

The landscape of mental health services in rural Canada

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Abstract

Many Canadians living in rural and remote communities face difficulty accessing mental health services. This has become a pressing issue in the Canadian healthcare system due to an increased focus on mental health and the high rate of suicide in rural regions as compared to urban communities. The inaccessibility of mental health services in rural Canada can only be partially explained by the lack of psychiatrists working in these areas. Additional access barriers arise from sociocultural nuances within individual rural communities, including an increased value placed on self-reliance and stigmatization of seeking mental health support. It has been challenging for mental health services to adequately address the vast social, economic and cultural differences that exist among individual rural communities – a reality that necessitates holistic mental health programs tailored to the unique complexities of each community. Nonetheless, programs aiming to improve accessibility of rural mental health services do exist across Canada, often employing technology to deliver psychiatric support to rural patients or provide guidance to rural primary care physicians who care for patients with mental illness. This narrative review outlines the barriers that are impeding mental health care in rural Canada, the existing strategies to circumvent these barriers, and the role of current medical students in the future of rural psychiatry.

prevent individuals from accessing healthcare services in their community.^{1,2} For rural Canadians, barriers to access can be more apparent. The needed services are often too far away and, in turn, inaccessible with regards to geographic location. However, geography is not the only factor influencing accessibility in rural communities, as these populations are equally susceptible to similar social, economic and cultural access barriers present in urban centres.³ Upon closer examination, access to healthcare in rural communities continues to be a complex and multifactorial issue. The higher proportion of Indigenous populations in rural and remote regions of Canada adds to this complexity, as the history of colonization and ongoing systemic racism that negatively affects Indigenous communities must be incorporated into discussions of inequitable access to the healthcare system in rural Canada.⁴

Rural communities have limited access to most medical specialists. However, the past decade witnessed an emphasis on psychiatry, with numerous calls to improve rural access to addictions and mental health services.^{3,5} This shift in healthcare priorities has been driven by persisting negative mental health outcomes, namely suicide, in rural Canada combined with a lower availability of rural mental health workers.^{3,6,7} In response, strategies to address these issues have been employed across the country. Of these, many are based in Ontario and centred around the use of technology-based psychiatric consults, travelling clinics, and mental health supports for primary care physicians in rural areas.⁸ The implementation of these strategies has been challenged by several factors, notably a relative lack of psychiatrists practicing in rural regions and an insufficient awareness of the unique needs of individual communities.³ The purpose of this article is to outline the factors that are acting as barriers to improving mental health services in rural Canada, with a focus on the current state of affairs in Ontario. There will also be a discussion of the mental health services that are being used to circumvent these barriers and the role of medical students in the future of rural psychiatry.

Introduction

Even though accessibility is one of the five pillars of the Canada Health Act, many Canadians still face significant barriers to accessing the healthcare that they need. In larger cities, this is particularly apparent amongst marginalized populations, as social and economic determinants of health including immigration status, poverty and homelessness often

Barriers to Accessing Mental Health Services in Rural Communities

Like urban centres, mental health in rural communities is complex and its dynamics are influenced by a multitude of social, economic and cultural factors. Studies across multiple countries have established that, relative to urban populations, suicide is significantly increased in rural communities.⁹ Despite having an increased incidence of suicide, rural communities do not appear to face an increased burden of mental illness. Rather, most research suggests a similar or decreased prevalence of mental illness in rural communities relative to urban centres.^{3,9,10} For example, in Canada, Romans and colleagues found there to be a lower risk of depression in rural populations.¹⁰

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One explanation for a higher suicide rate without a proportionally higher rate of mental illness is that limited access to mental health services in rural communities contributes to increased negative mental health outcomes, including suicide.³ A recent study in Newfoundland found that individuals living in rural communities perceive their community-based mental health services to be very difficult to access, resulting in a need for rural residents to travel to larger centres to receive mental health care.¹¹ Limited access to rural mental health services can be partially explained by the lack of psychiatrists working in rural areas. Figure 1a illustrates the Canadian Medical Association's 2018 report on the number of psychiatrists per 100 000 people broken down by province, with the Canadian average being 13.2.¹² The statistics provided in this report are evidence that more rural parts of Canada, notably the Yukon, Northwest Territories, Nunavut, and Saskatchewan, have a lower number of psychiatrists per capita.^{2,7}

