 resignations, 7 parental leaves and 3 new additions.

GENESIS

When the midwife approached the hospital in Parry Sound, there had been some home births attended by midwives from a midwifery practice group 80 km away, but there had not previously been midwives with hospital privileges at WPSHC, even though midwifery in Ontario had been legally recognised for 18 years. Preliminary discussions were held which included sharing of information about the midwifery scope of practice, model of care, education and regulation of midwives in Ontario.

The FPs were clear that they expected the midwives to consult with regional obstetricians and paediatricians for complications in pregnancy, labour and for newborns, as the FPs did. The FPs were, however, open to receiving requests for medical consultations that were appropriate for FP referral and outside the scope of Ontario midwives, such as testing and treatment of thyroid conditions, prescribing antibiotics for endometritis and management of SSRIs.

SHARING ON-CALL RESPONSIBILITIES FOR THE HOSPITAL MATERNITY UNIT

The FPs were aware that their call group which was 6 at that time would likely be shrinking to 4 within the subsequent year or two and were keen to know whether midwives could share in their on-call coverage rota for the hospital maternity unit. At that time, each of the FPs provided continuity of care for their own maternity patients. In addition, they were also on-call for the hospital maternity unit 1 week in six. On-call duties included coming into the hospital if someone without a local care provider presented for assessment, or if the local care provider was unavailable due to illness or being away or if another FP was having a difficult case and requested an additional care provider beyond the RN.

This seemed reasonable to the midwife, and support was obtained from the midwifery regulatory body and the professional association. An alternate practice arrangement was approved which included the midwife being supported to have an expanded scope of practice to include conducting vacuum-assisted deliveries, ordering laboratory tests and prescribing relevant medications beyond MWs' current scope through the use of medical directives. The WPSHC administration was fully supportive of this plan, and the midwifery practice received approval from the Ontario Ministry of Health and Long-Term Care (MOHLTC) in August, 2013. The first midwife began to work at WPSHC in February 2014 and was on-call for the maternity unit that month for the first time.

FUNDING OF HOSPITAL ON-CALL COVERAGE

The FPs had previously secured funding for their on-call services through the Hospital On-Call Coverage program (HOCC) of the MOHLTC some years earlier as Parry Sound is considered a remote community given its distance from the nearest referral centre and geographic isolation. In addition, FPs were able to bill on a fee-for-service basis for any assessments and deliveries conducted during their on-call weeks. However, HOCC was a program that was only open to physicians in Ontario, and midwives were not eligible for HOCC funding.

The midwife approached the Ontario Midwifery Program at the MOHLTC and proposed a funding model roughly equivalent to the HOCC funding for the on-call services provided by midwives, along with an evaluation structure. Funding was approved on a 2-year pilot

project basis and has been extended following a positive evaluation conducted in 2016. Shadow billing calculations were included to determine the cost implications of midwifery participation in the hospital on-call rota. Results demonstrated a marginal increase in costs to the MOHLTC in the first 2 years, and a decrease in costs in the 3rd year during the midwife on-call weeks.

STRUCTURE OF COLLABORATION

Four midwives currently provide maternity care for 75–85 pregnant individuals in Parry Sound per year including prenatal, intrapartum and postpartum care up to 6 weeks after the birth, at which time they return to their FPs or Nurse Practitioners for ongoing primary care services. Midwives provide continuity of care and choice of birthplace for their clients and work at WPSHC and also have privileges at the Level II referral centre, Orillia Soldiers' Memorial Hospital (OSMH), approximately 115 km away. At WPSHC, midwives and physicians work with the RNs as the second trained care provider at births, as that supports RNs to maintain their skills and experience at births. When a midwife is on-call for the maternity unit, a 2nd midwife covers the midwifery clinic and is on-call for any births planned at OSMH.

If a cesarean section is required, the midwife requests the on-call surgeon and anaesthesiologist directly, and the surgeon becomes the most responsible provider (MRP) for the parturient, while the midwife remains the MRP for the baby. The anaesthesia team had requested that a FP also attend every caesarean section to ensure the presence of an additional 'unscrubbed physician' in the operating room (OR). However, this request has been withdrawn since COVID-19 to minimise the number of health care providers in the OR.

Unlike some other models of physician/midwife collaboration across Canada, [9,10] midwives and FPs in Parry Sound do not have a shared practice so are not seeing the same childbearing patients throughout their care. While the FPs originally provided individual continuity of care to their own maternity patients, the FP group now offers a shared prenatal clinic where they participate in a weekly rotation and weekly team meetings to review cases and patient care. The physician on-call for obstetrical care that week provides the prenatal care as well as the labour, birth and postpartum care. This change to a shared prenatal clinic model has encouraged new graduates to include obstetrical care in their practice and has provided the community with continuous physician coverage. In 2019, the FP group identified that they wanted to increase learning opportunities in intrapartum care for their newly qualified FPs and residents. There is now a FP on-call to attend the FP patient births during the week that the MW is on-call for emergencies and pregnant patients without a local care provider presenting for assessment. The MWs have remained on-call for their own clients. There has been a high level of patient satisfaction as reflected in the hospital and midwife surveys received.

CONSULTATION AND REFERRAL

Some of the FPs have been referring patients to the midwives when patients require intrapartum care at the Level II hospital, including those requesting trial of labour after caesarean or those with elevated body mass index that exceed the existing protocols at WPSHC. This collaboration enables pregnant individuals to have local prenatal care and to have a known care provider for their labour and birth at OSMH. The midwives have also undertaken shared care with obstetricians from OSMH for clients who are appropriate for delivery at OSMH but can benefit from having a significant proportion of their prenatal care locally, such as those with socioeconomic challenges and medical or obstetrical conditions such as significant hypertension, substance abuse, insulin-dependent gestational diabetes, foetal growth concerns or uncomplicated twin pregnancies.

The FPs in Parry Sound have had an established relationship of consultation and referral with the obstetricians and paediatricians at the Level II hospital, which the midwives were welcomed to utilise. The midwives working at both hospitals has been very helpful in becoming known and respected members of both teams and in sharing clinical practice protocols. Both midwives and FPs are able to initiate telephone consultations with the obstetricians or paediatricians on-call at OSMH in labour or postpartum if they have an urgent concern or to refer patients for in-person or virtual

consultation appointments. Unit managers of both hospitals also meet periodically as part of a regional maternity care support network. The open links of communication both at the clinical level and at the regional level have ensured that high quality care is well supported in a small and geographically isolated hospital.

