Review Article

Pan-Canadian licensure: Potential impact on the rural physician workforce

Bosco Carmela, BA[1,2,5], Sweatman Louise, BScN, MSc, LLB[4,5,6], Sue Kyle, MD, MHM, BSc, GCPain, CCFP(PC)[7,8,9]

[1]Former Lead, Rural Road Map Project, Society of Rural Physicians of Canada, [2]Consultant, Canadian Medical Association, [3]Political Science, York University, [4]Sweatman Consulting, [5]University of Toronto, [6]Osgoode Hall, York University, [7]Clinical Assistant Professor in Pediatrics, University of Alberta, [8]Clinical Assistant Professor in Family Medicine, Memorial University of Newfoundland, [9]Assistant Professor, School of Rehabilitation Science, McMaster University, ON, Canada

Correspondence to: Bosco Carmela, bosco@look.ca

This article has been peer reviewed.

Access this article online

Quick Response Code:

Website: https://journals.lww.com/cjrm

DOI: 10.4103/cjrm.cjrm_19_23

Abstract

Proposals to establish pan-Canadian licensure for physicians have broad support amongst medical groups to address physician shortages in underserved rural communities. The concept has also elicited concern from some stakeholders that its implementation could exacerbate rural physician workforce shortages by prompting an exodus of rural physicians to urban centres. An environmental scan of reports from key medical groups published within the past 10 years was conducted to determine factors influencing rural physician practice patterns. Data from membership surveys of the Society of Rural Physicians of Canada and the Canadian Medical Association – conducted in fall 2022 – were reviewed to determine whether licensure is a factor in rural physicians' decisions to leave or stay in practice in rural Canada. Factors contributing to physicians' decisions to leave rural practice identified in the environmental scan included lack of infrastructure support, inability to find locum coverage, inadequate support for team-based care and effects of high workloads on wellness. A common theme found in responses to the membership surveys was the recognition of licensing restrictions as barriers preventing rural physicians from practising in multiple provinces or territories. Survey respondents also voiced strong support for national licensure implementation. Pan-Canadian licensure holds promise as a strategy to enhance the recruitment and retention of physicians in rural communities. It could also provide physicians flexibility to work in multiple jurisdictions to address the health workforce needs of underserved communities.

Keywords: Health human resources, licensure, national licensure, national registration, pan-Canadian licensure, physician shortages, physician workforce

Résumé

Les propositions visant à établir un permis d'exercice pancanadien pour les médecins bénéficient d'un large soutien de la part des groupes médicaux afin de remédier aux pénuries de médecins dans les communautés rurales mal desservies. Ce concept a également suscité des inquiétudes de la part de certaines parties prenantes qui craignent que sa mise en œuvre n'aggrave les pénuries de médecins en milieu rural en provoquant l'exode de ces derniers vers les centres urbains. Une analyse environnementale des rapports des principaux groupes médicaux publiés au cours

Received: 04-04-2023 **Revised:** 10-07-2023 **Accepted:** 10-10-2023 **Published:** 20-02-2024

How to cite this article: Bosco C, Sweatman L, Sue K. Pan-Canadian licensure: Potential impact on the rural physician workforce. Can J Rural Med 2024;29:13-9.

des dix dernières années a été effectuée pour déterminer les facteurs influençant les modes de pratique des médecins ruraux. Les données des enquêtes sur les membres de la Société de la médecine rurale du Canada et de l'Association médicale canadienne-menées à l'automne 2022-ont été examinées pour déterminer si le permis d'exercice est un facteur dans la décision des médecins ruraux de quitter ou de rester en pratique dans les régions rurales du Canada. Les facteurs contribuant à la décision des médecins de quitter la pratique rurale, identifiés dans l'analyse de l'environnement, comprenaient le manque de soutien en matière d'infrastructure, l'incapacité à trouver une couverture de suppléance, le soutien inadéquat des soins en équipe et les effets des charges de travail élevées sur le bien-être. Un thème commun ressorti des réponses aux enquêtes menées auprès des membres est la reconnaissance des restrictions en matière de permis d'exercice en tant qu'obstacles empêchant les médecins ruraux d'exercer dans plusieurs provinces ou territoires. Les répondants à l'enquête ont également exprimé leur soutien à la mise en place d'un système national de permis d'exercice. Le permis d'exercice pancanadien est une stratégie prometteuse pour améliorer le recrutement et la fidélisation des médecins dans les communautés rurales. Il pourrait également permettre aux médecins de travailler dans plusieurs administrations afin de répondre aux besoins en personnel de santé des communautés mal desservies.

