International Medical Graduates and Canadians Studying Medicine Abroad

International M.D. Degree
As with other highly skilled professionals, physicians spend years in specialized education and training preparing for their future work. The medical education process is a graduated one, composed of two main stages. The first stage involves successful completion of a Medical Doctor (M.D.) program. M.D. programs are usually 3-4 years in length and build on the student’s basic life science knowledge while introducing new clinical skills. Having completed an M.D. degree program, physicians move on to postgraduate medical education, or “residency training”. Residency training prepares the medical graduate for practice in a family medicine, surgical, medical or laboratory specialty.

Fact 1: Of the 72,368 physicians in Canada in 2012, 17,407 (24.1%) achieved their medical degree outside of Canada.
CMA Masterfile, 2012

Physicians who complete the first stage of their medical education – the M.D. degree – in countries other than Canada are commonly referred to as international medical graduates, or IMGs, when they are in Canada. IMGs who have completed only the M.D. degree typically look for residency training opportunities when they arrive in Canada. IMGs who have completed both the M.D. degree and residency training may look for “practice eligible” routes leading to direct patient care under a full or restricted medical license. IMG pathways are largely determined by the level of medical education and practice achieved prior to coming to Canada.

Fact 2: In Québec and Nunavut about 1 in 10 physicians are IMGs. In Newfoundland and Labrador, Saskatchewan and Yukon Territory IMGs comprise almost half of the physician workforce. CIHI, 2011

A First Step for IMGs in Canada
IMGs typically write the Medical Council of Canada Evaluating Exam (MCCEE) as an initial step toward medical practice in Canada. The MCCEE is a computer based exam that evaluates basic medical knowledge at the level of a new medical graduate who is about to enter the first year of postgraduate residency training. As an initial evaluation tool, the MCCEE serves as an early indicator of the number of IMGs who might pursue medical careers in Canada.


Between 2005 and 2010, a total of 13,440 IMGs passed the MCCEE. However, the MCCEE is administered in 80 countries worldwide and many IMGs who pass the Evaluating Exam may never come to Canada. Of the IMGs who passed the MCCEE between 2005 and 2010, 4,762 (35.4%) said they were were Canadian citizens. This subgroup suggests the number of IMGs, between 2005 and 2010, who possessed at least a basic level of medical knowledge and who could work in Canada on a permanent basis.

Fact 4: Of all IMGs who passed the MCCEE between 2005 and 2010, 4,762 (35.4%) were Canadian. National IMG Database, 2012

IMGs and CSAs
Some IMGs were Canadian citizens before starting an M.D. program outside of Canada. While working toward the M.D. degree, these individuals are referred to as Canadians studying medicine abroad, or more colloquially, “CSAs”. Other IMGs complete an M.D. program outside of Canada before they become Canadian citizens or permanent residents of Canada. These individuals are often referred to as immigrant IMGs. Whether returning to Canada as a Canadian citizen or immigrating to Canada, individuals who complete their M.D. degree outside of Canada are IMGs.

Fact 5: Among Canadian IMGs who passed the MCCEE between 2005 and 2010, 38.5% (1,832) were born in Canada and 61.5% (2,930) were immigrant IMGs. National IMG Database, 2012

Results of a 2010 survey provide a snapshot of CSAs. For example, there was an estimated 3,570 CSAs in 2010 and most (n=2,000) were enrolled in Caribbean medical schools. Significant numbers were also studying in Ireland (n=650) and Australia (n=550). Some CSAs were at the start of their medical studies in 2010, while others were nearing the end. In total, an estimated 3,117 CSAs will complete their M.D. programs between 2011 and 2014. Based on the 2010 survey results, about 90% of CSA IMGs plan to return to Canada for all or part of their residency training.
Fact 6: There were an estimated 3,570 CSAs in 2010, of which 3,117 planned to complete the M.D. program between 2011 and 2014. CaRMS, 2010

The 2010 survey also gathered data on the general characteristics of CSAs. About 1 in 5 CSAs report that at least one of their parents is a physician. According to the final report “CSAs are older than students in Canadian medical schools, 73.9% of CSAs are 26-30 years old while only 46.4% of Canadian medical graduates (CMGs) are the same age.” This age differential may be due, in part, to time spent by CSAs applying to medical school in Canada prior to studying abroad. Among CSAs surveyed in 2010, 73.3% applied to a Canadian medical school at least once and 36.3% applied two or more times.

