IMG SELECTION:

Independent Review of Access to Postgraduate Programs by International Medical Graduates in Ontario

---

Volume 1: Findings and Recommendations

SEPTEMBER 2011

Submitted to the Ontario Ministry of Health and Long-Term Care and the Council of Ontario Universities

by George Thomson and Karen Cohl

CONTENTS

IMG Selection:
Independent Review of Access to Postgraduate Programs by International Medical Graduates in Ontario

Volume 1: Findings and Recommendations

"The stakes are high. It's a career ending decision."
–Faculty member

"There are a lot of very good candidates. Nobody really knows the best way to choose."
–Faculty member

"What most IMGs want is a chance to prove to the system that they can do the job."
–Former IMG resident and current faculty member

"The more experienced the international medical doctor, the less the chance of getting in."
–Association of International Physicians and Surgeons of Ontario

[Quotations are from consultation participants.]

A. INTRODUCTION

Background

For many doctors with medical degrees from outside Canada or the United States, Canadian postgraduate training is an essential step on the path to medical practice in Ontario. Competition is stiff, and there are many more applicants than there are positions. In 2011, for example, more than 1,800 applicants vied for 191 first-year residency positions designated for international medical graduates (IMGs) at the Ontario faculties of medicine.

Despite many reforms by government, faculties of medicine, and regulatory bodies, IMGs have continued to raise concerns about the fairness of policies and practices that determine access to the medical profession. In October 2010, the Ministry of Health and Long-Term Care commissioned us (George Thomson and Karen Cohl) to conduct an independent review (the IMG Review), with administrative support from the Council of Ontario Universities. The purpose was to examine the selection process for IMGs

seeking postgraduate positions at Ontario's faculties of medicine, to identify and assess barriers in that process, and to recommend solutions.

The IMG Review consultation process included visits to the six faculties of medicine in Ontario and many meetings with international medical graduates, postgraduate faculty, and relevant provincial and national organizations. Over all, we heard from more than 200 people. We reviewed data, reports, and submissions, including a special data-run by the Canadian Resident Matching Service (CaRMS) on the 2011 selection process. We also took an in-depth look at the 2011 process in three programs: family medicine, pediatrics, and internal medicine.

This report is not about the demand for medical services, physician supply, or the role IMGs should play in meeting the need for additional physicians in Ontario. Nor is it an examination of Canada's immigration policy in relation to internationally trained physicians. It is a focused look at one vitally important issue: how to ensure that the process through which applicants are selected for the available postgraduate positions is fair.

This volume (Volume 1) sets out the key findings and recommendations of the IMG Review. Volume 2 provides a more detailed description of our work over the past year in understanding the selection process and identifying and analyzing the challenges faced by the two key players: IMG applicants and Ontario's faculties of medicine.

Read Volume 2 of this report to learn about…

- What the selection process looks and feels like for IMGs and faculty members
- Data from the 2011 selection process and an in-depth look at 3 program areas
- The evolution of IMG programs in Ontario
- Concepts of fairness and decisions of courts and tribunals
- IMG programs in other provinces
- References to reports and studies

OBSERVATIONS

We believe there are measures that would make the postgraduate selection process fairer for IMG applicants and more manageable for the faculties of medicine. Before describing our findings and proposed solutions, we offer several broad observations.

THIS IS AN IMPORTANT PUBLIC POLICY ISSUE

Decisions about access to postgraduate medical positions have a wide-ranging impact. For IMGs, it can mean the difference between fulfilling their dream to practise medicine here and giving up on it. They deserve a fair and transparent process for determining who gets these coveted positions.

Postgraduate faculty members supervise the delivery of high-quality medical services in Ontario's teaching hospitals and provide hands-on training in family medicine and many other specialties. Selection decisions affect their ability to do so. They need an evidence-

based process to select the applicants who are most likely to succeed in the program and beyond.

Most important, selection decisions affect the public by helping to shape the population of future licensed physicians.

For these reasons, the selection process would be of vital importance even if Ontario's faculties of medicine had unlimited capacity to accept IMGs into their programs.

THE ENVIRONMENT IS ONE OF CONTINUAL CHANGE

The last decade has seen major changes and substantial reform in areas that have an impact on the IMG selection process. For example, increases in medical school enrollment have put pressure on the clinical capacity of the medical school faculties and teaching hospitals. Adding to the pressure, the number of Ontario postgraduate positions designated for IMGs more than doubled in 2004, from 90 to 200. The composition of those positions has since changed significantly, with a growth in first-year residency positions and a decline in opportunities to begin at a more advanced level.

In 2006, the Ontario faculties of medicine assumed a more intensive role in IMG selection. Since then, they have tried various ways to improve the process. Meanwhile, the volume of applications has grown, as many more Canadians studying medicine abroad apply for postgraduate residency positions alongside immigrant physicians. This has created a challenge for the faculties in reviewing applications and comparing applicants at different stages in their medical careers.

In 2007, the IMG-Ontario office was disbanded. In its place, the Ontario government created the HealthForceOntario Access Centre to provide information, counselling, and support to IMGs and the Centre for the Evaluation of Health Professions Educated Abroad as an expert assessment body. At that time, Ontario's clinical exam for IMGs seeking first-year residency positions went from being mandatory to optional, and in 2011, this provincial exam was integrated into a new national exam.

Another change occurred in 2010, when the Ontario government loosened the requirements about where IMGs can practise medicine after completing the postgraduate program.

This ever-changing landscape, in an already complex system involving multiple players, presents challenges for IMGs in navigating the system, for medical faculties in managing the selection process, and for researchers in determining the impact of policies, practices, and tools.

We recognize that implementing the changes recommended in this report will add yet more reform to a constantly changing system. We have recommended change only where we believe there is strong value in doing so.

There are high levels of commitment—and high levels of frustration

We have had the benefit of speaking with many IMGs and postgraduate faculty members during the course of the IMG Review. We were struck by the unwavering commitment of IMGs to pursuing their medical careers, and by the faculties' dedication to selecting the best applicants. We were equally struck by the collective sense of frustration.

Many IMGs see medicine as their true calling and being a doctor as an integral part of their personal identity. We heard the stories of individuals who did whatever they could, often over a period of years, to improve their chances. For most, a postgraduate position is their only way into the system, and it can be devastating when they are not selected for an interview or offered a position.

Among IMGs who immigrated to Canada after practising medicine abroad, there is a feeling that the door is now closing. One issue is that Canadians who studied medicine abroad (CSAs) obtain more of the first-year residency spots each year. At the same time, the number of advanced postgraduate positions seems to be in sharp decline. Immigrant physicians with extensive experience in another country have expressed frustration that alternative routes to practice are not widely available. CSAs also face challenges. Their numbers are expanding rapidly, reducing their chances of finding a position when they return to Canada.

Other challenges for IMGs include the length and cost of the process and the difficulty of finding opportunities to demonstrate clinical skills. IMGs who obtained a position reported difficulties with the mandatory pre-residency program or the requirement that they sign a "return of service" agreement to practise medicine outside of the Toronto or Ottawa areas for five years.

The postgraduate faculty and staff who lead, manage, and support the IMG selection process devote considerable time and attention to running a fair process, selecting the best applicants, and experimenting with new selection methods. Their efforts also gained our respect. Workload pressures and uncertainty are major causes of their frustration. Within a short time period, many programs must process hundreds of applications from a diverse group of applicants with so much at stake. Some faculty members also experience frustration in their attempts to accommodate experienced physicians in the advanced-level postgraduate positions available in some specialty programs. Added to this is the almost impossible task of assessing the education offered in a wide variety of medical schools in dozens of countries and uncertainty about clinical skills obtained outside of North American health care settings.

The impact of selection methods is different for the two groups of IMGs

There are in effect two groups of IMGs. One is immigrant IMGs who obtained their medical degrees abroad, and in many cases practised abroad, before immigrating to

Canada. The other is Canadians who studied abroad (CSAs). CSAs are Canadians citizens or permanent residents who left Canada to obtain a medical degree abroad. While some CSAs are also immigrants, the distinction is that they came to Canada before obtaining their medical degrees.

Immigrant IMGs are finding it increasingly difficult to compete with CSAs for first-year residency positions. CSAs are mostly recent graduates, many of whom apply in their final year of medical school. In that respect, they are similar to graduates of Canadian medical schools who apply for residency at the same point in their careers. Many postgraduate programs favour both recent graduation and North American clinical experience, which some CSAs are able to obtain as part of their undergraduate medical education.

Some of the advantages enjoyed by CSAs do not exist to the same degree in all postgraduate programs, and many CSAs are not successful in obtaining positions. Based on CaRMS data for 2011, approximately 80% of CSA and 94% of immigrant IMG applicants were unsuccessful after the first iteration of the matching process for first-year residency positions in Ontario.

Many of our recommendations are designed to address factors that affect the relative positions of the two IMG groups. We are not advocating that more positions go to one group or the other. Rather, we envision a system in which both groups can compete fairly for the designated first-year positions and where the pathway is expedited for experienced doctors who do not need to repeat a full residency program.

Nothing in this report challenges the basic premise that postgraduate positions must be available for graduates of Canadian medical schools in whom a substantial investment has been made to prepare them for admission into the medical profession. Nor are we challenging the premise that legitimate indicators of success in residency must be taken into account.

Rather, the objective is to ensure that all international medical graduates, both immigrant IMGs and CSAs, can compete fairly based on their skills and experience for the positions that are available to them. A system that disadvantages qualified immigrant applicants would not be in keeping with the societal obligation to integrate individuals who have been selected for immigration to Canada. Nor would it be acceptable to prevent CSAs from competing fairly for the available postgraduate positions.

WE ARE LEARNING MORE, BUT THERE IS MORE TO LEARN

There is a growing body of studies, research, and reports examining the experience of IMGs and the challenges associated with their entry into the Canadian health care system. The IMG Review has benefited greatly from this work, especially from reports conducted in the Canadian context. There is also much to learn from innovations introduced here in Ontario and in other provinces.

One positive development is the collaborative process that the six Ontario universities use for screening and interviewing first-year IMG residents in family medicine. Another positive development is the use of "Multiple Mini-Interviews" to select residents in some specialty programs.

There is still much that we do not know. For example, a significant challenge in IMG selection is determining the reliability of the various criteria, processes, and tools for predicting success in residency and beyond, and assigning the appropriate weight to each of them. Clearly, the more selection decisions can be made on the basis of solid research and data, the more defensible they will be.

Summary: Observations

- This is an important public policy issue
- The environment is one of continual change
- There are high levels of commitment—and high levels of frustration
- The impact of selection methods is different for the two groups of IMGs
- We are learning more, but there is more to learn

B. ACCESS TO FIRST-YEAR RESIDENCY POSITIONS

2011 Ontario Snapshot

First Iteration

In the "first iteration" of the selection process for first-year residency positions, IMGs competed for 191 designated positions at Ontario faculties of medicine in a stream separate from that of Canadian or US medical school graduates.

Those who obtained interviews "ranked" the faculties they wished to attend, who in turn ranked them. The Canadian Resident Matching Service (CaRMS) then ran a computerized program to match applicants to positions.

The following were the results after the first iteration:

- 183 IMGs were matched to first-year residency positions (98 CSAs and 85 immigrant IMGs)
- Eight designated IMG positions remained unfilled
- 1,697 IMG applicants were not matched (371 CSAs and 1,326 immigrant IMGs)

Second Iteration

In the "second iteration," IMGs and graduates of Canadian or US medical schools competed in a blended process for first-year residency positions left unfilled in either stream after the first iteration.

The following were the results after the second iteration:

- An additional 38 IMGs were matched (14 CSAs and 24 immigrant IMGs), for a total of 221
- 1,282 IMG applicants remained unmatched (269 CSAs and 1,013 immigrant IMGs)

Source: CaRMS Data Tables, 2011 Main Residency Match (R-1)

DESIGNATED IMG POSITIONS

In 2011, 191 of Ontario's 200 designated positions for IMGs were for first-year residency. Of those, 80 (42%) were for family medicine and 111 (58%) were for other specialty programs. In the first iteration of the first-year residency match, IMGs competed for these 191 positions, while graduates of Canadian (or US) medical schools competed for the 935 positions (83%) reserved for them.

The 191 designated IMG positions represented 17% of all first-year Ontario residency positions. Table 1, below, shows the breakdown of designated first-year IMG positions by programs and by the six faculties of medicine.

TABLE 1

IMG Designated Positions Offered in Ontario 2011 First-Year Residency Positions							
	Ottawa	**Queen's**	**Toronto**	**McMaster**	**Northern**	**Western**	**Total**
Family Medicine	13	11	24	12	2	18	80
Internal Medicine	4	4	8	3		6	25
Pediatrics	2	1	3	3		2	11
Psychiatry	2	2	3	1		2	10
Anesthesiology	2		3	1		2	8
Emergency Medicine	2		3	2			7
Orthopedic Surgery	1		2	2		1	6
Diagnostic Radiology	2		2	1			5
General Surgery	1		3			1	5
Laboratory Medicine	1	1	3				5
Neurology	1		2	1		1	5
Obstetrics & Gynecology	1		1	1			3
Dermatology	1		1				2
Ophthalmology	1		1				2
Physical Med & Rehab			1	1			2
Plastic Surgery	1		1				2
Radiation Oncology			1	1			2
Urology			1	1			2
Anatomical Pathology				1			1
Cardiac Surgery	1						1
Community Medicine				1			1
General Pathology				1			1
Medical Genetics			1				1
Medical Microbiology				1			1
Neurology - Pediatric			1				1
Neurosurgery			1				1
Nuclear Medicine	1						1
Hematological Pathology							0
Medical Biochemistry							0
Neuropathology							0
Otolaryngology							0
TOTALS	**37**	**19**	**66**	**34**	**2**	**33**	**191**

Source: CaRMS Data Tables, 2011 Main Residency Match (R-1)

The second iteration in Ontario is referred to as a "blended" competition. This is because both IMGs and Canadian or US graduates can apply for any unfilled positions. If any positions remain vacant after the second iteration, there is an informal "scramble" in which individuals apply directly to the postgraduate programs, with no computerized matching process.

