THE ALBERTA INTERNATIONAL MEDICAL GRADUATE PROGRAM

Context, Mandate, Process and Impact

ABSTRACT

This paper outlines the role of the Alberta International Medical Graduate Program (AIMGP) in facilitating the licensure of international medical graduates (IMGs) in Alberta. It presents the AIMGP's own application and assessment process in the context of Canadian medical education and regulatory systems. Key IMG initiatives and challenges across the country are highlighted.

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The Alberta International Medical Graduate Program (AIMGP) was created by the Government of Alberta in 2001 with a mission to increase the number of international medical graduates (IMGs) practicing medicine in the province.

IMGs are physicians who received their medical degree outside of either Canada or the United States (www.img-canada.ca).[2] It is estimated that there are over 500 IMGs residing in Alberta who do not meet the requirements for a medical license in the province.[3] The AIMGP runs a competitive and merit-based assessment and orientation service that gives qualified IMGs residing in Alberta who are not otherwise eligible for practice access to dedicated postgraduate residency positions in one of the province's two medical schools. With many communities across the province experiencing difficulties recruiting and retaining physicians, the AIMGP is one way to utilize the valuable skills of IMGs to help address the health care needs of Alberta's population.

Paths to licensure

Canadian medical graduates

The Canadian medical education system is designed so that, in most cases, its graduates will be eligible for a medical license across the country. Canadian undergraduate and postgraduate medical education programs are each accredited by national bodies that ensure the national standards for medical education are being met. Each of the 17 undergraduate medical education programs in Canada, which provide students with the basic medical knowledge they need to enter a postgraduate medical education program (called residency), are accredited by the Committee on Accreditation of Canadian Medical Schools (www.afmc.ca).[4] Residency programs, which prepare the medical graduates for independent practice in family medicine or another specialty, are accredited by either the College of Family Physicians of Canada (CFPC) (www.cfpc.ca) or the Royal College of Physicians and Surgeons of Canada (RCPSC) (www.rcpsc.medical.org). In most cases, physicians who successfully complete an accredited residency program will participate in the CFPC or RCPSC certification exams. Passing these exams is a requirement for full licensure in most provinces.

The licensure and registration of physicians in Canada is a provincial and territorial responsibility. Each province has a regulatory body that is given authority through a provincial or territorial medical Act to regulate the practice of medicine in the respective jurisdiction (in Alberta, this is the College of Physicians and Surgeons of Alberta). There are commonalities in the requirements for a medical license across jurisdictions. For example, all physicians in Canada must complete both undergraduate and postgraduate medical education in order to practice medicine. In most provinces, physicians must also pass the CFPC or RCPSC national certification exams, be a Licentiate of the Medical Council of Canada[5] (www.mcc.ca) and be authorized to work in Canada in order to obtain a full license to practice medicine. These professional standards help ensure that only good and safe doctors with the necessary skills and competencies receive a license.

International medical graduates

IMGs have always been an integral part of the physician workforce in Canada. Since 1969, IMGs have represented between 20% and 30% of Canada's physician pool (IMG National Symposium Proceedings 2002). However, while IMGs come to Canada with medical degrees from abroad, it can be difficult to determine the applicability of their education and practice experience (if any) to the Canadian context. The medical education and health care systems in which IMGs studied and/or practiced can be significantly different from the Canadian system. Figure 1 shows the country of medical education for applicants to the AIMG Program.

The comparability of these other medical education systems to the Canadian system can be determined in some cases. The RCPSC, for example, has assessed postgraduate medical education programs in 29 overseas jurisdictions and deemed them to meet RCPSC criteria. IMGs coming from one of these jurisdictions may be able to challenge the RCPSC exams and go onto obtain licensure with a provincial regulatory authority. Some provincial regulatory bodies will also grant restricted or provisional licenses to IMGs who do not hold national college certification but who have completed a minimum amount of postgraduate medical education comparable to what they would have received in Canada. In Alberta, physicians in this context (including IMGs) may be placed on the "Special Register" of the College of Physicians and Surgeons and are thus permitted to practice under specified conditions. In 2005, 674 of the 6,279 physicians in Alberta (10.7%) were licensed on the Special Register.

