STATUS REPORT ON RURAL MEDICAL EDUCATION ADVANCEMENTS IN CANADA:

RURAL ROAD MAP FOR ACTION ANALYSIS

February 2022

MERLIN
MEDICAL EDUCATION RESEARCH LAB IN THE NORTH

NOSM
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THE COLLEGE OF FAMILY PHYSICIANS OF CANADA
LE COLLÈGE DES MÉDECINS DE FAMILLE DU CANADA

Advancing the Rural Road Map
The Canadian Collaborative
Faire avancer le Plan d'action sur la médecine rurale
Le collectif canadien

SOCIETY OF Rural Physicians OF CANADA
SOCIÉTÉ DE LA Médecine Rurale DU CANADA

Report Contributors:

Erin Cameron PhD[1,2]

Megan Gao MD, CCFP[3,4]

John Dabous PhD(c)[1,2]

Carmela Bosco[5]

Brenton L. G. Button PhD[1,2]

Ghislaine Attema MA[1,2]

Ivy Oandasan, MD CCFP MHSc FCFP[4]

1. Northern Ontario School of Medicine (NOSM), Thunder Bay, Ontario, Canada
2. Medical Education Research Lab in the North (MERLIN), Ontario, Canada
3. University of Toronto, Toronto, Ontario, Canada
4. College of Family Physicians of Canada, Mississauga, Ontario, Canada
5. Rural Road Map Secretariat, College of Family Physicians of Canada and Society of Rural Physicians of Canada, Toronto, Ontario, Canada

Acknowledgements:

The authors would like to acknowledge the financial support from the College of Family Physicians of Canada (CFPC) and providing their guidance as well in the development and execution of the survey to postgraduate deans and postgraduate family medicine directors across Canadian medical schools. Further, the authors acknowledge the CFPC, Society of Rural Physicians of Canada (SRPC), and the Rural Road Map Implementation Committee (RRMIC) for their support and advice in research findings.

Report Reference:

Cameron, E., Button, B., Gao, M., Attema-Pilot, G., Dabous, J., Oandasan, I., Bosco, C. (February 2022). Status Report on Rural Medical Education Advancements in Canada: Rural Road Map for Action Analysis.

Contents

1 Executive Summary (English)

The lack of access to timely and essential health care services in rural and remote areas has been declared a significant global health threat and is driving reform in education and practice around the world. Critical to this reform is the growing commitment towards social accountability and equity that further align educational accreditation standards with workforce needs. As a global leader in social accountability, Canada has an important role to play in advancing educational standards, policies, and practices that can support the rights of all Canadians to access quality, timely, and culturally safe health care. This report focuses on promising and emerging practices within rural medical education that can serve as benchmarks to assess progress and gaps in the field.

This report provides a high-level evaluation of the directions and actions in the *Rural Road Map (RRM) for Action*, and provides a guiding framework for ongoing and continuous evaluation of rural medical education in Canada. It documents trends in, challenges of, and opportunities, to strengthen rural undergraduate and family medicine postgraduate medical education programs in Canada. The report identifies six high level recommendations that span both Undergraduate Medical Education and Family Medicine Postgraduate Programs. Specifically, the need to:

- Support the development of a standardized approach to defining rural within different settings (i.e., rural community, rural teaching site, rural admissions);
- Support rural leadership sustainability and decision-making opportunities and incentives across the many units and departments within medical schools;
- Support stronger integration and alignment between rural competencies in UGME and PGME program curriculum and structures;
- Support regional and community-based approaches to faculty development and enhanced rural skills training;
- Provide cultural safety training at all levels of medical education and in so doing address the recommendations of the Truth and Reconciliation Calls to Action;
- Support ongoing evaluations of the rural road map directions and actions;

The need to act quickly to avoid irreversible and negative health outcomes to the many Canadians living in rural and remote Canada supports a call for rapid and extensive institutional responses at national, regional, and local levels.

1 Résumé (français)

Le manque d'accès en temps opportun à des services de santé essentiels dans les régions rurales et nordiques est une menace mondiale pour la santé et commande la réforme de la formation et de l'exercice partout dans le monde. L'engagement grandissant envers la responsabilité sociale et l'équité qui aligne davantage les normes d'agrément sur les besoins en matière de main-d'œuvre est un élément vital de cette réforme. En tant que chef de file mondial de la responsabilité sociale, le Canada joue un rôle important dans l'avancement des normes éducationnelles, des politiques et des pratiques qui appuient les droits de toute la population canadienne à l'accès à des soins de santé de qualité, opportuns et respectueux de la culture. Ce rapport met en évidence des pratiques prometteuses et en émergence en formation médicale en milieu rural qui peuvent constituer des points de repère pour évaluer les progrès et les lacunes dans le domaine.