Mots-clés: Ressources humaines en santé, autorisation d'exercice, autorisation d'exercer nationale, permis d'exercer pancanadienne, enregistrement national, pénurie de médecins, effectifs de médecins

INTRODUCTION

Canada's publicly funded healthcare system is intended to provide medically necessary health services, as covered by provincial health insurance health plans, but results in inequalities in access to care in numerous underserved communities across the country. Many such communities are in rural and remote parts of Canada, and urgent calls for assistance occur regularly across the country to fill critical gaps in healthcare staffing in these locales. Qualified physicians from other provinces or territories who want to help, face burdensome licensure requirements, such as fees and time consuming paperwork, which often serve as deterrents. It has become common for emergency departments and obstetrical services across Canada to close for varying lengths of time when no coverage is available. Regions also tend to have small pools of locum physicians they can draw on, who are licensed to practise there.[1]

Labour mobility requirements outlined in the Canadian Free Trade Agreement (CFTA) and applicable provincial/territorial labour mobility legislation allow individuals to apply to work in multiple jurisdictions.[2] Yet, physicians licensed in one province or territory who wish to practise in another currently face the additional burden of applying for licensure in that second jurisdiction; this serves as a barrier to anyone wishing to fill locum vacancies seamlessly or to include working in an underserved community outside their home province or territory as part of their regular practice.

To improve access to care in these communities, a pan-Canadian approach to medical licensure has been proposed. Pan-Canadian licensure is defined as the ability of physicians with full licenses to practise independently without restrictions – or for medical resident trainees registered in any Canadian province or territory to practise or train in any other – without having to acquire more than one license or pay additional licensing fees[3] (Pan-Canadian licensure is used interchangeably here with national licensure.).

In May 2022, the Society of Rural Physicians of Canada (SRPC) hosted a virtual dialogue with other national medical groups that revealed a broad agreement that this issue is a high priority. The dialogue also resulted in a call for a national approach to licensure to address health human resource shortages. One question about pan-Canadian licensure that elicited concern from some stakeholders was whether its implementation could exacerbate existing physician shortages in rural Canada through an exodus of rural physicians to urban centres. In fall 2022, the SRPC and the Canadian Medical Association (CMA) developed and conducted separate membership surveys to assess members' views on national licensure.

The objectives of this review were to better understand factors that affect physicians' decisions to leave or stay in rural communities and to determine rural physicians' perspectives on national licensure.

METHODS

Environmental scan [Table 1]

The environmental scan addressed three questions:

- What are the factors that influence a rural physician's decision to leave their rural practice?
- What evidence is there for the view that pan-Canadian licensure will precipitate an exodus of physicians from rural areas?
- What has been the impact of the CFTA in supporting mobility?

Grey literature published between January 2013 and October 2022 was included in the environmental scan; the approach and information sources used are summarised in Table 1.

Review of membership survey data

In fall 2022, the SRPC developed its own survey to be sent to its members who were informed by the findings of the environmental scan. The specific objectives of the survey were to determine whether licensure is a factor that affects rural physicians' decisions to leave or remain practising in rural communities and to understand members' views on existing licensure processes and the potential impact of pan Canadian licensure, were it to be implemented, on patient care, physicians and the healthcare system.

The SRPC's survey was open to its 5900 members, of whom 33% are physicians who self-identify as practising in rural communities (the SRPC is a voluntary professional organisation whose members include practising physicians, medical residents, medical students and allied healthcare professionals who practise or have an interest in rural healthcare. It should be noted that a substantial proportion of SRPC members are medical students and residents who reside in