CHALLENGES

As with any human endeavour, challenges have presented themselves over the past 8 years. We recognised from the outset that MWs and FPs would likely have different "practice cultures" but we shared a commitment to joint continuing education activities, lots of communication and a common goal of strengthening the sustainability of maternity services in this community. Not all members of the wider health-care team have been comfortable with offering maternity care at WPSHC, and as maternity care providers, we have had to work hard at communicating the importance of maintaining excellent maternity care locally, including intrapartum care in this community. Rural poverty and socioeconomic disadvantage are significant in many of Canada's rural and remote communities and having care close to home has been demonstrated to improve outcomes. [11-13]

The issue of birth numbers has not been raised as a concern at our joint FP/MW meetings except with regard to all practitioners wanting to keep the overall numbers sufficient at WPSHC. Both the FP group and the MW group recognise that a proportion of our childbearing patients have medical and obstetrical risk factors that make them unsuitable for local delivery. In the past 3 fiscal years, the MW group has attended 31.6%–42.5% of their births at OSMH, 45%–55% at WPSHC and 4%–10% at home. It is important to note that WPSHC provides valuable back-up, including surgical services, which supports the safety of planned home and hospital births in this community.

We note the lack of evidence linking specific provider delivery numbers to competence in providing care in Level I settings. [14-16] The midwives are choosing to have a reduced caseload to have improved work life balance and as of 2021 are attending 18-23 births each as MRP per year. They are also attending more births in the role of 2nd during the past year as part of orienting midwives who are new to the practice and in response to shortages of OB trained nurses.

UNEXPECTED COLLABORATIONS

When situations arise where a pregnant individual or baby has required ambulance transport to a higher level centre, a midwife or a nurse has accompanied the patient with the paramedics for the transport. A midwife has come from home to accompany the transport when there was only one obstetric nurse available; had the RN left, the maternity unit would have had to close. There have been other occasions where the unit was closed due to the lack of obstetrical nurse availability, and the MWs have agreed to be called in if a patient with imminent delivery was admitted. On another occasion, a patient in preterm labour was being transported to a Level II hospital, and both a FP and MW went in the ambulance with the paramedics in case of delivery enroute. Three of the obstetric RNs have been available over past years to attend home births with a midwife when not working at the hospital. Some of them commented that they felt that their experience at home births had enhanced their skills in caring for women giving birth at the hospital. Regular re-certification in the Neonatal Resuscitation Program (NRP) has been offered for years to RNs, FPs and MWs by one of our FPs who is an NRP instructor. She has now been joined by a MW NRP instructor and most courses are co-taught.

DISCUSSION

Over time, this model of collaboration has evolved and changed, demonstrating that flexibility is important on the part of all maternity care providers to keep the local service sustainable and available to meet local needs. Medical, midwifery and nursing students have been involved in providing maternity care in our community, benefiting from exposure to an inter-professional model of care that is unique in our province. In 2021, FPs attended 54.3% of the births at WPSHC and midwives attended 45.7%. Interprofessional communication, case reviews, educational activities such as MORE^{OB}, skills drills, ALARM, a Fetal Health Surveillance course and joint participation on hospital committees that develop policies and procedures are essential for a positive inter-professional working environment

and the provision of ongoing high-quality services to meet local needs. Our committee meetings include lively discussions and thoughtful review of policies with an awareness of current clinical guidelines and research. Having excellent specialist support at our regional Level II hospital has also been an important component of our ongoing success.

CONCLUSION

A number of authors have identified the challenges and successes of a variety of models of inter-professional collaboration in maternity care for rural and remote communities. [17-22] We hope that our description of what is working well in Parry Sound, Ontario, will offer another example that may contribute to the development of additional models of sustainable maternity care in other rural and remote communities across Canada.

RECENT UPDATE

At the time of this publication, the WPSHC has closed its obstetrical unit due to a critical shortage of obstetrically trained RNs. Prior to that difficult decision, the option of using midwives in the role of OB RNs was explored. It has become clear that more time and preparation are required before this can be put into action. Creative thought, support from administration and ongoing inter-professional collaboration are needed to come up with solutions that will allow us to continue to provide this vital service to our community.

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Indigenous cultural identity of research authors standard: Research and reconciliation with Indigenous peoples in rural health journals

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INTRODUCTION

'It is vital that Indigenous researchers are recognised and duly acknowledged, and that the research being published is culturally appropriate' (Professor Donald Warne, Oglala Lakota, International Adviser, *Australian Journal of Rural Health*, 2021).

Background

In health research publication, it is difficult to distinguish authors who self-identify as Indigenous peoples, for example, as First Nations, Aboriginal, Torres Strait Islander, Māori, Pacifica, American Indian, Alaskan Native, Métis, Inuit or as any of the 370 million Indigenous peoples worldwide.[1] Their invisibility is partly due to the lack of attribution in the publications; for instance, the author list - with first and last names only - restricts the conveyance of identity. Our goal as an academic community should be to expand the inclusiveness of research governance to include publication governance. Editorial rules stipulate the publication of ethics approvals, statements of interest, organisational affiliations, declaration of funding sources and author contributions to the articles, but what about Indigenous cultural identity? The issue of author identity is especially relevant for rural and remote health journals because Indigenous peoples living in rural and remote health locations experience health inequities linked to racism and cultural suppression. We, the editorial teams of the *Canadian Journal of Rural Medicine* (CJRM), *Australian Journal of Rural Health* (AJRH) and the *Rural and Remote Health* (RRH), are changing our editorial rules so that research published about Indigenous peoples includes Indigenous peoples as authors, or evidence is provided of Indigenous peoples' genuine engagement in all the stages of the research process, including crafting the manuscript.[2-4] Our next step is to propose the development of an

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Indigenous Cultural Identity of Research Authors Standard (ICIRAS, pronounced 'I-keye-ras', short 'I' sound in Indigenous, hard 'k' sound for Culture and long 'eye' sound in Identity) [Figure 1].

Environmental scan

Discerning the cultural provenance of the authors of a research paper involving Indigenous peoples is difficult (Cultural provenance is a concept that signals the diversity of Indigenous peoples' cultural roots specific to local tribes, e.g., Ngiyampaa is one of hundreds of tribes of Indigenous Australians). Published articles vary in how the Indigenous identity is flagged, and for most journals reporting the Indigenous identity of authors is optional and, therefore, often completely absent in many manuscripts. An environmental scan was conducted to detect the Indigenous cultural identity of authors using a novel method of hand searching author libraries, and scholarly databases, for example, where Indigenous author identity was explicit. Notation of cultural provenance was variable. It appeared in the byline of both the webpage header and in the pdf,[5-7] researcher positionality,[8] acknowledgements section,[9] ethics section,[10] methods section,[11] materials and methods section,[12] the introduction and preceding the methods,[13] citation format,[5] front page of author information on preprint[14] and indicated with additional author information symbols (*, †, ‡, §).[15]

Definition

For the purpose of this standard, we specify Indigenous cultural identity as the self-identified Indigenous status of authors whose ancestors 'inhabited a country or a geographical region at the time when people of different cultures or ethnic origins arrived'.[1] Many Indigenous peoples have a shared experience of occupation, settlement or colonisation. To align with current United Nations nomenclature, we use the term Indigenous peoples.

Figure 1: Flagging the Indigenous Cultural Identity of Research Authors Standard (Art by Jason Lee, Larrakia).

WHY A STANDARD?