Even in provinces where the number of psychiatrists per capita is close to or above the national average, practitioners tend to cluster into larger cities, leaving rural areas underserved.⁶ Ontario is a prime example of this, as psychiatrists are predominantly located in densely populated Local Health Integration Networks (LHINs) such as Toronto Central and Champlain, but are poorly distributed in more rural LHINs such as Central East/West and North East/West (Figure 1b).⁶ Of concern, Kurdyak and colleagues found that psychiatrists working in urban LHINs tend to be earlier in their career, whereas psychiatrists working in more rural LHINs tend to be closer to retirement.⁶ This forecasts that, without an influx of new psychiatrists to these areas, the existing shortage of psychiatrists in rural Ontario communities will likely worsen in the coming years.

Mental health care, however, is not solely the responsibility of psychiatrists. It is also provided by other mental health practitioners such as psychologists, nurses, primary care physicians, and emergency physicians as well as informal supports such as friends and family. Due to the lack of psychiatrists in rural communities, rural populations often rely more heavily on these alternative sources of mental health support.³ Indeed, the use of emergency departments (EDs) for psychiatric reasons is twofold higher in rural versus urban Ontario, and strategies to improve mental health support in the primary care setting have been proposed and implemented in rural Ontario and across Canada.^{8,13} As such, there are alternative avenues that can be used to increase mental health support in rural communities outside of directly increasing the number of available psychiatrists. Nonetheless, like psychiatrists, these other mental health practitioners also become increasingly unavailable, and therefore ineffective, with increasing geographic remoteness.

The lack of mental health workers is not the only factor that decreases access to mental health care in rural communities. There are unique access barriers these communities face even when mental health care workers are present. For example, rural populations tend to experience an increased sense of stigma and decreased sense of anonymity when accessing mental health services in their community.^{14,15} Interestingly, some studies have indicated that the interconnectedness of rural communities offers a unique capacity to promote mental health.^{10,16} Therefore, it appears as though the tightknit social structure of rural communities can have both positive and negative effects on the ability and the desire

of community members to access mental health services.

Other sociocultural factors such as an increased value placed upon hardiness and self-reliance have been suggested to be barriers to accessing mental health services in rural Canada.^{3,17} This is supported by research focusing on mental health amongst male farmers, who can be particularly affected by traditional masculine roles that do not promote the value of emotional vulnerability or seeking mental health support.^{17,18} Thomas and colleagues found that, like rural communities in general, farmers also experience higher rates of suicide but lower rates of mental illness relative to the general population.¹⁸ Interestingly, despite the decreased prevalence of diagnosed depression and mental illness in the study population, male farmers were more likely to report that "life was not worth living".¹⁸ Therefore, it can be speculated that the prevalence of mental illness amongst rural farmers may not actually be lower than the general population, but that individual factors such as a limited knowledge of mental illness and decreased propensity to address symptoms and then to seek mental health care reduces the reporting of mental illnesses. This points to a larger issue when conducting research on rural mental health. The unique combinations of social, economic, and cultural factors present in individual communities can modify the diagnosis and reporting of psychiatric illness.^{3,4} In turn, it becomes challenging to evaluate rural mental health without using innovative and culturally relevant research measures and methodologies.

This issue becomes particularly important when considering the mental health of Indigenous communities, which represent a core demographic in rural and remote Canada. It is known that the history of colonialism, including the residential school system, contributes to the disproportionately high suicide rate amongst Indigenous populations.¹⁹ However, researchers also caution that the history of colonialism can result in the fabrication of mental illnesses in Indigenous communities.⁴ That is to say, settler perspectives on mental illness may not align with those of Indigenous people, resulting in inappropriate and culturally one-sided psychiatric diagnoses. While there have been recent efforts to improve intercultural communication and reconciliation with Indigenous people, this cultural one-sidedness has historically been echoed in psychiatric research within Indigenous communities, which has often been conducted by urban settler populations without consideration or incorporation of Indigenous perspectives.⁴ Western perspectives are also deeply embedded into the Canadian healthcare system, which can reduce the accessibility of mental health care for Indigenous people due to culturally inappropriate services.³ Combined, these factors complicate the accessibility, delivery, and reporting of mental health care for Indigenous populations and challenge the use of settler-derived research measures and methodologies to improve understanding of mental health within these communities. A more comprehensive discussion of this important topic can be found in a recent article by Nelson and Wilson.⁴

Lastly, the Canadian Mental Health Association (CMHA) highlights unemployment, lower socioeconomic status, and a lack of affordable housing in rural Ontario as additional factors contributing to the reduced accessibility of mental health services in rural areas.¹³ This supports the notion that increasing the presence of psychiatrists and other mental health workers in rural communities is only part of the solution to improving rural access

to mental health care. Strategies must also account for the social, economic, and cultural landscape of each community, and work towards ameliorating the effects of the underlying inequities that many of these communities face.