Table 1: Environmental scan approach and data sources

Activity	Approach	Data sources
Literature review	Undertake environmental scan to explore trends across Canada related to rural medical practise and licensure	Grey literature review
		Rural medical publications (e.g. *Canadian Journal of Rural Medicine*)
	Review surveys and internal documents of key medical groups on	CFPC Family Medicine Longitudinal Survey reports
		Royal College of Physicians and Surgeons of Canada
	Member's experiences with rural practise and their relation to licensure	National Physician Survey reports (Canadian Medical Association, Canadian Institute for Health Information)
	Factors influencing medical resident's decisions not to practise in rural communities following rural training rotations or during the transition to practise	Canadian Association of General Surgeons
		Canadian Association of Emergency Physicians
	Factors affecting the mobility of international medical graduates and Canadian medical graduates to practise in underserved rural communities across Canada	Canadian Post-M.D. Education Registry
		Canadian Resident Matching Service
		Resident Doctors of Canada
		Canadian Federation of Medical Students
	Review federal government reports (e.g. annual reports) on legislation related to internal trade (i.e. CFTA), specifically regarding the provincial and territorial application of federal legislation to facilitate the mobility of healthcare workers	Physician Resources Planning Advisory Committee – Committee on Health Workforce (Health Canada)
		CFTA reports (not caselaw)
Data collection	Contact medical groups to request access to data sources related to licensure, if available	SRPC/CFPC Rural Road Map Implementation Committee internal documents (unpublished), including environmental scan reviews with federal, provincial and territorial agencies on rural physician recruitment and retention programmes
	Conduct inquiries on informal (unpublished) reviews on licensure through rural physician groups and rural family medicine education sites	
Consultation with select rural physician experts	Conduct informal discussions with rural physicians who are lead researchers, educators and experts in rural physician workforce issues	Experts at rural health research departments with oversight of rural medical education and at rural physician recruitment and retention programmes from the University of British Columbia, the University of Saskatchewan, NOSM University, Dalhousie University and Memorial University of Newfoundland

CFPC: College of Family Physicians of Canada, CFTA: Canadian Free Trade Agreement, SRPC: Society of Rural Physicians of Canada

urban locations during their education). An e-mail invitation to participate in an online survey was sent to all SRPC members on 03 November, 2022; the survey closed on 05 December, 2022.

The CMA developed its own survey with essentially the same goals. It was sent to all 63,141 members by e-mail and was conducted from 18 to 30 November, 2022.

In an initial report of the survey findings, the CMA conducted quantitative analyses, and the SRPC also conducted qualitative analyses of the data in aggregate and de-identified form. In this paper, we review select components of these data. Responses from individuals who self-identified as students were excluded in analyses of questions that were practice related.

RESULTS

Factors affecting rural practice

Twenty-five reports and papers were reviewed for the environmental scan. This included an extensive study[4] (including unpublished research) on factors that affect the rural physician workforce led by the SRPC and the CFPC.[5] This study involved more than 300 stakeholders and was executed in six components that included medical schools; family medicine residency programmes; rural speciality training programmes; federal, provincial and territorial government policymakers; rural and remote communities and indigenous communities; Health Canada-funded rural family medicine education projects and rural physicians. Commissioned by the CFPC, another small study led by researchers at the Memorial University of Newfoundland examined factors affecting physicians' choices to practise in rural communities.[6] Much of this work led to the development of the Rural Road Map for Action,[7] which included a key recommendation calling for the creation of a national locum license.[7,8]

Factors physicians identified as having influenced their decisions to leave rural practice are summarised in Box 1.

Reports reviewed in the environmental scan did not specifically identify licensure as an issue. The possibility of national licensure had also not been raised in any probing questions or as a potential solution to factors that influence physicians' decisions to leave rural practice.

Review of the Society of Rural Physicians of Canada and Canadian Medical Association licensure survey results

Quantitative results

A total of 1147 members responded to the SRPC survey (response rate = 19%); 77% of respondents identified themselves as rural physicians practising either full time clinically, in an academic setting, or primarily as a locum.[17] A total of 5022 members responded to the CMA survey (response rate = 8%).[3]

Key findings from both surveys are summarised in Table 2.

The SRPC survey also asked whether respondents had ever left rural practice to move to an urban or suburban practice. Of the 1009 respondents to this question, 71% answered no. Amongst those respondents who had left rural practice at one point or another (n = 259), the most common reasons given were: to be closer to family and friends (50%), to be closer to their spouse or partner (29%), to have a more attractive community or lifestyle (26%) and to have better education and professional development opportunities (21%). Respondents (n = 43) also provided written answers to this question outlining other factors that contributed to their decisions to leave: burnout owing to lack of support making rural practice unsustainable; having been offered a better job or work opportunities; the need for a better lifestyle for their family and inability to provide specialised services (e.g., anaesthesia) for their rural community.[17] In the SRPC survey, 66% of respondents indicated they had considered practising outside their home provinces but had ultimately chosen not to owing to the burden of licensure requirements.[17]

Qualitative observations

Amongst respondents to the SRPC survey, 362 participants provided additional written comments on their perspectives on licensure. Their comments indicated overwhelming support for the implementation of national licensure. The following themes emerged from their observations:

- National licensure, by allowing interprovincial mobility, may help address rural physician