A standard means setting a bar for equity, diversity and inclusiveness. Currently, without any such agreed minimum, rural health research discourse reflects research colonialism and power imbalances. This history accords value to a degree, profession or organisational affiliation, but not deep cultural wisdom, and expertise. This must end, for example, by principles of:

1. Aligning with current best practice in research with Indigenous peoples
2. Promoting culturally safe publishing
3. Acknowledging, including and respecting Indigenous researchers and participants
4. Promoting culturally appropriate positionality
5. Recognising Indigenous peoples' knowledge sovereignty
6. Respecting Indigenous peoples' cultural authority and expertise
7. Amplifying Indigenous peoples' voices in research publications.

These points indicate the need to develop and enact a standard for all academic publishers, ethics committees and research institutions so that Indigenous peoples are acknowledged, recognised and respected throughout academia and research. This would assist journal reviewers and readers alike in their appraisals of research.

Aligned with current best practice in research

There are parts of the international research environment where publications proactively address systemic biases and structural racism.[16-19] However, there has been no standardised 'flag' to signal that the terrain systematically includes the Indigenous cultural identity of authors. It was in 2007 that the United Nations Declaration on the Rights of Indigenous Peoples, Article 2 stated 'the right to be free from any kind of

discrimination, in the exercise of their rights, in particular that based on their indigenous origin or identity'.[20] The ICIRAS would be a lever for embedding the rights of Indigenous peoples into academic publishing governance, as aligned to the movement for embedding human rights in research with Indigenous and Tribal peoples.[21]

Promoting culturally safe publishing

Indigenous cultural identity is important in cultural safety because it promotes professional reflexivity about personal, professional, organisational and social biases.[22] The ethic of respecting identity and cultural diversity is a part of many definitions of cultural safety.[23-25] Readers routinely search the name of authors, their organisation, the funding bodies, their qualifications and their background to help assess the research's integrity: What about cultural integrity? Academic journals need to do more to make Indigenous peoples' voices and cultural qualifications obviously visible because, 'By acknowledging not just the contributors to the piece but the standpoints, we take the conversations to a deeper and fuller level'.[26] The first step toward deeper conversations is being aware of an author's name, while the next step is to recognise their Indigenous cultural identity as a flag for their cultural worldviews and lenses.

Inclusivity – 'be it to see it'

An ICIRAS sends a strong message: '(Indigenous researchers) are pushing back against assimilation and attempts to hide our identities and our realities through terms and methodologies that ignore our distinctiveness'.[27] This sentiment also resonates with the non-Indigenous authors of this paper, who believe transparent authorship and cultural provenance is important in assessing the integrity of research concerning Indigenous peoples.[28] The three journals championing this initiative have agreed to operationalise this position but recognise that policy change requires consultation and co-design activities. The RRH Journal's policy, 'nothing about us, without us', means that 'an article about people in any country or region without authors from that country or region will not be published'.[28] The AJRH's Author Cultural Identity Matters statement urges that 'cultural identity as a component of an author's credentials could be a meaningful action to acknowledge and respect Indigenous authors involved in rural health research and manuscripts'.[29] The leadership of the CJRM, in prompting the idea of the 'Position Statement: Research and Reconciliation with Indigenous Peoples in Rural Health Journals',[2] has implemented screening questions for submitted manuscripts.[30]

Promoting culturally appropriate positionality

The global movement toward cultural safety, led by Indigenous peoples and championed by non-Indigenous allies,[31-35] prompts journals and publications to reflect on their position in perpetuating the power structures of colonial processes. This is relevant to research journals 'because the academic publication process, from authors to reviewers to editors, has legitimatised scholarship norms that obscure the role of racism in publishing practices'.[36] It means decolonising those norms by reflecting on the pattern of culturally dangerous research (which diminishes, demeans and disempowers Indigenous cultural identity) and standardising ways of including Indigenous knowledge systems and intellectual sovereignty,[37] preventing human rights violations through unethical research,[38] building trust in academic research conduct,[39] acknowledging the authenticity of Indigenous scholarship,[40] preventing the cultural appropriation of knowledge[41] and promoting the power of Indigenous writing styles.[42] We believe that the ICIRAS would signal to Indigenous peoples that academia is a space for action on breaking down colonial research traditions and moving toward respectful, inclusive research practice.[43-50]

Recognising Indigenous peoples' knowledge sovereignty

Gamilaraay Australian scholar Bindi Bennett's seminal research 'regarding the practice of acknowledging Indigenous participants and knowledge in articles that contain Indigenous content'[26] found few examples of recognition despite the argument where 'some participants pointed out that by being able to indicate the author's own cultural heritage, this can then give the audience a better understanding of the origins

of the author's perspective' (p. 177). She argued that the lack of acknowledgement of Indigenous Australians in published articles 'serves to reaffirm that possession of knowledge and knowledge production is controlled by others' (p. 168). Therefore, within our sphere of influence in rural health research publishing, we respect that Indigenous peoples' knowledge belongs to them, and we will work with Indigenous stakeholders to develop practical strategies, perhaps along the lines of Indigenous data sovereignty,[51-53] to ensure knowledge sovereignty.

Respecting Indigenous peoples' cultural authority and expertise

The ICIRAS would also link to cultural authority because power rests with Indigenous peoples to determine if cultural knowledge should be embedded in journal publications: 'One of the ways we acknowledge our worldviews and value is through our cultural worldview and lens'.[26] Our worldviews naturally inform the research evidence base and all aspects of the research process. For example, through Harfield *et al.*'s *Aboriginal and Torres Strait Islander Quality Appraisal Tool*, researchers are asked: 'Did the research have Aboriginal and Torres Strait Islander research leadership?'[54] This question is difficult to answer when Indigenous status is hard to determine from the content and metadata of an article. Recently, several publications denoted Indigenous cultural identity of authors as: first name, last name (Indigenous Nation),[5-7] thus signalling the importance of cultural authority.

Amplifying Indigenous peoples' voices in research publications

An ICIRAS should reflect on the findings of research from the sphere of Australian micro- and small presses. Professional Editor Jodie Lea Martire dug deeply into the publishing world: 'The acquisition and editorial stages of publishing beg the question of who has the privilege and power to edit whom'.[55] In order to support the voices of under-represented authors, Martire found that the small presses cemented specific steps into their publishing processes. Therefore, all the steps of the rural research publication process should be examined to determine the points and pathways through which Indigenous peoples' voices are constrained or enabled. As the editors of research wherein messages live through academic discourse, we have a moral obligation to ensure those messages frame the cultural strengths of Indigenous peoples.