Ce rapport évalue en profondeur les orientations et actions figurant dans le *Plan d'action pour la médecine rurale* et offre un cadre d'évaluation régulière et continue de la formation médicale en milieu rural au Canada. Il documente les tendances, les défis et les possibilités de renforcement des programmes de formation médicale de premier cycle en médecine rurale et de formation postdoctorale en médecine familiale au Canada. Il contient six recommandations de grande envergure touchant les programmes de premier cycle et les programmes postdoctoraux en médecine familiale, en particulier, la nécessité de :

- Soutenir la conception d'une approche normalisée de la définition du mot « rural » dans différents contextes (c.-à-d., communauté rurale, site rural d'enseignement, admissions rurales);
- Appuyer le leadership rural durable et les possibilités de prise de décisions ainsi que l es incitatifs dans les nombreux départements et unités des écoles de médecine;
- Appuyer une meilleure intégration et un meilleur alignement des compétences pour exercer en milieu rural dans les programmes d'études et structures de la FMPC et de la FMPD;
- Appuyer des approches régionales et communautaires du perfectionnement du corps professoral et de la formation en compétences avancées pour exercer en milieu rural;
- Fournir une formation en respect de la culture à tous les niveaux de la formation médicale tout en tenant compte des recommandations contenues dans les appels à l'action de la Commission de vérité et de réconciliation;
- Appuyer les évaluations régulières des orientations et actions de la feuille de route rurale.

La nécessité d'agir rapidement pour éviter des conséquences négatives irréversibles sur la santé de nombreux Canadiens et Canadiennes des régions rurales et éloignées du pays justifie la demande de réponses rapides et étendues des institutions nationales, régionales et locales.

2 Introduction

Nearly half the world's population live in rural or remote areas.[1] Despite this, those living in rural or remote regions experience a higher burden of disease, higher mortality rates[2] and are generally older, poorer, and less educated, all of which are commonly related to poor health. Attributed to many factors (i.e., socioeconomic deprivation, geographical barriers, distance, lack of transport, lack of telecommunications), a lack of essential health care services in rural and remote areas continues to be a pervasive global challenge that adversely affects health outcomes. In response, governments and policy makers are working to improve the deficiency in numbers and mix of trained and motivated health workers available to provide timely health service coverage in rural and remote areas.

In Canada, approximately 20% of Canadians live in rural and remote regions, but fewer than 10% of family physicians and 3% of specialists practice in rural and remote communities.[3] The unique make-up of rural Canada exacerbates this problem as large geographic distances can separate rural communities. In fact, at latitudes above 70° north, the median distance to the nearest physician is approximately 839 km.[4] With the population of rural Canada staying relatively stable, it is critical to address the challenges of attracting, recruiting and retaining physicians in rural and remote Canada.

With calls for action, The College of Family Physicians of Canada (CFPC) and the Society of Rural Physicians of Canada (SRPC) formed the Advancing Rural Family Medicine: Canadian Collaborative Taskforce in 2014. The goal of the Taskforce was to "improve the health of rural Canadians by producing and sustaining an increased number of family physicians practicing comprehensive rural generalist medicine".[5] Through expert knowledge, literature reviews, and environmental scans, a framework to improve access to care for rural communities was created. This framework, *The Rural Road Map for Action*, consists of 4 directions and 20 actions. A core part of the framework, and the focus of Direction 1 (particularly actions 1-5 and 7 and 8), is the need to advance medical education to better respond to the needs of rural and Indigenous communities. Since the publication of this framework, COVID-19 has put rural communities in crisis and further exasperated the inequitable distribution of healthcare services. Now more than ever medical schools must be held accountable to take up these actions and to collectively work to address the inequities felt in rural contexts.

The purpose of this report is to highlight strengths and gaps in the implementation of rural medical education in Canada, to assess progress that has been made in promoting and retaining physicians in rural settings since the release of the Rural Road Map. It serves as important data for the continued evaluation of the efforts to advance rural medical education in Canada to support equitable access to care.