Box 1: Factors contributing to physician's decisions to leave rural practice
Inadequate levels of and access to support, funding and infrastructure for physicians seeking to establish or take over practices;[9] feeling overwhelmed or overloaded by work and poor work/life balance[10]
Insufficient clinical courage or confidence required to practise full-scope comprehensive family medicine[11,12]
Spouses unable to find jobs; high-quality day care and schools lacking for children and families unhappy due to cultural differences and lack of opportunities to integrate into the community[9,13,14]
Desire to work in group practices rather than in isolation;[13] in group practices, other physicians assist with community integration, provide psychological and emotional support and help with transitions from residency to independent practice
Burnout, lack of support for locum coverage[15]
Lack of readily accessible healthcare services (e.g. laboratory services), specialist referrals and transportation access for urgent care
Inability to practise full-scope, comprehensive family medicine due to limitations of community institutions (e.g. local hospitals without surgical capacity)[10]
Dissatisfaction with working environments,[13,16] such as the lack of availability of turnkey practices that include team-based environments with collegial support

Table 2: Summary of responses to questions about licensure from the Society of Rural Physicians of Canada and Canadian Medical Association surveys

Survey responses	Percentage of respondents to SRPC survey (%)	Percentage of respondents to CMA survey (%)
The most common reasons given for applying for a license in another province or territory		
To provide locum services	76	39
To seek/explore adventure	53	40
To be close to family/friends	22	31
Better compensation	22	25
Educational opportunities and professional development	20	34
More attractive community or cultural diaspora	20	32
The most common obstacles encountered in applying for an additional license		
The overall complexity of the process to obtain a license	Not asked	77
Length of process to obtain a license	92	68
Cost of getting licensed	84	64
How would the implementation of national licensure affect practice (responses of 'somewhat likely' and 'very likely')		
Remain in Canada rather than seek opportunities abroad	75	74
Continue to practise part-time during retirement	69	69
Seek locum opportunities in other provinces or territories	78	63
Practise temporarily in rural or remote areas in other provinces or territories	77	56
Practise permanently in rural or remote areas in other provinces or territories	25	16

SRPC: Society of Rural Physicians of Canada, CMA: Canadian Medical Association

workforce shortages by facilitating physicians (including urban physicians) to practise in rural and underserved communities and to provide locum coverage

- Rural physicians who are semi-retired or retired currently have no or little intention to fill locums outside their home provinces due to licensure requirements
- Most respondents indicated administrative burdens (i.e., fees and paperwork) deter licensed physicians from seeking licensure in another province or territory
- Restrictive licenses, requirements and processes imposed by provincial and territorial medical regulators
- Separate provincial/terroritorial licensing requirements make it difficult to attract international medical graduates to Canada to work, whether in urban or rural communities
- National licensure may facilitate learning opportunities for rural physicians that would allow them to expand their knowledge and skill sets and to practise in more than one setting.

DISCUSSION

What factors influence rural physicians' decisions to leave rural practice?

Rural medical practice thrives when physicians can work with others – through networks of care and as part of teams – to provide comprehensive generalist care to patients.[1] Factors identified in our environmental scan that contribute to physicians leaving rural areas include poor infrastructure support, licensure issues and burnout. Decisions to leave rural practice may also spring from a lack of effective support for physical or psychological challenges in the workplace.[18] Previous work has also shown that international medical graduates practising in rural areas who have met their conditional licensing requirements often choose to return to their home provinces (where their families reside) once they have fulfilled their contractual obligations of services.[19] Furthermore, physicians' decisions to enter into rural family practice may be influenced more by personal preference (e.g., lifestyle and scope of practice) than by a desire to respond to where population health needs are the highest.[9,17]

Would pan-Canadian licensure precipitate an exodus of physicians from rural areas?

There has been speculation that pan-Canadian licensure, if it was implemented, could lead to physicians fleeing some regions to work in provinces that offer more lucrative compensation strategies. In contrast, our review and comments of survey respondents suggest that national licensure would not precipitate an exodus of physicians from rural communities and instead has the potential to assist with rural recruitment and retention of physicians. National licensure could ease the mobilisation of rural physicians from one part of the country to another to help communities in need. For example, 78% of respondents to the CMA survey indicated that national licensure would support the rapid mobility of physicians to help with disaster and crisis response. Amongst reasons CMA survey respondents gave for considering seeking licensure in another province or territory, better compensation ranked sixth amongst the most common reasons; the top five reasons were: (1) seeking adventure, (2) providing locum services, (3) educational opportunities and professional development, (4) more attractive community or cultural diaspora and (5) to be closer to family and friends.

