**BACKGROUNDER:**

**INTERNATIONAL MEDICAL GRADUATES AND THE CANADIAN HEALTH CARE SYSTEM**

A Joint Project of the Committee on Health Policy and the Medical Education Committee

March 2016

**Committee of Health Policy:**

**Rafael Sumalinog**

University of Toronto

**Alisha Zacharias**

University of British Columbia

**Medical Education Committee:**

**Aarti Rana**

McMaster University

**Taneille Johnson**

University of British Columbia

**Shuai (Stone) Li**

University of Alberta



**I. ABOUT THIS BACKGROUNDER:**

This backgrounder was created by the Canadian Federation of Medical Students (CFMS) as a collaboration between the Committee of Health Policy and the Medical Education Committee. This document provides Canadian medical students with introductory background information regarding International Medical Graduates, International Medical Graduates of Canadian Origin, and the corresponding CaRMS residency matching processes. All information included in this report is meant to be objective and does not address any of the controversies regarding residency matching and graduates from medical programs outside of Canada. Data was gathered from a variety of sources including CaRMS Residency Match Reports and various Canadian health authorities and organizations. We hope this backgrounder provides a useful background on this complex topic.

**II. THE BASICS**

**Who are IMGs?**

International medical graduates (IMGs) are individuals who have completed or will complete medical training and/or residency outside of Canada or the United States. They are graduates of schools that have not been accredited by the Committee for the Accreditation of Canadian Medical Schools (CACMS) or the Liaison Committee on Medical Education (LCME).1,2 The IMG designation is strictly a description of educational training and does not describe citizenship or legal status in Canada. As such, IMGs can be:

1. Canadian citizens who have studied medicine internationally. These individuals are also known as International Medical Graduates of Canadian Origin (IMGCs) or Canadians studying abroad (CSAs).
2. Immigrant physicians who immigrated to Canada after completing their MD and/or residency abroad. Frequently these individuals were practicing physicians in their country of origin or education.
3. Visa trainees whose post-graduate education is sponsored by their country of origin. These individuals apply directly to Canadian medical school training programs and do not need to go through the Canadian Resident Matching Service (CaRMS).

The countries from which immigrant IMGs move to Canada – also known as source countries or countries of origin – have changed in the last several decades. 2,3 In the 1970s to 1980s, India, the UK, Ireland, and South Africa were the main contributors of IMG applicants.3 From 2003-2007, more IMGs are arriving from Saudi Arabia, Pakistan, Romania, Libya, Iran, and Kuwait.4 Notably, graduates of a US-accredited medical school can compete directly with CMGs for residency positions. This is a result of reciprocal accreditation of Canadian and American medical schools by both the LCME and CACMS.

In recent years, a growing number of IMGs accepted into residency positions are comprised of IMGCs who wish to practice in Canada.5 In 2014, most IMGCs participating in the CaRMS residency match graduated from medical schools in Central America and the Caribbean, Europe, and Asia. Many matching in the first iteration graduated from schools in Europe, Central America, and the Caribbean.6

**How many Canadians are studying medicine abroad?**

In 2010, an estimated 3,570 Canadian citizens were studying medicine abroad, many in the Caribbean (56%), Ireland (18%), and Australia (15%), but also in Poland and the Middle East.2 In contrast, over 11,500 students are enrolled in undergraduate medical education in Canada.7 Out of 1,000 IMGCs training abroad, who were surveyed in 2010, the majority (77.6%) reported that they chose to study abroad due to their inability to obtain a placement in a Canadian medical school.2 Most of these students (90%) hope to return to Canada for at least a part of their postgraduate training. 2

**Why do IMGs choose to practice in Canada?**

For immigrant IMGs, the choice to live and work in Canada as a physician is largely due to various push and pull factors. Push factors are conditions in the countries of origins that compel IMGs to leave. Some push factors include the socio-economic and/or political situation at home, stagnant or worsening physician remuneration, and lack of professional development.8 Pull factors include family and social connections, such as marriage to a Canadian, the Canadian health care system, better education and opportunities for children, and a culture of tolerance and diversity in Canada.8

**How many IMG physicians are currently training or practicing in Canada? Where do they practice?**

In 2014, IMGs constituted about 18,531 (24%) of the 77,479 total physicians in Canada.9 This has decreased from the peak of 30 years ago, where IMGs accounted for 33% of the Canadian physician workforce.10

In absolute terms, most IMGs practice in Ontario, which offers 200 new training and assessment spots each year for IMGs.11 This is followed by Quebec, Alberta, and British Columbia. Provinces with substantial rural populations rely heavily on IMGs and employ a higher proportion of them relative to Canadian graduates.12 About 41% of physicians in Newfoundland and Labrador are IMGs, as well as 54% in Saskatchewan.12