3 Methods

3.1 Research Design

The Rural Road Map Implementation Committee (RRMIC) conducted a survey to evaluate the status of rural medical education in Canada. The survey was designed specifically to evaluate the status of Direction 1 and 2 and Actions 1-4, 7, and 8 (see table 1). Ethics was not sought by RRMIC

[1] https://www.who.int/publications/i/item/9789240024229

[2] https://secure.cihi.ca/free_products/rural_canadians_2006_report_e.pdf

[3] https://www.hhr-rhs.ca/index.php?option=com_mtree&task=viewlink&link_id=6185&Itemid=109&lang=en

[4] https://www150.statcan.gc.ca/n1/en/pub/82-003-x/1996004/article/3022-eng.pdf?st=9-zM0rI3

[5] https://srpc.ca/Rural_Road_Map_Directions

as the work was considered to be a post-implementation evaluation of RRMIC. Two surveys were designed in Qualtrics, one for undergraduate medical education programs and one for postgraduate family medicine medical education programs. Both surveys included open ended and closed ended survey questions and were designed to capture information on admissions criteria for rural and Indigenous students, clinical and educational learning experiences in rural settings, characteristics of rural or remote educational offerings, and leadership opportunities and training for rural physicians within schools. Once data had been collected, the RRMIC collaborated with the Medical Education Research Lab in the North (MERLIN)[6] at the Northern Ontario School of Medicine (NOSM) who led the data analysis and knowledge mobilization phases of the study.

Table 1. Actions 1-4, 7 and 8 from the Rural Road Map for Action

Direction 1: Reinforce the social accountability mandate of medical schools and residency programs to address health care needs of rural and Indigenous communities.

Action 1: Develop and include criteria that reflect affinity and suitability for rural practice in admission processes for medical school and family medicine residency programs.

Action 2: Establish and strengthen specific policies and programs to enable successful recruitment of Indigenous and rural students to medical school and family medicine residency training, with established targets and measures of effectiveness.

Action 3: Support extended competency-based generalist training in rural communities to prepare medical students and residents to be capable of and confident in providing broad-based generalist care in these settings.

Action 4: Provide high-quality rural clinical and educational experiences to all medical students and family medicine residents that support experiential learning, enabling medical learners to feel comfortable with uncertainty and gain clinical courage.

Direction 2: Implement policy interventions that align medical education with workforce planning.

Action 7: Establish government and university partnerships with rural physicians, rural communities, and regional health authorities that include formal agreements to strengthen the delivery of medical education in rural communities by developing and implementing specific visible rural generalist education pathways led by rural academics and rural physicians. Provide substantial ongoing funding required to support rural faculty engagement, faculty development, research, administration and community engagement.

Action 8: Establish programs with targeted funding from federal, provincial, and territorial governments to enable rural family physicians and other specialists, predominantly those already in practice, to obtain additional or enhanced skills training to improve access to health care services in rural communities.

[6] https://www.nosm.ca/research/centre-for-social-accountability/merlin/

3.2 Survey Recruitment & Response

The RRMIC distributed letters of information and survey links through email to all 17 undergraduate and 17 postgraduate family medicine Deans in Canada. Data responses were gathered over a two-month period from October-November 2020. Two reminders were sent to encourage participation.

3. 3 Quantitative Analysis

All data analyses were performed in SPSS 24 (IBM Corp. Armonk, NY, USA). Descriptive statistics, including frequencies and percentages, were calculated for appropriate questions. Questions that used a 5-pt scale (only found on the postgraduate survey) gauging perceived preparedness for certain competencies were dichotomized as prepared, which included very well prepared, well prepared, and adequately prepared and not prepared, which included somewhat prepared and unprepared. The decision to group responses was based on the recommendations of the RRMIC. Frequencies were also calculated for yes and no response questions.

3.4 Qualitative Analysis

A basic content analysis was performed on all qualitative responses from the surveys. Teams of two researchers were assigned to each of the UGME and PGME data sets. After independently first reading the data to familiarize themselves with the data, the researchers then coded the data deductively based on the specific categories identified within Direction 1 and 2 and Actions 1-4, 7, and 8. The researchers met to discuss their analytic progress and address any discrepancies in their coding. Once coding was completed and codes were put into the relevant categories by the UGME and PGME data researchers, the two research teams met with the lead researcher to look across all the data and to ensure trustworthiness in the analytic process and the resulting themes.

3.5 Limitations of the Study

Not all schools responded to the survey, and the survey was filled out by the participants who may or may not know all the specifics of the program. Currently, comparisons are difficult to draw as no baselines exist in the literature.

4 General Findings

Presented below are the key findings from across both the surveys. They represent the most salient and general findings from the surveys. Detailed findings from each survey are presented separately in Section 5 (UGME), Section 6 (PGME-FM), and Section 7 (Discussion & Recommendations).