As Table 2 shows, below, IMGs obtained more than the designated 191 first-year positions in 2011 by competing alongside unmatched graduates of Canadian medical schools after the first iteration. A total of 221 IMGs were matched to first-year positions in 2011. Approximately half of those 221 positions went to Canadians who had studied medicine abroad and half to immigrant IMGs.

TABLE 2

IMGS Matched Into First Year Residency Positions in Ontario, 2011						
	CSAs		Immigrant IMGs		Total	
	#	%	#	%	#	%
Matched in 1st iteration	98	53.6	85	46.4	183	100
Matched in 2nd iteration	14	36.8	24	63.2	38	100
TOTAL	**112**	**50.7**	**109**	**49.3**	**221**	**100**

Source: CaRMS Data Tables, 2011 Main Residency Match (R-1)

STEPS IN THE SELECTION PROCESS

Postgraduate programs at the Ontario faculties of medicine typically go through four basic steps in the first iteration of the selection process. If required, the steps are repeated in the second iteration.

- Step 1: Apply initial filters
- Step 2: Review files in detail
- Step 3: Conduct interviews
- Step 4: Rank interviewed applicants for the computerized matching process

The following descriptions and comments relate to the selection of IMGs to fill designated positions in the first iteration.

STEP 1: INITIAL FILTERS

VOLUME OF APPLICATIONS

A critically important question for program directors is how to reduce the number of IMG applications to a manageable level. Filtering is a necessary first step because programs simply cannot give extensive time to all of the applications they receive.

The family medicine programs save time by jointly conducting the filtering, file reviews, and interviews. This way, each applicant is considered once, even if he or she submitted multiple applications. Even so, the joint family medicine process has over 1,400 applications to reduce to the approximately 300 applicants who will be invited to an interview to fill 80 positions.

The number of applicants can also be very high in the other specialty areas, where each faculty of medicine conducts the selection process independently. Volume can be looked at in terms of the number of applications a program received or the ratio of applications per designated position. Many IMGs apply to more than one program and more than one faculty of medicine.

Due to the volume of applications, most programs apply one or more filters to determine which files to review in greater detail. The two most common filters are date of medical school graduation and exam scores. The joint family medicine selection process uses exam scores as the initial filter. Many specialty programs use date of graduation, either alone or in combination with exam scores. We did find a few examples of specialty programs that filter on exam scores alone, but they appear to be the exception. Typically, an applicant who does not make it past this filter will be eliminated from the competition. In some cases, program directors will review files to identify some exemplary applicants to bring back in.

Volume of IMG Applications, First Iteration, 2011

- Five of the six Ontario faculties of medicine each received over 1,000 applications from IMGs for family medicine, over 500 for internal medicine, and over 200 for pediatrics
- The Northern Ontario School of Medicine received 856 applications for its two designated IMG positions in family medicine
- Each of the three faculties with designated positions in general surgery received over 150 applications from IMGs
- At the low end, some programs received approximately 40 applications per designated IMG position, e.g., neurosurgery at the University of Toronto, cardiac surgery at the University of Ottawa, and medical microbiology at McMaster University

Source: CaRMS Data Tables, 2011 Main Residency Match(R-1)

FILTERING BY DATE OF GRADUATION

Many programs consider recent clinical experience a predictor of success in residency. It is hard to disagree with this proposition and it seems to be supported in the research literature.[1] Recent training (which almost always includes a clinical experience component) is an easy filter to apply electronically, using date of graduation from medical school. Identifying recent, relevant practice, however, requires a labour-intensive review of the file. Many specialty program directors told us that they use the date of graduation as an initial filter. Three years from graduation is common, but some use five or ten years.

The effect of this practice on immigrant IMGs is potentially enormous. CSA applicants are mostly recent graduates, often applying in their final year of medical school. Most immigrant IMGs graduated much earlier. Looking at 2011 statistics, it is clear that the more recent the date of graduation the programs use as an initial filter, the more immigrant IMGs would be eliminated from the competition.

Date of Graduation, 2011 Applicants

- 86.1% of CSA vs. 5.3% of immigrant IMG applicants graduated in 2009, 2010, or 2011
- 48.6% of CSAs vs. 0.1% of immigrant IMGs graduated in 2011
- 78.8% of immigrant IMG vs. 2.3% of CSA applicants graduated in 2004 or earlier
- 32.1% of immigrant IMG vs. 0.4% of CSAs graduated in 1995 or earlier

Source: CaRMS Data Tables, 2011 Main Residency Match (R-1)

FILTERING BY EXAM SCORES

"Programs need a standardized clinically relevant exam that can help them decide."
–Faculty member

Some specialty programs use exam scores as a filter, although not as often as date of graduation. This is because the only exam all IMG applicants must take is the Medical Council of Canada's written evaluating exam. Program directors are concerned about distinguishing among applicants on the basis of an exam that has no clinical component—largely a pass-fail exam rather than one where differences in scores have real significance.

A clinical exam, which is administered by the Centre for the Evaluation of Health Professionals Educated Abroad (CEHPEA), does assess clinical skills and is seen as a better indicator of suitability for residency. However, since the clinical exam is no longer mandatory in Ontario, many IMGs, and particularly CSAs applying for residency positions in their final year of medical school, do not take it. That leaves program directors in a quandary about how to filter on the basis of an exam that not all applicants have taken. Some specialty program directors report that a high score on the clinical exam can bring back applicants who were filtered out by date of graduation and a low score can be fatal. However, in many programs, the selection impact of the clinical exam appears to be modest or nonexistent.

In their joint selection process, the family medicine program directors have found a way to deal with the problem of having clinical exam results for only some of the applicants. Their solution is to filter recent graduates by their evaluating exam scores and less-recent graduates by their clinical exam scores. Interview spots are reserved for the top scorers from each group. In 2011, 50% of the family medicine interview spots were reserved for each group. All IMGs who obtained an interview also received a file review.

The joint selection process for family medicine is attractive in that it uses objective criteria (exam scores) to determine who gets an interview and file review. However, it involves a somewhat arbitrary division of applicants into the “evaluating exam” and “clinical exam” groups. Another concern is that less-recent graduates who do not submit clinical exam scores are eliminated from consideration, without a chance to be considered based on their clinical experience or evaluating exam scores. In 2011, over 700 applicants were eliminated off the top on this basis.

In short, without a mandatory clinical exam, program directors, whether in family medicine or other specialties, lack a meaningful exam score for comparing all applicants at the initial filtering stage. This works to the advantage of CSAs. They do better when date of graduation is the filter and they can avoid the risk of being eliminated because of a poor score on the clinical exam. To its credit, the family medicine selection process ensures that a certain number of applicants who submit clinical exam scores (mostly immigrant IMGs) obtain a file review and interview.

If they had clinical exam scores from all applicants, program directors could easily and fairly compare applicants at the initial filtering stage. The filtering decision would be objective, transparent, and easily explainable. It would level the playing field at the initial stage of the selection process because large numbers of immigrant IMGs would not be eliminated by their date of graduation. A wider range of factors could still be considered during the subsequent stages of the selection process.

To achieve this, Ontario would need to make the national clinical exam mandatory for all IMGs applying for first-year residency positions. It is already mandatory in other provinces, such as British Columbia, Alberta, and Quebec, although in Quebec the Medical Council of Canada’s Qualifying Exam – Part 2 is accepted as a substitute.

The national clinical exam, which took effect in 2011, is the result of several years of work to develop an exam that can be used with confidence across the country. In many ways, it models Ontario’s former clinical exam. The introduction of this exam was accompanied by a commitment to research and tracking to evaluate its effectiveness and its ability to predict which applicants are most likely to succeed in residency, on the certification exams, and in independent practice. Making the exam mandatory in Ontario would have the additional benefit of feeding into national studies on its effectiveness as a predictor of success.

The national clinical exam also has the advantage of assessing applicants on a wider range of generic skills than previous clinical exams did. This is an important factor in assessing the ability of IMGs to adapt to the Canadian health care system.

We therefore recommend broader adoption of the family medicine programs’ practice of using exam scores to decide who will receive both a file review and an interview. Using the national clinical exam for this purpose would provide an objective and transparent approach to filtering. It would also reduce the workload for program directors and potentially allow for more applicants to be interviewed. In family

medicine, it would also eliminate the need to somewhat arbitrarily divide applicants into two categories.

We realize that at this or later stages of the selection process, many programs will still want to know whether there has been recent, relevant clinical experience. We do not believe that date of graduation should be used as a proxy for this factor. Instead, we encourage the medical faculties to work with CaRMS to determine whether it is possible to develop a more reliable indicator that would not require extensive additional manual work.

For example, some faculty members suggested a series of defined questions on the residency application form. CaRMS has indicated that this can be considered as part of a planned, broader review of its application form. One of the drivers for such a review is the need to ensure that the diversity of IMGs' experience is captured on the application form in a way that assists decision-making at the various stages of the selection process.

Three conditions need to be met before making the national clinical exam mandatory for all IMGs applying to first-year residency positions in Ontario:

1. Capacity to administer the exam

There must be sufficient capacity to administer the exam each year to all eligible applicants. Ontario was unable to provide the exam to all who wanted it during the first year of operation. The number of nationally scheduled days when the exam could be offered was limited, as was the size of the Ontario exam facility. The Ontario government, the Medical Council of Canada, and the Centre for the Evaluation of Physicians Educated Abroad will need to work out a plan to correct the problem. Based on our discussions with officials at each of these bodies, we are confident that this can be done.

2. Opportunity to take the exam in final year of medical school

To be fair to both groups of IMGs, Ontario must accommodate CSAs in their final year of medical school to ensure they can take the exam without losing a year. One factor that will help is that, unlike the former provincial clinical exam, the new national exam does not require applicants to first complete Part 1 of the Medical Council of Canada qualifying exam.

From our discussions with officials in Ontario and with national bodies, a potential scenario would be for CSAs to take the evaluating exam in the summer after their third year of medical school, and then take the clinical exam in the early fall of their fourth and final year. This would mean taking the exam before completing the final year of clerkship rotations and electives, and it would mean coming to Canada to do so. However, the exam is designed to reflect the competencies reasonably expected of someone at this stage of his or her education.

Immigrant IMGs will face different challenges in having to take the clinical exam. Many will be several years away from clinical experience outside their specific area of practice, and less familiar with this type of structured examination.

Because CSAs and immigrant IMGs are highly heterogeneous groups with a broad range of training and clinical experience, it is difficult to generalize about the advantages and disadvantages they might face. The bottom line is that a fair selection process requires a common test of clinical capability.

3. Building confidence in the national clinical exam

We recommend that the national clinical exam become the all-important first filter in deciding who will receive a detailed file review and interview. This means that postgraduate faculty will need to have confidence in the exam's ability to perform this function well. Some of the past reluctance to place significant weight on clinical exams arose from a lack of understanding about how they were developed and what they measured. It will be extremely important, as part of making the national clinical exam mandatory, that information on the exam, and on how to interpret its results, is readily available to all faculty involved in IMG selection. It will also be important to have clear policies on issues that affect faculty confidence, such as the number of times applicants can take the exam.

The National Clinical Exam (NAC OSCE)

The national clinical exam is an objective, structured clinical examination (OSCE) developed by the National Assessment Collaboration (NAC):

"Physician examiners observe candidate interactions with the standardized patients and complete ratings on up to seven of nine possible competencies relevant to the presenting problem and clinical task. These competencies are history taking, physical examination, organization skills, communication skills, language fluency, differential diagnosis, data interpretation, investigations and management. A candidate could be rated on any combination of these competencies on a given station. A candidate's total score for each station is the average of all his or her competency ratings. A candidate's total score on the OSCE component is the average of the total scores from the 12 stations."

Source: Website of the Medical Council of Canada

Step 2: File review

After the initial filtering, specialty programs conduct a file review to reduce the number of applicants to those who will move on to the interview stage. As noted earlier, the joint family medicine process is different in that the initial filtering also determines the number who will be interviewed, and all interviewed applicants also have a file review.

Most programs have introduced a structured approach to file reviews in an effort to provide more objective comparisons among applicants and greater consistency when several individuals or teams conduct the reviews. Some use rating sheets to assign a range of numerical scores for each factor and others use more qualitative measures. Often, certain criteria can trigger automatic elimination (such as failed courses or no clinical experience in the particular specialty). Generally, there is an opportunity to add

comments or to raise red flags. Most of the rating sheets we looked at give points for such elements as letters of reference, grades, awards, clinical experience in the specialty, Canadian or North American clinical experience, and the applicant's personal statement.

We were impressed with the efforts of many programs to try to structure the file review. Approaches did vary, however. It did not seem unreasonable for different specialty programs to have different views about the relative weight to be assigned to various factors, but one could question the range of approaches to the same specialty among different faculties.

It is here that we face the reality that letters of reference and personal statements (and interviews) have not been shown to be highly reliable methods of distinguishing among applicants and predicting success in medical school or residency.[2] This is true for Canadian graduates as well as IMGs. Program directors acknowledge the limits of these criteria, but rely on them in the absence of other tools to distinguish among applicants.

A common theme in our discussions with program directors was the difficulty of assessing reference letters from abroad and personal statements from a very diverse group of applicants. They recognize that CSAs, particularly those who have completed Canadian electives, are better able to score high on these elements. In fact, several rating sheets explicitly recognized the importance of North American clinical experience or local electives, with additional points for letters of reference confirming that the experience was positive. Once again, for understandable reasons, the advantage lies with the CSAs. Even though their clinical experience is at the undergraduate level, CSAs can be in a better position at the file review stage than immigrant IMGs who have more extensive experience but not in North America.

