When a Canadian is not a Canadian: marginalization of IMGs in the CaRMS match

Lorsqu'un Canadien n'est pas un Canadien : la marginalisation des DIM dans le cadre du jumelage du CaRMS

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Abstract

This paper explores the marginalization experienced by International Medical Graduates (IMGs) in the Canadian Residency Matching Service (CaRMS) Match. This marginalization occurs despite all IMGs being Canadian citizens or permanent residents, and having objectively demonstrated competence equivalent to that expected of a graduate of a Canadian medical School through examinations such as the MCCQE1 and the National Assessment Collaboration OSCE. This paper explores how the current CaRMS Match works, evidence of marginalization, and ethnicity and human rights implications of the current CaRMS system. A brief history of post graduate medical education and the residency selection process is provided along with a brief legal analysis of authority for making CaRMS eligibility decisions. Current CaRMS practices are situated in the context of Provincial fairness legislation, and rationalizations and rationales for the current CaRMS system are explored. The paper examines objective indicators of IMG competence, as well as relevant legislation regarding international credential recognition and labour mobility. The issues are placed in the context of current immigration and education policies and best practices. An international perspective is provided through comparison with the United States National Residency Matching Program. Suggestions are offered for changes to the current CaRMS system to bring the process more in line with legislation and current Canadian value systems, such that "A Canadian is a Canadian."

Résumé

Cet article explore la marginalisation vécue par les diplômés internationaux en médecine (DIM) dans le cadre du jumelage du Service canadien de jumelage des résidents (CaRMS). Cette marginalisation se produit en dépit du fait que les DIM concernés sont des citoyens canadiens ou des résidents permanents au Canada et qu'ils ont objectivement démontré une compétence équivalente à celle attendue d'un diplômé d'une faculté de médecine canadienne à des examens comme l'EACMC1 et l'ECOS de la Collaboration nationale en matière d'évaluation. L'article explore le fonctionnement actuel du jumelage du CaRMS, ses répercussions sur le plan de l'ethnicité et des droits de la personne, et les preuves de marginalisation. Un bref historique de la formation médicale postdoctorale et du processus de sélection des résidents est présenté, ainsi qu'une brève analyse juridique du pouvoir décisionnel en matière d'admissibilité au CaRMS. Les pratiques actuelles du CaRMS sont situées dans le contexte de la législation provinciale sur l'équité, et les rationalisations et raisons d'être du système CaRMS actuel sont explorées. L'article comprend un examen des indicateurs objectifs de la compétence des DIM et de la législation relative à la reconnaissance des titres de compétence internationaux et à la mobilité de la main-d'œuvre. Ces problématiques sont replacées dans le contexte des politiques et des pratiques exemplaires en vigueur en matière d'immigration et d'éducation. Une mise en perspective internationale est proposée par le biais d'une comparaison avec le National Residency Matching Program des États-Unis. Des suggestions pour modifier le système CaRMS actuel sont présentées, afin de rendre le processus plus conforme à la législation et aux valeurs canadiennes d'aujourd'hui comme celle exprimée par le slogan « Un Canadien est un Canadien. »

In order to apply to the Canadian Residency Matching Service's (CaRMS) R1 Main Residency Match, all applicants must be either Canadian citizens or permanent residents.¹ As such, all applicants should be treated equally. Instead, International Medical Graduate (IMG) applicants are marginalized in the application process. marginalization has been raised in the popular press,^{2,3} and has recently been raised in a Letter to the Editor in CMEJ⁴ and in a Canadian Medical Association Blog.⁵ While there is little in the way of published literature that addresses this marginalization other than recent papers by Najeeb,6 Bartman et al,⁷ and Watts and colleagues^{8,9} there are, however, several excellent unpublished dissertations and theses exploring this topic. 10,11 It is past time for this important equity issue to be addressed in a major professional journal.

The Canadian Medical Association (CMA) recently released its *Policy on Equity and Diversity in Medicine*. ¹² This policy advocates "opening the conversation to include the voices and knowledge of those who have historically been underrepresented and or marginalized." It supports "reducing the structural barriers faced by those who want to enter the medical profession." The structural barriers and systemic discrimination of the current CaRMS matching process for IMGs would appear to be exactly the type of marginalization this policy is intended to address.