1. Aligning Rural Definitions: Like other studies, this study found that there is no consistent definition of "rural" being used across medical institutions in Canada and across undergraduate and postgraduate family medicine medical education training programs. There is a need to standardize terms in order to be able to compare progress in rural medical education in Canada.

2. Advancing Equity and Diversity: Most participating undergraduate medical education programs identified specific policies addressing equity and diversity, but within the postgraduate family medicine programs in Canada, only three programs identified specific equity and diversity policies. There was some evidence in this study of programs offering specific seat allocations to Indigenous students and rural students, but there are calls for more. There is a need for equity and diversity policies to span across institutions and be a "whole medical school" approach.

3. Increasing Rural Experiences: The study identified that a low percentage of students are spending significant time in rural communities. While Longitudinal Integrated Clerkships (LIC) are a positive way to provide students with rural exposure and can serve as a proxy for rural exposure only half the programs surveyed offer LICs.

Furthermore, only about 25% of residents in first and second year spend the majority of their clinical training in rural or remote communities, even though residents in rural streams are similarly or better prepared when compared to all residents. There are calls to create more high-quality rural clinical and educational experiences across UGME and PGME.

4. Enhancing Cultural Competency: In the undergraduate medical education survey there was not enough data to make conclusions about how prepared students are to address Indigenous health, but at in the postgraduate survey respondents identified that they felt only 61.5% of residents were adequately prepared to address Indigenous health issues. This significantly falls short of the TRC calls for action and needs to be addressed immediately.

5. Supporting Rural Leaders: Across both surveys it was clear that there was value and importance given to having rural clinical leaders integrated in decision-making committees and programs.

6. Focusing Faculty Development: It was identified that all participating schools offer and value rurally focused faculty development, but there was limited data on any enhanced rural skills training.

5 Undergraduate Medical Education (UGME) Findings

In total, twelve participants completed the UGME survey from a total of seventeen who were asked to participate. The results from the Undergraduate Medical Education (UGME) Survey are broken up into each of the findings that correspond with specific actions from the RRM.

Action 1: ***Develop and include criteria that reflect affinity and suitability for rural practice in admission processes for medical school and family medicine residency programs.***

At the undergraduate level, 10/12 schools identified having a unique definition of "rural" and 2/12 schools claimed to have no definition. Of those schools that did have a definition, there was no consistent definition of "rural" with definitions ranging from population numbers (i.e., <1000, <4000, <50 000) or 50 km from a university centre.

Action 2: ***Establish and strengthen specific policies and programs to enable successful recruitment of Indigenous and rural students to medical school and family medicine residency training, with established targets and measures of effectiveness.***

All schools who participated in the study identified that they have admission policies addressing equity and diversity. Of the twelve schools, seven schools identified unique rural admission processes, such as reserved seats for rural students and a specialized application for rural students. Ten of the twelve schools identified unique Indigenous admission processes. Six schools identified that they have reserved seats for Indigenous applicants, some suggested they try to achieve a certain percentage of Indigenous students every year through their admissions process, and lastly one school suggested they have a unique assessment process.

Action 3: ***Support extended competency-based generalist training in rural communities to prepare medical students and residents to be capable of and confident in providing broad-based generalist care in these settings.***

The survey focused on Longitudinal Integrated Clerkships (LICs) given the strong evidence of their promising role in rural generalist training. Of the schools that participated in the study, only 6/12 offered LICs. Of those six that offered LICs, 4 schools offered between 42-48 weeks and 2 schools offered 18 weeks. The percentage of students that participated in the LICs at the 6 schools' ranged between 0-30%. Importantly, it was noted by the participating schools that the largest barrier affecting medical school's ability to provide LICs and other learning experiences in rural settings include capacity/recruitment/placement availability, housing, and financial constraints.

Action 4: ***Provide high-quality rural clinical and educational experiences to all medical students and family medicine residents that support experiential learning, enabling medical learners to feel comfortable with uncertainty and to gain clinical courage.***

As stated above, the survey focused on LICs given the strong evidence of their promising role in rural generalist training. Of the six schools with LICs, four directly linked the growing student interest and positive rural practice outcomes with the high-quality experiential learning opportunities offered by the LICs. One respondent stated, *"We anticipate adding more sites, and student feedback has been very positive."* The other notable rural educational experiences mentioned in the survey included community learning opportunities and outreach opportunities.