IMPLEMENTATION CONSIDERATIONS

The environmental scan revealed some factors to consider for this exposition. For example, guidelines exist for the inclusion of cultural identity in author lists,[56] but they need to be updated to enable authors to self-identify.[57] Several issues demand deep conversation: must authors self-identify or can it be optional? Note that the authors of this report were explicit in having our cultural identity included. What form of identity to use? How do non-Indigenous authors identify? Should identification occur where Indigenous authors publish non-Indigenous and Indigenous content? Should cultural identity be noted in reference lists? And then, there is cultural intersectionality (e.g., LGBTIQA+, gender diversity, multicultural and other forms of cultural expression). These, and no doubt other issues to be uncovered in our future systematic review, will require careful consideration to inform research publication governance, such as the peer-review process.[58]

DISCUSSION – TRANSLATING POLICY INTO ACTION

The intent of ICIRAS is to celebrate Indigenous cultural identity in academic discourse. This aligns with a key aspect of cultural safety - services are provided regardful of culture, identity and difference.[59-62] This means that the editorial governance of journals should be geared to epitomise Indigenous peoples as a reconciliation indicator for 'unwrapping epistemic injustice and colonisation' in public health scholarship.[63] According to Dr. Alika Lafontaine (the first Indigenous president-elect of the Canadian Medical Association), 'A big part of reconciliation comes with shifting what we think is normal, and that's going to require work from a lot of different sides'.[64] Is this an attitude that the worldwide research community can adopt for creating the ICIRAS?

CALL TO ACTION – 'EDITING WITH INDIGENUS AND FOR INDIGENUS'

In the spirit of cultural safety, there is an imperative to work towards a scholarly state where Indigenous peoples are 'assured that the system reflects something of you',[23] that there is 'shared respect, shared meaning, shared knowledge and experience, of learning together with dignity, and truly listening',[24] and that employs ongoing critical reflection of power differentials.[65] This requires journal editors, managers as well as research committees, funders and publishers to work for genuine truth and reconciliation with Indigenous peoples.

Our collaboration of rural and remote health journals invites other academic journals to:

1. Conduct an audit to baseline the status of Indigenous peoples at all the levels of governance, [66] such as on editorial boards, publishing house governance structures and at all stages of publishing
2. Establish an editors' sub-committee or working party to discuss ICIRAS and consider implementation issues
3. Include manuscript submission questions about author indigeneity and the participation of Indigenous peoples in the research
4. Include Indigenous identity of authors in the byline
5. Revise author guidelines for acknowledging contributions
6. Publicise their position on research and reconciliation with Indigenous peoples
7. Provide a journal-specific position statement about the ICIRAS
8. Monitor, evaluate and report on the impact of ICIRAS for assessing inclusivity and visibility of Indigenous research authors.

CONCLUSION

Research needs to evolve to achieve the best-quality evidence possible to support policy, advocacy and practice in rural healthcare reforms. However, academic publishing processes could be better geared to value the cultural voices of Indigenous peoples. In this way, research evidence would be clearer in its cultural authority, expertise, provenance, respect and sovereignty. With the Indigenous Cultural Identity of Research Authors Standard, a consortium of rural health research journals has committed to systematic reforms to translate hashtags into academic reality. #DecolonizePublication Governance, #PrivilegeIndigenousAuthors, and #DecolonizeScholarlyDiscourse. The ICIRAS is a call to action for research journals and institutions to rigorously improve research governance and show leadership in amplifying the cultural identity of Indigenous authors in health research.

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PROCEDURAL REPORT

The Occasional ultrasound-guided serratus anterior plane blockade

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INTRODUCTION

An 85-year-old male presents to the emergency department with right-sided chest wall pain and shortness of breath after a ground-level fall. The chest X-ray shows anterior, non-displaced fractures in ribs 6–8 and a small pneumothorax on the right. The patient's comorbidities include chronic obstructive pulmonary disease, lung cancer and brain metastases. His vitals are stable, and his pneumothorax is managed conservatively on 15 L oxygen through a non-rebreather mask. Despite receiving IV hydromorphone, he is in severe pain and taking shallow, frequent breaths. You wonder if there is an alternative to further opioid analgesia at this time.

The rural physician is no stranger to chest wall trauma. From high-velocity accidents to ground-level falls, rib fractures and pneumothorax are common in the rural emergency department. Effective pain management is essential to prevent splinting of respirations and subsequent complications such as atelectasis and pneumonia. Elderly patients (age >65) are more likely to be admitted to a hospital and die due to complications from rib fractures.[1] Opioids are often used to manage chest wall pain and can have unwanted side effects of respiratory depression, suppression of cough reflex, sedation and delirium.

Regional anaesthetic techniques, including epidural and local nerve blockade, have gained popularity in the management of chest wall pain. Epidurals and spinals can be effective for managing pain, but are time-consuming, often unavailable in a rural setting, and not indicated for high chest wall injuries.[2] Local intercostal nerve blockade is possible but impractical and risks causing pneumothorax.

The serratus anterior plane block (SAPB) is an effective, simple and safe regional anaesthetic technique that can be performed by any rural emergency physician with a basic knowledge in ultrasound.[3-9] SAPB provides analgesia to the anterolateral chest wall through blockade of the lateral cutaneous branches of the thoracic intercostal nerves.[10,11] A large volume of dilute local anaesthetic is deposited in the fascial plane superficial to the serratus anterior muscle, and the motion of the chest wall with respiration distributes

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the anaesthetic throughout the fascial plane from approximately T2-12.[11] SAPB decreases subjective pain scores and improves pulmonary function for up to 24 h after administration, depending on the local anaesthetic chosen.[3]

Here, we describe a procedure for ultrasound-guided SAPB that we have found effective in our rural ED.

ANATOMY

The chest wall is primarily innervated by pairs of thoracic intercostal nerves (T1–T11) and subcostal nerves (T12). These nerves innervate skin, muscle, parietal pleura and the periosteum of the rib. The intercostal nerve travels in the costal groove on the inferior margin of each rib through the intercostal muscles. In the mid-axillary line, the nerve gives off a collateral lateral cutaneous branch, which penetrates through the intercostal and serratus anterior muscles to lie in the fascial plane superficial to the serratus anterior.[12]

The serratus anterior muscle covers the lateral chest wall from the anterior margin of ribs 1–10 to the vertebral margin of the scapula. It lies immediately superficial to the ribs and intercostal muscles. It can be visualised on surface anatomy between the pectoralis and latissimus dorsi muscles [Figure 1]. The superficial serratus fascial plane travels between the serratus anterior and the latissimus dorsi.[12] The thoracodorsal artery travels within the superficial serratus fascia in the mid-axillary line and can be used as a landmark to identify the correct plane with Doppler ultrasound.