Strategies for Improving Rural Access to Mental Health Services

Despite the complexities of rural mental health, programs to improve access to rural psychiatric care are being employed across Canada. A 2018 report by the Newfoundland & Labrador Centre for Applied Health Research (NLCAHR) provides a summary of these programs and the geographic location of each is indicated by green circles in Figure 1a.⁸ Presented this way, it becomes clear that most of the current programs operate in provinces that are close to or above the national average of psychiatrists per capita, with an abundance of programs in Ontario. Equally evident is that many provinces and territories are devoid of such programming. The NLCAHR report identified five strategies common to the current programs: the use of technology, an involvement of primary care physicians, the use of travelling clinics, a focus on improving coordination of services and a focus on Northern communities.⁸ Each of these strategies are represented across the four programs in Ontario, which include the Champlain Building Access to Specialists through eConsultation (BASE) program, the Local Health Hubs project, the Ontario Psychiatric Outreach Program

(OPOP) and Extension for Community Healthcare Outcomes (ECHO) Ontario Mental Health.

Technology-based Strategies

The use of technology is a particularly dominant theme in Ontario and comes in two forms. The first is one-on-one digital communication, i.e. through video or telephone call, between rural patients and psychiatrists through platforms such as the Ontario Telemedicine Network (OTN). OTN is the largest such service in Ontario, providing over 100 000 annual telepsychiatry consultations, which comprises 67% of all telemedicine consultations provided by OTN.³ The second is digital support for rural primary care physicians who provide mental health care. In this regard, both the Champlain BASE program and ECHO Ontario Mental Health are specifically designed to assist rural physicians in providing psychiatric support to their patients. The BASE program provides a platform for direct telecommunication between psychiatrists and rural primary care physicians. In contrast, Project ECHO operates within a “hub-and-spoke” model, where weekly group videoconferencing sessions facilitate information flow between psychiatrists in the urban academic “hub” at the Centre for Addiction & Mental Health (CAMH) and primary care physicians and other mental health workers in rural or underserved “spoke” locations.^{7,20}