How the CaRMS Match works

The Canadian Residency Matching Service (CaRMS) describes itself as "a national, independent, not-for profit, fee for service organization that provides a fair, objective and transparent application and matching service for medical training throughout Canada."13 CaRMS receives applications for post graduate medical training from graduates of Canadian and international medical schools, and using a mathematical algorithm matches applicants with post graduate residency training programs taking into consideration the rank order preference of both the applicants and the training programs. According to the CaRMS website, eligibility criteria for participation in the CaRMS match are determined by the various Canadian faculties of medicine in conjunction with the provincial Ministries of Health. 14 The R1 Main Residency Match has two iterations. In the first iteration Canadian Medical Graduates (CMGs) and International Medical Graduates do not compete with each other, and each participate in separate streams. In the second iteration the two streams are blended and CMGs and IMGs compete for the same residency positions in some provinces. In others, CMGs and IMGs are segregated throughout the process. The Match is structured to ensure that CMGs "be assured access to a residency position in Canada to complete training necessary to enter practice," Because there is a limited number of residency positions, this assurance to CMGs has the effect of excluding the majority of IMGs from residency and hence medical practice.

Marginalization in the R1 CaRMS match

In the 2020 R1 March, in the first streamed iteration, there were 3,072 positions for 3,011 CMG applicants and 60 USMGs resulting in a 97.7% match rate. In contrast, there were only 325 IMG positions available for 1,822 IMG applicants, resulting in about a 22.6% match rate. ¹⁶ In past years, the typical match rate for IMGs was between 13% and 18%. The positions available to IMGs in the streamed first iteration are limited mostly to family medicine, internal medicine, psychiatry, and a few pediatric positions, and offer IMGs far fewer opportunities in these select disciplines than the CMG positions offered. In contrast, CMGs can apply to the full range of over 30 base specialties which leads to more than 70 recognized specialties and sub-specialties.

To participate in the CaRMS Match, IMGs are required to demonstrate their competence to practice medicine by passing two objective examinations, the MCCQE1¹⁷ and the NAC OSCE¹⁸ examinations. IMGs are required to pass these examinations *before* they can apply to CaRMS. CMGs, however, are not required to sit the MCCQE1 until *after* the Match is completed and can proceed to residency even if unsuccessful. According to the Medical Council of Canada, approximately 3 to 5% of CMGs fail this exam each year.¹⁹

IMGs are Canadian citizens and permanent residents, just like CMGs, yet the current streaming process prohibits them from competing for 90% of residency positions in Canada despite having objectively demonstrated themselves qualified to enter supervised practice. In 2020, over 1400 IMGs who had demonstrated competence were unmatched because of this marginalization. A 97.7% match rate for CMGs vs a 22.6% match rate for IMGs is a significant and substantial discrepancy and represents clear evidence of marginalization and systemic discrimination, as does excluding IMGs from most recognized disciplines. These are the type of structural barriers that the CMA's Policy on Equity and Diversity in Medicine is intended to address. It is now up to the various faculties of medicine and other key decision makers regarding CaRMS eligibility to bring their practice and policies in line with this CMA Policy.

Marginalization, ethnicity and human rights

According to membership information from both the Society of Canadians Studying Medicine Abroad, and their allied IMG advocacy partners, the vast majority of immigrant physicians are racialized, and more than 50% of Canadians Studying Medicine Abroad (CSAs) are visible minorities. As such, IMGs comprise an equity seeking group. Both the Canadian Human Rights Act²⁰ and provincial human rights acts²¹ prohibit discrimination based on national or ethnic origin. An argument can be made that as place of education is strongly associated with place of national or ethnic origin, that the current CaRMS streaming of Canadian and permanent resident IMGs to a pathway with limited opportunities constitutes discrimination based on place of origin. It may also represent a violation of Charter rights to equality of treatment under the law. A Human Rights complaint is currently in process in British Columbia regarding this issue.

