The Stigmatization of Internationally Educated Family Medicine Residents at the University of Manitoba

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Abstract

Competition for seats in Canadian medical schools has driven many Canadians to seek medical education abroad. Systematic barriers make it necessary for internationally educated physicians (IEPs) hoping to practice in Canada to complete postgraduate residencies. To do so, they must transition into new medical education systems. The transitional experiences of internationally educated physicians are not well understood.

This phenomenological qualitative study reveals the perspectives of twenty recent graduates from the University of Manitoba Family Medicine residency program. Canadians Studying Abroad constituted the majority of participants. Participant interviews revealed the presence of clinical practice gaps, created by curricular differences in the timing of graduated clinical responsibility between the Canadian and international medical education systems. Participants also shared their experiences of being singled out (visibility and invisibility), rejected and mistreated. They perceived that IEP residents were assigned low status in resident hierarchies. Their experiences are conceptualized as stigmatization.

Keywords: Internationally Educated Physicians, International Medical Graduates, transition into residency, Family Medicine, clinical practice gap, stigmatization, resident hierarchy, rejection, visibility and invisibility, qualitative phenomenological study

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Table of Contents

List of Tables

List of Figures

List of Copyrighted Materials for which Permission to Use was Obtained

Appendices

Definition of International Medical Graduates and Internationally Educated Physicians

In 2004, the Task Force on the Licensure of International Medical Graduates defined International Medical Graduates as: "IMGs are individuals holding medical degrees from schools not accredited by the Committee on Accreditation of Canadian Medical Schools (CACMS) or the Liaison Committee on Medical Education (LCME)" (Federal/Provincial/Territorial Advisory Committee on Health Delivery and Human Resources, 2004, Canadian Task Force on the licensure of international medical graduates, p. 13). These two organizations accredit 17 medical schools in Canada and 141 medical schools in the United States. Thus, in the context of Canadian and American medical education, IMGs are individuals who have graduated from medical schools other than these 158 accredited medical schools.

In some discussions, IMGs are divided into two sub-categories: Immigrant-IMGs (I-IMGs) and Canadian IMGs (C-IMGs, also called Canadians Studying Abroad or CSAs). The definition used by the Canadian Resident Matching Service (CaRMS) identifies IMGs through the timing of their medical education to their citizenship status: those who were Canadian before completing their medical education (C-IMGs or CSAs) and those who became Canadians after completing their medical education (I-IMGs; S. Banner, personal communication, April 28, 2014).

International Medical Graduates (IMGs) are a heterogeneous group of physicians united only by the location of their medical school education.

They include:

1. Physicians who were born abroad and who trained and may have practiced medicine abroad before immigrating to Canada (Immigrant-IMGs);

2. Physicians who were born abroad, who immigrated to Canada prior to completing their undergraduate or postgraduate university education and who have gone abroad for their medical education (Canadian-IMGs or CSAs);

3. Physicians who were born in Canada, who completed some or all of their undergraduate or postgraduate university education in Canada and who have gone abroad for their medical education (Canadian-IMGs or CSAs);

4. Physicians from other countries undertaking training in Canadian, whose education is sponsored by their home countries and who will return to their countries of origin after completing their residencies (visa trainees).

For many IMGs, the acronym *IMG* is emotionally charged. It carries with it a stigma. Although many of the participants in this study used the term IMG in referring to themselves or others, they equally employed the term *International*. This seemed to be more acceptable to participants. As all IMGs are internationally educated, the phrase *Internationally Educated Physician* (IEP) identifies them by their place of training, without differentiating by country of birth. This is also consistent with the terminology used to identify other internationally educated professionals (e.g., internationally educated engineers, internationally educated nurses, etc.).

For this reason, I shall use the phrase *Internationally Educated Physicians* (IEPs) in lieu of International Medical Graduate (IMG). When it is necessary to differentiate between participants by country of origin or by country of citizenship, *CSA* will refer to

Canadians Studying Abroad and *Immigrant-IEP* (I-IEP) will refer to IEPs who were born abroad and immigrated to Canada after becoming physicians. I shall continue to use the term *IMG* where it has been used by participants in their interviews, where it is used in direct quotes from articles and documents and where it constitutes part of an official name or designation by governments, universities or regulatory authorities.

Chapter 1: The Journey to Medical Practice in Canada, ca. 1965-2014

How do Internationally Educated Physicians experience their transition from the medical education systems in which they have gained their medical degrees to the Canadian medical education system in which they undertake postgraduate residency training? Annually, over 3200 incoming residents enter Canadian post-graduate residency training; IEPs constitute a growing proportion of these new residents. In 2014, they represented 13.8% of all residents matched in all disciplines (449 of 3255 matched candidates) and 15.5% of all residents matched to Family Medicine programs, totaling 225 of 1449 residents matched (Canadian Resident Matching Service, 2014a).

In Manitoba, the proportion of IEPs is much greater. IEPs who matched to Family Medicine at the University of Manitoba totaled 31% of the 2013 CaRMS cohort (16 of 51) and 29% of the 2014 CaRMS cohort (16 of 56; University of Manitoba, 2014a, Department of Family Medicine alumni database).

For new residents, the transition from medical student to resident represents a major step in their development as physicians. It represents the change from being a medical learner to becoming a medical practitioner; for many it is a time of intense learning but also a time of great pressure (Teunissen & Westerman, 2011a). Many medical students report being apprehensive about transitions despite the proliferation of transition to clerkship and residency courses (Teo, Harleman, O'Sullivan & Maa, 2011).

As I shall demonstrate in this chapter, IEPs experience many barriers in their quests to practice medicine in Canada. These barriers are not unique to physicians. Internationally educated nurses, physiotherapists, pharmacists, dentists and engineers

face similar challenges in entering practice in Canada (Canadian Information Centre for International Credentials, 2014; Prepare for Canada, 2014; University of Manitoba, 2014d). A review of these barriers may provoke future discourse with the goal of facilitating the integration of IEPs and other internationally educated professionals into Canadian practice.

To explore these issues, I shall conduct a phenomenological qualitative study of the perspectives of recent graduates of the Family Medicine Residency Program at the University of Manitoba to understand how they experienced this transition. In doing so, I shall situate their experiences in the greater sociopolitical contexts of healthcare funding, medical licensing and immigration policies and the emerging phenomenon of Canadians Studying Abroad as well as within the current medical education literature on the education of IEPs. Finally, I shall identify gaps in our understanding of IEPs' transitions and identify areas for further investigation.

In this chapter, I shall outline the journey IEPs take in becoming licensed physicians in Canada. I shall review the sociopolitical forces affecting the funding of the Canadian healthcare system and their impact on physician numbers from c.1965 to present, the immigration policies and practices affecting physician immigration and the changing licensing procedures which have created the situation such that the only viable route to licensure for most IEPs is through securing postgraduate training in Canada. I shall review the processes by which IEPs endeavor to enter postgraduate training, administered by the Canadian Resident Matching Service (CaRMS). I shall review the growing phenomenon of Canadians going abroad for medical education and how limited access to postgraduate training in Canada presents barriers to their medical practice in

Canada. Finally, I shall outline how these barriers ensnare both Immigrant-IEPs and CSAs as both groups are caught in complex webs of policy, licensing and politics.

As I shall outline in this chapter, the journeys undertaken by internationally educated physicians has been across shifting sands: shifting as a result of ever-changing sociopolitical landscapes, immigration policies and quotas, processes in gaining licensure and varying success in securing Canadian training.

Canadian Sociopolitical Contexts

As a nation, Canada has long relied upon immigrant physicians to provide care to its citizens. Before the first medical school was established in Canada (the Montreal Medical Institute in 1824, later renamed the McGill Medical School in 1829), the first physicians were those who had immigrated from Great Britain, Ireland, Scotland and France. By the turn of the 20th century, medical schools had been established at l'université de Montreal (1843), the University of Toronto (1843), l'université de Laval (1847), Queen's University (1854), Dalhousie University (1868), the University of Western Ontario (1881) and the University of Manitoba (1883). In 2005, the newest medical school was established at the Northern Ontario School of Medicine, bringing the total number of Canadian medical schools to 17 with a combined total of medical students in training of 2,861 in 2013 (Association of Faculties of Medicine of Canada, 2014).

Health care funding and its effect on physician resources. Since it's founding, Canada has not been self-sufficient in physician resources, relying on immigration to supplement the numbers of physicians produced in Canada. The percentage of

internationally educated practicing physicians has ranged from highs of 30-35% in the late 1970's to 24.1% in 2011 (Canadian Institute for Health Information, 2012; Dauphinee, 2005). A recent review of physician resources for the upcoming decade suggests that Canada will continue to require more physicians than are graduated annually and thus must rely on immigrant physicians to make up the shortfall (Esmail, 2011).