Action 5: ***Educate medical students and residents about the health and social issues facing Indigenous peoples, and ensure they attain competencies to provide culturally safe care.***

There was not enough data concerning action 5 to draw strong conclusions.

Action 7: ***Establish government and university partnerships with rural physicians, rural communities, and regional health authorities that include formal agreements to strengthen the delivery of medical education in rural communities by developing and implementing specific visible rural generalist education pathways led by rural academics and rural physicians. Provide substantial ongoing funding required to support rural faculty engagement, faculty development, research, administration and community engagement.***

A common strategy for supporting rural programs identified in the survey was the implementation of funded rural leadership positions. Ten out of twelve schools identified specific leadership positions dedicated to rural programs. For example, four schools identified having Assistant or Associate Deans for their Rural or Distributed Medical Education programs, and two of those four schools had Regional Deans in their distributed sites. Six schools identified having Directors overseeing rural programs, and two of those six schools had Regional Directors. Three schools indicated they had a site lead in each community. Notably, only two schools clearly stated their leadership positions are held by rural physicians.

Of the twelve schools that participated in the survey, three claimed *most* or *all* decision-making educational committees have rural physicians on them, five schools indicated that *some* rural physicians sit on decision-making educational committees, and four indicated that *none* or *very few* of their rural physicians sit on such committees. Participants in the survey indicated that three

undergraduate level programs have rural physicians who sit on program leadership committees, curriculum committees, admissions committees, electives committees, and clerkship committees. One school also mentioned that inviting rural physicians to faculty retreats was important.

In terms of funding, schools that participated in the survey indicated that they provided rural clinical teachers incentives in the form of stipends, faculty development, and awards. Specifically, 10/12 offer stipends, 10/12 offer continuing professional development incentives, and 8/12 offer awards. Other incentives included: school resources, bursaries, library access, academic promotion, faculty appointment, supervision opportunities. However, only two schools offer a salary increase to rural clinical teachers.

Action 8: ***Establish programs with targeted funding from federal, provincial, and territorial governments to enable rural family physicians and other specialists, predominantly those already in practice, to obtain additional or enhanced skills training in order to improve access to health care services in rural communities.***

All schools who participated in the survey identified a mix of in-person and online faculty development specifically to rural clinical teachers. Of the twelve schools that participated, ten identified professional development as an incentive to rural clinical teachers. Five schools offered specific regional training for rural clinical teachers, highlighting the benefits of a regional and a community-based practice approach. Five schools indicated having a centralized CPD office available to all faculty.

6 Postgraduate Family Medicine Program (PGME-FM) Findings

In total, 13 participants completed the survey out of the seventeen who were invited to participate. The results are broken up into seven separate sections to correspond with specific actions from the PGME-FM RRM.

Action 1: ***Develop and include criteria that reflect affinity and suitability for rural practice in admission processes for medical school and family medicine residency programs.***

Of the postgraduate family medicine programs that participated in the survey, only 5 out of 13 programs (38%) identified that they have definitions of rural. Notably, there was no consistent definition of "rural" across schools or between undergraduate and postgraduate programs within the same medical schools, with definitions ranging from less than 30,000 or a site at least 50 km away from the resident's home site.

Action 2: ***Establish and strengthen specific policies and programs to enable successful recruitment of Indigenous and rural students to medical school and family medicine residency training, with established targets and measures of effectiveness.***

Of the postgraduate family medicine programs that participated in the survey, only 3 out of 13 (23%) had policies for equity and diversity, from those three, only one school indicated that applicants' Indigenous background was considered in the admissions process. The consideration was that if an Indigenous applicant identified as Indigenous then an Indigenous interviewer was included in the panel. The two other programs took rural backgrounds into consideration.

Action 3: ***Support extended competency-based generalist training in rural communities to prepare medical students and residents to be capable of and confident in providing broad-based generalist care in these settings.***

In total 9 of the 13 schools (69%) identified that they use the College of Family Physicians of Canada (CFPC)'s priority topics for rural and remote medicine. In all instances, rural-specific stream residents were equally or more likely to be adequately prepared than all residents for rural practice.

Action 4: ***Provide high-quality rural clinical and educational experiences to all medical students and family medicine residents that support experiential learning, enabling medical learners to feel comfortable with uncertainty and gain clinical courage.***

It was identified in the survey that approximately 25% of R1's and R2's spend most of their clinical learning time in rural or remote communities. All rural stream students were rated as adequately prepared for clinical courage and were better prepared to adopt rural life.