A brief history of post graduate medical education

It has long been recognized that a period of post graduate training was critical, allowing new medical graduates to gain experience before entering independent practice. Prior to 1993, both CMGs and IMGs had equal access to the first and second iterations of the CaRMS Match. A one-year internship was the only requirement to practice as a General Practitioner (GP). Specialty training required further training beyond the GP designation. The one-year internship post graduate experience took the form of rotating internships in community hospitals. The various Provincial Colleges of Physicians and Surgeons were responsible for determining the acceptability of any particular internship experience as part of their statutory duty to oversee entry to practice assessments and qualifications.

In 1993, with the shift from a General Practitioner Model to a Family Practitioner model under the authority of what is now the College of Family Physicians of Canada (CFPC), one-year internships in Community Hospitals were abolished.²² In their place, a two- and three-year post graduate family medicine residency was established. The CFPC, RCPSC, and provincial Colleges moved to require that post graduate medical education be offered only through University faculties of medicine, accredited by the CFPC or RCPSC in order to be certified and licensed.

Once the Canadian Faculties of Medicine assumed control of post graduate medical education, their Association, the Association of Faculties of Medicine of Canada (AFMC)

began making changes aimed at protecting their own graduates. In 1993, the AFMC passed a resolution prohibiting international medical graduates - both immigrant physicians and Canadians who chose to study medicine overseas - from competing against their own graduates for residency positions in the first round/iteration of competition. IMGs were entirely excluded from the first iteration, leaving only a few leftover positions for IMGs to compete for in the second iteration. Only American medical school graduates, of which there were very few, were eligible to compete against Canadian medical school graduates under this resolution. In every year between 1993 and 2005, the Association of Faculties of Medicine of Canada passed a resolution to prevent international medical graduates from competing against their graduates for residency positions in the first round/iteration of the CaRMS competition. Finally, in 2006, in response to threats of legal action by IMGs, the AFMC passed a revised resolution which created a limited opportunity stream for IMGs to the first iteration of the CaRMS Match. 15 This became the foundation of the current two-streamed CaRMS Match process.

Legal authority

How did the university faculties of medicine come to assume authority for setting eligibility criteria that discriminate against IMGs who are Canadian citizens and permanent residents, just like CMGs? Indeed, do they even have the authority to do so? Much of this depends on whether we see post graduate medical education as part of a regulatory scheme, or as education.

A consideration of the facts points to post graduate medical training being largely part of medical regulation, and as such should be the responsibility of the Provincial Colleges of Physicians and Surgeons. Using Ontario as an example, the College of Physicians and Surgeons of Ontario (CPSO) is authorized under the Regulated Health Professions Act to "develop, establish and maintain standards of qualification" for members seeking to be registered in the classifications it established.²³ In Section 11(1) of its Registration Regulation,²⁴ the CPSO makes it clear that it assumes responsibility for the regulation of post graduate medical education. It sets clear criteria for a certificate of registration authorizing post graduate education. One of the criteria is, acceptance to a program of post graduate medical education. Clearly the intent of the Act and the regulations is that CPSO is to assume responsibility for regulating post graduate medical training. This is consistent with the purpose of regulation, namely,

(1) the College's determination that beginner physicians require practical experience under supervision before they should be fully licensed, and (2) resident physicians practice medicine which requires College governance to ensure public safety.

An argument may be made that the CPSO and other Provincial Colleges of Physicians and Surgeons with similar legislation have delegated the responsibility for assessment of eligibility of applicants for post graduate medical education to the various faculties of medicine. As will be discussed below, such delegation of administration of assessments and training programs is the Medical College's right. However, Colleges of Physicians and Surgeons have a responsibility to regulate in the public interest. In contrast, the eligibility decisions being made by the various faculties of medicine regarding IMGs are made from a position of conflict of interest²⁵ aimed at protecting their own CMG graduates. Such protection is not in the public interest, and may contravene the ethical standards of the Canadian Medical Association (CMA) regarding conflict of interest.26

Fair registration practices

Five provinces in Canada have legislation that governs and establishes fair registration practices: British Columbia, Alberta, Manitoba, Ontario and Nova Scotia. 27,28,29,30 Although specific wording of the legislation varies from province to province, all require that registration practices of provincial health colleges be transparent, objective, impartial, and fair. These requirements under legislation extend to any third parties the Colleges of Physicians and Surgeons delegate to complete assessments. To the extent that the provincial faculties of medicine are assessing eligibility for entry to post graduate medical training, which is part of the registration process, they are required to do so in a manner that is transparent, objective, impartial and fair. The current eligibility and selection process for IMGs in the CaRMS match fails these standards on all four points, as I will demonstrate.