EQUIPMENT

- Ultrasound with high-frequency linear probe (13-6 MHz)
- Sterile ultrasound gel and sterile probe cover
- Sterile procedure tray
- Sterile gloves
- Sterile skin marker
- Antiseptic skin cleansing agent
- 5-10-mL 1% lidocaine with epinephrine in syringe with 27G needle for skin wheal
- 30-mL 0.25% bupivacaine (one can mix 15-mL 0.5% bupivacaine mixed with 15-mL normal saline in a 30-mL syringe) connected to extension tubing

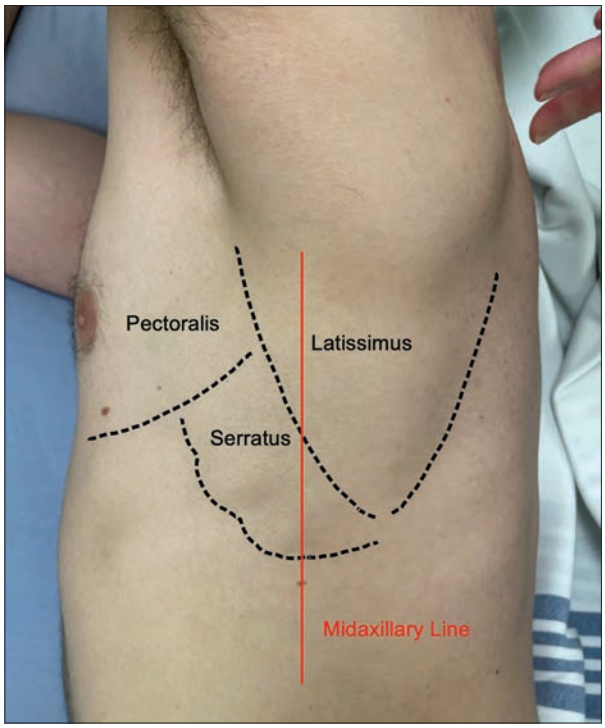

Figure 1: Superficial anatomy in the lateral decubitus position. Gross anatomic structures in the right lateral decubitus position are shown. The patient rests their arm above their head displaying the latissimus dorsi, serratus anterior and pectoralis muscles.

- 22G 50-mm needle. For better visibility, we use a SonoTAP needle with a facet tip. There are many similar echogenic needles on the market (20-22G, preferably a shorter bevel to illicit fascial pop).

PROCEDURE

Pre-procedure

1. Obtain informed consent from the patient. Tables 1 and 2 list contraindications and complications of the SAPB procedure
2. Ensure IV access and place the patient on continuous cardiac monitoring with pulse oximetry
3. Review the possibility of local anaesthetic toxicity, and be aware of access to lipid emulsion therapy if needed. The maximum permissible dose of bupivacaine without epinephrine is 2.5 mg/kg.[13]

Landmarking

1. Have the patient lie in the lateral decubitus position on the side contralateral to their injury with the arm resting above the head, as shown

Table 1: Contraindications to serratus anterior plane blockade
Absolute
Overlying soft-tissue infection at the site of injection
Allergy to local anaesthetic
Relative
Disruption to anatomy from scarring or previous injury
Patient unable to tolerate supine or lateral decubitus position for an extended period of time

Table 2: Potential complications of serratus anterior plane blockade
Failure to provide analgesia
Rebound pain
Intramuscular injection and myotoxicity
Infection
Haematoma
Local anaesthetic systemic toxicity
Pneumothorax

in Figure 1. The supine position is acceptable if lateral decubitus is not tolerated

2. Observe the surface anatomy of the pectoralis anteriorly, latissimus posteriorly and the serratus anterior in between [Figure 1]
3. Place the linear ultrasound probe transversely, in the mid-axillary line, at the level of the nipple (4-5th intercostal space), with the probe marker pointing towards the nipple, as demonstrated in Figure 2
4. Identify, with ultrasound, the landmarks of the rib shadows and pleural line, as shown in Figure 3. The serratus anterior is the muscular structure immediately superficial to the ribs, while the intercostal muscles lie between the rib shadows immediately above the pleural line. The edge of the latissimus will be visible superior and posterior to the serratus and will act as a landmark for the superficial serratus anterior plane. Figure 3 demonstrates the superficial fascial plane that is the target for anaesthetic deposition
5. Table 3 offers additional suggestions for how to landmark on ultrasound
6. Place a gentle mark on the patient's skin at the posterior end of the transducer, which will be the entry point for the needle

Set up a sterile field

1. Set up a sterile field and avoid contamination from non-sterile items

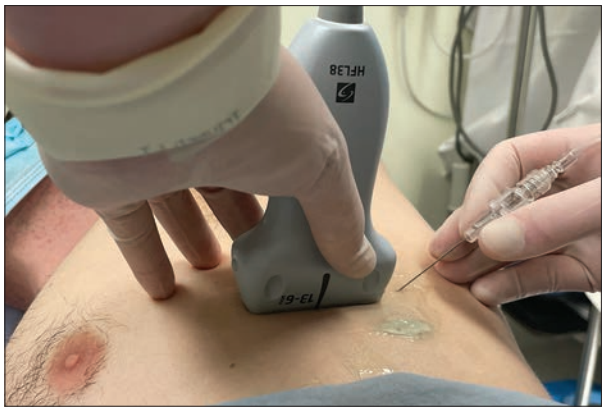

Figure 2: Placement of the ultrasound probe and needle insertion technique. The probe is placed in the mid-axillary line at the level of the nipple, with the probe marker towards the nipple. The needle is inserted in-plane to the probe at the posterior end of the probe.

2. Use an aseptic wash to clean the patient's skin and place sterile dressings to create a large clean area to work with
3. Sanitise the ultrasound probe, and place a sterile transparent dressing (e.g., Tegaderm) or a sterile probe cover over the probe

Anaesthetic injection

1. We recommend using a two-provider technique, one to hold the ultrasound probe and insert the needle and the other to inject the anaesthetic
2. Use 5 mL of 1% lidocaine with epinephrine to raise a small skin wheal and anesthetise the needle track at the marked site of needle entry
3. Place the ultrasound probe transversely in the same spot as previously landmarked. Insert the 22G 50-mm needle at the posterior end of the transducer [Figure 2], in-plane, taking care to continuously visualise the needle tip with the transducer. Aim for the anterior fascial plane between the latissimus and the serratus; a pop may be felt in the needle once the plane is entered. Aspirate to confirm the absence of vascular puncture, and then slowly inject 1-2 mL of the 0.25% bupivacaine
4. On ultrasound, fluid within the fascial plane will immediately separate the fascia and move away from the needle tip, while anaesthetic placed in muscle will not. Figure 4 demonstrates the separation of serratus and latissimus as fluid is injected into the correct fascial plane. Once

anaesthetic deposition in the correct plane is confirmed, slowly inject the full 30 mL of bupivacaine in a continuous fashion, aspirating intermittently to confirm the absence of vascular puncture and always visualising the needle tip.

It will take approximately 15-30 min for the anaesthetic to take full effect. The patient should be monitored for 30 min after the procedure for signs of local anaesthetic systemic toxicity.

CONTRAINDICATIONS

Absolute contraindications to SAPB are overlying soft-tissue infection at the planned site of injection and allergy to local anaesthetic medications.[14] Antecedent trauma may grossly disrupt anatomic planes and thus preclude successful SAPB. Relative contraindications include disruption to anatomic planes from scarring or fibrosis and inability of the patient to tolerate the lateral decubitus or supine position for a prolonged period of time.[14] Stabilisation and emergent transport to a tertiary care centre for life-saving interventions should not be delayed to administer SAPB.