IMGs who cannot obtain a license through either of these routes must demonstrate that they have the knowledge, skills and attitudes necessary for independent practice in Canada before they can be licensed. Each province has its own mechanism for facilitating this process. In most cases, provinces will fund a certain number of residency positions for IMGs at the province's medical school(s). Some provinces also offer practice-ready assessment programs that assess IMGs in a clinical setting for a period of time. In Alberta, IMGs who are not eligible for registration with the College of Physicians and Surgeons of Alberta must apply for one of the dedicated residency positions available through the AIMGP.

Alberta International Medical Graduate Program

The AIMGP assesses IMGs for their readiness to enter residency at the same level (Postgraduate Level 1) as a Canadian medical graduate. There has been sustained and recent exponential growth of the AIMGP since its inception in 2001. The program's initial mandate to provide qualified IMGs with access to family medicine residency programs only was expanded in 2004 to include selected generalist specialty residency programs as well. The AIMGP has seen a steady increase in the number of applications it receives and the residency positions to

Figure 1: AIMG Program applicants' country of medical education.

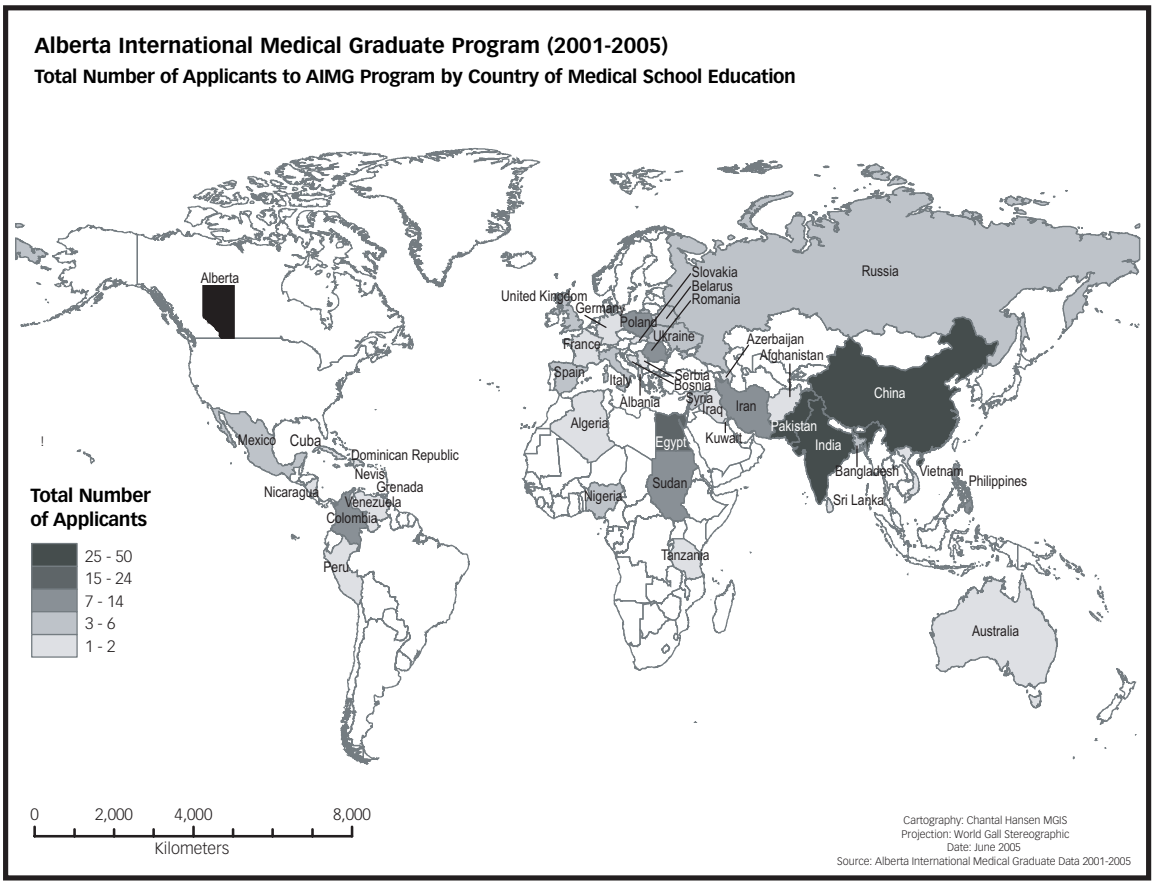


Table 1: AIMG Program growth from 2001 to 2006.