Canadians Studying Abroad and Immigrant IMGs

- Of the matched group of IMGs across Canada, the percentage of positions matched to CSAs rose from 26.9% in 2008 to 47.9% in 2011. The percentage matched to immigrant IMGs dropped from 73.1% in 2008 to 52.1% in 2001.

  Source: CaRMS National Match Results for Active IMGs, 2008-2011

- In 2011, CSAs represented approximately 1/4 of the IMG applicants and obtained just over 1/2 of the first-year residency positions filled by IMGs at the Ontario faculties of medicine

  Source: CaRMS Data Tables, 2011 Main Residency Match (R-1)

This brings home the great difficulty for immigrant IMGs who are unable to demonstrate their clinical skills, either through an exam that is given real weight or through clinical experience that is seen as helpful by those reviewing the files. It is not surprising that for IMGs, the most personally challenging part of the process is the often desperate search for the opportunity to prove themselves in a North American clinical environment and thereby become more likely to move past the file review stage. This applies to

immigrant IMGs and to those CSAs who are not able to obtain a North American clerkship or local elective.

There is limited scope at the file review stage to address the lack of ability to assess clinical experience obtained abroad. However, we do recommend that programs not assign a weight to North American experience and references that can overshadow other factors. One way to deal with this is to be careful not to, in effect, double-count North American experience and references for that experience in awarding points.

Step 3: Interview

Both faculty and applicants see interviews as a vitally important part of the process, yet they also question the reliability of major decisions made on the basis of one brief encounter. The research literature reinforces this uncertainty about the predictive value of personal interviews, although there is some evidence to suggest that structured interviews are more reliable.[3]

Despite filtering to reduce the pool of applicants, in most programs interviews are limited to no more than 30 minutes. Program directors generally recognize the limits of a short interview, but they must struggle to balance the desire to see as many applicants as possible with the limited resources and time available. In the joint family medicine program, for example, the decision has been made to interview approximately 300 IMG applicants in interviews of 20 to 30 minutes.

Some IMGs view it as unfair that they obtained only one joint interview for family medicine while graduates of Canadian medical schools were interviewed at each faculty to which they applied. Having looked at the volume of IMG applications for family medicine, we can see that the joint process actually expands the number of IMGs invited to an interview. Without the joint process, there would be fewer people, each interviewed several times, as opposed to close to 300 people interviewed once. This benefit outweighs the downside of having only one interview at one location. It also provides a broader pool of candidates for the programs to rank for the computerized match.

Most programs structure the interview by using standard questions and rating sheets that assign numerical scores. Many offer orientation for the interviewees and make an effort to prepare the interview team, especially new members, for the task. Some of the questions explore clinical skills, but there appears to be an emphasis on such issues as adaptability to the Canadian health care system, professional ethics, problem-solving and communication skills, and depth of interest in the particular specialty.

Most rating sheets, whether for file reviews or interviews, allow for adding comments about the candidate. We were told that these comments can play a role in the ultimate decision about how to rank individual candidates. Program directors and postgraduate deans acknowledged that this is the point where the somewhat “softer” factors come into play, including communication skills, adaptability and “fit” with the existing program and residents.

These softer criteria do invite more subjective decision-making. Nevertheless, it should be possible to identify, over time, the factors that should be considered in assessing whether an individual is able to communicate effectively, can adapt to the Canadian postgraduate environment, or is likely to fit into the particular program. Further, as one commentator observed,

> [T]he use of interviews in high stakes selection processes requires careful attention to how culturally and linguistically diverse candidates may be disadvantaged by the sometimes invisible assumptions that guide assessment of success and failure.[4]

To help meet the unique challenge of assessing an increasingly diverse set of applicants, we suggest, as others have, that faculty and residents be given more assistance in preparing to conduct interviews and file reviews in a fair and objective way. We were told of programs in Canada and elsewhere that assist faculty in recognizing and dealing with cultural differences effectively[5]. Such programs also help them recognize the extraneous factors that can influence their reactions to particular applicants. This is one of several areas where involving IMG faculty and residents in the selection process can be very helpful. We were impressed with the number of programs that have taken advantage of this valuable resource in creative ways, both in the selection stages and during residency.

We also think it is important to separate the interview function from the file review function. A few program directors told us that their interview panels have some background information on the applicants, but not the complete files or the file review ratings. This helps to ensure that interview scores do not become simply a rescoring of the applicant's paper qualifications. It also eliminates the possibility that knowledge of grades and other file information will produce a "halo effect."[6]

Multiple Mini-Interviews

Some specialty programs in Ontario have moved to Multiple Mini-Interviews for both IMGs and graduates of Canadian or US medical schools. Applicants move through a series of stations, each lasting about ten minutes. Designated faculty members preside over the stations and rate the applicants. One station is usually a personal interview, where applicants have an opportunity to speak about themselves and faculty can promote the program.

Multiple Mini-Interviews have been validated as an assessment tool through several research studies.[7] The main benefit comes from the multiple independent ratings. Multiple ratings help to prevent one person's positive or negative view from determining the outcome. Scoring is more consistent, since each applicant is rated on the same question by the same person rather than by different interview panels. An applicant's performance on one question does not influence his or her ratings on subsequent questions.

Faculty members in programs that use Multiple Mini-Interviews express confidence in them. Such interviews have been shown to provide more objective results and greater insight into how the applicant would function in a real-life setting. Those who do not use Multiple Mini-Interviews have voiced reservations about their ability to incorporate them into an already intense, time-limited process. They are particularly concerned about the logistics and personnel requirements associated with offering them to a large number of applicants in high-volume programs.

In Ontario, McMaster University has developed a selection of stations that can be adapted and used for individual admissions programs. Most Ontario medical schools already have a licence to use the materials that have been developed. Multiple Mini-Interviews have been employed in undergraduate programs, and the Michener Institute for Applied Health Sciences uses them with large numbers of applicants. This suggests that Multiple Mini-Interviews can be used successfully in high-volume programs, although it will require work to recruit and train interviewers and to deal with the logistics and costs.

We are not suggesting that all programs should move to Multiple Mini-Interviews. There may be other ways to achieve the same benefits. We do believe, however, that it would be important to try Multiple Mini-Interviews or alternative techniques that incorporate the features that make them a valuable assessment tool. We recommend that the joint family medicine selection process be supported to test and report on the use of Multiple Mini-Interviews in a high volume area.

Some people we spoke with suggested using a smaller number of stations to reduce the logistical challenges while still providing a more objective process than traditional interviews. Another suggestion was to use the Computer-based Assessment for Sampling PERsonal characteristics (CASPer) as a pre-test to bring down the number of applicants who participate in Multiple Mini-Interviews. This may be a valid way of dealing with problems that arise with larger programs. Research has been conducted and more is under way to test the reliability, short-term predictive validity, and acceptability of the CASPer with diverse populations.[8]

Some have suggested that, over time, Multiple Mini-Interviews might be administered as a common tool across different program areas and faculties as part of the IMG selection process. In that model, the programs could all start with the same scenarios, but they would have an opportunity to make modifications to reflect what they consider most important.

Step 4: Ranking

The last task in the selection process is for the programs to rank the interviewed applicants and for interviewed applicants to rank the programs. Through the CaRMS computerized match, these rankings determine who fills the first-year residency positions.

Ranking the applicants represents the final opportunity to determine which of them would be the best choices for that program in that faculty of medicine at that time. The individuals selected will be with the program for two years in family medicine or up to five or more years in other specialties.

The process of ranking applicants is much less formalized than the processes for the previous three stages. Each program (even the programs that participate in the joint family medicine selection process) determines how the interview and file review results, and any other factors, will be used in making ranking decisions. Our discussions with program directors suggest that the ranking decision is a jealously guarded one.

The postgraduate office at each faculty of medicine will generally conduct a final check of the ranking results to ensure that all ranked applicants meet the eligibility requirements and that a sufficient number of applicants have been ranked to fill the designated positions.

We understand why ranking *decisions* must be kept confidential. However, the ranking *process* can be made more transparent. Most program directors we spoke with said they assign great weight to the scores from the file reviews and interviews and make very few changes. Others stressed the need to be able to exercise discretion at the ranking stage. We agree that some discretion is necessary, but it is important to structure that discretion. By this we mean measures such as articulating the factors that can justify movement up, down, or off the list, an inclusive process for making decisions, and a good record of decisions so that it is possible to review results over time.

Many program directors described an inclusive process for the ranking decision that involves input from and discussion with the interviewers and file reviewers. This adds to the objectivity and transparency of the process since the ultimate decisions are based on multiple views rather than a single person's opinion.

North American clinical experience

"How do I prove that I am competent enough to work in the system?"

–IMG focus group

Although the national clinical exam is seen as an excellent assessment tool for screening applicants, the clinical skills that it tests are demonstrated in an artificial environment. Many faculty members told us that no exam result is equal to demonstrated ability to adapt well in a Canadian clinical setting. British Columbia, for example, offers a period of clinical assessment as well as the clinical exam because of concerns that performance on the exam does not always correlate with actual clinical performance.[9]

Over time, it may be that confidence in the exam can build to a point where it can stand alone as a sufficient measure of clinical skills. However, our consultations have persuaded us that, at this point, the absence of an opportunity to combine the exam

results with evidence of some actual North American clinical experience is a major impediment for IMGs. This conclusion is based on our discussions with Ontario program directors and faculty involved in the selection process, and on our in-depth review of three programs that collectively accounted for 116 of the 191 (60%) designated first-year positions in 2011.

As we noted earlier, the preference for North American experience is a major advantage for many CSAs. Their medical schools may arrange for their clerkships to take place in the United States, and they are often eligible to apply for electives at faculties of medicine in Ontario or elsewhere in Canada. We note that CSAs are not a homogeneous group, however, and that the clinical experience they obtain in their undergraduate medical training can vary greatly.

Many programs want to observe an IMG in an actual clinical setting or see positive, credible North American references from others who have done so. Program directors see great benefit in being able to learn from actual experience in a North American clinical setting, even a brief local elective. Since North American experience can be the deciding element in the selection process, applicants unable to obtain it are at a disadvantage.

We have recommended that the national clinical exam be mandatory and that the scores be used as a common filter to determine which applicants move to the file review and interview stage. Combined with the other changes we have proposed for the selection process, this would significantly level the playing field. However, the lack of an opportunity to demonstrate clinical skills in a North American environment would still work to the disadvantage of almost all immigrant IMGs and some CSAs—in the file review, in experiences they can draw on in the interview, and in their ultimate ranking.

We acknowledge that some excellent programs exist to help immigrant IMGs strengthen their language and cultural competencies and make them more comfortable with North American selection components such as personal statements, interviews, and exams. However, such programs do not make up for the lack of an opportunity to actually demonstrate clinical skills.

We considered two broad approaches to addressing the relative position of CSAs and immigrant IMGs: separate streams for the two groups and providing opportunities to demonstrate clinical skills.

Separate streams

Some consultation participants suggested separate streams for CSAs and immigrant IMGs as a means of eliminating an unbalanced competition. On the face of it, that option seems attractive. However, we believe that creating a more level playing field, where applicants from both groups can be judged on their skills and experience, is preferable to taking an arbitrary predetermined number from each group.

We have also rejected the idea of placing CSAs in the Canadian medical graduate stream, whether with positions added or with a number of the designated positions

transferred to that stream. Although CSAs have some characteristics in common with graduates of Canadian medical schools, they are different in one fundamental way: they were trained at medical schools that have not been accredited through the joint Canadian and American accreditation process. There is great variety among such schools and an ever-growing number of them located in many parts of the world. Adding CSAs to the Canadian medical graduate pool could create a perception that CSAs have necessarily had a medical education superior to that of immigrant IMGs and that they are better prepared for practice than immigrant IMGs are. Adding CSAs to the Canadian graduate stream could also compromise the commitment to ensure that all graduates of Canadian medical schools are placed.

OPPORTUNITIES TO DEMONSTRATE CLINICAL SKILLS

There are potential challenges in implementing measures to provide IMGs who need it with a chance to demonstrate their clinical skills. The first is the capacity of clinical settings to absorb IMGs into an environment already under great pressure. Even if clinical sites were available, it is unlikely that any new program could accommodate more than a modest number of IMGs. A method for choosing them would be needed, such as clinical exam results.

Another drawback is that such a program, especially if mandatory, would add another hoop for IMGs to jump through, without any assurance that even an excellent assessment would result in a residency position. It could also lengthen the process for those for whom the wait has been longest.

Despite these challenges, we see two options that should be considered. Both options would involve an optional assessment for a set number of IMGs who score in the highest percentile on the national clinical exam. This would give those IMGs an opportunity to show that they can function well in an actual clinical setting and not just in a simulated exam environment.

Option 1: A short, structured clinical experience

Broad access to electives or comparable experiences in Ontario medical schools is unrealistic in light of present program pressures. We were told many CSAs cannot obtain local electives, despite being eligible in their final year of medical school, because of the number of students of Canadian medical schools who are participating in electives. Making observerships more available also seems unrealistic—and of little help, because they do not carry weight with program directors and offer little or no opportunity to demonstrate clinical skills.

However, it might be possible to offer short, structured clinical opportunities to IMGs who score highest on the national clinical exam. Some consultation participants suggested that pockets of capacity could be found, contingent on funding. The recent move to “distributed” medical school programming at multiple locations suggests that effective supervision is possible in clinical settings away from the home base of the faculties of medicine. For example, it might be possible to use community hospitals that

are receptive and serve a diverse community, or the new and expanding Family Health Teams, as potential sites for short, structured clinical opportunities.

Option 2: A clinical assessment and training program

Another option would be to create a more formal program that would both assess clinical skills and offer "bridge" training to address the needs of IMGs as they make the transition to the Canadian health care system. A successful assessment would help to generate confidence in the applicant at the file review stage and would provide valuable experience that the applicant could draw upon in the interview. Such a program would also help prepare individuals for their residency experience should they be successful in obtaining a position. Depending on the design of the program, it might also serve as an assessment and training program for applicants being considered for advanced placement or an alternative route into practice.