Table 3: Additional tips for landmarking the superficial serratus anterior plane

Rotate the transducer slightly clockwise or counterclockwise to bring structures into view
Move the probe posteriorly and cranially if unable to visualise the latissimus
Use Doppler to identify the thoracodorsal artery, which travels in the mid-axillary line in the target superficial serratus plane

COMPLICATIONS

While incidence is not well documented, more common complications of SAPB may be failure to provide adequate analgesia, rebound pain as the anaesthetic wears off and unintentional intramuscular injection of local anaesthetic. Failure to provide adequate analgesia is likely the most common, and patients should be made aware of this possibility.[3] The use of ultrasound to confirm injection of anaesthetic into the fascial plane will mitigate the risk of inadvertent intramuscular injection. The potential for local anaesthetic myotoxicity should be considered, although there is limited research regarding the risk or clinical relevance of myotoxicity from fascial plane injection. Myotoxicity, in general, is more likely when there is a high concentration of local anaesthetic or multiple injections.[15]

Other rare complications of SAPB include local anaesthetic systemic toxicity, infection, haematoma and pneumothorax. Local anaesthetic systemic toxicity is possible whenever an anaesthetic is administered, thus care should be taken to ensure that the maximum permissible dose of bupivacaine is not exceeded. Haematoma and infection are conceivable risks, although the incidence of such is unknown and larger studies are needed to comment

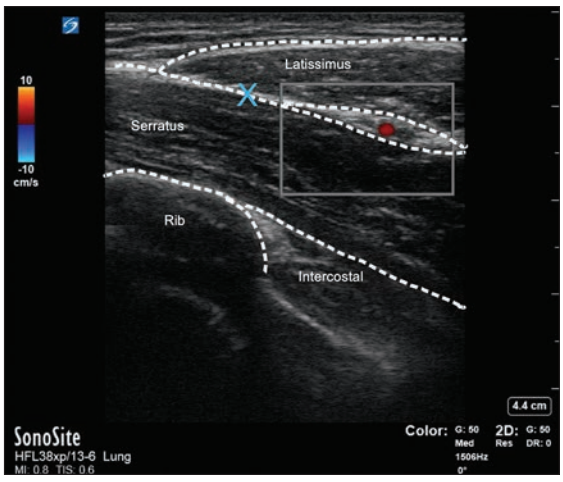

Figure 3: Ultrasound visualisation of the latissimus dorsi and serratus anterior. Colour Doppler has been used to locate the thoracodorsal artery, which appears as a red spot in the photo. A blue X marks the superficial fascial plane.

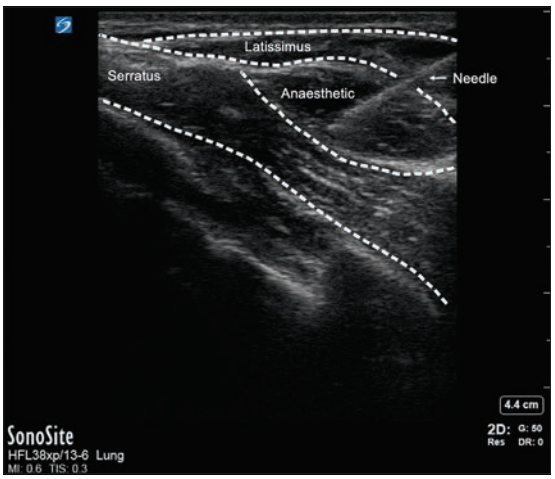

Figure 4: Anaesthetic deposition visualised by ultrasound. An echogenic needle is inserted in-plane to the ultrasound probe and into the superficial serratus anterior fascial plane. Bupivacaine is deposited, creating a separation between the serratus anterior and the latissimus dorsi.

on such. Cessation of Venous thromboembolism prophylaxis is not required before SAPB, but care should always be taken to avoid major vessels.[3,4,6] Pneumothorax is improbable if targeting the superficial serratus plane and would require a major deviation from the described method. There is only one incidence of pneumothorax resulting from SAPB found in the literature, and the authors were targeting the deep serratus anterior plane in that case.[16] We know of no reports of pneumothorax when targeting the superficial plane, and continuous visualisation of the needle entering the chest wall will minimise that risk further. In general, good provider technique and visualisation of the needle and anaesthetic entering the fascial plane will minimise the incidence of complications.

While discussed in this article as a pain management strategy for rib fractures, SAPB has also been used in the acute care setting for the management of herpes zoster pain, and discomfort from chest tube placement.[5,8] SAPB appears to be most effective in treating anterolateral, superficial chest wall pain and may not be a reliable sole source of analgesia in chest tube insertion.[3,4,8,11] However, SAPB can significantly reduce discomfort associated with chest tube placement and make the procedure more tolerable for patients.[8] Potential limitations to this technique include the patient's capacity to consent and their ability to cooperate with positioning. Variations on the technique described include placement of an epidural catheter in the superficial serratus plane for a longer duration of pain control, the methods of which are described elsewhere.[7]

In the case described earlier, we felt that giving further opioid analgesia would be unhelpful and instead performed a SAPB on the patient. Within 30 min, his respiratory rate had slowed, and he was comfortably taking deep respirations. The patient was admitted for observation and developed no further complications from his rib fractures.

CONCLUSION

SAPB is an effective and safe way to manage chest wall pain in the ED, providing pain relief for 12-24 h after injection and is technically simple to perform.

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Conflicts of interest: There are no conflicts of interest.

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PODIUM

Rural research: Let's make it happen!

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Canadians living in rural communities need rural research to improve their health and healthcare. Urban-based research just does not usually translate into better rural health or healthcare and is especially disconnected from remote Indigenous communities. COVID has emphasised the need to engage rural communities and health-care stakeholders to study their own health issues to develop, synthesise and mobilise knowledge required on the ground. This has been difficult to achieve, but some doors have begun to open. Let's make it happen!

Memorial University's research skills development programme, 6for6, and the Rural Coordination Centre of BC Rural Physician Research Support Project provide east and west coast lighthouse examples that demonstrate rural physicians are interested and ideally suited to become effective community-engaged researchers.[1,2] Research education, connection and support are the magic ingredients to assist them. In 2010, Canada's Academic Health Science Centres embraced the 'Three missions, one future' vision of becoming Networks combining clinical excellence, education and research.[3] Since every Canadian medical school has a distributed education network, it is time now for them to build research into these rural networks to advance rural clinical care, rural medical education and rural recruitment and retention. This model has been successfully developed in Australia.[4]

For decades, the doors to mainstream funding, support, and capacity building seemed closed for rural health research.[5] The Society of Rural Physicians of Canada (SRPC), in collaboration with the Canadian Family Physicians of Canada and Rural Road Map Implementation Committee advocated to Canadian Institutes for Health Research (CIHR) to make it mandatory that research initiatives and programmes should include a 'rural' lens to ensure that the rural and Indigenous health population needs are effectively being addressed and met. In 2021, CIHR took notice and rural health research is now noted in the new CIHR Strategic Plan 2021-2031: A Vision for a Healthier Future.[6]

What is further encouraging is that SRPC co-partnered with CIHR's Institute of Health Services and Policy Research (IHSPR) in October 2021 in co-hosting a focus group session with rural researchers, providers and decision-makers across Canada on integrating care for rural populations as part of a new research initiative to be announced in 2022. Revitalised

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in 2021, the SRPC Research Committee will continue discussions with CIHR in exploring ways to build rural health research capacity and to develop and disseminate quality rural medical research to inform evidence-based policymaking for better equitable access to rural health care.