The current assessment of eligibility for IMGs for CaRMS is not transparent: Eligibility decisions are made by the provincial faculties of medicine and the provincial Ministries of Health with no public input, no IMG representation, and no publicly available minutes or records of the decision-making process or other documentation of the reasons and rationale for the decisions made.

The current assessment of eligibility for CMGs and IMGs for CaRMS is not objective: An objective evaluation process is one where both CMGs and IMGs would be judged according to the same objective measures of competence at the same time resulting in an ability to compare results and make objective determinations regarding competence and suitability for residency. The results of such testing should be available to residency program directors from all candidates at the time of residency application as an aid to determining the most competent and capable applicants. This is not the current process.

IMGs are required to complete two standardized examinations before they can apply to CaRMS for residency: Medical Council of Canada Qualifying Examination 1 (MCCQE1), and the National Assessment Collaboration Objective Structured Clinical Examination (NAC OSCE). In contrast, CMGs are not required to complete either of these examinations prior to applying to CaRMS for residency, therefore program directors have no access to this objective measure of CMG competence to make admission decisions. CMGs are required to write the MCCQE1 prior to beginning residency but may still begin residency even if they fail the MCCQE1. Additionally, IMGs must write the MCCQE1 in the first months of their final year of medical school, while most CMGs do not write this exam until the end of their final year of medical school, as a result CMGs have almost a full year more of medical education when they write the MCCQE1 and results on this exam for CMGs and IMGs are not comparable even when available for CMGs.

Because CMGs are not required to write the MCCQE1 prior to applying to CaRMS, there is a lack of objective assessment information available to program directors for selecting the best candidate. Despite this lack of objective assessment information and inability to compare MCCQE1 results due to differences in when in their medical training CMGs and IMGs write this exam, CMGs have privileged access to residency spaces even without objective evidence of competence in the form of MCCQE1 results.

The current assessment of eligibility for IMGs for CaRMS is not impartial: Decisions regarding eligibility of IMGs for participation in CaRMS are being made by the various provincial faculties of medicine who have a vested interest in protecting the access of their own graduates to post graduate medical education. Their intent to protect is the interests of their own graduates vs. acting in the public interest is clear and apparent in the wording of their 2006

resolution, "That all graduates of Canadian medical schools be assured access to a residency position in Canada to complete training necessary to enter practice."

The current assessment of eligibility for IMGs for CaRMS is not fair: "Fairness" is defined in the "Best Practices Pilot Study on Health Professions Registration"³¹ in British Columbia (with similar definitions being found in other provinces as well) as:

"... access to the profession is available to all qualified candidates. This definition encompasses both (1) procedural fairness and (2) substantive fairness... Substantive fairness calls for the requirements to be clearly justified and logically connected to the matter at hand. One indicator of substantive fairness would be that special requirements for international trained applicants are clearly justified." p. 19, para. 1

The current CaRMS application system prohibits IMGs from applying to 90% of the positions for which they are qualified. IMGs are limited to 325 residency positions across Canada for 1822 applicants while CMGs have 3072 residency positions available for 3071 applicants. While CMGs can access all recognized medical disciplines in all provinces, IMGs may not. Even if a specialty is available the positions available for CMGs and IMGs are far from equal. For example, there were 81 general surgery and 139 pediatric residency positions available to CMGs Canada wide in the 2020 match, in contrast, there were only four general surgery and 17 pediatric positions available to IMGs Canada wide in the 2020 match. There were no positions in head and neck surgery or vascular surgery for IMGs anywhere in Canada.