This option is not dissimilar to the clerkship component of earlier Ontario IMG programs, which essentially provided assessment and bridging for a selected group of IMGs on the way to residency. Different models exist in other provinces, such as the 12-week clinical assessment in British Columbia prior to the CaRMS residency match, the two-year clerkship that a small number of IMGs are able to take in Quebec, and the new four-month bridging program being introduced in Quebec for some IMGs to enable them to better compete in the residency match. There is evidence that the opportunity to take part in a clerkship program similar to the last two years of medical school has a direct impact on success in residency and in the certification exams.[10]

Some postgraduate deans and faculty have expressed interest in this concept, and there are possible sites where the capacity would exist if resources could be found. We also received a proposal on behalf of York University and its clinical partners for establishing, in York region, a two-month clinical introduction and preparation program for first-year residency applicants.

In either scenario, both immigrant IMGs and CSAs would be eligible for the optional assessment opportunity. Owing to timing considerations and the fact that many CSAs will already have some recent North American clinical experience, we expect that there would be more interest and need within the immigrant IMG group.

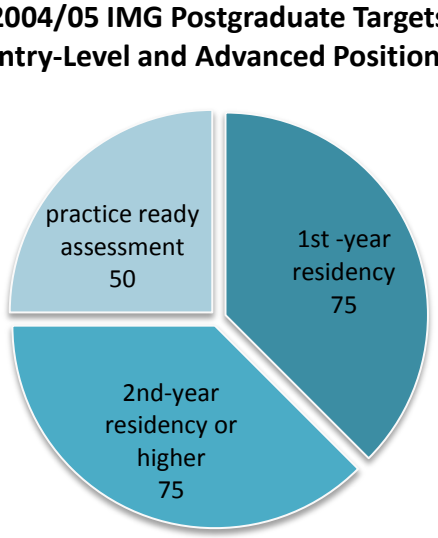
We recommend that the Ministry of Health and Long-Term Care and the faculties of medicine explore the feasibility of establishing and testing one or both of the above options to broaden access to North American clinical experience. Our vision is for IMGs to be judged on the experience they bring, whether obtained in North America or abroad. This added step would enable IMGs to compete on a more level playing field.

C. ACCESS TO ADVANCED POSITIONS

DECLINING NUMBER OF POSITIONS

Advanced positions enable IMGs with postgraduate training and experience to avoid having to redo a full residency program in certain specialties. In 2004, when IMG-Ontario was established and the number of designated positions was increased to 200, 125 were projected for advanced positions (75 for second-year residency or higher and 50 for a six-month "practice ready assessment"), as shown in Figure 1.

FIGURE 1



Source: Ministry of Health and Long-Term Care

In fact, as shown in Table 3, the number of advanced positions actually offered to IMGs has been much lower. The number of first-year designated positions, on the other hand, has increased substantially, with 191 designated and 221 in total offered in 2011.

TABLE 3

Advanced Postgraduate Positions Filled by IMGs at Ontario Faculties of Medicine		
Commencement of Postgraduate Program	**2nd year Residency**	**Practice Ready Assessment**
2008	18	3
2009	15	4
2010	0	0
2011	9	2

Source: Centre for the Evaluation of Health Professionals Educated Abroad

For advanced positions, CEHPEA uses written and clinical exams to determine whether an applicant is eligible. Interviews with program directors and other postgraduate faculty then determine whether the eligible applicant is acceptable on the assumption that there is unlimited capacity to absorb all acceptable applicants.

Some "acceptable" applicants, depending on their assessed level and on program capacity to absorb advanced positions, will be placed in the second year of residency. Other applicants may be given an opportunity to demonstrate their readiness to practise during a six-month practice ready assessment at a faculty of medicine. At the end of the six months, applicants who are deemed practice ready may begin supervised practice under a restricted licence. If found lacking but trainable, applicants may be required to take up to two years of additional training. If not assessed as trainable, they are dismissed from the program.

Neither type of advanced position is available for family medicine or in every specialty. For postgraduate positions beginning in 2011, CEHPEA assessed 57 IMGs for the seven specialties for which programs had declared capacity: **anesthesia, general surgery, internal medicine, obstetrics and gynecology, ophthalmology, orthopedic surgery, pediatrics**. Based on the assessment scores, CEHPEA identified 40 as ready for second-year residency or higher, and six for practice ready assessment. Following interviews with program faculty, it was agreed that 14 were acceptable for entry to an advanced position at their assessed level, subject to the capacity of the programs to offer positions. Of these, nine were offered second-year residency placements and two were taken into practice ready assessments.

The "CSA advantage" is not an issue in competing for the advanced positions. This is because CSAs are mostly recent graduates who do not have the prior postgraduate training or practice experience that would make them eligible for advanced positions. As with Canadian medical graduates, they are at the stage of their careers when a full residency program is warranted. As first-year residency positions become the only

viable option, immigrant IMG specialists face competition with CSAs for these positions and, if successful, a long period of postgraduate training. Therefore, advanced positions are potentially an important route of entry for immigrant IMGs.

There has been no explicit policy direction to reduce the numbers. Why then are these advanced-level positions drying up?

In our view, the main reason for the low numbers of IMG placements in advanced positions is that faculties and individual programs appear to have lost confidence in the concept because of their previous experience in trying to make it work. Program directors and other faculty described the difficulty of incorporating IMGs into advanced levels of a program that is based on step-by-step progression with increasing levels of clinical responsibility and authority.

Adding to this, there seems to be a general lack of awareness of the nature and calibre of the CEHPEA assessments. Program directors acknowledged this. At the same time, a few of them reported that their respect for the assessment process and their willingness to take advanced applicants grew substantially after taking part in the CEHPEA program.

The low numbers can also be seen as somewhat inevitable. By definition, the exclusion of family medicine and many specialty programs limits the number of available positions. CEHPEA made the understandable decision in 2010, in consultation with the postgraduate deans, to stop offering assessments to applicants for specialties in which no advanced positions were available. The decline in advanced placements can be seen, to some degree, as a self-fulfilling prophesy.

Part of the answer is also clinical capacity. Faculties of medicine are taking many more first-year residents, including, due to higher enrollment, more graduates of Canadian medical schools. These increases have reduced the availability of faculty to supervise IMGs coming in at advanced levels. In 2011, 191 first-year positions were designated. This left nine of the 200 available for advanced positions, although the numbers were exceeded in both categories.

We were struck by the significant gap between those assessed as “eligible” by CEHPEA in 2011 and those deemed “acceptable” after the interviews. CEHPEA has gone to great lengths to develop rigorous exams, and we were surprised to see that the interviews eliminated so many. We do not know if this is an indication of problems in the exams, the interview process, or other factors. We recommend careful analysis of the reasons for the drop in numbers and the discrepancy between the assessment and interview results. At a minimum, there is a perception problem when IMGs are told that they are eligible for advanced-level entry only to find themselves back in the large pool of applicants for first-year residency positions. That problem grows when many are then eliminated at the first step by a date of graduation filter.

The 2004 targets of 75 advanced-level residency positions and 50 practice ready assessment positions were likely over-ambitious. Even so, it is troubling that IMGs are assessed as advanced and then find that there is no position available for them. As IMGs

become aware that this route is becoming increasingly unavailable, it is not surprising that the number of applicants for advanced positions is declining.

A decision to increase the number of second-year residency or practice ready assessment positions would likely require an increase in the overall number of designated positions, a reduction in the first-year residency category, or simply a commitment from the ministry to fund any additional applicants who are deemed acceptable for placement into advanced positions.

Advanced entry versus fast-tracking

During our consultations, faculty members stressed the benefits of the first year of residency as an opportunity to adapt to a new health care environment and gain familiarity with the system. They spoke of cases where individuals were not ready to perform at the level designated by the CEHPEA assessment. Rather than starting someone in a senior supervisory capacity, they would prefer to start people in the first year of residency and have the opportunity to "fast-track" them.

We see merit in this suggestion, provided that a fair and transparent process for fast-tracking is established and a concerted effort is made to ensure that it is used. We also think that this approach would help to increase the number of applicants, assessed as advanced, who are taken into the residency programs. Faculty would be more confident in taking them and then fast-tracking in response to performance.

In this model, the application process for advanced-level positions would remain the same. The difference would be that applicants assessed as ready for second-year residency or higher would begin in a first-year residency position and receive priority consideration for fast-tracking. First-year residents who entered through the CaRMS match could also be fast-tracked (as some are now), but individuals assessed as second-year or higher through the CEHPEA process would be the priority candidates.

In developing fast-tracking policies and procedures, consideration will need to be given to how fast-tracking opportunities can be provided in smaller programs. The faculties of medicine could look to Quebec's experience in identifying applicants for early completion of residency and early access to the certification exam. The Royal College of Physicians and Surgeons has adopted a policy that will permit fast-tracking for individuals with previous training, so long as at least two years of postgraduate training are completed and at least one is at a senior residency level (years three to five).

Practice ready assessments

During our consultations, we heard about the challenge of trying to fit a six-month practice ready assessment into a multi-year residency program. To some, it seems a fish out of water in the postgraduate teaching environment. Also, it is somewhat misleading to call it an assessment. "Practice ready assessment and training" would be more apt, because some training is inevitably required.

Faculty supervisors take their assessment role seriously, and some suggested that six months can be too brief for making a conclusive determination about an individual's readiness for supervised practice. As a result, several program directors said that it was easier to avoid taking on practice ready assessments than to assume the risk of making a mistake.

Their reluctance has been reinforced by cases where a program has accepted an applicant and later discovered that some years of residency were required instead of the six-month assessment period. Individuals in this situation have been moved into the residency program at some level, with funding support from the Ministry of Health and Long-Term Care.

We recognize that there are some difficult decisions to be made about capacity to absorb practice ready assessments and about the number to be taken each year. However, if no action is taken, it seems that this route to practice will disappear. We believe that the practice ready assessment route should be revitalized and used in a more systematic way. It seems unfair and unnecessary to require experienced applicants to complete a full residency when a well-developed assessment says they do not need it, and when they will have difficulty obtaining an opportunity to do it. Although practice ready assessments are not available in family medicine, the impact is not as severe because a full residency is only two years. For the specialty programs, which can take five or more years, it is much more difficult to justify a full residency program in every case.

An important first step would be continuing discussion among the faculties of medicine, government, and the relevant provincial and national bodies. They will need to discuss how to identify, fund, and support practice ready assessment positions so that the process works, the applicants assessed at that level have a pathway to practice, and the need for physicians in various specialties is taken into account. It may also be necessary to introduce some flexibility to extend the assessment and training where necessary for individual applicants.

Making recommendations on the number of designated positions was not within the mandate of the IMG Review, but we encourage government and the faculties of medicine to consider an increase in this case. Subject to questions of clinical capacity, we recommend increasing the number of practice ready assessment positions without reducing the number of first-year residencies for IMGs.

Ways to increase the capacity for practice ready assessment positions could also be explored, which may require additional funding, staff, and access to clinical sites. CEHPEA and others are considering ways to create positions in community hospitals under the supervision of faculties of medicine or within their distributed sites. In Toronto and Ottawa, this might require waiving the return of service requirement where a community hospital's involvement is linked to its desire to add such a specialist to its staff.

Finally, we believe that the principles for practice ready assessments should be expanded into more a specific curriculum, with defined methods of evaluation, particularly if assessments are to take place at community hospital sites. Training for faculty who conduct the six-month assessment, along with identifying best practices, would also help make the assessment period work more effectively.

D. RELATED ISSUES

SUCCESS IN RESIDENCY AND BEYOND

"We take IMGs who are all different and fit them all into one program that has been designed for Canadian medical graduates."

–Faculty member

"IMGs are the most heterogeneous group of learners you will ever have."

–Faculty member

"The Canadian social contract requires that IMGs be incorporated into postgraduate medical education. There is a social responsibility to integrate immigrants into the Canadian workforce; and they bring a diversity of experience and cultures to training programs and to patient care."

–Report on IMG Current Issues for the Future of Medical Education in Canada, Postgraduate Project[11]

There is a clear connection between the IMG selection process and the residency experience itself. After all the care, time, effort, and resources expended in the selection phase, it is crucial to ensure that those selected are successful in residency and the certification exams that follow. This is important to the programs, to the IMG residents, and especially to the people of Ontario who are in need of medical services. If IMGs do not do well, it could be an indication that the selection process needs to be reexamined. Or it could mean that there are insufficient supports for IMGs before and within the residency program.

Faculty members told us that some of their finest residents are IMGs, including immigrant physicians who bring a wealth of experience. There is also a consensus that some IMGs find adaptation to the Canadian health care system a challenge, and that those with the most experience can find it difficult to be back in an entry-level position.

A recent report on current issues facing IMGs in Canadian postgraduate programs describes the additional elements that IMGs often need, but that residency programs may not be flexible enough to provide.[12] Some topics may be relatively straightforward to teach, such as information about the Canadian health care system and delivery model, common disease patterns and presentations, investigation and treatment options, evidence-based medicine, and medical references. Other topics, such as profession-specific language, communicating in a system of patient-focused care, and recognizing and dealing with different cultural values and beliefs, are more complex.

That report advocates opportunities for IMG residents and faculty to reflect on how cultural values can affect the teaching environment (such as willingness to ask for clarification, disagree with the attending physician, or give and receive feedback) and approaches to patient autonomy and gender roles. Personal and family considerations can also affect the performance of IMGs, who tend to be older and to have more social and financial obligations to manage during the residency period.

The need for supports to make the residency program a success is reinforced by the fact that IMGs appear to fare less well in the national certification exams, the point in the process when failure seems most devastating and most wasteful of resources.[13]

The additional learning needs of IMGs might be addressed at three stages: before selection to a residency position, after selection and before the residency program begins, or during the residency program itself.