The proportion of IMGs completing their post-MD training in specific specialties is similar to that of CMGs. Between 2003 and 2007, 699 (37%) of IMGs pursued family medicine for residency compared to 2,921 (38%) of CMGs. 645 (34%) of IMGs entered into medical specialties, 313 (17%) into surgical specialties, 141 (8%) into pediatric specialties, and 81 (4%) into laboratory medicine. These statistics are comparable to CMGs, of whom 2,863 (37%) were in medical specialties, 1,397 (18%) were in surgical specialties, 420 (5%) in pediatric specialties, and 133 (2%) in laboratory medicine.4

**How do IMGs obtain a medical license to able to practice in Canada?**

Becoming a fully-licensed physician in Canada as an IMG is a long and expensive process. Moreover, the specific steps and requirements vary according to each province.

There are two main routes available for IMGs to become practicing physicians in Canada: 1) entry-to-residency or 2) entry-to-practice.

The*entry-to-residency* route requires preparing specific documents before arriving to Canada. This involves confirming that one’s medical degree is from a recognized World Health Organization (WHO) / Foundation for Advancement of International Medical Education and Research (FAIMER) medical school, using the International Medical Education Directory (IMED) database. Applicants will then take the Self-Administered Evaluating Examination (SAE EE) to estimate their peer-related performance on the Medical Council of Canada Evaluating Exams (MCC EE) before submitting their final medical diploma and other related portfolio through the MCC Physicians Credentials Repository. After this, one must then take the MCC EE and National Assessment Collaboration OSCE (NAC OSCE). Exceptions for the MCC EE may apply for those with Canadian or American Board specialty certification. Depending on the province or territory, the IMG may be asked to take further assessments and meet additional eligibility requirements to qualify for residency. These include taking the National Assessment Collaboration (NAC) exam and the MCC Qualifying (MCC QE) Part I and Part II exams.13

IMGs, except for visa trainees and those not requiring further residency training, apply for training through the Canadian residency match (CaRMS).13 If the applicant meets the prerequisite qualifications, he/she may be invited to interview for a postgraduate residency training program. It is important to note that depending on the province, IMGs may be interviewed during the second CaRMS iteration after CMGs have matched, or they may compete in a separate parallel stream. Once accepted, the applicant will complete the residency program and, as with CMGs, will register under the licensing provincial college and will take exams for certification by the College of Family Physicians of Canada (CFPC) or the Royal College of Physicians and Surgeons of Canada (RCPSC). Generally, residents who enter through ministry-sponsored training programs must work in designated underserviced communities under a return-of-service contract.14 (Appendix Figure 2).

The *eligibility-to-practice* route allows physicians to practice medicine within certain limits and requirements; for example, under a sponsor organization and a supervisor approved by the provincial medical licensing college. This route is for IMGs who have at least one year of postgraduate training in their specialties and still require between one to four years of training.15 There are slight differences in acquiring full licensure depending on medical licensing authority and IMG program requirements of the province or territory that they choose to practice in. Applicants are evaluated through Practice Ready Assessment (PRA) committees of their provincial licensing authorities, except in Ontario, where IMGs apply through the Centre for the Evaluation of Health Care Professionals Education Abroad (CEHPEA.)15

All jurisdictions require at least two years of postgraduate training to obtain licensure. IMG applicants are awarded Licentiates of the Medical Council of Canada only after passing the MCC QE Part II.16

**III. CMGs, IMGs AND RESIDENCY POSITIONS**

**How many residency positions are available each year for Canadian and international medical graduates?**

A total of 3,321 residency positions were available across Canada in 2015. In the first round of CaRMS interviews and matching, 89.9% (2,984) of these positions were open to CMG applicants and 10.1% (337) were open to IMG applicants through a parallel first round matching IMG stream.17 All unfilled positions are then included in the second round of CaRMS, which both CMG and IMG applicants are equally eligible for and directly compete against each other for.

Historically, the parallel first round match for IMGs did not exist. IMGs were only eligible to apply through the second iteration of the CaRMS match, i.e. to positions remaining unfilled after the first round of the match.18 Parallel streams for CMGs and IMGs in the first iteration have now been introduced in most parts of the country. These parallel streams are completely independent and include specifically designated IMG and CMG positions. Conversely, in Quebec, IMGs are eligible to apply directly alongside CMGs in an open match process.18,19

**Who determines the number of residency positions available?**

Provincial and territorial Ministries of Health determine the total number of residency positions available, the specialties in which they are available, and the proportion open to CMGs versus IMGs*.* IMG positions are also funded by provincial and territorial Ministries of Health.