Following the release of the report of the Royal Commission on Health Services in 1964, publicly funded health care was implemented in Canada with the Medical Care Act of 1966, implemented in 1968. This led to an increased demand for physician services by those newly insured under Medicare, leading in turn to the opening of four new medical schools (l'université de Sherbrooke and McMaster University in 1966, and Memorial University Newfoundland and the University of Calgary in 1967; Dauphinee, 1996).

Despite the increased numbers of medical students in training, physician shortages continued. These were addressed by an influx of internationally educated physicians, predominantly from the United Kingdom and Ireland. Indeed, in the late 1960s and early 1970s, more physicians entered practice in Canada through immigration than through graduation from Canadian medical schools (Tyrrell & Dauphinee, 1999).

In 1967, the Department of Immigration and Manpower, today titled Citizenship and Immigration Canada, introduced a point-based system that awarded points for occupational status; at that time, physicians were in high demand and were awarded maximal points (Neiterman & Bourgeault, 2012). By 1970, the proportion of IEPs

practicing in Canada grew to 30% of the practicing physician workforce and remained at or above the 30% level until 1981(Dauphinee, 2003).

The 1970s and 1980s could be considered the Golden Years of medical practice in Canada. Physician numbers grew dramatically during this period, from 20,517 in 1960 to 45,900 by the end of 1990 (Chan, 2002; Statistics Canada, 1983). The physician to population ratio grew from 1.01/1000 in 1960 to 1.87/1000, peaking in 1993 at 1.91/1000 (Buske & Strachan, 2000; Chan, 2002).

Health care costs increased dramatically during the 1980s, in large part as a result of medical and surgical advances with increasing lengths of hospital admissions and their associated costs. This led to the commissioning of the Barer-Stoddart report in 1991 by the provincial deputy Ministers of Health. Barer and Stoddard made over 50 recommendations directed towards reforming the Canadian health care system; one of the few enacted was their recommendation of a 10% reduction in total enrolment at Canadian medical schools (Bourgeault, Parpia, Neiterman, Le Blanc, & Jablonski, 2011). By 1993, most medical schools had reduced their medical school intake. After the final reductions, the total medical student enrolment in 1998 was 15% lower than it had been in 1985 (Bowmer, Banner, & Buske, 2008).

The reductions in medical school enrolment coincided with two developments in postgraduate medical education. Firstly, the rotating internship was eliminated in 1993, replaced with two years of training in family medicine residencies, through the College of Family Physicians of Canada. Secondly, most training seats formerly assigned to rotating internships were allocated to seats in Royal College of Physicians and Surgeons of Canada (RCPSC) specialties; the numbers of physicians entering RCPSC specialties

dramatically increased. This decreased the number of physicians entering practice in any year as the length of training in RCPSC specialty programs is between four to five years[1]. Chan (2002) reports that between the early 1990s and the early 2000s, the proportion of physicians entering practice as general practitioners or family physicians dropped from 80% to 45%. By 1999, the proportion of IEPs in practice fell from 30% in 1980 to approximately 22% of all practicing physicians (Dauphinee, 2003).

Alongside these changes, several other factors influenced health workforce efficiency: unanticipated population growth and an increase in the proportion of elderly Canadians, both of which increased the demand for physician services; an increase in physician emigration to greener pastures in the United States of America; increasing numbers of female physicians who practiced fewer hours compared to their male peers; and an unanticipated increase in the retirement rates of older physicians (Chan, 2002). Chan (2002) calculates that the peak in the number of practicing physicians occurred in 1993 and declined annually thereafter, such that by 2000, this had declined to 1987 levels.

In the 2000s, healthcare was much studied and much debated. Many reports were commissioned to study the fiscal and human health resource issues. The Saskatchewan Commission on Medicare in 2001 (Fyke Report), the Commission on the Future of Health Care in Canada in 2002 (Romanow Commission), the Standing Senate Committee on Social Affairs, Science and Technology review in 2002 (Kirby Committee), the First Ministers' Accord on Health Care Renewal in 2003, the report of the Task Force Two: A Physician Human Resource Strategy for Canada in 2005, as well as numerous provincial reports, examined and made recommendations towards improving health care access and

[1] Subspecialty training may add another two to five years of postgraduate education.

affordability.

Public opinion polls conducted between 2002-2006 revealed widespread concern amongst Canadians about the state of healthcare in Canada (Soroka, 2007). Soroka (2007) reports that timely access to care was the highest policy priority of survey respondents and that "an overwhelming majority (87 per cent) of Canadians believe that there are not enough doctors and nurses in Canada" (p. 16). Federal and provincial governments committed themselves to increasing national human health resources.

Concerted political and legal action by IEPs in Canada caught the attention of both the public and governmental agencies. IEPs already residing in Canada were recognized as a potential, under-utilized resource that could be mobilized to meet the increasing demand for physician services (Federal/Provincial/Territorial Advisory Committee on Health Delivery and Human Health Resources, 2004; Federal/Provincial/Territorial Advisory Committee on Health Delivery and Human Health Resources, 2010; Health Canada, 2010).

Several initiatives were launched to assist IEPs in gaining licensure, either through direct entry to practice or through post-graduate education. The Canadian Task Force on the Licensure of International Medical Graduates (2004) made six recommendations to "aid in the integration of qualified internationally trained physicians into the Canadian physician workforce:

1. Increase the capacity to assess and prepare IMGs for licensure.
2. Work toward standardization of licensure requirements.
3. Expand or develop supports/programs to assist IMGs with the licensure process and requirements in Canada.

4. Develop orientation programs to support faculty and physicians working with IMGs.
5. Develop capacity to track and recruit IMGs.
6. Develop a national research agenda, including evaluation of the IMG strategy." (Federal/Provincial/Territorial Advisory Committee on Health Delivery and Human Health Resources, 2004a, p. 7-8)

Many initiatives were launched to address these recommendations, including the establishment of the Centre for the Evaluation of Health Professionals Educated Abroad in Ontario (recommendation 1), the development of http://physiciansapply.ca/ by the Medical Council of Canada as a one-stop portal for source-verification of physicians' credentials and documents (recommendation 2), and a faculty development program for teachers of internationally educated physicians supported by the Association of the Faculties of Medicine of Canada (recommendation 4). Much work remains to be done to develop the cohesive approach to internationally educated physician integration as envisioned by the Task Force "in removing unintended barriers and close current policy/implementation gaps and disconnects" (Federal/Provincial/Territorial Advisory Committee on Health Delivery and Human Health Resources, 2004b, p. 4).

Looking to the future, it appears that Canada will continue to need greater numbers of physicians. Buske (2007) advises that Canada required at least another 4,000 physicians while the College of Family Physicians of Canada reported in 2006 that 5 million Canadians (17% of the population) did not have a family physician (Bailey, 2007). Predictions of the numbers of physicians entering practice and physician

retirements for the next 15 years estimate that the full-time equivalent ratio[2] of physicians to 1000 population will range between 1.4 and 1.5, distinctly lower than the peak ratio of 1.93 in 1993 and markedly lower than the ratios enjoyed by other members of the OECD countries, which range between 2.9 and 3.0 (Buske, 2007).

As noted in the following sections, despite the need to increase the numbers of physicians in Canada, both immigration policy and licensing standards have and will continue to create barriers to the integration of IEPs into medical practice in Canada.

Immigration policies and practices. Responsibility for immigration resides jointly with the Canadian federal government and the provincial governments. In large part, the federal government sets overarching immigration policy while the provincial governments look to addressing labour shortages in their respective jurisdictions. The intent of the current Canadian immigration policy is "reuniting families, contributing to economic development and protecting refugees" (Citizenship and Immigration Canada, 2013, para. 3).

Traditionally, immigration in Canada was directed towards nation building, with the large-scale recruitment of immigrants to populate the newly acquired provinces and territories following Confederation and, later, to address general labour shortages. With the adoption of the Immigration and Refugee Protection Act (IRPA) of 2001, family reunification and refugee protection became the intent of immigration policy.

In the 1960s and 70s, physician immigration was relatively straightforward. The newly created Medicare system led to calls for increased numbers of practicing

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[2] The full-time equivalent ratio adjusts for differences in practice patterns between male and female physicians, the amount of hours worked and productivity during their working hours. Projections suggest that younger physicians will not increase their productivity in their mid and later career years in contrast to older physicians who entered practice during the 1960s-1990s (Buske, 2007).

physicians. Physicians were heavily recruited from Ireland, the United Kingdom and other Commonwealth countries. The points system used by Immigration Canada facilitated physician immigration. Points were awarded for fluency in one of Canada's official languages, attained educational levels, confirmed employment and intended immigration to an underserviced region. Between 1971 and 1975, physicians were on the preferred list of occupations (McDonald, Warman, & Worswick, 2011). With many provincial health systems actively recruiting abroad, physicians holding offers of employment were readily accepted into Canada.