CMGs are not required to take the NAC OSCE (a clinical and communication skills test) which is required of IMGs. CMGS are required to complete the MCCQE1 (tests medical knowledge) but not until after the Match. Failing the MCCQE1 is not a barrier for CMGs to begin residency training. By contrast, IMGs have no chance of obtaining a residency position unless they have outstanding scores in the MCCQE1 and NAC OSCE. Consistent with Section 6 of the Charter of Rights CMGs can apply for residency positions in any province but Alberta and Quebec deny IMGs these Charter rights, restricting residency positions in their province to residents of their province. Newfoundland does not allow IMGs to apply at all in the first iteration. Finally, in all provinces except Alberta and Quebec, IMGs must sign a Return of Service Agreement as a condition of being accepted into the residency position to

which they have matched. CMGs are not subject to Return of Service Agreements in the CMG stream despite Canadian taxpayers having heavily subsidized their medical education.

Discrimination is defined in Withler v. Canada (Attorney General), [2011] 1 SCR 396, 2011 SCC 12 (CanLII), ³² quoting earlier decisions:

[29] ...discrimination may be described as a distinction, whether intentional or not but based on grounds relating to personal characteristics of the individual or group, which has the effect of imposing burdens, obligations, or disadvantages on such individual or group not imposed upon others, or which withholds or limits access to opportunities, benefits, and advantages available to other members of society. Distinctions based on personal characteristics attributed to an individual solely on the basis of association with a group will rarely escape the charge of discrimination, while those based on an individual's merits and capacities will rarely be so classed.

Access to the medical profession clearly falls within this definition.

Rationalizations and rationales

Discrimination and marginalization of IMGs is often rationalized by noting that CMGs' undergraduate medical education has been subsidized by Canadian taxpayers,33 and this investment would be wasted if CMGs weren't able to progress to residency. This is flawed reasoning. Governments do not invest in individuals; they invest in education. It is a fundamental premise that advancement in the next stage of education is based on individual merit relevant to the position sought. Alberta, for instance, invests in high school education. This does not entitle all high school graduates a seat in U of Alberta or U of Calgary. British Columbia invests in undergraduate programs, but BC does not seek to ensure that the individuals BC educated progress to higher level education or government funded jobs they are educated for and aspire to. Ontario invests in numerous professional degrees, yet Ontario does not seek to ensure that all these professional degree holders obtain a postgraduate training position which is necessary to become licensed to practice the profession. Indeed, in every professional field except medicine, at each stage, the next step of advancement involves allowing all those that are qualified to apply with selection based on the individual merit.

This common but faulty reasoning based on previous "investment" is called the Sunk Cost Fallacy. 34 Just because we previously invested in an individual undergraduate medical student doesn't mean they will be the best person to invest in for future post graduate medical training. This is why an open and competitive process where CMGs and IMGs are allowed to compete equally for residency jobs is good for society. The CaRMS process is the opportunity to select the best candidate to progress to post graduate medical training and then full licensure. Since entry to medical school, some students will have thrived and proven themselves well suited to the demands of medicine and have grown competent in their knowledge and skills, while some will have failed to do so. Sound investment strategy requires that hiring of resident physicians involve objective re-evaluation of each candidate's appropriateness for future investment based, not on place of education, but on demonstrated merit.

Competence

There appears to be a mythology operating in the Canadian medical education establishment that IMGs are less competent than CMGs, and that a Canadian medical education is superior to medical education in other countries. While there are studies that suggest that some IMGs may encounter issues with cultural adaptation,³⁵ this myth is simply not supported by the evidence, and research clearly demonstrates that IMGs are just as competent as CMGs. 36 IMGs who have been determined to be eligible for the CaRMS match have clearly demonstrated their competence through two objective medical examinations: the Medical Council of Canada Qualifying Examination I (MCCQE1) designed to determine whether the examinee has the critical medical knowledge and decision-making ability expected of a graduate of a Canadian medical school;¹⁷ and the National Assessment Collaboration Objective Structured Clinical Examination (NAC OSCE) designed to determine whether one has the clinical and communication skills expected of a graduate of a Canadian medical school ready to begin residency training.18 In addition, there are a number of studies comparing health outcomes of IMGs to North American medical graduates. These studies have consistently indicated comparable or superior health outcomes for IMGs caregivers. 36,37 The myth of IMG incompetence is just that, a myth.