Before selection

An important development has been the introduction of programs that seek to prepare IMGs for the selection process. The HealthForceOntario Access Centre is funded by the Ontario government to provide free information and support to internationally trained health professionals. It provides IMGs with one-on-one counselling, exam preparation, mock interviews, and other services.

The Ontario Ministry of Citizenship and Immigration offers funding to support bridge training programs for newcomers on the path to licensure in their profession or trade. To date, this fund has not been used extensively for programs that support IMGs. In part, this is due to the existence of the Access Centre funded by the Ministry of Health and Long-Term Care. The only organization currently funded to provide services for IMGs is the Catholic Immigration Centre in Ottawa. Their services include information, advice, and practice in clinical examinations to improve the chances of obtaining a residency position.

Several other programs exist, typically on a user fee basis. For example, the Medical Literacy Course is an award-winning experiential program to improve cultural and professional language skills. It builds on the College of Physicians and Surgeons of Ontario's Communication and Cultural Competence website. The Medical Literacy Course has had to begin charging fees since its government funding ended.

We have already recommended, as one possible option, creating a program for applicants who score high on the national clinical exam and would benefit from an opportunity to demonstrate their clinical skills before they apply for residency positions. This could also include bridge training components to help improve relevant skills. Complementary programs will still be vitally important, either to be offered as modules in such a program or on their own.

We recommend that the relevant government officials discuss how the HealthForceOntario Access Centre and the Bridge Training Fund can be used in complementary ways to meet the most pressing needs of IMGs. In light of the identified

needs we have summarized above, we believe that programs to address cultural communication and professional language skills should be considered as a potential priority for government funding.

Pre-residency

IMGs who obtain a first-year residency position must complete an educational orientation program through the Centre for the Evaluation of Health Professionals Educated Abroad (CEHPEA). For family medicine residents, this is a four-month pre-residency program that includes a clinical component at the residency site. Specialists take a three-week Orientation to Training and Practice in Canada course, with added online components. These programs seek to address some of the bridging needs described above. CEHPEA and the faculties of medicine are continually looking at how they might improve and fine-tune the programs.

As residents, IMGs are not a homogeneous group. Learning needs can vary depending on their undergraduate medical education, exposure to North American clinical settings, and other factors. We therefore recommend a more modularized or customized program. CSAs and immigrant IMGs may well have different learning needs as groups, but neither group is homogeneous. Individuals from both groups could benefit from pre-residency training or orientation that is adapted to their specific requirements.

Every effort should be made to offer most if not all of these programs in the hospitals where the residency will take place, as is the case with the second part of the family medicine pre-residency program. This would provide more orientation to the actual working environment. It would also alleviate hardship for those who live outside of Toronto and who now have to temporarily uproot themselves. This approach would also benefit IMGs selected in the second iteration. They start residency late, miss the important early orientation stage, and can be perceived for a time as “different” from their colleagues.

The specialty orientation program has already begun to offer some components on line, which is a positive change. Some combination of onsite and online components, with much briefer sessions as a group in Toronto, might be workable.

Within residency

Assessment Verification Period

For IMGs, the first 12 weeks of residency constitute an Assessment Verification Period (AVP). Under the certificate authorizing postgraduate education issued by the College of Physicians and Surgeons of Ontario, IMG residents must successfully complete the AVP in order to remain in the residency program.

There are challenges for all concerned. It is difficult and potentially unfair to determine, within such a short period, whether someone will be a successful resident. It is a time of anxiety for IMGs, of course, but it also puts stress on the faculty who are conflicted in their double roles as teachers/mentors and assessors. Occasionally, program directors

see value in the opportunity during the AVP to help an applicant recognize the need to withdraw, or in very rare cases, to terminate the residency. On the other hand, the termination decision and appeals from that decision are both very difficult. Program directors report that it is onerous to sufficiently document their concerns and defend the termination decision, which is a career-determining decision for the IMG.

Considerable time and resources would be necessary to make the AVP work; for example, training for assessors, meticulous documentation of performance, and greater clarity about the policy and the criteria for success and failure. In our view, it would be preferable to devote resources to supporting remediation opportunities during residency rather than attempting to improve a somewhat artificial and premature assessment process.

We propose that the Ontario government, the College of Physicians and Surgeons of Ontario, and the faculties of medicine seriously consider eliminating the AVP. Improving the selection process should help to reduce the already very low number of residents who would face possible termination at the end of the 12-week period. Elimination of the AVP would not prevent suspension or dismissal during residency for serious misconduct or behaviour that threatens patient safety.

We were told that, where necessary, it is possible to extend the residency period in individual cases with Ministry of Health and Long-Term Care remediation funding. An established policy of permitting residency extension, with funding, seems better than a very difficult assessment after only 12 weeks in residency.

One main rationale for the AVP program is that it provides a chance to see the applicant in a clinical setting and to eliminate applicants who prove to be clearly unacceptable. We have recommended a way for top applicants to demonstrate their skills in a clinical setting *before* being matched to a position. It would be preferable by far to eliminate unsuitable applicants at this earlier stage.

Supports to IMGs

At each faculty of medicine, we heard of efforts to support IMGs within the residency program—special lectures, mentors, medical literacy tutorials, and assistance with exam preparation were examples. Perhaps the best example of a strong, focused effort to assist IMGs is the addition of faculty members serving as IMG coordinators in family medicine and a few specialty programs. We recommend that the Ontario faculties of medicine broaden access to IMG coordinators and make it possible for them to share best practices for improving the IMG experience within postgraduate training.

Funding supplement

The Ontario government pays each faculty of medicine a supplement of $20,000 per year per IMG resident and $25,000 per IMG in practice ready assessment positions. The supplement is intended to offset extra resources, faculty time, and remediation costs incurred in addressing the learning needs of IMGs.

Apart from payments to faculty who assume the added role of IMG coordinator, there seems to be considerable uncertainty about how faculty can access the funding supplement and how it is being used.

Greater transparency and accountability for how these funds are accessed and used to support IMG residents would help to ensure that this funding continues. We encourage the faculties of medicine to discuss how to make best use of the funds to meet the recognized additional learning needs of IMGs. In some cases, it may make sense to pool some of the funds to create supports that could be used across a variety of programs or faculties.

FACULTY TRAINING

A vitally important issue is how the teachers and supervisors of IMG residents are prepared for and supported in that role. This includes the people who make key decisions within the selection process.

The 2004 Canadian Task Force Report on licensure of IMGs identified the importance of preparing faculty to work with IMGs.[14] The federal government then funded the creation of several online modules and many train-the-trainers workshops across Canada. Our sense from the consultations is that there is a risk of losing momentum in the effort to prepare and assist faculty members for this important and challenging role.

The authors of the report on IMG issues for the Future of Medical Education in Canada, Postgraduate Project,[15] identify training as a priority. Specific training on the skills associated with understanding, working with, and adapting to cultural difference is an important part of effective training for those who select and those who supervise and educate immigrant IMGs in particular. While some faculties continue to make such training available, participation is voluntary.

Programs can build on training programs being offered in Canada and in other jurisdictions, particularly those that help faculty to recognize and understand the ways cultural difference can affect the education experience.

BUILDING ON BEST PRACTICES

There is value in learning about and evaluating innovative approaches in Ontario and elsewhere. The British Columbia family medicine residency program at St. Paul's Hospital is one model of helping IMGs succeed in residency and beyond. This is the first time in North America that a training site has been created specifically for IMGs (who also work alongside Canadian medical graduates). Notably, the program has tracked its residents and made changes when initial results showed they were having difficulty with the certification exam.

The British Columbia program may be an important example of the kind of customized programming that increases the likelihood of success. The program also demonstrates the value of tracking results and making adjustments to the program where necessary.

The Ontario family medicine programs, which already collaborate in IMG resident selection, could be considered as an area for testing and learning from innovative ways to support IMGs at the selection, pre-residency, and residency stages.

Reducing demand and increasing capacity

One of the biggest barriers for IMGs in gaining access to a postgraduate position is the high volume of applicants for each designated position. Our recommended changes to the selection process will enhance the fairness of decisions about which applicants will obtain the available spots, but many qualified IMGs will still be left without a postgraduate position to serve as their path to medical practice in Ontario.

An obvious option would be to designate more positions. This is outside our mandate and raises broader policy issues we have not examined, including resource implications for government and capacity issues for the faculties of medicine. As mentioned earlier, however, we encourage all parties to consider an increase that would provide more postgraduate opportunities for advanced-level entry and practice ready assessment along with recommended changes to those routes.

Another option would be to increase the capacity of the system to accommodate more IMG residents, for example through a decreased reliance on visa residents. However the ideal situation would be to increase opportunities for qualified, experienced IMG physicians to pursue alternative routes without having to complete a Canadian postgraduate program. In light of our mandate's focus on the postgraduate selection process, we have not explored that option in depth, but we do note the importance of ensuring that Ontario has the capacity to assess IMGs under the national standards being developed for provisional licences.

Visa residents

Visa residents are IMGs who pay (or whose countries pay for them) to take their residency training in Canada and then return to their home countries. Visa residents do not compete for first-year residency positions through the CaRMS match.

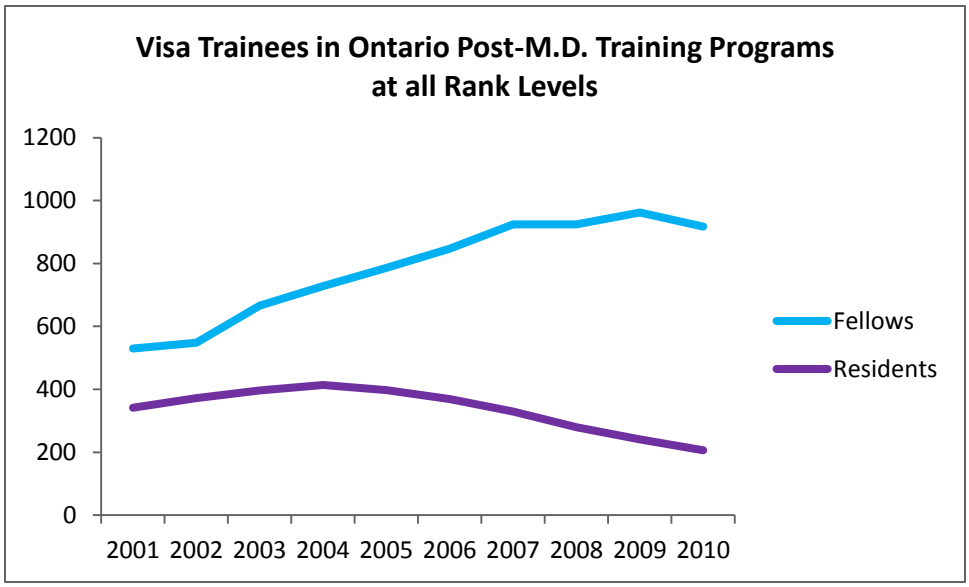
The elimination of visa residents in all but compelling circumstances could potentially increase clinical capacity to take on more IMG residents who intend to stay in Canada. The numbers of visa residents in Ontario are already declining, as shown in Figure 2, below, and we commend the faculties of medicine for what appears to be a conscious move in this direction. We realize that visa residents are a source of medical school funding, but we recommend that visa residents be accepted only in compelling circumstances and under a defined policy.

One possible justification for visa residents is for specialties in which jobs are disappearing. It is hard to attract Canadian medical graduates to such specialties, and it is not ideal for IMGs to take residency positions when no job awaits them at the end. At the same time, the teaching hospitals and faculties of medicine need residents to maintain the residency program and provide needed clinical services. Another possible

reason to take a visa resident would be as part of an effort to contribute urgently needed medical skills to a developing country.

Decreasing the number of visa residents would not affect the much larger number of "visa fellows" who fill an important niche in more senior sub-specialty work at the teaching hospitals, and the funding they bring to the medical faculties would continue. We also suggest that visa fellows be seen as a potentially valuable resource for supporting and mentoring IMG residents. We were impressed with examples we were given of visa fellows performing this important role.

FIGURE 2



Source: Canadian Post-M.D. Education Registry (CAPER), 2010

ALTERNATIVE ROUTES

There are alternatives to residency in place, but, as noted above, it was beyond the mandate of the IMG Review to examine them in detail. Nor were we able to find data showing the frequency with which each alternative is used. With one exception (provisional licences), we simply note the alternatives available and encourage all parties to find ways to use them more, where appropriate, to potentially lighten the demand for residency positions. This would address two barriers: the high volume of IMG applicants and the requirement for postgraduate training for experienced physicians in cases where it is not necessary.

The following is a brief summary of routes to practice for IMGs that do not require the completion of a full residency program in Ontario.

TABLE 4

Alternatives to Full Residency
Practice Ready Assessment
As discussed above, this is a six-month postgraduate position in Ontario for IMGs assessed at an advanced level in selected specialties.
Repatriation
If a North American or international medical graduate has postgraduate training from the United States, he or she may qualify for the Repatriation Program in an Ontario faculty of medicine. This program is for applicants who require up to two years of additional training to meet the certification requirements of the Royal College.
Transfer from another province
A physician licensed to practise medicine in another province can apply for a licence in Ontario. The registration committee of the College of Physicians and Surgeons of Ontario considers such requests. If the licence in the other province is equivalent to an Ontario licence, the request will be granted pursuant to the Agreement on Internal Trade.
Pathways 2 and 4
The College of Physicians and Surgeons of Ontario has established two pathways that enable IMGs to bypass Ontario postgraduate training and certification from the national college. "Pathway 2" is available to individuals who have completed Canadian postgraduate training and five years of independent practice in Canada. "Pathway 4" is available to those who have completed US postgraduate training and have certification from the US specialty board. In both pathways, qualified applicants receive a restricted practice certificate and assessment after one year before being eligible to obtain an independent practice certificate.
Registration through Practice Assessment
Administered by the College of Physicians and Surgeons of Ontario, this program provides a pathway to registration for physicians, including IMGs, who are currently practising in another Canadian province or the United States and have five years of practice experience. The Registration through Practice Assessment involves an intensive on-site assessment of the physician's current practice and bypasses the need for certification by one of the national colleges.
Recognition of international postgraduate training by the national colleges
An IMG can obtain national certification in family medicine or a specialty without completing a Canadian postgraduate program if the national college recognizes postgraduate training taken in another country. The College of Family Physicians of Canada has reciprocal agreements with some jurisdictions and is actively looking at expanding the number of agreements. The Royal College of Physicians and Surgeons will review and recognize postgraduate training taken in certain specialties from certain jurisdictions, although the Royal College is concerned about the ability to maintain this approach over time. Where the Royal College feels some additional training is required, we were told that the Ministry of Health and Long-Term Care will provide funding assistance to a faculty of medicine to enable this to happen.
Academic licences
Some IMGs in Ontario are able to obtain long-term academic licences. Others obtain "academic visitor" licences where the maximum stay in Ontario is 11 months.