By the mid-1970s, there were calls for Canada to become self-sufficient in producing physicians. Indeed, the forecasts of anticipated numbers of graduates of Canadian medical schools published in 1975 implied that this would be imminently achieved (Hacon & Aziz, 1975). Concurrently, the provincial Ministries of Health became increasingly concerned with rising physician numbers and escalating health care costs. Under pressure from the Canadian Medical Association and the provincial ministries, the federal government implemented a tightening of national immigration policy (Chan, 2002; Korcok, 1975; McKendry & McPhedran, 1975). Physicians were removed from the list of preferred occupations (Dauphinee, 2003). As a result, the number of physicians immigrating to Canada fell from 1347 in 1969 to 261 in 1978 (Tyrrell & Dauphinee, 1999).

Additionally, federal and provincial Ministers of Health agreed to further restrict immigration to only those physicians with pre-arranged employment in order to ensure ongoing physician recruitment to underserviced regions and provinces while limiting the numbers of IMGs settling in urban centres (Mullally & Wright, 2007). Several provinces

restricted billing numbers in areas deemed to be over-serviced, to deter physicians from entering these regions and to promote recruitment to underserviced regions. For example, in 1975, the province of British Columbia announced the restriction of full licenses to practice to Canadian citizens while landed immigrants would only be permitted to take out temporary licenses tied to work in underserviced regions (Full B.C. license now available only to Canadian citizens, 1975, September 20).

As Mullally and Wright (2007) report, "the number of international medical graduates licensed in Canada plummeted from over 1,300 per annum [in 1969] to 400 in 1976 and 300 in 1977, bottoming out at 250 in 1978" (p. 81). Buske and Strachan (2000) found that, despite these changes, approximately 380 IMGs annually entered medical practice in Canada through the 1980s, as the provinces continued to actively recruit physicians to address physician shortages in underserviced regions. Dauphinee (2002) reports that amongst landed immigrant physicians who identified medicine as their intended career during the 1980s, at least two thirds entered Canada without prior arranged employment. Thus, even while some IEPs entered Canada and set up practice, growing numbers of physicians arrived with uncertain possibility of employment.

In the late 1980s, Canadian immigration policy was further tightened. Immigrating physicians were no longer awarded any points under the occupation class (Neiterman & Bourgeault, 2012). McDonald, Warman and Worsick (2011) report that between 1987 and 2001, "the federal Skilled Worker and Professionals Program had a point system with occupational restrictions and physicians were banned from consideration over this period unless they had pre-arranged employment" (p. 16). Many physicians responded by immigrating under the family reunification class or by not self-

identifying as physicians during the immigration process (Dauphinee, 2003). Citizenship and Immigration Canada implemented a practice of requiring physicians entering Canada to sign declarations that there was no guarantee of future medical practice in Canada (Chan, 2002; Saieed, 2009, I-IEP-2).

Despite the many barriers raised to physician immigration, persisting regional physician vacancies required the active recruitment of internationally educated physicians by some provinces and territories. Mullally and Wright (2007) content that "the primary solution of backfilling underserviced areas with foreign trained doctors has been the principal pattern of some provincial governments for almost four decades" (p. 82) and that "it would not be hyperbolic to suggest that, without international medical graduates to service the outports [sic] of Newfoundland or rural communities in Saskatchewan, medical services in those regions would virtually collapse" (p. 82). Between 1986 and 2000, 817 South African physicians were recruited to the Prairie Provinces, which led many IEPs to complain that a double standard existed that advantaged some internationally educated physicians while disadvantaging others (Grant, 2004).

In 2001, immigration policy was significantly altered with the implementation of the federal Immigrant and Refugee Protection Act. The most significant change affecting IEPs was the elimination of occupational classifications in favour of a system that credited human capital. Points were awarded for educational attainment, language fluency, work experience and assessments of applicants' ability to adapt to life in Canada. Under this system, physicians were granted high marks on the immigration assessment and the numbers of immigrating physicians increased dramatically.

McDonald et al. (2011) abstracted data from the 2006 Canadian confidential

Census master file which records data from long-forms completed by 20% of the population. Their data shows that this sample included 1420 physicians who entered Canada in the 5-year period 2002-2006, which extrapolate to approximately 7,000 IMGs immigrating during this period. In contrast, over the prior 20-year period between 1982-2001, they tallied 2,203 physicians, which extrapolate to between 10-11 thousand IEPs immigrating in total. Thus, in the first 5 years post-IRPA, the number of immigrating physicians more than doubled that of the previous 20 years. Grant (2004) mined the Citizenship and Immigration Canada Landed Immigrant Data System to estimate the numbers of immigrating physicians. He found that 5,761 physicians recorded in this database had entered Canada in the 15 years between 1986 and 2000, or roughly 70% of the number extrapolated from the data reported by McDonald et al. (2011). The difference between these two numbers possibly represents those physicians who immigrated to Canada without declaring their occupational status in the 1980s and '90s.

Currently, physicians are eligible to apply under several categories of immigration: Economic Class, Family Reunification Class and Refugee Class. Most physicians entering under the Economic Class would do so under the Federal Skilled Worker Program and the Provincial Nominee programs. IEPs would score well based on their prior higher education and medical practice (Citizenship and Immigration Canada, 2014a).

Thus, the recent loosening of immigration policy and changes to the selection criteria that reward social and educational capital have led to a rapid increase in the number of physicians who have immigrated to Canada. However, there remains a wide gulf between Canadian Immigration policy, which values immigrants' educational

achievements and facilitates the entry of IEPs and the many barriers that prevent them from practicing medicine. Brouwer (1999) summarizes this disconnect thusly:

> Unless informed otherwise by a visa officer, many immigrants who are accepted as skilled workers understandably mistake the federal government's granting of 'points' for their occupation, education and training as recognition and approval of their qualifications. These immigrants assume that they then will be able to practise [sic] their profession or trade in Canada. In fact, however, the number of points granted by a visa officer and the Department of Citizenship and Immigration has no bearing on an individual's ability to practise [sic] an occupation in Canada. (p. 7)

In the following section I shall describe how barriers in securing licenses to practice medicine have and continue to limit the ability of many immigrant physicians to enter practice after immigration.

Licensing policies and practices. The system governing medical licensure is complex. These complexities date to the founding of Canada with the British North America Act of 1867, and successive acts, with the division of power between federal and provincial governments. As described in the report by the Task Force on the Licensure of International Medical Graduates,

> Under Canada's constitutional framework the authority to regulate medical practice is vested in the provinces and territories. The provincial/territorial legislatures delegate this responsibility in statute to Colleges of Physicians and Surgeons . . . . It is the statutory right and responsibility of the governing bodies for provincial/territorial Colleges

> of Physicians and Surgeons to set the standard for medical licensure in each of their respective jurisdictions. (Federal/Provincial/Territorial Advisory Committee on Health Delivery and Human Resources, 2004b, p. 23).

This division of authority and autonomy has created obstacles to the movement of physicians between provinces and challenges in ensuring common standards throughout Canada. Although there are commonalities between them, there is by no means uniformity in the licensing criteria and evaluation processes in each province.

In 1955 the Medical Council, in conjunction with the Association of Canadian Medical Colleges and the provinces decreed that a one-year rotating internship would be a mandatory requirement for a candidate in order to be eligible to sit the Medical Council of Canada examination; all graduating candidates now sat the Medical Council of Canada Qualifying Examination (MCCQE; Vodden, 2008). This examination now became a mandatory requirement for physician licensure in all provinces of Canada. In 1979, increasing numbers of IEP candidates led to the implementation of the Evaluating Examination, developed as a pre-test of IEPs' knowledge before they sat the MCCQE (Vodden, 2008).

As previously noted, the majority of immigrating physicians in the 1960s and 1970s came from Ireland, the United Kingdom. By the late 1970s and early1980s, the demographics of immigrating physicians began to change. Fewer physicians came from Ireland and the U.K., while more physicians entered from South Africa, South-east Asia and the Middle East. By 1980, the number of physicians from Ireland and the U.K. was surpassed by the number from all other countries (Canadian Institute for Health

Information, 2009). As Chan (2002) notes, the proportion of physicians arriving from Ireland and the U.K. declined from 64% (between 1972-1976) to 38% (between 2003-2007).

In response to these changing demographics, beginning in the1980s, the provincial Medical Regulatory Authorities differentiated between IEPs by the geographical location of their training: Category I comprised those physicians who had undertaken their medical training in Canada, the United States, Ireland, the United Kingdom, Australia, New Zealand or South Africa, and Category II was composed of those physicians who had trained elsewhere (*Bitonti v. British Columbia [Ministry of Health],* 1999).