Credential recognition and labour mobility

International labour mobility is becoming increasingly important to Canada's economy and international competitiveness. Canada and all provinces are signatories

to the Lisbon Recognition Convention (LRC).38 The purpose of the LRC is to facilitate the mobility of individuals through the recognition of academic credentials issued in and outside Canada. The Lisbon Recognition Convention stipulates that requests for recognition of credentials should be assessed in a fair and timely fashion, and that recognition should be granted unless a substantial difference can be demonstrated. The burden of proof for establishing a substantial difference lies with the organization responsible for recognition of the credential and/or qualification, not with the individual who wishes to access further studies, research, and/or employment. The current CaRMS eligibility criteria for IMGs restricts IMGs to a limited number and type of residency positions and makes no attempt to evaluate the quality or equivalence of undergraduate medical education on an individual basis. If it is not a Canadian or US degree, the road is closed. Such an approach is completely contrary to the principles of the Lisbon Recognition Convention.

Canadian values and immigration policy

In October 2020, Canada's Immigration Minister Marco Mendicino unveiled what he called an "ambitious" three-year immigration plan setting targets for bringing skilled workers to Canada.³⁹ This plan is consistent with other policy documents including Building on Success: International Education Strategy 2019-2024⁴⁰ and Global Education for Canadians: Equipping Young Canadians to Succeed at Home and Abroad.⁴¹ Approximately 25% of Canada's physician workforce are IMGs.⁴² Approximately five million Canadians are currently without a primary care physician. IMGs, whose first choice in the CaRMS match is typically family medicine, can help to fill this gap, but not if 1400 IMGs who have objectively demonstrated their competence to practice medicine are barred from competing in the CaRMS match due to systemic barriers.

An international perspective

These systemic barriers are not present in other countries where the university faculties of medicine do not exert such a strong influence over the application and eligibility process for post graduate medical education. The United States, for example, uses a system very similar to CaRMS called the National Residency Matching Program (NRMP). ⁴³ Eligibility criteria for participation in the NRMP Match are established by the Accreditation Council for Graduate Medical Education (ACGME). The ACGME is a physician-led organization comprised of multiple stakeholders interested in medical education; not just faculties of medicine as is the case in Canada. To register to participate in the U.S. match,

all applicants, both United States Medical Graduates (USMGs) and IMGs must pass three objective assessments of competency: the USMLE Step 1; the USMLE Step 2 CK; and, until it was discontinued in 2020, in part due to the COVID-19 pandemic, the USMLE Step 2 CS. Unlike Canada, IMGs in the US are not streamed to a restricted number of residency programs and specialties. IMGs are allowed to apply to all available residencies through the U.S. match. This is a far more equitable approach.

Addressing the issues

Ultimately, a fair and equitable residency selection process might involve:

- Ending the current bifurcated approach of separate streams for CMGs and IMGs.
- Implementation of a standardized objective assessment process for all CaRMS applicants similar to that of the NRMP Match in the United States. Such an objective assessment process may involve all applicants successfully passing the MCCQE1 and the NAC OSCE prior to applying for residency through CaRMS. This would ensure residency decisions are made based on objective measures of competence vs on country of undergraduate medical education and begin the erosion of prejudice that IMGs are inferior.
- Elimination of Return of Service Agreements as a condition of acceptance to residency or making this universal for all applicants
- A return to a model where the provincial regulatory medical authorities resume responsibility for setting eligibility criteria for post graduate medical training which is an entry to practice requirement. The regulatory medical authorities, unlike both the faculties of medicine and the Ministries of Health, are legally obligated to make entry to practice decisions in the public interest, and only for the purpose of establishing competence.
- Restore section 6 of the Charter of Rights so CMGs and IMGs can apply for residency positions in any province. Remove the restrictions against IMGs applying in Alberta, Quebec and Newfoundland
- Inclusion of IMGs in organizations making decisions that affect their future medical education.

A Canadian is a Canadian

Prime Minister Justin Trudeau has said, "A Canadian is a Canadian is a Canadian." It is past time for changes to the CaRMS eligibility criteria and application process to bring the treatment of IMGs in line with Canadian values and ethics. The Canadian Medical Association's Policy on Equity and Diversity in Medicine challenges us to remove the structural barriers faced by those who want to enter the medical profession. Five million Canadians are without primary care. IMGs can be part of the solution, but only if allowed to fully participate as equals in the CaRMS Match.

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