Action 5: ***Educate medical students and residents about the health and social issues facing Indigenous peoples, and ensure they attain competencies to provide culturally safe care.***

Almost 85% of schools reported that all residents are adequately prepared in cultural safety, but that number dropped to only 61.5% when asked about Indigenous health issues. Some schools felt a sense of pride in their Indigenous health initiatives. One school said, *"We have also taken good steps towards developing meaningful and culturally appropriate Indigenous health content, which will launch over the coming year."*

Action 7: ***Establish government and university partnerships with rural physicians, rural communities, and regional health authorities that include formal agreements to strengthen the delivery of medical education in rural communities by developing and implementing specific visible rural generalist education pathways led by rural academics and rural physicians. Provide substantial ongoing funding required to support rural faculty engagement, faculty development, research, administration and community engagement.***

Of the postgraduate family medicine programs that participated in the survey, respondents indicated that there are funded positions dedicated to rural leadership, which suggests that resources are being allocated in many schools. Programs indicated that *most* or *all* of their decision-making educational committees require representation from rural physicians. Importantly, 9 schools responded that R3-designated funding was available from a provincial or ministry of health and three schools responded that special funding from the ministry of health specific for rural practice preparation was accessible.

Action 8: ***Establish programs with targeted funding from federal, provincial, and territorial governments to enable rural family physicians and other specialists, predominantly those already in practice, to obtain additional or enhanced skills training in order to improve access to health care services in rural communities.***

Most postgraduate programs indicate some rural focused professional development is offered to rural physicians. However, only six out of thirteen schools (46%) identified specific learning opportunities to help practicing physicians feel more prepared to work in rural or remote communities.

7 Discussion & Recommendations

Rural Canadians face daily health inequities—worse health outcomes and reduced life expectancies compared to urban dwellers. Access to quality and timely health and social care is a growing concern for governments, health leaders, and health professional programs alike. ***In a post COVID-19 era with a human health workforce crisis worsening in Northern and Rural Canada, there is a critical need to advance upstream education that will help to recruit and retain professionals for rural practice.*** Based on the results of the survey and informed by relevant literature (see references), we put forth the following recommendations that build upon the directions and actions identified in the Rural Road Map (i.e., Directions 1 & 2, Actions 1-4, 7-8). These recommendations build upon the need to reinforce the social accountability mandate of medical schools and family medicine residency programs and the need to align medical education with workforce planning.

Finding 1: Aligning Rural Definitions

Although rural areas are heterogeneous, without an agreed-upon definition of rural, it will arguably limit the generalizability and comparability of future work to advance collaborations and evaluations around whether progress has been made in promoting and retaining physicians in rural settings. Future research and engagement with all 17 medical schools is necessary to work towards a glossary of defined terms that support the advancement of rural medical education in Canada.

1. Recommendation: Establish a standardized approach to defining rural within different settings (i.e., rural community, rural teaching site, rural admissions).

Finding 2: Advancing Equity and Diversity

Most of the participating undergraduate programs had specific policies addressing equity and diversity, whereas only three of the postgraduate family medicine programs had policies specific to equity and diversity. There is a need to better link equity and diversity strategies across educational programs within medical schools to support the strengthening of the successful recruitment and retention of Indigenous and rural students and residents.

In terms of seat allocations for Indigenous learners, while half of the undergraduate programs had specific seat allocations and other assessment protocols for Indigenous students, only one family medicine program considered Indigenous background in their admission process. To address the Truth and Reconciliation Call to Action #23 calling for more Indigenous health care workers, there is an urgent need to work with governments, who have committed new funding, and the National Consortium of Indigenous Medical Education to advance efforts around the recruitment, retention, and graduation of Indigenous medical students. With that, future research will need to track the impact of these efforts, once they are made, and measure progress in this critical area.

In terms of seat allocations for students with rural origins, only two undergraduate programs allocated specific seats for rural students and two postgraduate family medicine programs took rural backgrounds into consideration. With research consistently supporting rural upbringing as a predictor of rural medical practice, it is paramount that medical school's formally addresses this gap with direct seat allocations and other admissions criteria for rural applicants.

2. Recommendation: Identify mechanisms for ongoing evaluations of the rural road map directions and actions, particularly with regards to equity and diversity policies and admissions of Indigenous students and rural students.

Finding 3: Increasing Rural Experiences

Previous research has demonstrated that rural immersion is an excellent way to learn medicine. The results of this study reaffirmed that there is no perceived academic disadvantage of training rurally in a postgraduate family medicine program. In all instances, participants in the survey identified that rural-specific stream students were equally or more likely to be adequately prepared than non-rurally trained students to practice rurally.