Whilst all internationally educated physicians needed to successfully complete the Medical Councils of Canada examinations, in most Canadian jurisdictions physicians from Category 1-designated countries who entered Canada with one year of postgraduate training abroad were able to obtain their license to practice in Canada. In contrast, physicians from Category II- designated countries either needed to have had two years of prior postgraduate training abroad or to obtain two years of postgraduate training in Canada before being eligible for licensure.

This differentiation on the basis of country of training led to complaints of discrimination. Several lawsuits were launched and complaints were made to provincial Human Rights Commissions in several provinces (*Bitonti v. British Columbia* [*Ministry of Health*] 1999); Manitoba Human Rights Commission, 2010). A determined group of IEPs in British Columbia undertook a hunger strike to call attention to their plight (Andrew & Bates, 2000).

In the mid-1990s, a group of Manitoban IEPs formed the Association of Foreign Medical Graduates in Manitoba, Inc. and launched a complaint of discriminatory practices to the Manitoba Human Rights Commission against the University of Manitoba, Manitoba Health and the College of Physicians and Surgeons of Manitoba (CPSM). The Commission found there was sufficient evidence to determine that a breach of *The Human Rights Code* had taken place*;* subsequently an adjudicated settlement was reached between the four parties (Manitoba Human Rights Commission, 2010). Three changes in Manitoban policies were enacted as a result, implemented sequentially:

1. The discontinuation of designation by country for conditional licensure (implemented in the late 1990s).
2. The establishment of IMG training programs at the University of Manitoba (implemented in 2001).[3]
3. The first iteration of CaRMS was opened to IMGs (implemented in 2007).

As a result of this and other successful human rights complaints, the provincial medical regulatory authorities abolished the practice of designated categories by country of training, with each province establishing their individual criteria for licensure. Manitoba moved to establish an individual assessment process, through which candidates were evaluated on their own merits (Maxine Miller, CPSM, personal communication, December 4, 2014). The University of Manitoba, through the previously established Clinical Assessment and Professional Enhancement Program (CAPE), conducted these assessments.

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[3] a) The Medical Licensure Program for International Medical Graduate (MLP-IMG) provides a one-year program to prepare physicians for practice in rural Manitoba.
b) The International Medical Graduate Assessment for Conditional Licensure (IMG-ACL) provides three months of training for physicians deemed practice-ready to work in rural Manitoba.
c) The Non-Registered Specialist Program (NRSAP) provides individualized training programs for specialist physicians to prepare them for conditional licensure.

The College of Physicians and Surgeons of Manitoba lists four categories of registration for physicians: Full, Conditional, Temporary and Emergency Registration. Most physicians would apply for Full or Conditional Registration. The licensing criteria vary by location of medical education. To be eligible for a Full Registration, physicians must hold the Licentiate of the Medical Council of Canada (have passed the Licentiate of the Medical Council of Canada Qualifying Examination Parts 1 & 2) and must have completed the certification requirements of either the College of Family Physicians of Canada or the Royal College of Canada or have completed training suitable to the College obtained through an approved American teaching program. These criteria eliminate most IEPs from being eligible for Full Registration, as few would meet the certification requirements.

Candidates unable to meet these criteria must apply for Conditional Registration. The criteria are graduation from an approved faculty of medicine, hold a pass standing in one or more of the Medical Council of Canada Examinations (Evaluating Exam or the Qualifying Exam Parts 1 and 2), have completed an assessment program satisfactory to the CPSM, and have completed either two years postgraduate clinical training acceptable to the College or one year postgraduate clinical training acceptable to the College, and have had a total of at least three years practice experience in the preceding five year period and complete an orientation program acceptable to the College. The current Manitoba requirements for licensure may be found at http://cpsm.mb.ca/registration/categories-of-registration.

What divides IEPs into those eligible for practice-assessment eligibility assessment programs and those who require postgraduate medical residency training is

whether or not they have completed sufficient postgraduate training abroad. Only those IEPs who have creditable post-medical training or creditable practice experience as fully licensed physicians abroad are eligible for practice-readiness assessment and training programs. In broad terms, this category generally encompasses immigrant-IEPs with prior practice experience. For example, the eligibility criteria of the University of Manitoba Medical Licensure Program for IMGs (MLP-IMG) requires applicants to have completed at least one year of postgraduate training abroad and to have practiced abroad as an licensed physician for at least one additional year (University of Manitoba, 2014b). Consequently, the majority of IEPs must secure seats in residency programs as their only viable route to licensure.[4]

Securing Residency Training Positions

Entry to all residency-training programs is through the Canadian Resident Matching Service Residency-1 match (CaRMS R-1). Two iterations of the match are held annually over the winter to early spring. These two iterations provide candidates with residency seats for a July intake each year.

In the first iteration (November to March annually) of the CaRMS match, thirteen universities offer two streams of seats; one is reserved for Canadian Medical Graduate

[4] The CFPC has recently established an alternate route to certification for physicians who have completed family medicine training in the USA, the United Kingdom, Ireland and Australia and who hold fellowship or certification in these jurisdictions (College of Family Physicians of Canada, 2014). This option is not available to physicians with Family Medicine training from other jurisdictions. Although the numbers of IMGs able to take advantage of this alternate route to certification may be small, it will afford them eligibility for Full Registration without the need to complete additional training in Canada.

(CMG) applicants whilst the other is reserved for IEP applicants[5]. The remaining universities permit IEPs to compete directly with CMGs for residency seats. Seats left unfilled after the first iteration are open to all candidates in second iteration (March to April of each year); these include unmatched Canadian medical students from both current and prior graduating cohorts, residents currently in training in Canadian or US medical residencies, practicing physicians desiring retraining and unmatched IEPs. In 2014, for example, 3319 seats were made available (Canadian Resident Matching Service, 2014 R-1 Main Residency Match Report, 2014a). In that year, 228 seats were left vacant at the end of the first match. These seats were entered in second iteration, to which 1362 candidates applied.

As previously noted, with the elimination of categories 1 & 2 designations, each province established its own criteria for the assessment and licensure of IEPs. The capacity for individual assessment at the provincial level was limited thus most IEPs turned to Canadian postgraduate residency training as their route to licensure. During the 1990s, the numbers of postgraduate residency seats were closely tied to the number of graduating medical students. As shown in Figure 1, there were few surplus seats in the late 1990s and early 2000s. In 1996, for example, there were 1,268 graduating Canadian medical students vying for 1,279 residency seats, for a seat/graduate ratio of 1.01, the tightest ratio of applicants to seats in the past two decades (Canadian Resident Matching Service [CaRMS], 1996; CaRMS, 1998; CaRMS, 2000; CaRMS, 2002; CaRMS, 2004, CaRMS, 2006, CaRMS, 2008, CaRMS, 2010b, CaRMS, 2012, CaRMS, 2014a). This created a significant barrier for IEPs, as there were few seats available to them. In fact,

[5] In the four Quebec universities, IMGs compete with CMGs directly in first iteration as well as competing for two seats at one of the seven University of Saskatchewan sites (Canadian Resident Matching Service, 2015).

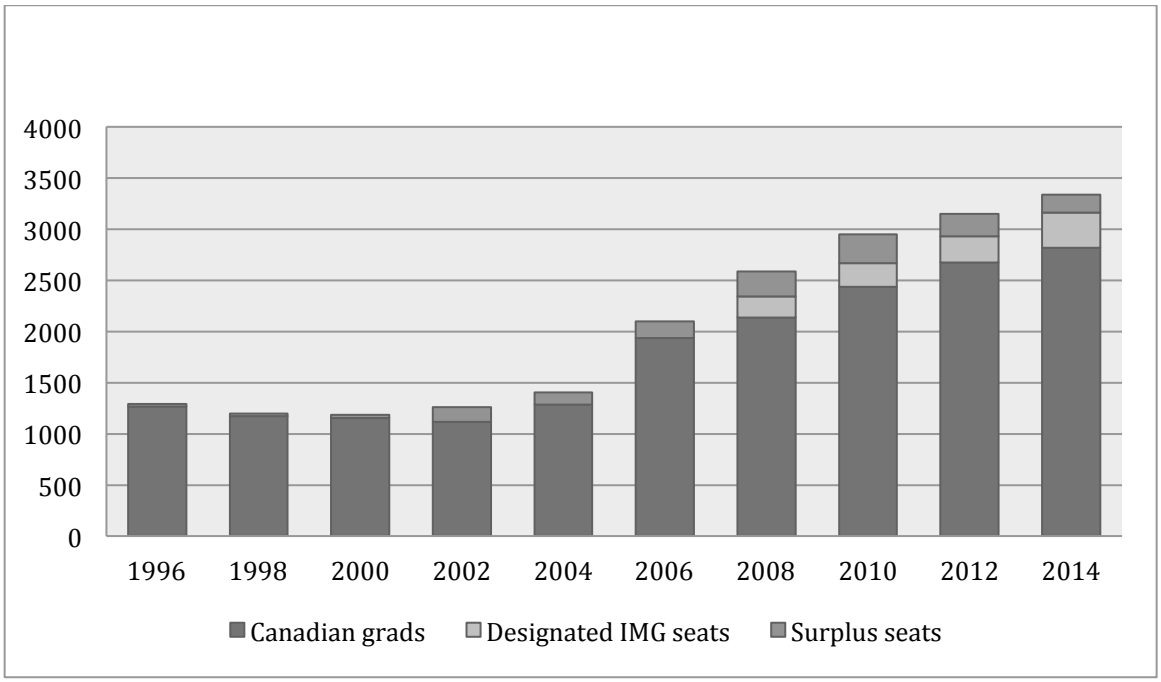
the numbers of IEPs entering postgraduate training declined in the 1990s compared to the 1980s (Chan, 2002).