Residency start date	Applications received	Family medicine training positions	Specialty training positions	Total positions
2001	56	11	n/a	11
2002	31	8	n/a	8
2003	39	8	n/a	8
2004	64	12	9	21
2005	92	12	10	22
2006	123	12	12	24
2007	251	20	29	49

which it provides access. Table 1 shows how the program has grown over time.

To date, there are 92 IMGs who have either completed or are currently completing a residency program in Alberta after securing a position through the AIMGP. As of June 30, 2006 there were 35 family medicine residency graduates. While "return of service" contracts have not been a feature of the AIMGP, the vast majority of program graduates are now working in clinical practice in urban centres in Alberta.

The AIMGP assessment process

The AIMGP's application and assessment process proceeds in four stages. A description of the application requirements and assessment steps can be found at www.aimg.ca. There is an Alberta residency requirement that must be met. A file review of candidates' applications ensures the required documentation (e.g. a valid medical degree, objective evidence of English language proficiency) is in place. Candidates who submit complete applications are eligible to proceed to an Objective Structured Clinical Examination (OSCE). In this widely used examination format, candidates rotate through a series of "stations" where they are required to perform a clinical task (or tasks) with a standardized patient.[6] All of the candidates must address exactly the same medical issue and are observed by an examiner, who scores their performance using a checklist.

In 2006, 175 IMGs participated in the AIMGP's OSCE in hopes of securing a residency position in 2007. Ten cases were selected for the OSCE in order to provide a good mix of discipline, clinical content, communication and English language skills. IMGs were given ten minutes to complete each case. The areas tested included:

- The ability to obtain a relevant history or perform a focused physical examination on a standardized patient;
- The ability to outline diagnostic impressions and ongoing management;
- Interpretation of laboratory results and X-Rays;
- Communication skills;
- Counselling skills;
- Ethical issues; and
- English language proficiency.

Seven cases included an assessment of communication and verbal language skills. The AIMGP used a communication checklist that is based on the Medical Council of Canada and the Calgary/Cambridge Guidelines. Oral English language proficiency was judged using a checklist developed by the AIMGP and adapted from the Canadian Language Benchmarks and the American Council on the Teaching of Foreign Languages descriptors.[7] At the conclusion of the clinical examination the candidates were asked to perform two clinical written tasks that were also scored.

The results of the OSCE were collapsed into three categories: the clinical score accounted for 70% of the result, the communications skills score accounted for 15%, and the language proficiency and written English score accounted for 15% of the total result. A rank order of candidate scores was generated. There was good evidence of the face and content validity of this examination. The overall reliability of this examination was 0.75 (Chronbach's alpha coefficient), which assured a high consistency in the rank ordering of the candidates. Candidates whose OSCE scores were above the minimum acceptable score had their files given to residency program directors for consideration for interviews.

Interviews are an important source of non-cognitive information about AIMGP applicants. The AIMGP's interview format is semi-structured. Residency program directors in the generalist specialties are responsible for determining which candidates will be interviewed and for conducting the interviews themselves, while the AIMGP coordinates the interviews for family medicine.

For the first six assessment cycles, the AIMGP used a behaviourally based technique (with two teams of two interviewers) for the family medicine interviews. In the spirit of quality improvement and in light of other work that has shown both traditional unstructured and behavioural structured interviews have weak measurement properties, the interview format for family medicine was changed in 2006 to a Multi-Mini Interview (MMI) technique. This procedure (developed at McMaster University and studied at both McMaster and the University of Calgary) provides higher validity and reliability. While psychometric analysis of 2006 AIMGP interview data is currently underway, early analysis of acceptability data shows that 89% of IMG interviewees preferred the MMI over other interview methods and that 100% of the interviewers were willing to participate in the MMI in the future.

Matching IMGs into residency positions

Residency program directors use the results of the OSCE and the interviews as part of their internal program process to rank IMGs for entry into the four-month

clinical assessment and orientation phase, which is the final step before IMGs are accepted into their residency program. In 2006, the AIMGP piloted a computerized "match" program to place IMGs into these pre-residency positions.[8] This "match" placed IMGs according to their preferred disciplines and city (i.e. Calgary or Edmonton), based on their rankings by program directors.

Each IMG that is matched into a discipline must successfully complete the four-month clinical assessment and orientation phase before beginning residency. This four-month program ensures that selected IMGs have the necessary competencies and understanding of Alberta's multi-faceted health care and medical education systems to enter a residency program at the level of a Canadian medical graduate. Once they successfully complete the clinical assessment and orientation phase, IMGs exit the AIMGP and become residents at either the University of Alberta or the University of Calgary.