In a similar survey conducted in 2020 by the Resident Doctors of Canada, 91.6% of medical residents supported the implementation of national licensure.[20] The Resident Doctors of Canada survey also revealed that 80.6% would likely seek temporary locum opportunities in provinces or territories outside their primary practise locations.

How has the Canadian Free Trade Agreement supported physician mobility?

The goal of the CFTA is to reduce barriers to labour mobility across provincial and territorial borders. In the case of the medical profession, the CFTA provides the right for a doctor who is licensed in one province or territory to apply for a license in another, but it does not automatically provide the right to practise there.[21] Applicants must still apply for licensure in the second jurisdiction, pay any associated fees and navigate the time-consuming administrative burden imposed by regulatory requirements.

At best, the CFTA triggered alignment in some processes between provinces and territories, but it did not eliminate redundancies and inefficiencies related to separate licensing requirements.[22]

Limitations and future research

Limitations of this study include that definitions of 'rural' and 'national licensure' vary amongst medical stakeholder groups, and the SRPC did not provide a definition of what constitutes a rural practice or community in its survey. National and provincial physician databases report different types of information on physician supply, and few consistently provide details on physician demographics, where they work, or scopes of practice, which are crucial for workforce planning and informing policy. The robustness of forecasting tools that provinces and territories use to guide planning varies, with some having minimal abilities to factor in elements of system needs, physician workload trends and licensure barriers and issues. This variation points to a need to reach a consensus on terminology and approaches to be able to create reliable and useful predictions about the physician workforce.

CONCLUSION

To date, national licensure for physicians has not been included as part of rural health human resource strategies to enhance access to care in underserved communities in Canada. The findings presented here confirm that existing licensure frameworks hinder efforts to improve access to care for rural populations by discouraging physicians from seeking licensure in a second province or territory. Our survey results indicate that Canadian physicians see national licensure as having the potential to increase the physician workforce in underserved rural communities. No evidence was found to substantiate the fear that national licensure would spark an exodus of rural physicians from their current locations. Rather, by facilitating workforce mobility, it has the potential to combat barriers to rural practise and to decrease regional inequities in access to care.

Financial support and sponsorship: The research conducted in the development of this article was financially supported by the Canadian Medical Association and Society of Rural Physicians of Canada.

Conflicts of interest: There are no conflicts of interest.