Following the recognition in the early 2000s that Canada required more physicians, the enrollment of medical students into Canadian medical schools was increased, from 1557 in 1998 to 2919 in 2014 (Association of Faculties of Medicine of Canada, 2014 Canadian Medical Education Statistics, 2014). Postgraduate residency seats were also increased, from 1,186 in 2000 to 3319 in 2014. Despite these increases, the ratio of CMG applicants/seats in the early 2000s ranged from 1/1.03 to 1/1.08 (Health Canada, Balancing Supply and Demand, 2004; Health Canada, Health Human Resource Newsletter, 2008). As shown in Figure 1, by 2008 the applicant/seat ratio rose to 1/1.21 and has remained fairly constant near 1/1.20 since this time.

Although the increase in residency seats relative to the numbers of graduating Canadian medical students made additional seats available to IEP applicants, prior to 2007, they were only able to apply to seats left unmatched through the first iteration of CaRMS (Kondro, 2006a; Kondro, 2006b).[6] But during the 2000s, a decline in the interest of Canadian medical graduates in Family Medicine left additional unfilled seats that IEPs to which could apply in second iteration (Health Canada, Balancing Supply and Demand, 2004).

[6] It was not until 2007 that first iteration seats were specifically reserved for IMG candidates through CaRMS in several provinces; Manitoba and Quebec permitted IMGs to apply for seats in competition with CMGs. In 2011, Manitoba established separate streams for IMGs and CMGs, while Quebec continues to offer one stream open to both groups.

Figure 1. Canadian Postgraduate Residency Seats 1996-2014



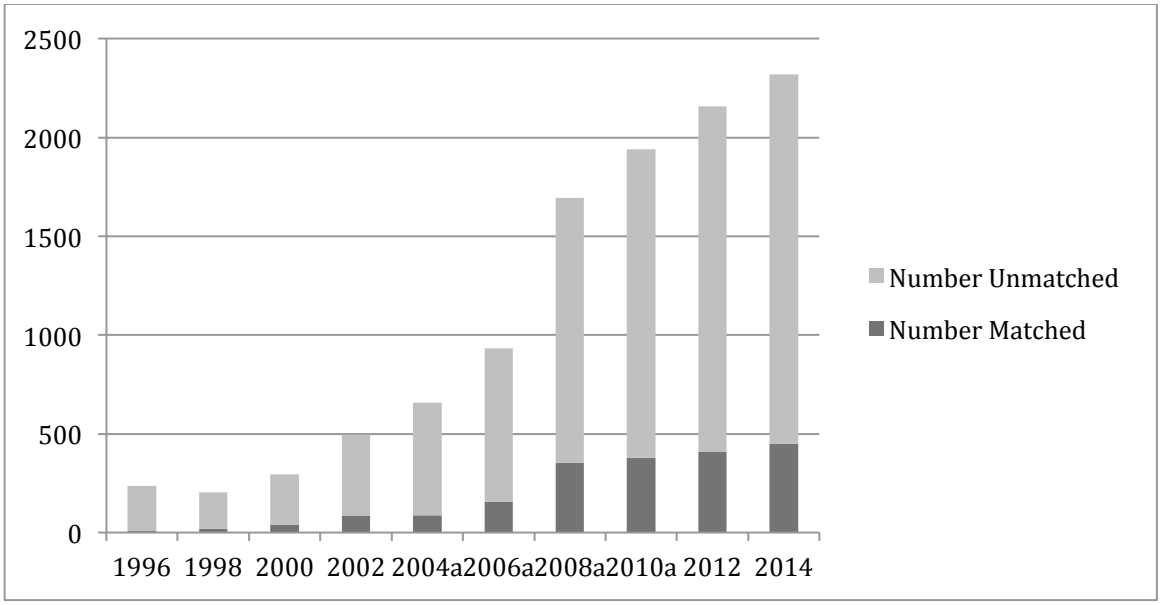
Note: Data adapted from Canadian Resident Matching Service R1 Annual Match Reports 1996, 1998, 2000, 2002, 2004, 2006, 2008, 2010, 2012 & 2014a. Permission to use granted by Irving Gold, Vice President, CaRMS, March 4, 2015.
Data is shown from every second year, for clarity in viewing table.
Beginning with the 2007 CaRMS match, some provinces designated specific residency seats for IEPs whilst other provinces allowed IEPs to compete directly with CMGs.

These developments led to increases in both the numbers of IEPs applying to CaRMS and in the numbers of those who successfully matched to residency seats, from 11 of 236 applicants in 1996 to 449 of 2318 applicants in 2014. In some provinces IEPs and CMGs competed directly for seats, whilst in others they applied to parallel streams. In 2014, the number of IEP applicants totaled 2318, the greatest number ever to apply (Canadian Resident Matching Service, 2014 R-1 Main Residency Match Report, 2014a). As shown in Figure 2, the percentage of successful IEP applicants has hovered near 20% since 2008, in keeping with the CMG applicants/seats ratio of 1/1.20.

The CaRMS match rates shown in Figure 2 suggest that all IEPs face equal challenges. However, Figure 3 demonstrates that the likelihood of success in CaRMS

varies considerably by region of training. Graduates from Oceana/Pacific Islands (typically applicants from Australian medical schools) enjoyed the highest rate of success in 2014 at nearly 65%, followed by those from European medical schools (including those from Ireland and the United Kingdom) at 30% (Canadian Resident Matching Service, 2014a). Although the use of categorization by country of training to select for medical licensure has been abolished, it appears that training in a Western First World country confers additional benefit to IEPs hoping to enter residency training in Canada.

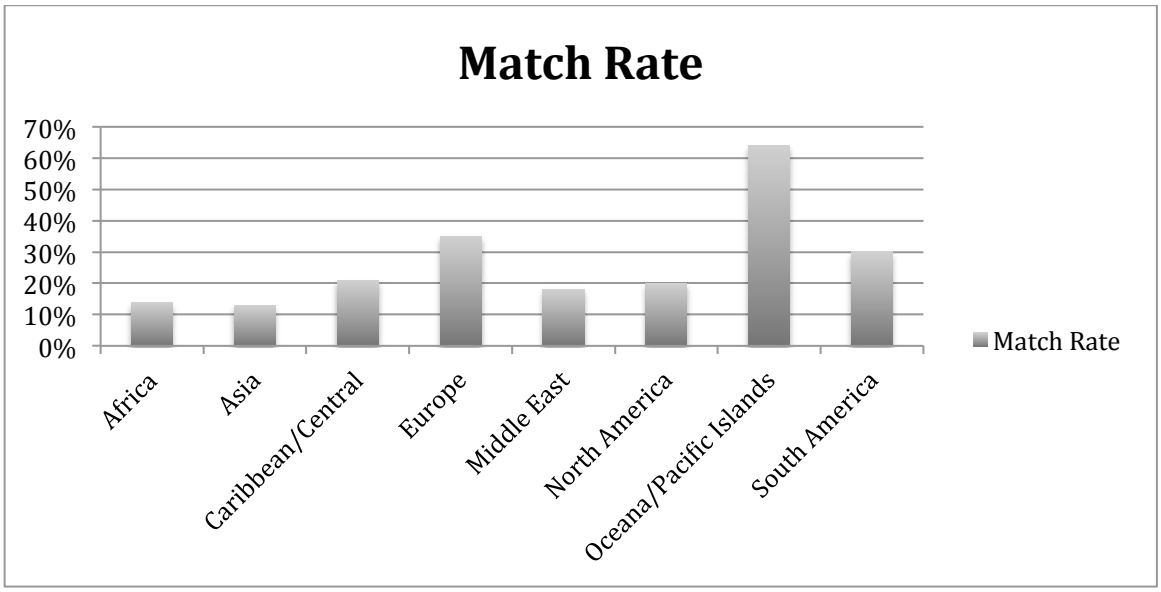
Figure 2. IEPs' Success in CaRMS Matches 1996-2014



Source: Adapted from Data adapted from Canadian Resident Matching Service R1 Annual Match Reports 1996, 1998, 2000, 2002, 2004, 2006, 2008, 2010, 2012 & 2014a. Data from every second year reported for ease of viewing. Permission to use granted by Irving Gold, Vice President, CaRMS, March 4, 2015.