However, a concerning trend across the responses in the undergraduate and postgraduate family medicine programs surveys was identified as the overall lack of rural experiential learning opportunities for students. Only 50% of responding undergraduate programs identified that they offer a LIC in rural communities. In the PGME survey, approximately 25% of R1's and R2's spend the majority of their clinical training in rural or remote communities, even though residents in rural-streams are similarly or better prepared for rural practice when compared to all residents. Given what we know about the benefits of rural and remote experiences at all levels of medical training, increasing the number of and time within communities, will provide quality educational experiences and will contribute to a larger long term solution for rural healthcare shortages. In the postgraduate family medicine survey, respondents identified that the lack of preceptors and funding were the largest barriers to including more high quality rural clinical and education opportunities. Given the workforce challenges already in rural settings, broad system level discussions are needed to discuss innovative strategies that extend across UGME and PGME that can establish novel training pathways and can support curriculum and structure decisions. Rural communities are important settings for the teaching of generalism, an accreditation standard of the Committee on Accreditation of Canadian Medical Schools (CACMS).

3. Recommendation: Create stronger integration and alignment of and learning opportunities to support the teaching of rural generalist competencies across UGME and PGME program curricula.

Finding 4: Enhancing Cultural Competency

At the undergraduate level, there was not enough data to conduct a meaningful analysis on this finding. However, in the postgraduate family medicine survey respondents identified that only 61.5% of residents were adequately prepared in the area of Indigenous health. Clearly, more work needs to be done to understand how to enhance training in the area of Indigenous health while also ensuring that residents develop the competencies to deliver culturally safe care.

4. Recommendation: Provide cultural safety training at all levels of medical education and in so doing address the recommendations of the Truth and Reconciliation Calls to Action.

Finding 5: Supporting Rural Leaders

At the undergraduate level, most undergraduate programs who participated in this survey identified specific rural leadership positions, and some had multiple leadership positions within their institutions. Only two schools clearly stated the leadership positions were held by rural physicians. At the postgraduate level, most schools have dedicated rural PG Directors and/or site leads, half of which have these positions filled by rural physicians. As well, most schools require rural physician representation on their decision-making educational committees. Overall, the findings from this study indicated that the participating schools at the undergraduate level value rural leaders.

5. Recommendation: Support rural leadership sustainability by establishing decision-making opportunities and incentives across the many units and departments within medical schools.

Finding 6: Focusing Faculty Development

Most schools (10/12) at the undergraduate level offer professional development as an incentive to rural clinical teachers. At the postgraduate level, most schools offer rural focused professional development for rural physicians, although fewer (6/13) offer rural learning opportunities for non-rural practicing physicians. As well, only 5 schools at the undergraduate level have regional specific training for rural clinical teachers. In general, there is limited information on enhanced skills training.

6. Recommendation: Establish regional and community-based approaches to faculty development and enhanced rural skills training.

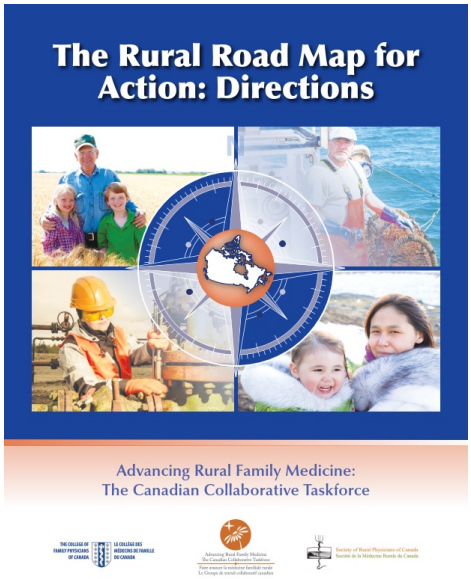
8 Next Steps

This report reflects the first comprehensive analysis of RRM Actions focused on medical education. Its purpose was to serve as a baseline for the RRM Actions, and to identify advances and or opportunities to help advance key directions and actions identified in the *Rural Road Map for Action*. Given the support from the SRPC and the CFPC and the leadership at NOSM, it is expected that this work will be able to provide a platform and environment to support and inform the implementation of change going forward.