From data provided by the College of Physicians and Surgeons of Ontario, we know that, as of December 31, 2010, IMGs represented 23% of physicians with independent practice certificates and 73% of those with restricted practice certificates. We also know how many such certificates are issued to IMGs each year. Without further breakdowns,

however, it is not possible to tell to what degree the various routes to practice (with or without a Canadian postgraduate position) are enabling entry to practice in Ontario.

Volume 2 of this report includes summaries of approaches to IMGs in four other provinces, including alternative routes to practice without requiring Canadian postgraduate training. Typically, a restricted or conditional licence is granted following a period of assessment, but the programs vary significantly. In some cases, helpful evaluations have been done and some programs have been strengthened to improve the process and ensure patient safety. Ontario could take advantage of the experience in other provinces when developing the clinical assessment and training program for high-scoring IMGs that we recommended earlier.

Assessment for Provisional Licences

The Federation of Medical Regulatory Authorities of Canada (FMRAC) is leading a project to develop a national approach for the admission of IMGs into practice through an assessment followed by a provisional licence. This has the potential to become the method by which Ontario and the other provinces assess experienced IMG physicians for admission to practice without a full residency.

IMGs with Certificates from the College of Physicians and Surgeons of Ontario

- As of December 31, 2010, 28,983 physicians held an independent licence to practise medicine in Ontario. Of those, 6,613 (23%) were IMGs
- During 2010, the College of Physicians and Surgeons of Ontario issued 378 independent practice certificates to IMGs
- As of December 31, 2010, IMGs represented 24% (974) of postgraduate certificate-holders for residency appointments (as opposed to fellowship appointments) in Ontario

Source: College of Physicians and Surgeons of Ontario, 2011, used with permission

Adoption of a nationally accepted process would ensure that IMGs who follow this route into practice in other provinces would be able to transfer easily to Ontario. As well, experienced IMG physicians in Ontario would, in theory, have another route for entering practice.

What is not known, however, is whether Ontario will provide the assessment process to enable IMGs to obtain provisional licences within this jurisdiction if the FMRAC proposal is adopted. We believe that the Ministry of Health and Long-Term Care, the College of Physicians and Surgeons of Ontario, the Council of Faculties of Medicine of Ontario, and CEHPEA should begin soon to consider how an effective assessment program, as envisaged by the FMRAC proposal, might be established here in Ontario. Implementing our recommendations to revitalize practice ready assessments and establish a clinical assessment and training program would provide a solid foundation for building this assessment capacity.

The national clinical exam may also prove to be useful in the new assessment process. Regulatory authorities in Canada are considering the possible future use of this exam,

currently used for entry to first-year residency positions, as a filter for entry to assessment programs en route to a provisional licence. Potentially, by extension, the exam could also be used as an assessment tool for practice ready assessments in Ontario. The clinical scenarios could be the same as for entry-level residency positions, but with different standards applied to applicants seeking to be placed at the higher levels.

Alternate careers

In 2011 there were more than 1,800 applicants in Ontario for 191 first-year residency positions designated for IMGs. This means that many are unlikely to practise medicine in Ontario. It is not an easy topic to broach. Programs such as the Access Centre told us that it is very hard to bring home this reality to individual IMGs who are working so hard to find a postgraduate position. IMGs can find it enormously difficult to step away from a career choice that has been the defining element of their lives.

We heard about career options in the broader health and social services sectors and the drug and insurance industries. However, many IMGs told us that they were interested in alternative pathways only as a bridge to medical practice and not as an alternative career. They find hope in the stories of individuals who succeeded after years of effort and sacrifice. A mandatory national clinical exam and a more transparent selection process should enable a more informed judgment about an individual's prospects.

We do not have concrete recommendations in this area, which is outside the main focus of our mandate. However, we do feel that there should be much more open and frank discussion of this issue, involving all who are able to contribute to both an understanding of the problem and the development of innovative solutions. It is important to support and benefit from the talents of IMGs who do not become practising physicians in Ontario.

Transparency

Access to information

In the Canadian federal system, jurisdiction on issues affecting IMGs is divided between two levels of government and multiple departments and ministries. A wide range of national and provincial bodies, including regulators and educators, have key areas of responsibility. Rules, policies, and practices vary among the different provinces, universities, and medical specialties. On top of that, as we have noted, the environment is one of constant change.

It is therefore not surprising that IMGs find it difficult to obtain the information they need about ways to enter the profession in any one province or across Canada. There have been impressive efforts on the part of many organizations, such as the Access Centre, the Medical Council of Canada, and CaRMS, to create more accessible and informative websites to assist potential IMG applicants. However, our work on this project has brought home the challenges faced by those who need information in order

to navigate the system. Many told us that it was not until they met with staff at the Access Centre or other organizations that the requirements, and their own prospects, became clear to them.

In 2004 the Canadian Task Force on Licensure of International Medical Graduates recommended the creation of a "central online site where IMGs may access information required for medical licensure in Canada, with linkage to provincial/territorial sites and educational material." It appears that efforts to implement this recommendation have not been as successful as initially hoped. Some of this is the inevitable result of divided jurisdiction and many different organizations, each carrying responsibilities for part of the process. We believe that implementing the 2004 recommendation should be a priority. In conducting the IMG Review, we were faced with the daunting task of trying to understand the system. We can only imagine how difficult this must be for IMGs, especially those arriving as new immigrants.

A commonly expressed concern is that immigrant physicians enter Canada without good information about the challenges they will face and how to overcome them. Others point out that Canada is such an attractive location for skilled immigrants that their desire to come is not dampened by any information about limited opportunities to practise their profession.

We recognize that governments and other organizations have made substantial efforts to make more accurate and realistic information available at an early stage. One promising example is the Canadian Immigrant Integration Program, which is funded by the Government of Canada and administered by the Association of Community Colleges of Canada. That program offers free orientation to individuals selected for immigration, and their families, while they are still overseas. A recent innovation in that program is webinars for immigrating physicians, provided in partnership with Ontario's Access Centre. There is value in thinking about how such information might be made readily available before an individual has been selected for immigration to Canada.

For Canadians considering a medical education abroad, we likewise stress the importance of having access to accurate information, beforehand, about the process for applying to a postgraduate position in Ontario or other provinces. Given the numbers now studying in other countries, that information should include the fact that success in returning to complete postgraduate training in Canada is far from assured.

What are the chances?

How informed are CSAs before they decide to study medicine abroad?

- In Ontario, after the first iteration in 2011, 98 (20.9%) of the 469 CSA applicants were matched to first-year residency positions and 371 (79.1%) were not matched
- An additional 14 were matched in the second iteration

How informed are other IMGs before they immigrate to Canada?

- In Ontario, after the first iteration in 2011, 85 (6%) of the 1,411 immigrant IMG applicants were matched to first-year residency positions and 1,326 (94%) were not matched
- An additional 24 were matched in the second iteration

Source: CaRMS Data Tables, 2011 Main Residency Match (R-1)

Feedback and transparency of the selection process

Many IMG applicants for postgraduate positions, and particularly immigrant IMGs, desperately want feedback about why they did not obtain an interview or why they did not do well in the interview if they did get one. They say that, without feedback, they will not know how to improve their chances for the following year. The response from the faculties of medicine is that individual feedback would be an overwhelming addition to an already time-consuming and labour-intensive selection process.

We agree that it would not be realistic to expect programs to offer individual feedback to all unsuccessful applicants. However, certain changes we have recommended to the selection process would make the system more transparent and lessen the pressure for feedback. For example, if the national clinical exam becomes mandatory and is used as the filter for deciding who gets an interview, IMGs will be aware of why they did or did not move to this stage of the process. This decision affects the largest number of applicants.

In reviewing the 2011 entry-level selection process, we examined the information available about internal medicine, pediatrics, family medicine, and other programs on the CaRMS website and the joint family medicine website. The documentation required to be submitted as part of the application was clearly specified. The information about specific criteria and how the selection process would unfold was much more variable. In some cases, exams or other qualifications were identified as an “asset” or “preferred,” but in reality, the programs often did not have a way to factor them into their decision-making.

We have recommended that all programs review their online descriptions with a view to making them as accurate and complete as possible. Several program directors expressed concern about potential legal challenges if they were more explicit about both the process (filtering, file review, interviews, and ranking) and their criteria. We believe that it is possible to provide helpful information in ways that do not carry any significant legal risk.

Where programs use cut-off scores or percentiles on the national clinical exam or other exams, we recommend that those be posted. Alternatively, at least the lowest and average scores or percentiles achieved by successful applicants in the previous year should be posted. These are approaches some programs have taken with exam scores now, and it is very helpful for applicants.

In addition, if CaRMS posted the number of IMG applicants for each designated position, it would help IMGs to put their potential success or failure into perspective.

GOVERNMENT POLICIES

We encourage the Ontario government to be more transparent about the rationale for its policies affecting IMGs. For example, a statement about the intended purpose of the designated IMG postgraduate positions would enable the trend toward CSAs and the decline of advanced postgraduate positions to be assessed against that purpose.

Many IMGs see the government's return of service requirement as unfair because it is imposed on only one segment of the resident population. In some cases, the policy seems to have the unintended consequence of depriving Ontario's most diverse communities of physicians ideally suited to serving them. Some faculty noted that IMGs can be an important resource in the effort to connect with patients in communities where language and cultural difference can be a major barrier. Faculty from McMaster commented that they were considering reducing the number of family medicine IMG residents in the Brampton area because that community is not able to keep them after residency due to return of service restrictions.

There may be other vulnerable populations that have needs not easily defined by geography alone. Some people we met with suggested that non-geographical considerations would provide a sounder basis for designing a return of service requirement.

Further, as pointed out in a submission by the Professional Association of Internes and Residents of Ontario, it remains uncertain whether the policy is having the desired effect of retaining physicians in underserviced areas. Some have suggested that the policy might be considered more fair if the length of the return of service were tied to the length of the residency program and if the Ministry could be more transparent about the circumstances in which an IMG could apply for a waiver.

We recommend that the Ministry of Health and Long-Term Care more clearly articulate the policy rationale for the return of service requirement, and then consider whether the requirement needs restructuring to achieve its stated objective. A new look at the rationale might justify altering the nature or scope of the requirement, whether that will mean applying it beyond IMGs or granting waivers in compelling circumstances.

A LEARNING ENVIRONMENT

EXISTING RESEARCH

We were pleased to discover the recent growth in research studies, policy analysis, and literature reviews relating to the IMG experience and to the broader challenge of choosing the best applicants through traditional and emerging methods of selection. We could not review all of that research and analysis, but we were able to rely upon the most directly relevant materials to supplement the information we gathered through our consultations. We have included a list of references as an appendix to Volume 2 of this report.

We would like to highlight three Canadian reports that we found especially valuable:

(1) Canadian Task Force on Licensure of International Medical Graduates (2004)[16]
This groundbreaking report created a blueprint for change that was endorsed by senior levels of the leading organizations and government departments. More than that, it has inspired a number of concrete reforms to improve the processes involving IMGs. These include the Physician Credentials Registry of Canada, the National Assessment Collaboration, the national IMG Database, and pilot programs for faculty development.

(2) Canadian Students Studying Medicine Abroad (2010)[17]
This report by the Canadian Resident Matching Service contains the most valuable analysis to date regarding a growing group of IMGs. It provides insight into the numbers, demographics, motivations, and characteristics of CSAs.

(3) International Medical Graduates: Current Issues (2011)[18]
As part of a comprehensive review of The Future of Medical Education in Canada, Postgraduate Project, leaders in the field were asked to develop a report on "IMG Themes" that would inform the review and assist in the development of proposed reforms. We were given an advance copy, and as our references to it in this report make clear, we found it helpful on several issues within our mandate.

NEED FOR ADDITIONAL RESEARCH

The above report on IMGs: Current Issues reviews the available research on predictors of postgraduate success, which it summarizes as follows:

> There seems to be a fair consensus that recent clinical experience, performance on standardized examinations, as well as younger age and recent graduation from medical school are all reasonable predictors for success of IMGs' performance as residents.

Although a "fair consensus" about these predictors does appear to exist among many of those who make the selection decisions, we found less agreement among others we consulted. Even among the decision-makers, we found no universal agreement on the predictive value of each element, the appropriate weight to attach to them, and how to measure them.

Therefore, we believe that the most urgent research need related to the IMG postgraduate selection process has to do with the predictors of success, the ways to measure and weigh them, and the extent to which newer tools (such as the national clinical exam and Multiple Mini-Interviews) make success more predictable. Comprehensive research to support an evidence-based approach should lead to a reexamination of many current techniques—or at least reconsideration of the weight to be attached to them. It will also be important to broaden awareness of what we already know, including the frailties of unstructured interviews and personal references.