**How many IMG applicants apply to CaRMS each year for a residency position?**

The number of IMG applicants to CaRMS has more than doubled in the last decade.17 In fact, in 2013 the number of IMGs participating CaRMS (2,962) surpassed CMGs (2,837) for the first time in history.20 Several factors, outlined below, have contributed to the increasing number of IMG applicants.

Firstly, in the last decade, the CaRMS application process has moved online making it more accessible for all applicants. Secondly, until recently physicians trained outside Canada were able to immigrate to Canada under the Federal Skilled Worker program. However, many have been unable to subsequently obtain Canadian licensure or a residency spot as required. These immigrant IMGs still constitute the majority of IMG applicants.21 Finally, an increasing number of Canadians are studying medicine abroad and the majority hope to return to Canada for residency and to practice medicine.2 In 2006, an estimated 1,500 Canadians were studying medicine abroad.23 In 2011, this estimate more than doubled to 3,570.2

**Are the number of residency positions awarded to IMGs increasing?**

While an increasing number of IMGs are starting residency in Canada each year, so are an increasing number of Canadian students. While the total number of IMG R1s nearly doubled from 268 in 2005 to 496 in 2013, the proportion of IMGs to CMGs has stayed largely the same. Since 2005, the proportion of IMGs starting residency rose from 13% in 2005/2006 to a peak of 17% in 2009/2010, but subsequently lowered to 16% in 2013/2014.22

**Are CMGs and IMGs in competition for the same CaRMS positions?**

Yes and no. With respect to the CaRMS matching process, CMGs and IMGs for the most part are not competing directly with one another. In the first round of residency matches, CMG and IMG applicants apply to parallel streams with a pre-allotted quota of positions for each stream. Quebec is an exception to this process and offers an open match for both IMGs and CMGs in the first iteration. In 2015, for example, out of a total of 3,321 residency positions in the first round, 2,984 (89.9%) were CMG-specific and 337 (10.1%) were IMG-specific.17 Of these 3,321, 3,105 were filled in the first round and 216 remained open for a second round. 157 CMG applicants and 1,137 IMG applicants competed for these positions in this second round.17

**What are the respective matching rates of IMGs and CMGs?**

In 2015, match rates for IMGs and CMGs respectively were 21.2% and 96.1%.17 These match rates have been consistent for the last 10 years with minor fluctuations.

While the *rate* of matching has remained largely consistent over the last decade, the *total number* of unmatched students has increased given the increase in total number of applicants: i.e. CMG applicants increased two-fold in the last decade from 1,405 to 2,862.17

**What programs do IMGs match to?**

A substantial number of IMGs match to family medicine, followed by internal medicine, psychiatry, and pediatrics. The most common matches were at University of Toronto, UBC, Western University, University of Ottawa, and McMaster University.17

**Do Canadian IMGs and Immigrant IMGs have the same matching rates for CaRMS?**

No. While Canadian IMGs represented approximately a quarter of the applicant pool in 2011, they received about half of the positions available to IMGs.21 Immigrant IMGs have a much lower match rate than Canadian IMG applicants, respectively 11.5% and 31.5% in 2014.6

The proportion of immigrant IMGs to Canadian IMGs accepted into residencies continues to decrease. In 2005, immigrant IMGs represented 65.9% of all IMGs in post-MD training. By 2011, their proportions decreased to 48.7%.23