We would like to hear from physicians and others across Canada who are interested in rural research. Please send your ideas to SRPC's Research Committee through Info@SRPC.ca.

(See also SRPC website https://srpc.ca/research-committee).

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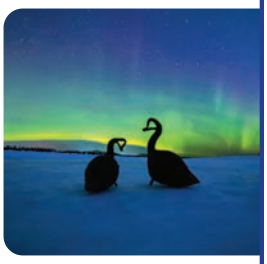
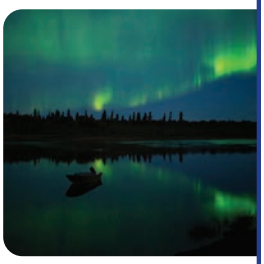
Weeneebayko Area Health Authority
In Moose Factory, ON





The Weeneebayko ("Two Bays" - James Bay and Hudson's Bay) Area Health Authority (WAHA) provides medical services to 6 communities on the shore of James and Hudson's Bay; Moose Factory, Moosonee, Fort Albany, Kashechewan, Attawapiskat and Peawanuck.

- Challenge yourself to provide comprehensive health care to remote First Nation communities
- Faculty appointments at Queen's University, Northern Ontario School of Medicine, University of Toronto, and University of Ottawa, with a well-developed teaching practice
- Become a member of an exceptionally multidisciplinary team with full-time surgical and anesthesia as well as back up speciality services
- Very generous compensation package with a yearly travel allowance plus remote medicine funding bonus
- Signing bonuses up to $20,000, housing in Moose Factory provided with all amenities included
- Recruiting Locums and full-time family doctors, salary ranges from $370,550 - $420,000
- Now offering ER and OB incentives

For more information contact:
Jaime Kapashesit
Physician Services Coordinator
jaime.kapashesit@waha.ca
705 658-4544 ext. 2237

Rural Medicine Careers / Classified and Recruitment Ads

DAWSON CITY, YUKON - VIBRANT NORTHERN TOWN WITH URGENT SUMMER LOCUM NEED, LOOKING TO ADD 2 FULL-TIME FAMILY PHYSICIANS Enjoy endless outdoor opportunities, a tight-knit community, rewarding work, collegial docs and outstanding pay! Full-time contract is a minimum of 38 weeks/year – housing provided, Northern Lights guaranteed. Clinic/ED/inpatient care. URGENT LOCUM NEED July 18 - Sept 9th. Learn more at www.dawsonclinic.com or e-mail dawsonlocums@gmail.com or info.

Family Practice on Westcoast Gulf Island:

The beautiful, well-equipped clinic on Denman Island is looking for an FP to provide family medicine for a broad demographic of 1400 people. The Island is a 10 min ferry from Vancouver Island and the clinic offers free rent for a year. The position is for one FTE and could be shared by one or more FPs or NPs. As a PCN clinic, allied health professionals provide a variety of support roles. Please see https://divisionsbc.ca/comox-valley/live-work-play/physician-postings/permanent/denman-medical-clinic-denman-island for more information or contact comoxvalleyrecruitment@comoxvalleydivision.ca.

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THE SOCIETY OF RURAL PHYSICIANS OF CANADA IS PROUD TO ACKNOWLEDGE THE ACHIEVEMENTS OF OUR 2022 RURAL AWARD RECIPIENTS.

Congratulations

Dr. Kimberley Chang, Nanaimo, BC - **Resident Leadership Award**
Dr. Dennis Dahl, Moose Factory, ON - **Rural Mentorship Award**
Dr. Khalid Enver, Fergus, ON - **Rural Specialist Merit Award**
Ms. Tyrus Gibson, London, ON - **Student Leadership Award**
Ms. Sarah Hyett, Hamilton, ON - **Student Leadership Award**
Dr. Jill Konkin, Edmonton, AB - **Rural Leadership Award**
Mr. Andrew Lee, Kingston, ON - **Student Essay Winner**
Dr. Robert McCarthy, St Bernards-Jacques Fontaine, NL - **Resident Leadership Award**
Dr. Natalya O'Neill, Mount Forest, ON - **Resident Essay Winner**
Dr. Danielle Pichie, New Hazelton, BC - **Rural Community Impact Award**
Mr. Brett Redden, Marathon, ON - **Rural Health Champion**
Dr. Tina Williams, Fergus, ON - **Rural Specialist Merit Award**
Memorial University of Newfoundland - **KEITH Award** - with 43.5% of their family medicine grads practicing rural 10 years after graduation.
NOSM University and Memorial University of Newfoundland - **Rural Education Award** - with 86% Rural Family Medicine Matched in 2021

Dr. Dennis Atoe, Wallaceburg, ON
Dr. Deon Erasmus, Provost, AB
Dr. Vesta Warren, Sundre, AB
Dr. Robert Warren, Sundre, AB
Dr. Michael Wright, Charlie Lake, BC

FELLOWSHIP OF RURAL AND REMOTE MEDICINE OF THE SRPC

Dr. Deon Erasmus, Provost, AB
Dr. Trina Larsen Soles, Golden, BC

LIFETIME MEMBER AWARD

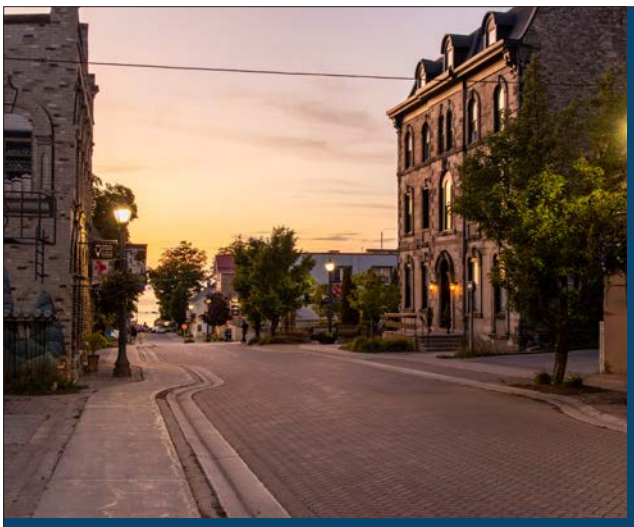
Dr. Dennis Atoe, Wallaceburg, ON
Dr. Deon Erasmus, Provost, AB
Dr. Gordon Horner, Daajing Giids/Queen Charlotte, BC
Dr. Edward Marquis, Prince George, BC
Dr. John Pawlovich, Abbotsford, BC
Dr. Vesta Warren, Sundre, AB
Dr. Michael Wright, Charlie Lake, BC
Dr. Barbara Zelek, Marathon, ON