IMG initiatives across Canada

The AIMGP is one example of a provincial initiative that provides IMGs with access to the postgraduate medical education they need to become licensed. A number of provinces have also developed assessment and orientation programs similar to that offered by the AIMGP. Ontario offers the largest number of funded opportunities for IMGs in Canada, with 200 training and assessment positions available to qualified IMGs annually. British Columbia's IMG program offers 35 clinical assessment opportunities for IMGs wishing to compete for 18 funded residency positions. With 49 positions funded in 2007, the AIMGP is the second largest IMG program in English-speaking Canada.

The development of provincial IMG assessment and orientation programs, coupled with physician shortages and the complexity of IMG workforce issues nationwide, has presented an opportunity for shared learning and planning across jurisdictions. In 2002, the first IMG National Symposium was held. During this pan-Canadian gathering, stakeholders discussed strategies for the successful integration of IMGs in a national context to help address present and anticipated future Canadian physician supply needs. Participants agreed to support the development of a national integrated approach to the assessment and training of IMGs (IMG National Symposium Conference Procedings).[9] The Advisory Committee on Health Delivery and Human Resources (a committee of the Conference of Deputy Ministers of Health) responded to the Symposium recommendations and set licensure of internationally educated health care providers as a priority. The committee created a Canadian Taskforce on the Licensure of International Medical Graduates with a mandate to develop strategies to aid in the integration of qualified internationally trained physicians into the Canadian physician workforce. In February 2004, the *Report of the Canadian Task Force on the Licensure of International Medical Graduates* was released.[10] Six actions were recommended, and these are shown in Table 2. The recommendations were supported by all levels of government. An oversight committee, called the IMG Implementation Steering Committee (http://testunix.mediaforce1.com/imgtaskforce/), was established and is now steering a multi-jurisdictional recommendation implementation effort in follow-up to the Task Force's report. Early indicators of success are encouraging.[11]

Other initiatives to support IMGs

Along with the ongoing initiatives of governments and their funded programs to coordinate the integration of IMGs into the physician workforce in Canada, other programs to support IMGs are also entering the picture.

Many of the larger provinces have IMG associations that play an advocacy and supporting role for IMGs.[12] Some provinces are also supporting programs to help IMGs develop the language and communications skills they need to be successful in the assessment processes and in residency. The Medical Communications Assessment Program in Alberta (M-CAP) is one such program.[13] As shown in Figure 2, the original language of medical instruction for IMGs residing in Alberta varies widely. M-CAP aims to help immigrant IMGs improve their medical language and communication skills for entry into the Canadian medical profession.

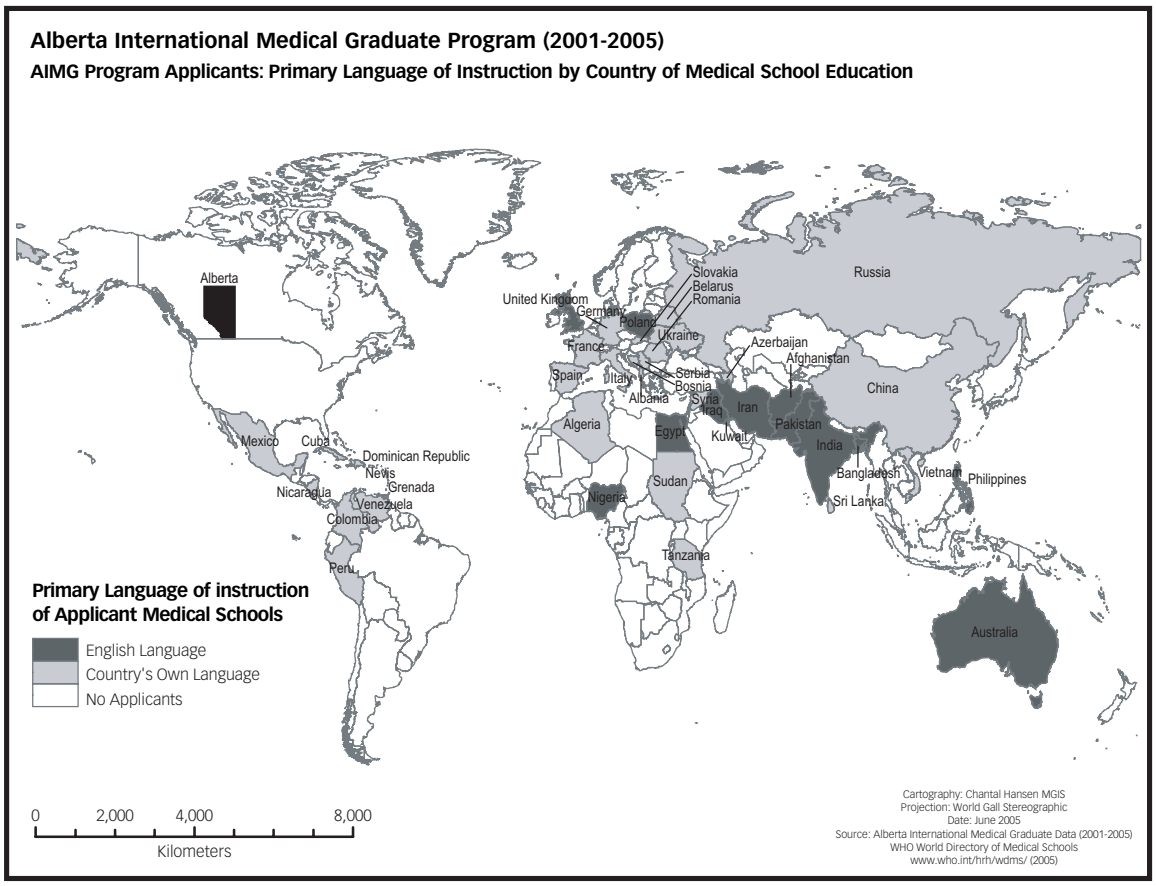
While "return of service" contracts have not been a feature of the Alberta International Medical Graduate Program, the vast majority of program graduates are now working in clinical practice in urban centres in Alberta.