Ongoing work to look at certification exam failure rates and how to reduce them is vitally important as well. There may be no better indication that there is a problem that needs to be addressed than when a system invests heavily in applicants who stumble at the final hurdle in larger numbers than expected. The report on IMGs: Current Issues provides a summary of this trend:

> [T]he success rate for all IMGs in Canadian family medicine residency programs on the College of Family Physicians of Canada (CFPC) certification exam is significantly lower than for CMGs [Canadian medical graduates], and has been decreasing over time. In 2007, CMGs' overall success rate on the CFPC exam was 90.4%, whereas the success rate for IMGs was 66.0%. In 2008, the pass rate was 74% for residency-trained IMGs. In 2009, it was 64%, and, in 2010, there was a 51% success rate on this examination. A similar pattern was reflected in IMGs coming from a practice eligible route (non-residency trained) but with much higher failure rates. Notably, the failures were triggered by both the written and the oral components of this examination equally.
>
> ...
>
> On the examinations of the Royal College of Physicians and Surgeons of Canada (RCPSC), the relative success rates between IMGs and graduates of Canadian medical schools are less striking, but still different. From 2005 to 2009, for candidates on their first attempt, the CMG pass rate for primary specialty examinations was 95%, while the IMG pass rate was 76%; for subspecialty examinations, the success rates were 96% and 75% respectively.

We recommend that support for research on predictors of success and ways to improve certification exam results, using the Ontario experience, should be a priority.

Learning and Collaboration

We were impressed by examples of a strong commitment to research, learning, and process improvements within the faculties of medicine. We note the important work being done at McMaster University to develop effective and more objective tools to support the interview stage of the selection process. We also benefited from the compilations of helpful literature reviews and bibliographies regarding IMG selection and success prepared by two individual faculty members at McMaster and the University of Toronto.

In particular, we note the efforts of the family medicine program directors in trying to understand and improve the selection process that fills over 40% of the designated IMG positions. It took hard work to create a joint process for the first three stages (filtering, file reviews, and interviews). They acknowledge concerns about the effectiveness of their procedures and are eager to find ways to improve them. We believe that the family medicine area is ideally suited to identifying, testing, and evaluating innovative approaches, such as the introduction of Multiple Mini-Interviews in a high volume program.

The IMG selection process should be viewed as an area for continuous learning and collaboration. Fortunately, many forums already exist to encourage this. The Council of Faculties of Medicine provides a forum for high-level policy-making and discussion among the postgraduate deans. Each program director has a committee to assist in defining and managing the selection process and for discussing issues.

We believe there is more that can be done to reinforce the value of continuous learning and sharing of experiences. Outside the family medicine area, opportunities for program directors to come together seem generally limited to annual gatherings, where IMG issues are one of many topics. We see value in developing more structured meetings to discuss the IMG selection process. More than that, we think there are opportunities to learn about and test new approaches that can be adopted by all programs without interfering excessively with their individual decision-making.

Statistical Data

During the IMG Review, we were pleased to note and benefit from statistical data maintained by key organizations such as the Canadian Resident Matching Service, the College of Physicians and Surgeons of Ontario, the Centre for the Evaluation of Health Professionals Educated Abroad, the Ontario Physicians Human Resources Data Centre, and the Association of Faculties of Medicine of Canada's CAPER and IMG databases. At the same time, we were frustrated by a lack of breakdowns that would reveal a more complete picture of IMG trends. We are hopeful that the IMG Database created in response to the 2004 Canadian Task Force will be able to do more of this over time.

We applaud CaRMS for its capacity to differentiate between CSA and immigrant IMG applicants (although limitations in the data mean that the CSA numbers are likely slightly higher than the CaRMS data show). We encourage CaRMS to further enhance capacity to track CSAs and also encourage other data sources to follow their lead. Without distinguishing between the two groups, it is difficult to tell the true story of IMGs in Ontario.

Data from the College of Physicians and Surgeons of Ontario is very useful in showing the number of IMGs holding different types of certificates and the number granted each year. As noted earlier, publishing further breakdowns would be helpful here as well. For example, it would be helpful to have an indication of the different routes IMGs took to obtain independent and restricted certificates and to see the number of residency appointments versus clinical fellowships among postgraduate certificate-holders.

E. CONCLUSION

A VISION OF FAIRNESS

Our vision has two components:

1. A fair, objective, and transparent process for selecting IMGs for first-year residency positions

2. Alternative routes for experienced IMGs to enter practice where completion of a full residency program is not warranted

In keeping with our mandate, we have looked into the selection process for first-year residency positions in greatest depth. This is a fundamentally important topic, since residency is the main gateway to practice in Ontario for IMGs. It is also important, however, to consider alternative routes. The ideal solution should include assessment and bridging programs that enable highly qualified and experienced physicians to move more expeditiously into practice in Ontario.

The two components of the vision are related in two important ways. First, as experienced IMGs gain access to alternative routes, they could potentially free up residency positions for those who truly need them. Second, any program established for IMG residency applicants to demonstrate competency in a North American clinical setting could also be expanded to assess readiness for a provisional licence or other alternative route.

The following tables summarize our vision for Ontario under each of the two components.

TABLE 5

Vision: IMG Selection Process for First-Year Residency Positions	
Information and support	Each postgraduate program posts its selection process and criteria on the CaRMS website, including the following: • Information and documents that must be submitted with the application • What the program will use as an initial filter to determine who gets a file review and interview • Elements the program will consider in the file review • Purpose, method, and competencies for interviews the program will conduct • Process and factors for ranking interviewed applicants for the computerized match Counselling, advice, and support are provided, by HealthForceOntario Access Centre and other funded programs, on how to successfully complete applications, interviews, and clinical exams; medical literacy; and alternative career paths.
Exams and demonstrating competency	Pass mandatory evaluating exam ↓ Pass mandatory national clinical exam → If a high-scorer on clinical exam, take optional clinical assessment and training to demonstrate competence in a North American clinical setting. ← ↓ Apply to computerized matching service Information on the clinical exam, and on how to interpret its results, is available to all faculty involved in IMG selection.
Review of applications	The program applies an initial filter using scores or percentiles from the national clinical exam to determine who receives both a detailed file review and an interview. The program conducts a structured, scored file review of applications remaining after the initial filter. In the file review, an assessment from the optional clinical assessment and training program is used to confirm North American clinical experience for applicants who have taken it. The program conducts structured, scored interviews of applications remaining after the initial filter, using Multiple Mini-Interviews or a comparable format. Training is available for file reviewers and interviewers.
Ranking and computerized match	Interviewed applicants rank programs. File reviewers and interviewers jointly rank interviewed applicants, using a pre-defined process and criteria. Program staff double check to ensure the process has been followed, a sufficient number have been ranked, and all ranked applicants are eligible. The Canadian Resident Matching Service completes the computerized match. It posts statistics on match results by province and nationally, and the number of applications received for each designated position.
Residency	Mandatory, modular, pre-residency programs for IMGs are available, primarily on site with some components available on line. The pre-residency programs do not delay the start of residency. The residency program accommodates specific learning needs of individual IMGs. IMG coordinators are in place throughout the residency period. Training is provided to the coordinators and to faculty supervising IMGs. The residency program helps IMGs to prepare for national certification exams.
Collaboration	Postgraduate programs collaborate across the faculties of medicine to try innovative approaches that increase the transparency, objectivity, and efficiency of selection processes. The Centre for the Evaluation of Health Professionals Educated Abroad works with the faculties of medicine in the design of the most effective pre-residency programs and in the identification, evaluation, and sharing of best practices within residency.

TABLE 6

Vision: Alternative Routes for Experienced Physicians	
Practice ready assessments	Practice ready assessment becomes a viable route for experienced IMG physicians to demonstrate competence without completing a full residency program in Ontario. As with the current program, successful completion of a practice ready assessment entitles the physician to obtain a restricted licence until completion of the national certification exams. The six-month assessment includes a training component targeted to specific gaps in the physician's experience, knowledge, or skills. Where necessary, the assessment period can be extended. Positions are available in specialties where Ontario has or projects a need. Postgraduate program directors and faculty have a good understanding of the specialty written and clinical exams administered by the Centre for the Evaluation of Health Professionals Educated Abroad, and how to interpret the results. Curriculum and guidelines for practice ready assessment are in place. Supervisors are well trained and supported. Some opportunities for practice ready assessments exist outside the teaching hospitals, with oversight and safeguards. Return of service contracts do not bar physicians from returning to practise in the location where their assessment took place.
Assessment for provisional licences	The Federation of Medical Regulatory Authorities of Canada adopts national standards for granting provisional licences to international medical graduates. Ontario has the capacity to assess experienced IMGs for provisional licences to the national standards. This assessment capacity is consolidated with assessment of IMGs for other purposes.
Fast-tracking within residency	IMGs assessed as ready for an advanced level of residency begin in a first-year residency position to provide a sufficient period of adaptation and orientation before assuming senior-level responsibilities. A defined and structured fast-tracking policy is in place and actively applied to them.

LEADERSHIP IN MOVING FORWARD

The postgraduate deans of the Ontario faculties of medicine have been strongly supportive of the IMG Review. They played an important role in enabling it to be completed and generously provided us with access to faculty and residents during the consultations. That leadership will be equally important in engaging faculty and others in discussions on how best to implement the spirit and specific recommendations of this report.

The Ontario government, through the Ministry of Health and Long-Term Care, has also been supportive of the IMG Review. The IMG Review was launched in the context of wider efforts by government and stakeholders to improve access to practice for qualified, competent, internationally trained doctors. Government leadership will be important in moving forward, whether in leading some components or in providing funding support to others. The Ministry has doubled the number of designated positions and created the HealthForceOntario Access Centre and the Centre for the Evaluation of Health Professionals Educated Abroad (CEHPEA). There is an opportunity for the Ministry to build on these accomplishments.

We encourage the faculties and the Ministry to prepare concrete plans for moving ahead with the implementation of this report. This would involve individual plans for their independent roles as well as coordinated plans that involve the relevant players.

We envisage that the initial stages of implementation would include discussions on how to implement key elements, notably the following:

- Making the national clinical exam mandatory for all IMGs applying to postgraduate positions in Ontario
- Creating a program to allow high-scoring IMGs to demonstrate clinical skills
- Eliminating the Assessment Verification Period
- Increasing access to advanced postgraduate positions
- Building capacity to assess applicants for provisional licensure once national standards are in place
- Supporting research and pilot projects to promote successful IMG selection, training, and assessment processes and to evaluate measures introduced as a result of this report

We also encourage other relevant bodies to review this report carefully and to consider what they can do to help make its objectives a reality. Such organizations include CEHPEA, the Canadian Resident Matching Service, the HealthForceOntario Access Centre, and the College of Physicians and Surgeons of Ontario.

SUMMARY OF RECOMMENDATIONS

A. ACCESS TO FIRST-YEAR RESIDENCY POSITIONS

INITIAL FILTERING

1. The national clinical exam (NAC OSCE) should be mandatory for all IMGs applying for first-year residency positions in Ontario. Scores or percentiles on this exam should be the basis for initially filtering IMG applications. Program directors should use this filter to determine who will receive a file review and who will be invited to an interview.
2. Ontario should ensure sufficient capacity to deliver the national clinical exam to eligible applicants. IMGs in their final year of medical school should be permitted to take the exam without delaying their residency application.
3. Date of graduation should not be used to eliminate applicants without first checking to see if the individual has recent, relevant clinical experience. The faculties of medicine should work with CaRMS to develop a reliable electronic filter that would make it easier to identify applicants with recent, relevant clinical experience.
4. Faculty involved in postgraduate selection should have access to information and orientation on the national clinical exam and on how to interpret its results.

FILE REVIEWS AND INTERVIEWS

5. As is currently the practice in many programs, file reviewers and interviewers should take a structured approach that employs standardized rating sheets and point systems. Care should be taken not to double-count North American experience when assigning points for the experience itself and for references related to the experience. Programs should clarify the distinct purposes of file reviews and interviews and take steps to ensure that information from the file does not distract interviewers in assessing interview performance.
6. Training should be available for faculty and residents on conducting file reviews and interviews in a fair and objective way, and on meeting the unique challenge of assessing an increasingly diverse pool of applicants.
7. Programs should explore ways to collaborate on components of the selection process and share best practices.
8. The joint family medicine selection process should be supported to test and report on innovations, such as the use of Multiple Mini-Interviews in a high-volume area and longer-term evaluative research on the validity of the tools and criteria used to assess residency applicants.
9. All programs should consider adopting Multiple Mini-Interviews or other approaches that research shows to be more objective and reliable than the traditional interview format.

RANKING

10. Although ranking decisions should be kept confidential, steps should be taken to make the process of ranking more transparent. We suggest the following procedures and criteria for program directors to consider:

    - The preliminary ranking should be based on a set percentage for the interview score and a set percentage for the file review.
    - The program should identify in advance the criteria that can be used in deciding how to rank applicants with equal scores or in moving applicants up or down the list.
    - The program should decide on a maximum permitted movement up or down the list (e.g., 10%).
    - The program should identify criteria to be used in deciding not to rank an interviewed applicant.
    - Faculty and residents involved in the file reviews and interviews should be consulted, prior to the decision, on how to apply the above factors to the ranking decision.
    - Programs should keep records of their ranking decisions to enable them to review results over time.

DEMONSTRATING CLINICAL SKILLS

11. The Ontario government, the faculties of medicine, and others should test the feasibility of offering opportunities for IMGs to demonstrate clinical skills in a Canadian setting. This could take the form of a short, structured clinical placement or a more formal program that would assess clinical skills and offer bridge training opportunities. Eligibility would be based on high national clinical exam scores or percentiles.

APPLICANT STREAMS

12. We recommend keeping all IMGs in a single pool for the first iteration of the first-year residency match, rather than creating a separate stream for CSAs or combining CSAs in a stream with graduates of Canadian or US medical schools.

B. ACCESS TO ADVANCED POSITIONS

13. The faculties of medicine should establish a provincial fast-tracking policy. The policy should be actively applied to IMGs who start in first-year residency if they have been assessed at a higher level.