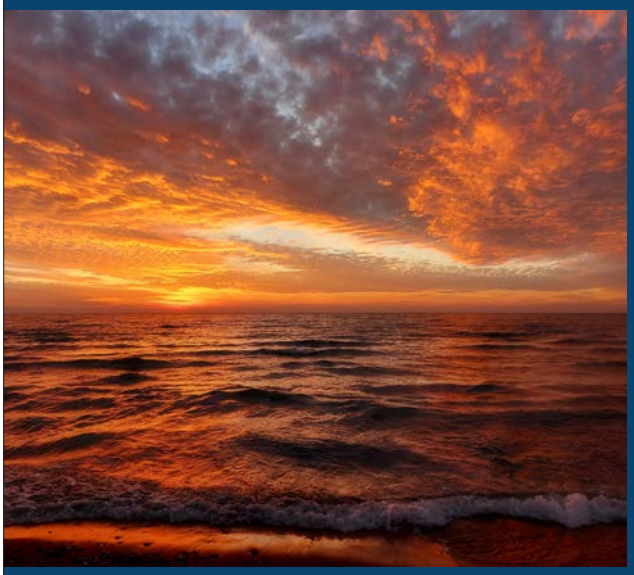
RURAL LONG SERVICE AWARD

Dr. Ryan Falk, Chilliwack, BC
Dr. Andre Jakubow, Sioux Lookout, ON
Dr. Sarah Lespérance, Petitcodiac, NB
Dr. Tracy Morton, Queen Charlotte City, BC
Dr Mark Saul, Chelsea, QC

RURAL SERVICE AWARD

For more details about SRPC rural awards visit **www.srpc.ca/awards**





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PHYSICIAN RECRUITMENT

Incentive to change pace

PRACTICE MEDICINE IN KINCARDINE, ONTARIO

Looking for a new relaxed lifestyle? Consider living and working in a wonderful rural community located on shores of Lake Huron. Small town living, four picture perfect seasons; a great place to call home. Turn key clinic space with the Kincardine Family Health Organization, financial incentives, and excellent support staff await you.

FOR MORE INFORMATION

Chrystel Murphy
Physician Recruiter
Municipality of Kincardine
1201 Queen Street
Kincardine, ON N2Z 3C1
W: kincardine.ca/pr
T: 519-385-5266
E: physicianrecruitment@kincardine.ca

READY FOR A CHANGE OF SCENERY?

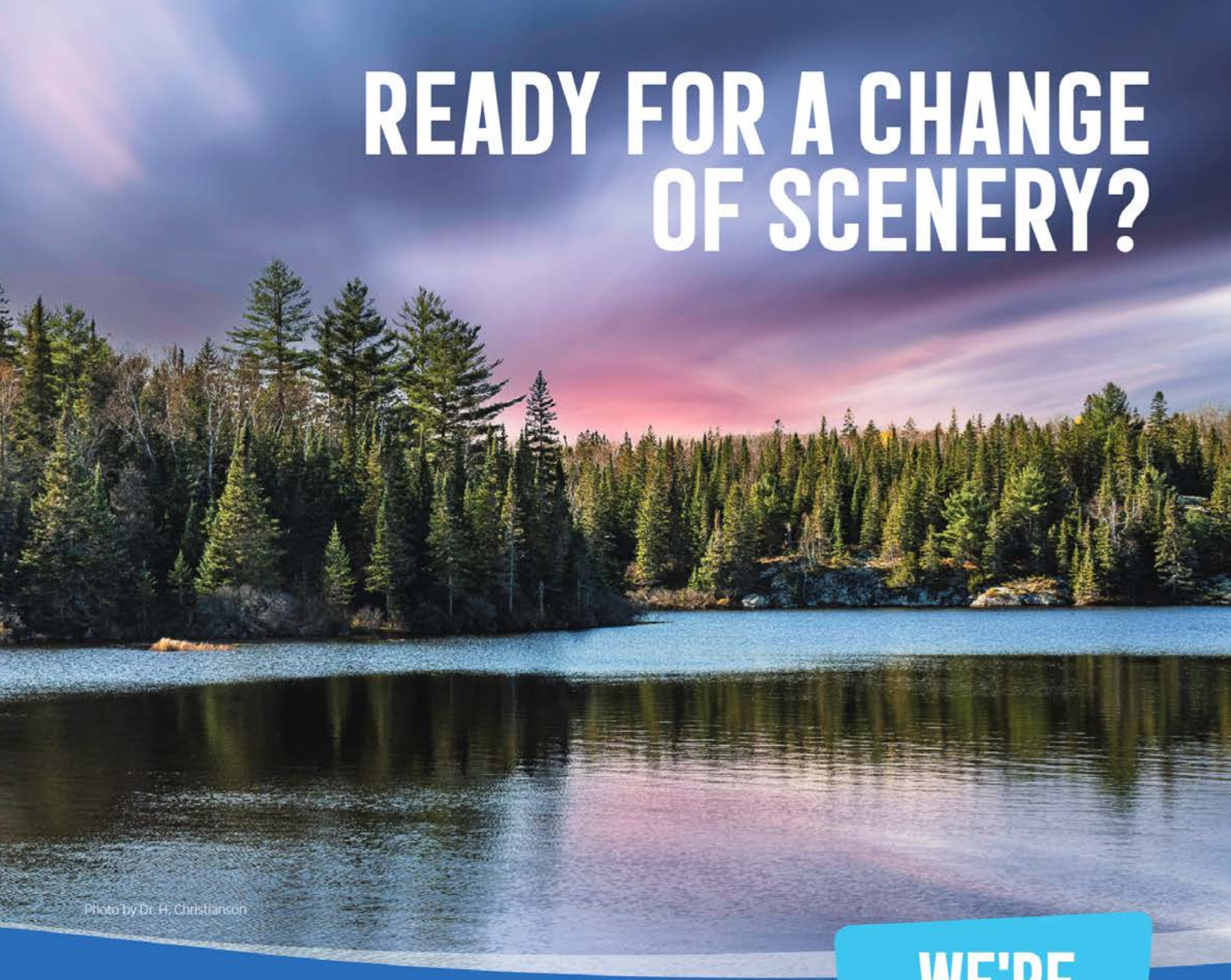

Photo by Dr. H. Christianson

WE'RE HIRING!

Quinte Health Care

NORTH HASTINGS HOSPITAL

Located in the beautiful town of Bancroft

IS SEEKING ADDITIONAL

EMERGENCY MEDICINE PHYSICIANS

JOIN OUR TEAM!

Enjoy comprehensive emergency medicine in a rural setting.

- CCFP or CCFP-EM or FRCP Emergency Medicine with experience or interest in working in a rural setting
- Valid license from CPSO or be eligible for independent licensure in Ontario

For more information and available incentives, contact

Martha - mfarrell@qhc.on.ca

QHC Quinte Health Care

www.qhc.on.ca

READY FOR A CHANGE OF SCENERY?

Photo courtesy of Bay of Quinte Regional Marketing Board

WE'RE HIRING!

Quinte Health Care

PRINCE EDWARD COUNTY MEMORIAL HOSPITAL

Located in the beautiful town of Picton

IS SEEKING ADDITIONAL

EMERGENCY MEDICINE PHYSICIANS

JOIN OUR TEAM!

Enjoy comprehensive emergency medicine in a rural setting.

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