IMGs and our health care system

The collective provincial and national efforts to integrate IMGs into medical practice in Canada are beginning to have a measurable impact on physician supply in Canada. In 2006, 15% of the graduating class from Canadian residency programs were IMGs (www.caper.ca). However, there are a number of other initiatives underway to improve access to health care across the country. For example, we are also seeing enrolment increases at Canadian medical schools, greater utilization of nurse practitioners, the creation of new provider roles and the introduction of inter-disciplinary care teams across the country. The increased opportunities for IMGs in Alberta and in Canada complement these initiatives on a number of levels.

IMG workforce integration efforts have a number of additional benefits beyond increasing physician supply. IMGs bring unique gifts to the practice of medicine in Canada that can help address population and health workforce needs. In order to deliver competent care to our increasingly diverse population, our physician workforce must be sensitive to patients' and families' ethnicity, beliefs, values and language proficiency. Health care

Figure 2: AIMG Program applicants' language of instruction.



providers who are able to bridge cultural gaps in the provision of health services demonstrate a clinical skill that is described in some recent literature as "cultural competence" (Betancourt et al. 2005). While in academic circles there is debate about definitional substance or nuances, there is no debate that culturally competent or culturally sensitive care includes care that is characterized by effective communication. With evidence that the quality of "doctor-to-patient" communication is linked to both patient satisfaction and positive health outcomes (Stewart et al. 1999), the ability of IMGs to communicate effectively with a diverse patient base is crucial.

The assessment and education of IMGs has also been found to be a cost-effective way to improve physician supply. In a recently published study, a team at the University of Calgary (Emery 2002) explored whether investments in IMG skills assessment, training and licensure were a socially desirable use of resources. Estimates showed that resources allocated to providing skills assessments and residency opportunities that lead to licensure for IMGs in Alberta generated real annual rates of return of 9% to 13%.[14]

Next steps

While considerable work has been done in Alberta and elsewhere to establish rigorous processes to assess and orient IMGs, much remains to be done. In Alberta, a priority for the AIMGP over the next few years will be the evaluation of its assessment and orientation tools. Development activities that support ongoing quality improvement will be a focus for the program, as will its support of residency programs as they assess, orient and teach IMGs.

Many challenges also remain at a national level. Work is underway across the country to implement the recommendations of the Canadian Task Force on the Licensure of IMGs.[15] In the fall of 2006, the Association of

Table 2: Recommendations of the Canadian Taskforce on the licensure of IMGs.

Recommendations
1.Increase the capacity to assess and prepare IMGs for licensure.
2.Work toward standardization of licensure requirements.
3.Expand or develop supports/programs to assist IMGs with the licensure process and requirements in Canada.
4.Develop orientation programs to support faculty and physicians working with IMGs.
5.Develop capacity to track and recruit IMGs.
6.Develop a national research agenda, including evaluation of the IMG strategy.