Fact 7: 90% of CSAs plan to return to Canada for all or part of their postgraduate residency training. CaRMS, 2010

**IMGs and Residency Training in Canada**

Canada’s residency training programs prepare M.D. graduates for independent practice in a specific area of medicine. IMGs and graduates of Canadian medical schools apply to residency programs through the Canadian Resident Matching Service (CaRMS). For all faculties of medicine combined, 11 to 12 residency spots are available for every 10 students graduating from Canadian M.D. programs. In addition, most faculties of medicine dedicate a number of residency positions specifically for IMGs. If residency positions are unfilled midway through the annual CaRMS match, qualified IMGs may fill spots above and beyond the dedicated IMG positions.

Fact 8: The number of IMGs entering postgraduate residency training programs went from 77 in 2000 to 432 in 2011, a 461% increase. CaRMS, 2010

Data show that IMGs comprise both an increased number and percent of postgraduate medical residents. The number of first year IMG residents increased 461% over the last decade, going from 77 in 2000 to 432 in 2011. During the same time period the number of Canadian medical school graduates entering residency programs increased 68.7%, from 1,470 to 2,480. In 2000, IMGs comprised 5% of first year residents and in 2011 they accounted for 15% of incoming residents. In 2011, at total of 2,139 IMGs were training in postgraduate residency programs across Canada.

Fact 9: In 2000, IMGs comprised 5% of first year postgraduate medical residents. This figure increased to 15% by 2011. CAPER, 2012

Data are now available to look at the numbers of CSAs and other IMGs trying to enter residency training in Canada. In 2008, 1,543 IMGs applied to residency programs through CaRMS - 12% (n=181) were CSAs and 88% (n=1,362) were other IMGs. At the end of the 2008 CaRMS process, 52% (n=95) of CSAs and 19% (n=258) of other IMGs were matched to a residency program. Three years later, in 2011, 25% (n=473) of IMGs participating in CaRMS were CSAs and 75% (n=1,447) were other IMGs. In that year 39% of CSAs and 14% other IMGs were matched to residency training programs.

Fact 10: CSAs account for an increasing proportion of IMGs participating in the CaRMS match. In 2008, 12% of IMGs in the CaRMS match were CSAs. This figure increased to 25% in 2011. Thomson and Cohl, 2011

A number of key points emerge from the data trends on entry to residency training in Canada. Over the past decade, more than 1,000 additional positions have been created to provide postgraduate medical training for an increased number of graduates of Canadian medical schools. As well, 355 additional spots have been opened for IMGs, leading to a five-fold increase in the number of IMGs entering residency programs in Canada. However, due to the increased number of IMGs applying, the percent who secure a residency position has declined. This decrease is true for CSAs as well as immigrant IMGs.

Fact 11: While the number of IMGs participating in the CaRMS match increased between 2008 and 2011, success rates decreased for CSAs and other IMGs. The success rate dropped from 52% to 39% for CSAs and from 19% to 14% for other IMGs. Thomson and Cohl, 2011
Looking Forward

IMGs will continue to be a large part of Canada’s future physician workforce. As noted, there are currently 17,407 licensed IMGs in Canada. Between 2007 and 2011, no fewer than 400 IMGs entered residency programs in Canada each year. Soon to be added to the licensed physician workforce are the more than 2,000 IMGs who were in training in 2011. These data underscore the role IMGs play in providing health care to Canadians.

Looking forward, a variety of initiatives are aimed at streamlining processes and assisting IMGs in Canada. For example, the National Assessment Collaboration (NAC) brings a pan-Canadian approach to the assessment of IMGs’ medical knowledge and clinical skills. The benefits of a coordinated assessment approach are highlighted in a recent report carried out in Ontario (Thomson and Cohl, 2011). To improve objectivity and transparency the authors “recommend that the NAC exam become the all-important first filter in deciding who will receive a detailed file review and interview” for possible entry to residency training. The authors argue that this is a fairer approach, compared to using year of M.D. graduation as an initial filter, which tends to favor CSAs over immigrant IMGs.