At its core this report represents a starting point for future conversations and academic inquiry. While the survey itself offers an opportunity to be repeated in future, there are opportunities to build upon the research methodology and methods in future. For future consideration, the SRPC is well positioned to carry this work forward as part of rural education reform in order to support effective rural physician workforce planning. With the CFPC's role as the accrediting body for Postgraduate Family medicine residency training, these findings provide valuable information that helps to identify where improvements can be made and how the CFPC can work with residency programs to influence change. Given that many of the educators are both CFPC and SRPC members, collaborative opportunities to support teachers could facilitate ongoing implementation of the report recommendations. Rural training by family physicians enables the teaching of generalism which is a key standard expected by Committee on Accreditation of Canadian Medical Schools (CACMS) and offers the role modelling to support career planning for learners who see the value of working in rural and remote communities. The goal is to maximize physician recruitment into rural and remote communities in order to improve access to care close to home. Ongoing implementation and evaluation of the educational RRM actions can optimize the role medical education has in supporting the establishment of a strong home grown rural physician workforce in Canada.

To all current and future rural physicians, policy makers, educators, staff, and community members, we want to conclude by thanking you for all the work you have done and continue to do to advance rural medical education.

Thank you. Merci. Miigwetch.



A Review of Rural Medical Education in Canada

Megan Gao, MD, CCFP[1]; Brenton Button, MSc[2]; Ghislaine Attema, MA[2]; John Dabous, MSc[2]; Carmela Bosco[3], Ivy Oandasan, MD, MHSc, CCFP, FCFP[1,3], Erin Cameron, PhD[2]

[1] Department of Family and Community Medicine, University of Toronto, [2] Northern Ontario School of Medicine, [3] College of Family Physicians of Canada

Objective

1. Understand the current state of Canadian rural medical education at both the undergraduate and postgraduate levels
2. Identify strengths and gaps in rural medical education in Canada
3. Propose recommendations to inform future rural medical education

Background

- Taskforce in 2014 created The Rural Road Map (RRM) for Action to improve physician recruitment and retention.
- Several actions provide guidance on social accountability mandates of medical programs, and ensure medical education aligns with workforce planning
- An environmental scan was completed by the CFPC in 2015 to explore the status of rural education, however there is a need to re-examine the current trends in rural medical education in Canada

- Grey literature search and web/database analysis on rural medical education trends was conducted
- One online survey was distributed to 17 undergraduate medical education (UGME) deans. Another online survey was distributed to 17 postgraduate family medicine program (PGME FM) directors,
- RRM Medical Education Actions 1-5, 7, 8 were explored in both surveys

Results General Findings

1. Aligning Rural Definitions: Like other studies, this study found that there is no consistent definition of "rural" being used across medical institutions in Canada and across undergraduate and postgraduate family medicine medical education training programs. There is a need to standardize terms in order to be able to compare progress in rural medical education in Canada.
2. Advancing Equity and Diversity: Most participating undergraduate medical education programs identified specific policies addressing equity and diversity, but within the postgraduate family medicine programs in Canada only three programs identified specific equity and diversity policies. There was some evidence in this study of programs offering specific seat allocations to Indigenous students and rural students, but there are calls for more. There is a need for equity and diversity policies to span across institutions and be a "whole medical school" approach.
3. Increasing Rural Exposure: The study identified that a low percentage of students are spending significant time in rural communities. While LICs are a positive way to provide students with rural exposure and can serve as a proxy for rural exposure only half the programs surveyed offer LICs. Furthermore, only about 25% of residents in first and second year spend the majority of their clinical training in rural or remote communities, even though residents in rural streams are similarly or better prepared when compared to all residents. There are calls to create more high-quality rural clinical and educational experiences across UGME and PGME.
4. Enhancing Cultural Competency: In the undergraduate medical education survey there was not enough data to make conclusions about how prepared students are to address Indigenous health, but at in the postgraduate survey respondents identified that they felt only 61.5% of residents were adequately prepared to address Indigenous health issues. This significantly falls short of the TRC calls for action and needs to be addressed.
5. Supporting Rural Leaders: Across both surveys it was clear that there was value and importance given to having rural clinical leaders integrated in decision-making committees and programs.
6. Focusing Faculty Development: It was identified that all participating schools offer and value rurally focused faculty development but there was limited data on any enhanced rural skills training.

Conclusion/Future Directions

This study shows the extent to which Canadian undergraduate medical education and postgraduate Family Medicine Residency Training have incorporated rural admission policies, rural training, rural teachers, rural representation on committees and rural leadership roles.

The findings provide a baseline for comparison to use in the future.

Acknowledgement

Special thanks to the members of the Rural Road Map Implementation Committee (RRMIC) for providing feedback for this study and for their tireless dedication.