Faculties of Medicine of Canada released a Faculty Development Program for Teaching of IMGs. Residency programs across the country can now use this guide to help their faculty and preceptors work effectively and collaboratively with IMGs and to enhance the learning and practice experience of IMGs in their programs. Initiatives that are still underway include the establishment of national standards for the assessment of IMGs, the creation of a national body to verify the credentials of IMGs and the development of a national IMG database. Other challenges include increasing provincial capacity for teaching IMGs, indemnifying physicians who assess and teach IMGs, and developing alternate career paths for IMGs not successful in obtaining work as a physician.

Conclusion

The AIMGP is an evolving and effective program. It is a vibrant example of a provincial program created to respond to provincial health workforce needs by embracing the opportunity to encourage and utilize the skills of unlicensed IMGs residing in Alberta. This program, in tandem with programs in other jurisdictions, is part of the Canadian response to the challenge of providing competent health care professionals able to provide timely care for our population.

Notes

[1] The views expressed in this article are those of the authors and do not necessarily reflect the views of Alberta Health and Wellness or the Alberta International Medical Graduate Program.

[2] This paper uses the term "IMG" to refer to Canadian-born individuals who left Canada to study medicine abroad and/or physicians who immigrated to Canada after completing medical education. Technically, IMGs may also be citizens of another country who studied abroad and are visiting Canada temporarily to study, teach, or do research; or citizens of another country who studied medicine and live abroad.

[3] Based on the current membership of the Alberta International Medical Graduate Association (AIMGA), as quoted through consultation with an AIMGA representative in the fall of 2006.

[4] Undergraduate medical education programs in Canada are also recognized by the Liaison Committee on Medical Education (LCME), which is an American body sponsored by the Association of American Medical Colleges and the American Medical Association.

[5] The Medical Council of Canada (MCC) is a national body that, together with key stakeholders, develops, validates and implements tools and strategies to evaluate physicians' competence and maintains a national registry of physicians and their qualifications throughout their careers. In order to become a Licentiate of the Medical Council of Canada (LMCC), physicians must pass the MCC Qualifying Exam Parts 1 and 2 (QE1 and QE2). The MCCQE1 is a basic eligibility requirement for many organizations that work with IMGs, including the AIMGP.

[6] A Standardized Patient (SP) is a person trained to portray a patient scenario, or an actual patient using their own history and physical exam findings, for the instruction, assessment, or practice of communication and/or examining skills of a health care provider. In the health and medical sciences, SPs are used to provide a safe and supportive environment conducive to learning or to standardized assessment. (Association of Standardized Patient Educators. January 10, 2007. *What are SPs?* http://www.aspeducators.org/sp_info.htm).

[7] Dr. David Watt and Ms. Deidre Lake from the University of Calgary developed the process and English language proficiency tool for the AIMGP.

[8] The computerized match program used by the AIMGP in 2006 was developed by Mr. Jim Jenkins.

[9] Available at http://testunix.mediaforce1.com/imgtaskforce/main_files/Calgary_proceedings.pdf (accessed January 10, 2007).

[10] Available at http://testunix.mediaforce1.com/imgtaskforce/main_files/Taskforcefeb2004_fr.pdf (accessed January 10, 2007).

[11] In April 2005, the IMG Implementation Steering Committee released a *National Projects for IMGs Status Report*, which can be accessed at http://testunix.mediaforce1.com/imgtaskforce/main_files/update-June.pdf (accessed January 10, 2007). In April 2006, Health Canada launched www.img-canada.ca, the Canadian Information Centre for International Medical Graduates. In August 2006, the Association of Faculties of Medicine of Canada (AFMC) released it Faculty Development Program for Teachers of International Medical Graduates, which can be accessed at http://www.afmc.ca/pages/sa_faculty_development.html (accessed January 10, 2007).

[12] For a list of IMG associations across Canada, visit the "Medical Links" section of www.img-canada.ca (accessed January 10, 2007).

[13] Visit www.m-cap.ca for more information.

[14] To calculate the social "rate of return," Emery calculated the value of the returns to society from investment in the human capital of unlicensed IMGs in Alberta using an income-based approach.

[15] Health Canada has provided most of the funding to support the implementation of the recommendations of the Canadian Task Force on the Licensure of IMGs.

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