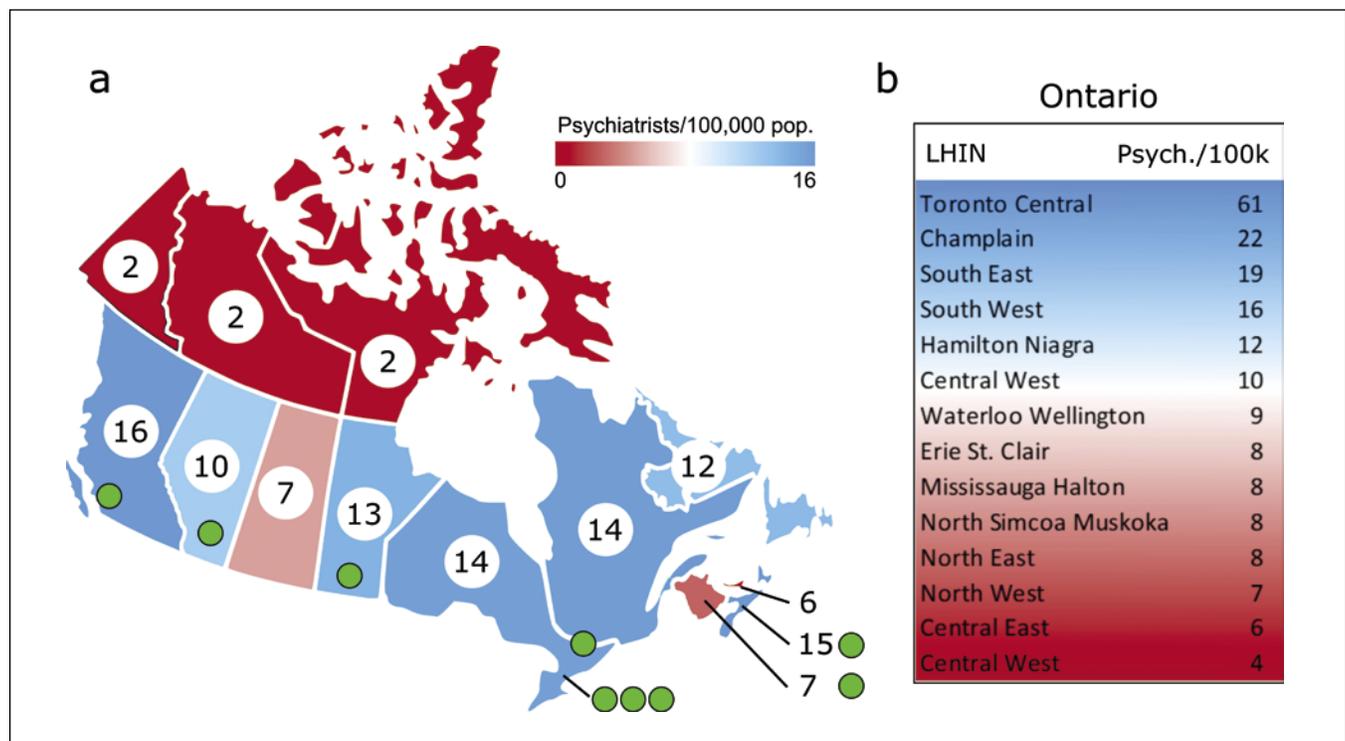


Figure 1. Relative abundance of psychiatrists in Canada. (a) Colour-coded map of per capita abundance of psychiatrists by province/territory. Red indicates lower abundance, blue indicates higher abundance. Exact number of provincial/territorial psychiatrists per 100 000 population is indicated by the numbers in white circles. Data derived from the Canadian Medical Association’s 2018 Psychiatry Profile. Green dots indicate the geographic location of programs being utilized to increase rural psychiatric care as identified in a 2018 report by the Newfoundland & Labrador Center for Applied Health Research. (b) Break down of per capita psychiatrist abundance in Ontario by Local Health Integration Network (LHIN). Red indicates lower abundance, blue indicates higher abundance. Data derived from Kurdyak and colleagues.⁵

These services are particularly important given that North American primary care physicians have expressed feeling ill-equipped to manage more complex psychiatric illness, and psychiatrists are not readily available in many rural communities.²⁰ The ECHO program also specifically offers culturally relevant support for healthcare workers in First Nations, Métis, and Inuit communities. Importantly, the bi-directional information flow between hub and spoke locations in the ECHO model helps to ensure that this support remains culturally appropriate for the individual communities involved and that Indigenous perspectives are heard and used to guide care. In addition to facilitating information flow, services such as the ECHO and BASE programs also help to combat the professional isolation that many physicians and healthcare workers experience when working in rural communities.²⁰

The ECHO model, initially developed at the University of New Mexico to improve the treatment of Hepatitis C in rural communities, is now used in Ontario to increase rural access to a variety of medical specialists in addition to psychiatrists.²¹ The effectiveness of this model in improving rural access to specialist care is indicated by the 577 ECHO programs currently being used in over 30 countries worldwide. However, despite the global implementation of this program, little formal research has been done to evaluate the efficacy of hub-and-spoke models in the context of mental health and addictions. The ECHO Ontario Mental Health program, a cross-collaboration between CAMH and the University of Toronto, has been a pioneer in this field. Several recent papers published by this group have quantified the efficacy of the program. The most recent study demonstrated that the program facilitated a significant improvement in the knowledge of mental health and addiction treatment strategies amongst primary care physicians in spoke communities.^{7,20,22,23}

Despite the promise of technology to improve rural access to mental health care, these strategies are met by several challenges. First, technology-based psychiatry programs fail to benefit communities lacking the required technology for effective digital communication. In turn, this type of programming may not be able to close the gap in care between more urban versus more remote communities, or between more wealthy versus more economically disadvantaged communities.³ A second challenge is that rural residents can be resistant to the introduction of novel technology-based psychiatry programs, suggesting that these programs may be an ineffective or inappropriate solution for some communities. For example, a recent study in Manitoba illustrated that many individuals living in rural communities favor more traditional avenues of seeking mental health care, including in-person visits to physicians, rather than the novel telepsychiatry options being offered.²⁴