[a] The total number of applicants is abstracted from the total participant number from first iteration plus new applicants in second iteration. This does not account for participants who may have withdrawn from second iteration prior to the match.

Figure 3. Success Rates in the CaRMS 2014 Match, by Region of Training



Note: Data adapted from the Canadian Resident Matching Service, 2014 R1 Main Residency Match Report, 2014a. Permission to use granted by Irving Gold, Vice President, CaRMS, March 4, 2015.

All IEPs must complete a series of preliminary steps in order to participate in the CaRMS match. They must provide proof of their prior training, provide language proficiency assessments if they did not study medicine in French or English and must pass the Medical Council of Canada Evaluating Examination (MCCEE) and National Assessment Collaboration-Observed Standardized Clinical Examination (NAC-OSCE). This demands a considerable amount of their time and financial resources. Although the MCCEE is available on-line at testing sites around the world, there is limited access to the NAC-OSCE exam; in recent years, the number of applicants has exceeded the number of available seats. The NAC-OSCE is only offered in Canada, thus candidates must come to Canada to sit the exam or defer it until they have either immigrated to Canada or completed their medical training abroad, in the case of CSAs. Both exams are now

mandatory for most universities[7]; candidates who have not yet taken and passed these exams are consequently unable to compete for seats in 16 of 17 universities.

In addition to examinations, two provinces have established additional screening or evaluation processes to identify acceptable IEP candidates for residency training at their universities. The province of Alberta has established evaluation programs for potential IEP applicants; only candidates who have been deemed acceptable based upon these evaluations are permitted to apply through CaRMS for seats at the University of Alberta and the University of Calgary. In Ontario, those IEPs who match to residency programs through CaRMS must successfully complete a three-month assessment program before being permitted to enter residencies at any of the six Ontario medical universities (Alberta International Medical Graduate Program, 2014; Centre for the Evaluation of Health Professionals Educated Abroad, 2011).

The consequence of limited access to medical training seats creates a large pool of IEPs repeatedly trying to secure a foothold in Canada (Boyd & Schellenberg, 2012). Many try repeatedly, only to fail year after year. Those who do secure a seat do so after intensive efforts. Although this has not been extensively studied, Wong and Lohfeld (2008), in their qualitative analysis of IEPs' adaptation to medical training, heard that their participants perceived the process of securing a training seat to be "logistically difficult, impersonal and stressful" (Wong & Lohfeld, 2008, p. 55). It is reasonable to conclude that IEPs entering residencies have experienced considerable stress in order to do so, creating less than ideal conditions with which to begin the training required for their professional careers.

[7] The University of Saskatchewan currently is the only university that does not require the NAC-OSCE.

The Phenomenon of Canadians Studying Abroad

Although some Canadians have always gone abroad for their medical education, the numbers of Canadians Studying Abroad (CSAs) has substantially increased since the late 1990s. There is little published literature on CSAs. A PubMed search with the term "Canadians studying abroad" retrieved two editorials, both published in the Canadian Medical Association Journal, one from 2007 and the other from 2014. The tone of the editorials has changed over the intervening 7 years, from an initial call to increase access to residency training seats in 2007, to a 2014 cautionary note for prospective students and their parents as the prospect of returning to Canada for residencies has become increasingly grim (Barer, Evans, & Hedden, 2014; Sullivan, 2007).

The number of applications to medical schools in Canada far exceeds the number of seats made available each year. The Association of Faculties of Medicine of Canada publishes annual reports listing the numbers of applications per seat and the percentage matched to each university, for all but the Ontario universities. As shown in Table 1, the acceptance rates range from a low of 10.3% at McGill University to a high of 20.5% at Memorial University Newfoundland. The Ontario Universities Application Centre collates acceptance data for the six Ontario universities: the posted acceptance rates range from 2.2% at Queen's University to 6.5% at Western University, with an Ontario-wide acceptance rate of 14.6% (as shown in Table 1).

Because of these low acceptance rates, medical school applicants often apply both multiple times and to multiple universities across Canada. This low likelihood of acceptance to medical school in Canada is the rationale many Canadians provide in explaining why they chose to go abroad for their medical education.

Table 1. Acceptance Rates at Ontario Medical Schools (2014) and Other Canadian Medical Schools (2013/14)

University	Number of Seats Offered	Number of Applicants	Success Rate (%)
Memorial University Newfoundland	78	497	20.5[a]
Dalhousie University	109	942	16.5[a]
Université de Laval	231	2331	17.8[a]
Université de Sherbrooke	205	2342	20.2[a]
Université de Montréal-prep year	213	2040	20.4[a]
Université de Montréal-first year	92	735	14.8[a]
McGill University- prep year	76	782	15.5[a]
McGill University- first year	186	2069	10.3[a]
McMaster University	204	4973	4.1[b]
Northern Ontario School of Medicine	64	2115	3.0[b]
Ottawa University	156	4167	3.7[b]
Queen's University	100	4374	2.2[b]
University of Toronto	259	3463	7.5[b]
Western University	171	2623	6.5[b]
All Ontario Medical Schools	954	6539	14.6[b]
University of Manitoba	106	1009	13.4[a]
University of Saskatchewan	100	808	17.9[a]
University of Alberta	162	1458	15.2[a]
University of Calgary	151	2006	14.4[a]
University of British Columbia	287	1920	17.7[a]

Note: Data for Ontario universities adapted from Ontario Universities' Application Centre, Medical Education Statistics, 2015. Permission to use granted by R. Granger, Executive Director, February 13, 2015. Data for the remaining universities adapted from the Association of Faculties of Medicine of Canada, 2013 Canadian Medical Education Statistics, 2014. Permission to use granted by Y. Fortin, Director of Data & Analysis, March 2, 2015.

[a] Percentage of applicants who received at least one offer of admission whether subsequently registered, declined or deferred.

[b] Number of seats offered divided by the number of applicants

In 2006, researchers affiliated with CaRMS estimated that there were approximately 2000 Canadians studying abroad in that year. A repeat study conducted in 2010 estimated the number to be roughly 3,500 CSAs. If the numbers of CSAs undertaking an international education were to expand at the same rate, it would be reasonable to estimate that, currently, there are between 4,500 and 5,000 CSAs in training abroad. The phenomenon of students travelling abroad for their medical education is not limited to Canada. Johnson, Hagopian, Veninga and Hart (2006) noted a similar expansion of Americans studying at international medical schools, particularly at medical schools located in the Caribbean.

In 2006, Canadians were studying medicine at approximately 40 international medical schools; by 2010, this number grew to at least 75 with more opening annually in the intervening years (Canadian Resident Matching Service, 2010a). In 2014, CaRMS posted data indicating that Canadians are currently studying medicine in over 130 schools across 30 countries (Canadian Resident Matching Service, 2014b). It is estimated that 90% of CSAs plan to return to Canada for all or part of their postgraduate training although their prospects are poor (Canadian Resident Matching Service, 2010a).

Although published CaRMS annual reports do not differentiate IEP applicants into immigrant-IEPs and CSAs, the 2013 CaRMS data provides some indirect evidence that CSAs are more successful in matching to a residency. Of the 2013 candidates applying in the year of their medical school graduation, 43% (146/338) were matched to residencies. The vast majority of these applicants would have been CSAs, as most immigrant-IEPs would have required additional time post-graduation and post-immigration to complete the prerequisite examinations and language proficiency tests.

The success rate for all other 2013 IEP applicants, excluding current year graduates, was 19% (353/1878; Canadian Resident Matching Service, 2013).

Crutcher, Banner, Szafran and Watanabe (2003) noted that CSAs composed 4.5% of all IEPs participating in the 2002 CaRMS match. By 2010, this figure increased over six-fold as CaRMS calculated the potential number of returning medical students to be equal to 30% of the annual Canadian graduating medical cohort (Canadian Resident Matching Service, 2010a). With current funded residency seats set at 1.12 seats per Canadian medical school graduate, and an additional 750-1000 Canadians studying abroad eligible annually to apply to CaRMS, the likelihood that these graduates will achieve success in securing a residency seat is increasingly bleak.

With the increase in numbers of IEPs applying to CaRMS since 2008, both CSAs and I-IEPs have recently experienced a relative decline in acceptance rates, as shown in Table 2. CSAs have fared better than immigrant-IEPs as they increasingly match to residency seats at the expense of immigrant-IEPs (from 27% of IMGs matched in 2008 to 47% of all IMGs matched in 2011; Thomson & Cohl, 2011).