Concerns about access and fairness have been raised by graduates of Canadian medical schools and IMGs alike. Mindful of increased Canadian M.D. program enrolment and competition between Canadian medical graduates (CMGs) and IMGs, the Canadian Federation of Medical Students states that it will “continue to monitor match rates to ensure that any changes in the system do not negatively affect CMG match rates”. The Alberta IMG Association advocates for “fair and equitable access for all Alberta IMGs, according to the Canadian standards”. Similarly, the mission of the Association of International Physicians and Surgeons of Nova Scotia is to “ensure that internationally trained physicians are integrated effectively and equitably into the Canadian health care system”. The particular concerns of CSAs are more recently voiced through groups such as the Society for Canadians Studying Medicine Abroad. In this milieu, Canada’s faculties of medicine strive to remain responsive to a variety of groups that may have divergent goals.

Responding to concerns voiced by CSAs, the province of British Columbia recently examined the Challenges Facing Canadians Studying Abroad. A December 2011 report issued by the BC Ministry of Health, Ministry of Advanced Education, and UBC’s Faculty of Medicine comments on the fair treatment of CSAs and other IMGs in Canada:

*Given that the greatest barrier for IMGs/CSAs to access postgraduate training positions in Canada is the fact that international medical school education and training is not necessarily comparable or equivalent to Canadian medical school education, there are no measures that can be introduced to privilege or otherwise treat differently CSAs who apply for postgraduate training positions in Canada or BC. CSAs must be treated in the same manner as all other IMGs. To do otherwise would breach human rights and Canadian Charter legislation.*

Looking beyond postgraduate residency training programs, governments and medical organizations are actively developing policies and best practices related to foreign qualifications recognition. For example, the Government of Alberta has implemented an International Qualifications Assessment Service that assesses international educational credentials and compares them to educational credentials in Canada. The province of Quebec and France have implemented a Mutual Recognition Agreement that facilitates physician mobility between the two jurisdictions. The Federation of Medical Regulatory Authorities of Canada is developing an Agreement on National Standards that will inform regulatory decisions related to provisional licensure, a common transitional status for IMGs in Canada. The Royal College of Physicians and Surgeons of Canada (RCPSC) has implemented a Practice Ready Assessment Route for IMGs who plan to live and practice in Canada. Finally, the College of Family Physicians of Canada (CFPC) has put in place a process to confer CFPC certification through Recognized Training and Certification outside Canada.

The Association of Faculties of Medicine of Canada (AFMC) strongly supports recent efforts to take a more evidence-informed approach to health human resource planning in Canada. Recent government submissions by the AFMC, RCPSC and Canadian Medical Association all speak to the overall need for access to physician care, but also emphasize the need for increased attention to the mix and distribution of physicians. The themes that emerge from these submissions are reflected in recommendation #1 of the Collective Vision for Postgraduate Medical Education in Canada. The recommendation states:
In the context of an evolving healthcare system, the PGME system must continuously adjust its training programs to produce the right mix, distribution, and number of generalist and specialist physicians—including clinician scientists, educators, and leaders—to serve and be accountable to the Canadian population. Working in partnership with all healthcare providers and stakeholders, physicians must address the diverse health and wellness needs of individuals and communities throughout Canada.

IMG planning needs to be connected to this collective vision and Canada’s broader health human resource strategy. In so doing, a variety of perspectives should be considered. As noted in the December 2011 BC Briefing Document, “international medical school education and training is not necessarily comparable or equivalent to Canadian medical school education”. The Federal/Provincial/Territorial Advisory Committee on Health Delivery and Human Resources raises self-sufficiency and ethical recruitment in the context of the Framework for Collaborative Pan-Canadian Health Human Resources Planning. In consideration of IMGs and CSAs, the Canadian Federation of Medical Students notes that “the participation of these groups should be met with the appropriate investment required to train these additional learners, it should not be detrimental to Canadian medical students and it should not be seen as an ultimate solution to Canada’s physician shortage.” These perspectives highlight the need to consider the role of IMGs as part of a broader health human resource planning discussion.

Again, the AFMC strongly supports using the best data and a collaborative forum to reach consensus around physician workforce planning, including the role of IMGs in Canada.

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