This issue points to a third challenge: technology-based psychiatry programs are largely ineffective if they are not properly integrated into the target community. Indeed, these programs are most effective when they can be used as a resource within the existing local healthcare framework rather than imposed as an alternative to the existing services.³ This is not altogether surprising given the social, cultural, and economic diversity of rural communities in Canada, which necessitates tailored and community-relevant mental health services and makes generic solutions imposed by external organizations largely ineffective

and often culturally inappropriate, particularly in the context of Indigenous populations.^{3,4} Therefore, while technology-based psychiatry programs show significant promise in improving rural access to mental health care, further investigation is required to understand how these programs can be modified to meet the needs of rural communities.

Community-based Strategies

The need for tailored mental health services in rural Canada has prompted the development of several community-based mental health programs, including Assertive Community Treatment (ACT) programs and Local Health Hubs for Rural and Northern Communities. Both involve the use of an interdisciplinary team of healthcare workers based in the patient's community, which serves to increase the capacity for patient-centred and culturally relevant care.

The ACT model, initially developed in Wisconsin in the 1970s, provides intensive community-based care for individuals diagnosed with severe mental illness.²⁵ At the time of its development, many patients were being discharged from psychiatric hospitals in the US but their reintegration into local communities was not being adequately supported by the available community mental health services.²⁵ ACT programs address this issue by providing 24-hour access to psychiatric treatment, rehabilitation and support services from an integrated team of healthcare workers, including nurses, occupational therapists, psychiatrists, social workers and addictions specialists.²⁶ Fundamental to these programs is a low healthcare worker-to-patient ratio, which facilitates highly individualized care and, in turn, better patient outcome.³

While ACT programs were not specifically designed for rural populations, their patient-centred nature aligns with the need for mental health services tailored to the individual needs of rural communities. A recent study focused on a Nova Scotia-based ACT program and illustrated the effectiveness of ACT in rural Canada. Their program reduced emergency room visits and was associated with high client satisfaction amongst rural patients diagnosed with schizophrenia.²⁷ Community-based programs such as ACT may also be relevant for Indigenous mental health services, as their collaborative and patient-centred approach may facilitate the development of holistic and culturally appropriate services guided by input from the local community. Nonetheless, the implementation of ACT programs in rural communities is limited by the availability of mental health workers to provide interdisciplinary and round-the-clock care.^{3,26} Similarly, while a low staff-to-patient ratio is a key benefit of ACT programs, this may not be feasible in rural communities already burdened by a deficiency of mental healthcare workers.

An alternative solution is "Local Health Hubs for Rural and Northern Communities", a health service delivery model developed by the Ontario Hospital Association (OHA) in 2013. Unlike ACT programs, which were specifically designed for patients with psychiatric illnesses, Local Health Hubs aim to improve access and delivery of the entire healthcare system to rural communities. This is accomplished by creating local "hubs" that integrate most or all healthcare sectors at a single rural hospital or healthcare centre.²⁸ This facilitates better communication between healthcare sectors and allows rural patients visiting the hub to utilize a full complement of healthcare services that were previously more

dispersed and difficult to access. Mental healthcare is an important service integrated into the hub, which facilitates improved screening and treatment of mental illness in rural communities (28). Local Health Hubs also include traditional healing services for First Nations patients, which contributes to the accessibility and culturally relevant care afforded by this model.²⁸

Embedded within the Local Health Hub framework are formal connections with larger healthcare centres, which facilitate rapid referrals, telehealth services for patients, and mental health education and support for rural primary care physicians.²⁸ In addition, these connections allow for technology-based psychiatry programs based in urban centres to be effectively delivered to rural communities, while the team of healthcare workers within the hub ensure that these programs remain relevant to their patient community and integrated into the local healthcare framework. As such, the Local Health Hub model capitalizes on primary care physicians already present in rural communities, facilitates the integration of multiple healthcare sectors, and allows for the effective delivery of telepsychiatry solutions to rural communities. In turn, this model has become a promising new approach for improving the quality and accessibility of mental healthcare for patients in rural Ontario. Nonetheless, while some hospitals have successfully adopted this model, the approach is still in its infancy, and its implementation has been slowed by a number of economic and political factors beyond the scope of this article. A more comprehensive discussion of the Local Health Hubs model can be found in a 2013 report prepared by the OHA.²⁸

These technology- and community-based strategies to improve the accessibility of rural mental health services are only a subset of those being employed across Canada.⁸ In reviewing the strengths and weaknesses of each, it becomes clear that a solution does not lie in a single strategy but in the flexible integration of multiple strategies to meet the needs of individual communities. Community-based models, such as ACT and Local Health Hubs, will remain important as they ensure that mental health services are relevant to the unique complexities of individual rural communities.