14. Faculties of medicine, CEHPEA and other relevant organizations should discuss measures to provide workable “practice ready assessment and training” positions, with the opportunity to extend those positions beyond six months where necessary.

15. The above discussions should include consideration of how to effectively use community hospital sites, with appropriate supervision, for practice ready assessment and training positions.

16. The above discussions should also consider how to ensure that a greater number of qualified IMGs have access to practice ready assessment or first-year entry with fast-tracking. This could be accomplished through a higher allocation within the 200 designated positions, by designating a higher number of positions, or by committing Ministry funding for any advanced applicants accepted into postgraduate programs on the basis of a CEHPEA assessment and faculty interviews.

17. The faculties of medicine and CEHPEA should conduct an analysis of the significant gap between the number of applicants assessed as eligible for advanced positions and those deemed to be acceptable after the faculty interviews. This analysis should inform discussions on how to improve assessment and selection for advanced positions.

C. Related Issues

Success in residency and beyond

18. Faculties of medicine and other stakeholders should find ways to address the additional learning needs of IMGs accepted into residency programs. Examples include a more modular, customized approach to pre-residency and residency programs, expansion of the availability of IMG coordinators, focused preparation for the national certification exams, and faculty training on how to select, educate, and supervise the highly diverse IMG population.

19. The Ontario Ministry of Citizenship and Immigration, the Ministry of Health and Long-Term Care, and the HealthForceOntario Access Centre should discuss how the government's Bridge Training Fund and the Access Centre can be used in complementary ways to meet the most pressing needs of IMGs, including the need for cultural communication and professional language skills.

20. The College of Physicians and Surgeons of Ontario and the faculties of medicine should consider eliminating the Assessment Verification Period.

Reducing demand and increasing capacity

21. Postgraduate programs should accept visa residents only in compelling circumstances, pursuant to a defined policy. This recommendation does not apply to visa fellows.

22. Early discussion among the relevant bodies should take place on how Ontario will build capacity to conduct assessments for provisional licences if the work to develop a national standard led by the Federal Medical Regulatory Authorities of Canada proves successful.

23. The Ministry of Health and Long-Term Care should encourage the HealthForceOntario Access Centre to convene discussions with relevant

stakeholders to consider how to assist IMGs to find other careers that make use of their skills and capacities where there is no reasonable prospect of entry to medical practice.

TRANSPARENCY

24. Ontario postgraduate programs should make best efforts to improve the objectivity and transparency of selection criteria but should not be expected to offer individual feedback to unsuccessful applicants.

25. Each postgraduate program should ensure that its information on the CaRMS website regarding selection criteria and how selection decisions are made is as accurate and complete as possible.

26. CaRMS should post the number of IMG applications received for the designated positions in each program.

27. The HealthForceOntario Access Centre should be supported to work with other stakeholders on ways to improve early provision of information to physicians considering immigration to Canada and to Canadians considering studying medicine abroad.

28. The Ontario government should review the present return of service requirement, develop a clearer statement of the rationale for the policy, and consider how the policy and the approach to waivers may need to be restructured to achieve the stated objective.

A LEARNING ENVIRONMENT

29. The faculties of medicine, supported by the Ontario government, should identify research priorities to increase the evidence base for selection decisions and outcomes, including the following:

    - Predictors of success in residency and beyond, including the best ways to weigh and measure those factors
    - Certification exam success and failure rates and measures that will improve the results for IMGs
    - The impact of recommendations implemented as a result of this report

30. The faculties of medicine should develop structured ways for discussing how to improve the IMG selection process and residency training programs, whether across programs or across faculties of medicine.

31. Holders of statistical data on IMGs should increase efforts to provide breakdowns for CSAs versus immigrant IMGs and for the extent to which IMGs follow various routes into practice.

D. Moving forward

32. The Ontario postgraduate deans and the Ministry of Health and Long-Term Care should play leadership roles in convening internal and multi-stakeholder discussions and preparing plans for implementation of the recommendations in this report.

33. The Ministry of Health and Long-Term Care and the Council of Ontario Universities should post both volumes of this report on their websites and advise the organizations and experts consulted during the IMG Review on how to gain access to the report.

ACKNOWLEDGEMENTS

We would like to thank the many people who took time and care to speak frankly and constructively with us about the issues, to share information, and to discuss possible solutions. This report is very much the product of the consultation that preceded it. The analysis and recommendations are ours, but we have included and adopted ideas, perspectives, and concerns gathered from many sources. We especially want to express our appreciation to the many international medical graduates who shared their stories and perspectives and to the postgraduate faculty members who described their experiences in the selection process. Below we acknowledge individuals who went above and beyond what we could have expected in providing advice and support to the IMG Review.

PROJECT SPONSORS

Our two sponsors provided input and support while respecting the independent nature of the IMG Review. From the Ontario Council of Ontario Universities, we would like to thank Michelle Cyr, Celia Hammond, and Frances Lamb for supporting our ambitious schedule of consultation meetings. At the Ministry of Health and Long-Term Care, Lee Tregwin was instrumental in facilitating Ministry input and information, with additional support from Samia Shaheen. We would also like to acknowledge Karin Eisen and Leah Nord for their assistance in the early stages as we developed our terms of reference, as well as the ongoing support of Gilles Huot and Jeff Goodyear.

FACULTIES OF MEDICINE

The postgraduate program managers and their staff ably organized our visits to the Ontario faculties of medicine and provided information and support at various stages of the process. We are grateful to Francine Brisebois, Sharon Cameron, Loreta Muharuma, Maureen Morris, Nicholas Snider, and Tina Vrbanac.

Dr. Alan Monavvari, Dr. Inge Schabort, and Dr. Allyn Walsh shared their impressive literature reviews and findings on topics of relevance to the IMG Review. Dr. Marcus Law took great care to help us understand the joint selection model for family medicine and how it worked in 2011. The program directors in two specialties also took the time to speak with us in depth about their 2011 selection process. In internal medicine, we spoke with Dr. Catherine Code, Dr. Claude Kortas, Dr. Heather McDonald-Blumer, Dr. Christopher Smith, Dr. Kim Tilbe, and Dr. Parveen Wasi. In pediatrics, we spoke with Dr. Adelle Atkinson, Dr. Tara Baron, Dr. Moyez Ladhani, Dr. Sarah Lawrence, Dr. Gregory Stidham, and Dr. Doris Yuen.

The postgraduate deans played a pivotal role at key points in the process and were generous in giving us access to postgraduate faculties across Ontario: Dr. Paul Bragg, Dr. Salvatore M. Spadafora, Dr. Maureen Topps, Dr. Christopher J. Watling, Dr. Ross Walker, and Dr. Mark Walton. Special thanks to Dr. Walton for support and assistance in his role as chair of the Postgraduate Management Committee of the

Council of Ontario Faculties of Medicine. Thanks also to associate postgraduate dean Dr. Glen Bandiera.

INTERNATIONAL MEDICAL GRADUATES AND SUPPORT BODIES

Dr. Mitra Arjang helped to convene a meeting of members from the Association of International Physicians and Surgeons of Ontario and submitted a thoughtful written brief on behalf of the Association. In addition to meeting with us, staff of the Catholic Immigration Centre's Medical Licence Bridge Program arranged for many of their clients to send in written comments and perspectives. We are also grateful to Stuart McAslan, Wayne Oake, Bradley Sinclair, and Jasmine Singh of HealthForceOntario/Access Centre. They convened a focus group of IMG clients, invited us to sit in on an IMG orientation session, and helped us to piece together the history and evolution of IMG programs in Ontario.

PROVINCIAL ORGANIZATIONS

The Professional Association of Internes and Residents of Ontario consulted their members, met with us, and sent in a formal written submission. At the College of Physicians and Surgeons of Ontario, we received helpful input and information from Dr. Rocco Gerace, Dan Faulkner, Rajni Sandhu, James Stratford, and members of the Registration Committee. Anne Marie Crescenzi and Dr. Murray Urowitz of the Centre for the Evaluation of Health Professionals Educated Abroad helped us to understand their assessment processes and pre-residency programs. We also received helpful support from Neil Johnston and Lyn Chrysler of the Ontario Physician Human Resources Data Centre. Special thanks to staff of the Ontario Human Rights Commission for their assistance in referring us to relevant cases decided by courts and tribunals under human rights legislation and the *Charter of Rights and Freedoms*.

NATIONAL BODIES

Several individuals helped us to understand developments at the national level: Dr. Ian Bowmer, Medical Council of Canada; Dr. Kenneth A. Harris and Emily Stephenson, Royal College of Physicians and Surgeons of Canada; Paul Rainsberry, College of Family Physicians Canada; and Fleur-Ange Lefebvre, Federation of Medical Regulatory Authorities of Canada. Thanks also to Dr. Nick Busing of the Association of Faculties of Medicine of Canada, and for data provided by Leslie Forward (Canadian Post-M.D. Education Registry) and Paromita Deb-Rinker (IMG Database). We are especially grateful to Sandra Banner, Sara Rattanasithy, and the team of the Canadian Resident Matching Service for arranging a special data-run, which helped to illuminate the 2011 IMG selection results in Ontario.

OTHER PROVINCES

Officials from other provinces helped us to understand different models for IMG programs. **British Columbia**: Dr. Rodney Andrew, IMG-BC. **Alberta**: Jaffar Malik and Shelley Currie, Alberta International Medical Graduate Program; David Kay, Alberta

Rural Physician Action Plan; Dr. Ken Gardener, College of Physicians and Surgeons of Alberta. **Manitoba**: Dr. Xin-Min Li, International Medical Graduate Program. **Quebec**: Dr. Anne-Marie MacLellan, College des médecins de Québec; Béatrice Vizkelety, Commission des droits de la personne et des droits de la jeunesse.

ADDITIONAL EXPERTS

Arthur Sweetman, Ontario Research Chair in Health Human Resources in the Department of Economics at McMaster University, provided context on some of the broader issues at stake. Dr. Peter Walker, on behalf of York University, sent in a submission on structured learning and assessment opportunities. Special thanks to Colette Peters who pointed us to a rich body of literature, provided a written submission, and helped us to prepare our list of selected references. Finally a big thank you to Naomi Alboim, Dahlia Klinger, and Agnes Vanya for their review and commentary on the draft report to help make sure it made good policy sense and communicated complex ideas in a readable manner.

ENDNOTES

[1] See, for example, Part, H. M., & Markert, R. J. (1993). Predicting the first-year performance of international medical graduates in an internal medicine residency. *Academic Medicine*, *68*(11), 856–858.

[2] See, for example, Siu, E., & Reiter, H. I. (2009). Overview: What's worked and what hasn't as a guide towards predictive admissions tools development. *Advances in Health Sciences Education, 14,* 759–775.

[3] See, for example, Illing, J., Campbell, M., Kergon, C., Thompson, N., Burford, B., Morrow, G.,…Spencer, J. (2009). *Selection methods for foundation programme: A literature review*. Retrieved from http://www.isfp.org.uk/Documents/Appendix%20K%20Newcastle%20Literature%20Review.pdf, or Poole, A., Catano, V. M., & Cunningham, D. P. (2007). Predicting performance in Canadian dental schools: The new CDA structured interview, a new personality assessment, and the DAT. *Journal of Dental Education*, *71*(5), 664–676.

[4] Peters, C. (2011). *The bridging education and licensure of international medical doctors in Ontario: A call for commitment, consistency, and transparency* (Unpublished doctoral dissertation). University of Toronto, Toronto, Ontario, Canada. 52.

[5] See, for example, Steinert, Y. (2006). Building on diversity: A faculty development program for teachers of international medical graduates. Ottawa, Ontario, Canada: The Association of Faculties of Medicine of Canada. Retrieved from http://www.afmc.ca/img/pdf/Intro_AppA_en.pdf.

[6] For research on the halo-effect, see, for example, Smilen, S., Funai, E., & Bianco, A. (2001). Residency Selection: Should interviewers be given applicants' board scores? *American Journal of Obstetrics & Gynecology*, *184*, 508–513.

[7] See, for example, Hofmeister, M., Lockyer, J., & Crutcher, R. (2009). The multiple mini-interview for selection of international medical graduates into family medicine residency education. *Medical Education, 43,* 573 – 579. See also Dore, K. L., Kreuger, S., Ladhani, M., Rolfson, D., Kurtz, D., Kulasegaram, K.,…Reiter, H. I. (2010). The reliability and acceptability of the multiple mini-interview as a selection instrument for postgraduate admissions. *Academic Medicine*, *85*(10 Suppl), S60–S63.

[8] Dore, K. L., Reiter, H. I., Eva, K. W., Krueger, S., Scriven, E., Siu, E.,…Norman, G. R. (2009). Extending the interview to all medical school candidates–Computer-based multiple sample evaluation of noncognitive skills (CMSENS). *Academic Medicine, 84*(10 Suppl), S9–S12.

[9] Personal communication with Dr. Rodney Andrew, Program Director, IMG-BC, July 26, 2011.

[10] Personal communication with Dr. Anne-Marie MacLellan, Director of Medical Education, Collège des médecins du Québec, June 27, 2011, with reference to an as-yet-unpublished study.

[11] Walsh, A., Banner, S., Schabort, I., Armson, H., Bowmer, I., & Granata, B. *International medical graduates - Current issues*. Association of Faculties of Medicine of Canada (AFMC); 2011 [forthcoming].

[12] Walsh et al. (2011)

[13] Walsh et al. (2011)

[14] Federal/Provincial/Territorial Advisory Committee on Health Delivery and Human Resources (2004). *Report on the Canadian taskforce on licensure of international medical graduates*. Ottawa, Ontario, Canada: Health Canada.

[15] Walsh et al. (2011)

[16] Federal/Provincial/Territorial Advisory Committee (2004)

[17] Canadian Resident Matching Service (2010). *Canadian students studying medicine abroad.* Retrieved from http://www.carms.ca/pdfs/2010_CSA_Report/CaRMS_2010_CSA_Report.pdf.

[18] Walsh et al. (2011)