Table 2. CSA and Immigrant-IEP Match Rates, 2008 & 2011

Year	CSAs (Number accepted/number applied)	Success Rate (%)	I-IMGS (Number accepted/number applied)	Success Rate (%)
2008	95/181	52.3	258/1362	18.9
2011	184/473	38.9	202/1447	14.0

Source: Adapted from The Association of Faculties of Medicine of Canada, 2012a. Permission to use granted by Y. Fortin, Director of Data & Analysis, March 2, 2015.

Most Canadians Studying Abroad prepare for the CaRMS application cycle during their medical school years abroad. This includes sitting the Medical Council of

Canada Evaluating Examination and securing, when possible, Canadian or North American electives during their clinical training years. Many also sit the United States Medical Licensing Examinations to be eligible for residency seats in the US.

Increasingly, host countries no longer accept Canadian or American graduates into postgraduate training seats following their medical school graduation. Watts, Davies and Metcalfe (2011) report that Australia, Ireland and the United Kingdom have set limits on the numbers of postgraduate education seats available to foreign students, including foreign graduates of their own medical schools. What had once been a safety net for unmatched CSAs, in allowing them to continue their postgraduate medical training abroad, has now been removed. CSAs can no longer rely upon continuing their medical education abroad whilst they attempt to secure Canadian residency seats. The result is a growing pool of CSAs who have graduated from medical schools abroad who go unmatched and are unable to remain current with medical practice. Watts et al (2011) have coined the term "the Canadian International Medical bottle-neck" to describe this phenomenon. They state,

> At the crux of this mismatch is an increasing population of Canadian students seeking alternative routes to obtain medical training. Each year, as the bottleneck goes unreported, more aspiring Canadian students will continue to pursue training overseas. In the absence of information about this worsening situation, however, such students may be pursuing a dream that the Canadian healthcare system is unable to support. (p. e89)

Summary

The changes in Canadian social and political contexts coupled with changes to immigration policy, licensing regulations and access to postgraduate training positions have created a complex morass through which IEPs must negotiate. I have summarized the key events in Table 3. This interplay of sociopolitical, immigration, regulatory and postgraduate education forces has created significant barriers that have prevented many IEPs from entering medical practice in Canada.

Table 3. Highlights of Sociopolitical, Regulatory and Educational Changes Affecting Internationally Educated Physicians, ca.1965- Present

Timeline	Development	Impact on Canadian Health Care	Impact on IEPs
1965	Medicare enacted in Canada	Increasing demand for physicians	Influx of physicians from Ireland and Commonwealth countries
1971-1975	Physicians awarded preferred status for immigration	Increasing internationally educated physicians enter practice in Canada	Immigration to Canada and entry to practice is easily obtained
Ca.1975	Ministries of Health become concerned with rising health care costs and increasing physician numbers	Calls from Ministries and the CMA to reduce physician numbers through caps on immigration	
1975-1980	Immigration Canada removes preferred status for physicians Immigration limited to those with pre-arranged employment		Number of immigrating physicians plummets; Many physicians immigrated under family class or did not declare medical occupation; Many physicians required to sign declarations that there were no guarantees of future medical practice in Canada;
1979	Medical Council of Canada develops the Evaluating Examination		All IEPs must sit the Evaluating Examination before being eligible to sit the Medical Council of Canada

			Licensing Examinations
1980s	Rising healthcare costs; Multiple Commissions review healthcare funding	Multiple calls to reduce healthcare spending on physicians	
Ca.1980	The demographics of immigrating physicians change from Ireland and the U.K. to those from other countries, particularly south-east Asia		
Ca.1985-1990	Medical Regulatory Authorities divide physicians into two categories: Category 1 is physicians from Ireland, the U.K. and Commonwealth countries; Category 2 is all other physicians		Physicians in Category 1 are given preferred status for licensure; Physicians in Category 2 must undertake additional training in Canada before being eligible fore licensure; Few training posts exist, limiting opportunities for Category 2 physicians
Ca.1985-2000	Regional physician shortages worsen (Saskatchewan, Manitoba, Newfoundland in particular)		IEPs recruited from South Africa and Commonwealth countries to fill vacancies while IEPs already in Canada are unable to access training positions or become licensed
1991	Barer-Stoddard Report released	Decrease in medical school enrollments	
1993	Rotating internship eliminated Most training seats moved to Royal College residency programs	Fewer physicians graduate per year due to increased length of training; Numbers of physicians entering practice annually declines	
Mid-1990s	Political and legal action launched by several groups of IEPs;	Category 1 & 2 designations for country of training abolished;	All IEPs must satisfy the same licensing requirements; Most IEPs must obtain postgraduate training in Canada in order to be eligible for licensure
Late 1990s	Successful complaint to the Manitoba Human Rights Commission wins a negotiated settlement	The College of Physicians and Surgeons establishes individualized assessment protocols for IEPs in collaboration with the University of Manitoba	Limited capacity restricts this route to licensure to a few IEPs annually

Ca.1995-2007			IEPs eligible for surplus residency training seats in the second iteration of CaRMS but unable to access them in any significant number until ca. 2004
Early 2000s	Declining acceptance rates at Canadian Medical Schools lead to greater numbers of Canadians choosing to go abroad to study (CSAs)		CSA pool abroad begins to grow
Early 2000s	Recognition that projections of physician manpower have underestimated the numbers of physicians needed	Canadian medical school enrollment doubles between 1998 and 2014; demand for medical school seats continues to outstrip available seats; Canadian postgraduate training seats increased, tripling in number between 2000 and 2014	Increasing numbers of surplus seats in postgraduate medical education, which offers increasing opportunity to IEPs
2001	IMG-Training Programs established at the University of Manitoba		IEPs who have completed postgraduate medical education abroad now able to apply for limited assessment/retraining seats
2001	Immigration and Refugee Protection Act (IRPA) enacted	Occupational classification eliminated in favour of educational attainment, language skills and assessment of ability to adapt to life in Canada	Physicians score highly under IRPA; Numbers of immigrating physicians dramatically increases; The pool of IEPs unable to secure training positions rapidly increases
2004	Canadian Task Force on IMG Licensure releases findings		Multiple recommendations made to ease IEPs' transitions into training and practice
2006	A study by CaRMS estimates that CSAs in training abroad number approximately 2,000		Increasing numbers of CSAs compete with other IEPs for residency training seats in Canada
2007	Many provinces open the first iteration of CaRMS to IEPs		IEPs now able to apply for residency training seats in first iteration; The number of IEPs entering residency training increases

			dramatically
2010	A repeat study by CaRMS estimates the numbers of CSAs in training abroad to be approximately 3,500		Increasingly, CSAs displace I-IEPs from Canadian residency training programs
Ca.2010-present	Host countries restrict postgraduate training seats to their own nationals		Most CSAs no longer able to continue their medical training abroad; The numbers of IEPs unsuccessful in CaRMS increase; Many CSAs apply repeatedly for residency seats in CaRMS, alongside I-IEPs who are also unable to secure residency or alternate training seats

Dr. Dale Dauphinee, Co-Chair, Task Force on IMG Licensure and Assessment of IMGS and former Executive Director of the Medical Council of Canada has summarized the interplay of Canadian immigration policy and fiscal restraints applied at provincial levels which contribute to:

> . . . an alarming 'disconnect' between immigration policy regarding landed immigrants and areas of need identified by the primary employers of physicians in Canada, the provincial/territorial health plans. This has resulted in two conditions:
>
> - a backlog of an unknown number of IMGs, currently residing within Canada, who immigrated without prior competency assessment or prior offer of a position, and who are not practicing or able to upgrade their skills; and,
>
> - a number of IMGs currently in Canada who have been inactive or who have only partial training in primary care or a specialty, [and who] are unable to seek remediation or upgrading due to the lack of opportunities for IMGs. (Dauphinee, 2003, p. 5)

His words ring as true today as they did in 2003. With increasing numbers of CSAs returning to Canada, caught in the "Canadian International Medical bottleneck", the backlog of physicians unable to secure training seats will continue to grow. For both groups of IEPs, each year out of training renders their medical experiences increasingly out of date and makes it even less likely that they will ever be able to become licensed as physicians in Canada.

In this chapter, I have described the socio-political forces that have affected the immigration and licensing opportunities of internationally educated physicians and how these forces have created a "Canadian International Medical bottleneck" for both immigrant-IEPs as well as Canadians Studying Abroad. In Chapter 2, I shall describe the educational challenges faced by those fortunate to gain a seat through CaRMS.

Chapter 2 The Transition to Residency

In this chapter, I shall review what is known from the medical education literature surrounding transitions in medical education, the impact of the learning environment on residents' performance and wellbeing, learning needs as identified for IEPs and endeavor to deduce the learning needs specific to CSAs.