**IV. REFERENCES**

1. Walsh A, Banner S, Schabort I, Armson H, Bowmer MI, Granata B. International Medical Graduates - Current Issues. Members of the FMEC PG consortium; 2011.
2. Canadian Resident Matching Service. Canadian students studying medicine abroad. http://www.carms.ca/pdfs/2010\_CSA\_report/CaRMS\_2010\_CSA\_Report.pdf. Accessed Mar 5 2015.
3. Islam N. The dilemma of physician shortage and international recruitment in Canada. Int J Health Policy Manag. 2014 May 29;3(1):29-32.
4. Mok PS, Baerlocher MO, Abrahams C, Tan E. Comparison of Canadian Medical Graduates and International Medical Graduates in Canada: 1989-2007. Acad Med. 2011 Aug; 86(8): 962-967.
5. Barer M, Evans R, Hedden L. False hope for Canadians who study medicine abroad. CMAJ, March 31, 2014, doi:10.1503/cmaj.131704.
6. Canadian Resident Matching Service. Selecting IMGs for residency programs: Myths and shibboleths. http://www.carms.ca/wp-content/uploads/2014/11/2014-FMF-myths-shibboleths-EN.pdf. Accessed March 24, 2016.
7. About AFMC. The Association of Faculties of Medicine of Canada. https://www.afmc.ca/about-afmc Accessed Aug 9 2015.
8. Lofters A, Slater M, Thulien N. The “Brain Drain”: Factors influencing physician migration to Canada. Health 5(1): Jan 2013.
9. CAPER. Fact Sheet on International Medical Graduates. Available at: http://www.caper.ca/~assets/Fact%20Sheet%20on%20IMGs%20-%20Final.pdf. Accessed March 4, 2015.
10. Canadian Institute for Health Information (CIHI). Analysis in Brief: International Medical Graduates in Canada 1972-2007. CIHI. 2009.
11. Health Human Resources Strategy - International Medical Graduates. Ontario Ministry of Health and Long-term Care. Available at: http://www.health.gov.on.ca/en/pro/programs/hhrsd/physicians/international\_medical\_graduates.aspx#eligibility. Accessed March 4, 2015.
12. Canadian Institute for Health Information (CIHI). Supply, Distribution and Migration of Canadian Physicians, 2012. CIHI. 2013.
13. Overview of licensure process for IMGs. Medical Council of Canada – Le Conseil Médical du Canada. Available at: http://mcc.ca/about/mcc-and-route-to-licensure/licensure-process-for-img/. Accessed March 4, 2015.
14. Guidelines for Return of Service (ROS) for International Medical Graduates (IMGs), Repatriation Program and Registration through Practice Assessment. Ontario Ministry of Health and Long-term Care. Available at: http://www.carms.ca/pdfs/OntarioROS.pdf
15. Health Human Resources Strategy - International Medical Graduates. Ontario Ministry of Health and Long-term Care. Available at: http://www.health.gov.on.ca/en/pro/programs/hhrsd/physicians/international\_medical\_graduates.aspx#eligibility. Accessed March 4, 2015.
16. Overview of licensure process for IMGs. Medical Council of Canada http://mcc.ca/about/mcc-and-route-to-licensure/licensure-process-for-imgs/. Accessed March 4, 2015.
17. Canadian Resident Matching Service. 2015 R-1 Match. http://www.carms.ca/wp-content/uploads/2015/05/2015-R1-match-report-full-EN.pdf. Accessed Aug 9, 2015.
18. Canadian Resident Matching Service. R-1 match reports. http://www.carms.ca/en/data-and-reports/r-1/. Accessed Mar 5, 2015.
19. Canadian Resident Matching Service. Summary of intake criteria for IMGs. http://www.carms.ca/en/residency/r-1/eligibility-criteria/provincial-criteria/summary-intake-criteria-imgs/. Accessed March 25, 2016.
20. Canadian Residency Matching Service. 2013 R-1 Main Residency Match Report. http://www.carms.ca/assets/upload/pdfs/2013R1\_MatchResults/Master\_PDF\_En.pdf. Accessed Aug 9, 2015.
21. Monavvari A, Peters C, Feldman P. International medical graduates: Past, present, and future. Canadian Family Physician. March 2015 vol. 61 no. 3 205-208.
22. Canadian Post-M.D. Education Registry, The Association of Faculties of Medicine of Canada. Annual Census of Post-M.D. Trainees 2014. http://www.caper.ca/~assets/documents/pdf\_2014-15\_CAPER\_Census.pdf. Accessed Aug 9, 2015.
23. Canadian Post-M.D. Education Registry, The Association of Faculties of Medicine of Canada. 2012 CAPER National IMG Database Report. http://www.caper.ca/~assets/documents/2012\_CAPER\_National\_IMG\_Database\_Report.pdf. Accessed Aug 9, 2015.

**V. APPENDIX**



**Figure 1. IMG physician routes to practice.**

Obtained from Faulkner D, Streefkerk C. Practice Ready Assessment for IMG Physicians: Medical Council of Canada – Annual General Meeting. Sept 15-17 2013. Ottawa. Available at: <http://www.slideshare.net/MedCouncilCan/nac-pra-annual-meeting>.

**VI. FURTHER INFORMATION**

**For more information on the demographics of Canadian medical residents:**

The Canadian Resident Matching Service (CaRMS) provides annual match reports: https://www.carms.ca/en/data-overview

The Canadian Post-M.D. Education Registry (CAPER) publishes an annual census of post-MD trainees since 1988/89: http://www.caper.ca/en/post-graduate-medical-education/annual-census/