REFERENCES

1. Briefing on the Emergency Situation Facing Canadians in Light of the COVID-19 pandemic. Submission to the House of Commons Standing Committee on Health. Shawville, QC: Society of Rural Physicians of Canada; 2021. Available from: https://www.ourcommons.ca/Content/Committee/441/HESA/Brief/BR11591485/br-external/SocietyOfRuralPhysiciansOfCan-e.pdf. [Last accessed 2023 Jun 07].
2. Government of Canada. Chapter 7: Labour Mobility. Canadian Free Trade Agreement. Consolidated Version. Winnipeg, MB: Internal Trade Secretariat; 2023. p. 83. Available from: https://www.cfta-alec.ca/wp-content/uploads/2023/01/CFTA-Consolidated-Version-January-31-2023.pdf. [Last accessed 2023 Jul 07].
3. 2022 Pan-Canadian licensure Survey. Summary Report. Insights and Analytics. Ottawa, ON: Canadian Medical Association; 2023. Available from: https://www.cma.ca/sites/default/files/pdf/Media-Releases/PCL_Survey_Summary_Report_2023_EN.pdf. [Last accessed on 2023 Dec 04].
4. Bosco C, Oandasan I. Review of Family Medicine within Rural and Remote Canada: Education, Practice, and Policy. Mississauga, ON: College of Family Physicians of Canada; 2016. Available from: https://www.cfpc.ca/CFPC/media/Resources/Rural-Practice/ARFM_BackgroundPaper_Eng_WEB_FINAL.pdf. [Last accessed 2023 Jun 07].
5. The Rural Road Map. Shawville, QC: Society of Rural Physicians of Canada; 2021. Available from: https://srpc.ca/Rural_Road_Map_Directions. [Last accessed 2023 Jun 07].
6. Asghari S, Aubrey-Bassler K, Godwin M, Rourke J, Mathews M, Barnes P, *et al*. Factors influencing choice to practise in rural and remote communities throughout a physician's career cycle. Can J Rural Med 2017;22:92-9.
7. Rural Road Map Implementation Committee. Rural Road Map: Report Card on Access to Health Care in Rural Canada. Mississauga, ON: College of Family Physicians of Canada and the Society of Rural Physicians of Canada; 2021. Available from: https://srpc.ca/resources/Documents/PDFs/Rural-Road-Map-Report%20Card-EN-FINAL.pdf. [Last accessed 2023 Jun 07].
8. The Rural Road Map for Action: Directions. Mississauga, ON: Advancing Rural Family Medicine: The Canadian Collaborative Taskforce; 2017. Available from: https://srpc.ca/resources/Documents/PDFs/Rural_Road_Map_Directions_ENG.pdf. [Last accessed 2023 Jul 05].
9. Fréchette D, Shrichand A, Manogaran M. Employment Patterns of Canada's Newly Certified Medical Specialists: Findings from the Royal College Employment Study. Ottawa, ON: Royal College of Physicians and Surgeons of Canada; 2019. Available from: https://www.royalcollege.ca/ca/en/health-policy/building-medical-workforce-data-evidence/employment-study/employment-study-findings.html. [Last accessed 2023 Jun 07].
10. Kabir M, Randall E, Mitra G, Lavergne MR, Scott I, Snadden D, *et al*. Resident and early-career family physicians' focused practice choices in Canada: A qualitative study. Br J Gen Pract 2022;72:e334-41.
11. Fowler N, Oandasan I, Wyman R, editors. Preparing Our Future Family Physicians: An Educational Prescription for Strengthening Health Care in Changing Times. Mississauga, ON: College of Family Physicians of Canada; 2022. Available from: https://www.cfpc.ca/en/Resources/Education/Preparing-Our-Future-Family-Physicians. [Last accessed 2023 Jul 07].
12. Taylor T. The Best Rural Physicians are Not Yet Physicians. Sustainability Strategy for Rural, Remote and Indigenous physicians in Northern British Columbia: Final Report November 2020. Rural Coordination Centre of British Columbia; 2020.
13. Cano G, Bain-Donohue S, Moore M. Why do some medical graduates lose their intention to practise rurally? Rural Remote Health 2021;21:5747.
14. McDonald JT, Worswick C. The migration decisions of physicians in Canada: the roles of immigrant status and spousal characteristics. Soc Sci Med 2012;75:1581-8.
15. O'Brien Institute for Public Policy. Recruitment and Retention of Rural and Remote Physicians: The Role of Alternate Payment Models. Calgary, AB: University of Calgary; 2022. Available from: https://obrieniph.ucalgary.ca/sites/default/files/Recruitment%20and%20Retention%20of%20Rural%20and%20Remote%20Physicians%20FINAL%20Feb%202022.pdf. [Last accessed 2023 Jun 05].
16. Mathews M, Seguin M, Chowdhury N, Card RT. A qualitative study of factors influencing different generations of Newfoundland and Saskatchewan trained physicians to leave a work location. Hum Resour Health 2012;10:18.
17. Rural Physician Perspectives on National Medical Licensure. Summary Report. Shawville, QC: Society of Rural Physicians of Canada; 2023. Available from: https://srpc.ca/resources/Documents/National%20License%20docs/Medical%20Licensure%20Survey%20Summary%20SRPC_FINAL_compressed.pdf. [Last accessed 2023 Jul 07].
18. Bourgeault IL, Chamberland-Rowe C, Demers C. Introduction to the Health Workforce in Canada. Ottawa, ON: Canadian Health Workforce Network; 2021. Available from: https://www.hhr-rhs.ca/images/Intro_to_the_Health_Workforce_in_Canada_Chapters/02_Introduction.pdf. [Last accessed 2023 Jun 07].
19. Mathews M, Ryan D, Randall E, Marshall EG, Goldsmith LJ, Jones L, *et al*. "At the mercy of some of the regulations": The impact of the residency match and return of service requirement on the early-career decisions of international medical graduates in Canada. Hum Resour Health 2022;20:15.
20. November 2020 National Resident Survey: Summary of Findings. Ottawa: Resident Doctors of Canada; 2021. Available from: https://residentdoctors.ca/wp-content/uploads/2021/05/RDoC-Summary-of-Findings-2020-R3.pdf. [Last accessed 2023 Jun 06].
21. Sweatman L, McDonald F, Grewal R. Pan-Canadian licensure: Without having to change the constitution. Health Law Can 2022;42:82-91.
22. Sweatman L. Models in professional regulation: Choices for Atlantic Canada? J Med Regul 2023;109:22-8.