There are still many parts of Canada that lack formalized strategies to address the barriers to access that rural residents face when seeking psychiatric care. Given the high suicide rate in rural Canada, particularly in Northern Indigenous communities, the implementation of innovative solutions to improve mental health care in rural communities is of critical importance. Addressing this issue will require an increased presence of rural mental health researchers and practitioners. Unfortunately, many Canadian psychiatry residency programs face yearly vacancies and new psychiatrists tend to practice in urban centres.^{5,6} Moreover, a recent review by Hatcher and colleagues emphasized the lack of quality research addressing effective strategies to reduce the burden of mental illness and suicide in Canadian Indigenous populations, and cited the scarcity of physicians and researchers practicing in rural and remote locations as an important contributor to this issue.²⁹ Therefore, Canada is in need of medical students, residents, psychiatrists and other mental health workers who are willing to work in rural communities, research and implement strategies to improve rural mental health, or ideally, both.

The Role of Medical Students

A 2018 report by the Coalition of Ontario Psychiatrists provided a series of recommendations for addressing the shortage of psychiatrists in Ontario.⁵ Three primary recommendations were put forward: improving psychiatry exposure in medical school, increasing the number of psychiatry residents, and increasing psychiatry wages to increase the financial appeal of the specialty. The report emphasized the importance of pre-clerkship exposure to psychiatry, which has been shown to positively influence recruitment to psychiatry residency programs. This is especially important in rural-based medical training programs, namely the Northern Ontario School of Medicine, where graduates pursuing psychiatry will be more likely to practice in rural communities.⁵ However, exposure to psychiatry and rural medicine is also important within urban medical schools. Indeed, exposure to rural medicine via participation in a Rural Medicine Interest Group was shown to significantly contribute to McMaster medical students' interest in working in rural communities.³⁰ Moreover, even for medical students committed to practicing in urban centres, pre-clerkship exposure to rural psychiatry could spark an interest in working with urban programs that deliver mental health services to rural communities, such as OTN and the ECHO Ontario Mental Health program, which are both based in downtown Toronto.

The recommendations put forward by the Coalition of Ontario Psychiatrists are primarily student-centred strategies that aim to increase the recruitment of new and aspiring physicians to psychiatry. While these strategies are important for increasing the number of practicing psychiatrists long-term, they have been criticized for failing to address the immediate need for psychiatrists in rural communities.³¹ This critique is based on the nine-year incubation period between the start of medical school and the end of a psychiatry residency program and the fact that newly minted psychiatrists tend to not practice rurally.³¹ Moreover, as mentioned above, the inaccessibility of mental health services in rural Canada is not solely an issue of too few psychiatrists, but also requires the implementation of mental health services that fit the unique needs of rural communities. To accomplish this requires ongoing epidemiological and health service research efforts to evaluate rural mental health services to understand how they can be modified to maximize effectiveness. Therefore, efforts aimed at increasing the number of rural psychiatrists should also emphasize the importance of conducting research on rural mental health.

Conclusion

The inaccessibility of mental health services in rural communities is a pressing issue in the Canadian healthcare system and does not have an easy solution. Rural mental health is influenced by social, economic, and cultural nuances that vary with geographic location, which necessitates multifaceted and holistic mental health services that mirror these complexities. While several programs have been developed to address the unique psychiatric needs of rural communities in Canada, there is still much work to be done, particularly within Indigenous and remote communities that have been historically underserved by the Canadian healthcare system. This, indeed, is a daunting task. However, it is also an exciting time for medical students interested in pursuing psychiatry, rural medicine, or both. The vast landscape of psychiatry and mental health services in rural Canada is met by

a vast potential for positive change. In turn, research and practice in rural psychiatry provides an opportunity to make a meaningful difference for both the Canadian healthcare system and Canadians living with mental illness.

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