The Challenge of Transitions

Physicians experience multiple transitions in their training, beginning with the matriculation into medical school, the transition from the primarily didactic early medical school years to the clinical clerkship, the transition from medical school to residency and the transition from residency into independent medical practice. In addition, there are multiple transitions during clinical training, as trainees move from one clinical placement (rotation) to another. Over the past decade, medical educators have begun to examine the effect of transitions on medical students and residents. A recent PubMed search (August, 2014) employing the search terms "medical students" and "transition to residency" resulted in 68 articles, 59 of which dated from the years 2000 to 2014. The issue of IEPs' transition to residency has been less well studied; a second search using the terms "international medical graduates" and "transition to residency" generated only 6 articles, 5 of which were published between 2000 and 2014.

The Association of Faculties of Medicine of Canada (AFMC) recently published a position statement in which transitions into residency and from residency into practice were highlighted. In its document, "Future of Medical Education in Canada: A Collective Vision for Postgraduate Medical Education in Canada" the AFMC recommended that institutions "develop smoother and more effective transitions from

medical school to residency and from PGME [Postgraduate Medical Education] into clinical practice [through the] review and redesign [of] current practices and systems (e.g., the entry-into-residency process)" (Association of Faculties of Medicine of Canada, 2012, p. 20). They further recommend,

> The UGME [Undergraduate Medical Education] and PGME systems must also collaborate to devise a plan whereby graduating medical students are optimally prepared for residency. Ensuring the effective integration of IMGs into Canadian residency programs and their transition into practice must be a priority. (p. 21)

The transition from medical student to resident represents a significant shift in perspective by medical students, from being medical learners to being medical practitioners. Teunissen and Westerman (2011a) conceive of transitions "as a dynamic process in which the individual moves from one set of circumstances to another" (p. 52). Teunissen and Westerman (2011b) propose that the transition to residency represents a clash between the different cultures of two educational systems. They identify that "transitions exemplify the clash between the learning orientation of university-based medical education and the performance orientation of workplace-based medical training" (p. 969) in residency education.

Holmboe, Ginsburg and Bernabeo (2011), through their review of the literature examining transitions between clinical rotations, have identified that frequent transitions during undergraduate and residency training may impair the sociological development of professional identity, expressing concern that learners "may acquire dysfunctional strategies to cope with and adapt to the demands placed upon them by frequent transitions between and within systems" (p. 73). They note that, "as trainees are repeatedly forced to

adapt to new clinical rotations, expectations, responsibilities and pressures, it is possible that a subset fail to realise [sic] or reach their potential as they simply do what they need to in order to 'survive' and endure each transition" (p. 75).

Fann, Hunt and Schaad (2003) developed a sociological calendar describing the stages experienced as residents moved into and through residency. They conducted a cross-sectional survey of 31 psychiatry residents in training at three teaching hospitals in the United States, using a previously validated survey to assess psychiatrists' professional development. They generated a timeline outlining residents' development from dependency on supervisors to collaboration and from survival to integration. Their participants described feeling fearful, excited and overwhelmed in the early months of their residencies to experiencing depression, anger and frustration at the six-month mark.

The medical school origins of their participants are not explicitly stated in their paper but, as psychiatry in the U.S. attracts a large number of IEPs (Bhalla, 2010), it is likely that both IEPs and U.S. Medical Graduates are represented in their study. Although there are differences in length between the four-year American psychiatry residency and the two-year Canadian Family Medicine residency, it is reasonable to suggest that Canadian residents experience similar distress during their early months in training, independent of specialty program.

Similarly, Hurst, Kahan, Ruetalo and Edwards (2013) examined the trajectory of first year residents' wellbeing at the University of Toronto. They interviewed 17 residents from Family Medicine (n = 5) and Royal College (n = 12) programs near the end of their first year; their respondents were predominantly female (n = 12; male = 5). All participants were graduates of Canadian medical schools; the authors excluded IEPs

"because of issues unique to these residents" (p. 97). Interviews were coded according to themes of stressors and coping strategies.

Participants were asked to chart their sense of wellbeing over the prior 10 months of training and provide their perspectives on the causes of upturns and downturns in wellbeing. Participants described being excited and anxious at the beginning of the year but overwhelmed with the increased clinical responsibilities of being residents. The authors report that variations in residents' wellbeing were closely associated with residents' moves between clinical rotations. They report, "with each change in rotation, residents needed to become acquainted with the unfamiliar setting, role expectations, the patients, their electronic records, and the team, while concurrently trying to learn a novel body of knowledge" (p. 99). Participants associated supportive work teams, opportunities for learning and increased confidence with upturns in their wellbeing while unsupportive teams, long work hours and frequent on-call duties were associated with downturns in their sense of wellbeing. By their tenth month, participants reported increases in their level of confidence with concomitant increases in fatigue and apathy.

Hurst et al. (2013) identified the coping strategies employed by their participants as cognitive (self-reflection, reframing and self-talk), behavioural (assertiveness and boundary setting), social supports (talking with peers in medicine and with family and friends outside of medicine) and self-care (exercise, sleep, hobbies and meditation) strategies. They identified that, from the perspective of residents, the clinical work environment played a major role in the stresses of residency and significantly influenced residents' sense of wellbeing.

Legassie, Zibrowski and Goldszmidt (2008) also assessed residents' wellbeing

through an anonymous cross-sectional survey of 48 residents enrolled in a three-year Internal Medicine program at the Shulich School of Medicine & Dentistry at Western University. They employed two validated tools that assess imposter syndrome and burnout. They found that slightly over half of the female residents (52%; 13/25) and most of the internationally educated residents (85%; 6/7) met the criteria for imposter syndrome, defined as "chronic feelings of self-doubt and fear of being discovered as an intellectual fraud" (p. 1090). Fewer participants were found to meet the diagnostic criteria for burnout (12.5 %; 6/48). Of note, they found that three of the six participants who met the criteria for burnout also met the criteria for imposter syndrome. Their findings raise concern for the wellbeing of internationally educated residents in Canadian residencies.

In their grounded theory analysis of the behaviours of junior doctors in the management of acutely ill patients at two Scottish universities, Tallentire, Smith, Skinner and Cameron (2011) solicited the perspectives of trainees and their senior registrars and consultants. They identified six themes, grouped into three categories:

1. Cognitive challenges: participants described their challenges in "transferring knowledge into practice" (p. 995) and in "decision making" (p. 995) particularly in the context of uncertainty;
2. Roles and responsibilities: participants described how some junior doctors were reluctant to make decisions due to fears of making patients worse ["acts and omissions" (p. 995)] and struggled to understand what was expected of them in managing acutely ill patients, and in particular, knowing when to call for help ["identity and expectations" (p. 995)];

3. Environmental factors: participants described their training system in militaristic terms and perceived themselves to be "foot soldiers" (the medical hierarchy; p. 1000) and related how they were often overwhelmed to the point of paralysis when faced with deteriorating patients (performing under stress).

Roberts (2009) interviewed junior physicians (Foundation 1, first year in postgraduate training) at six teaching hospitals in the United Kingdom to understand the effects of transitions on doctors' clinical performance. She conducted a collective case study in examining the regulatory and policy perspectives, the requirements of employers, the clinical teams in which doctors worked and the doctors themselves. She identified that junior doctors do not learn in isolation; rather, the contexts in which they work are critical to their progress and performance.

> Work, performance and learning practices involve specific activities determined by patients, divisions of labour, clinical protocols, ward culture, culture of each speciality, institutional and organisational cultures and so on. This recognition of learning in practice is critical. (p. 17)

In doing so, she conceptualized transitions as Critically Intensive Learning Periods (CILPs) in which learners experience profound transformations in knowledge and perspective. She notes,

> In practice supervision varies widely. Some supervisors do monitor transitions - in very different ways - whilst others may be largely absent and/or distant. Furthermore, because trainees may start a transitional period working on days or on nights or by being on call, monitoring will depend on who is around and how much responsibility they take in this respect. (p. 21)

And she further identified that,

> The extent to which the specific learning cultures of the clinical workplace (at ward and at institutional levels) recognise transitions as CILPs contributes to or inhibits the performance of new doctors. Therefore doctors can never be fully prepared in advance of a transition because learning, practice and performance are inseparable." (p. 20)

(See also Kilminster, Zukas, Quinton, & Roberts, 2010; Kilminster, Zukas, Quinton, & Roberts, 2011)

Frequent transitions between rotations in medical training are recognized as a cause of stress. Bernabeo, Holtman, Ginsburg, Rosenbaum, and Holmboe (2011) studied the impact of frequent transitions on Internal Medicine residents at three teaching hospitals in the U.S. through qualitative interviews with residents, faculty, nurses and other allied health professionals. Their resident participants identified that strong personal relationships with faculty and staff mitigated the stress of changing rotations. The more frequent the changes, the less opportunity residents had to develop relationships with other team members. The authors note that, although residents valued relationships with other residents and hospital staff, frequent changes necessitated that they establish new relationships repeatedly; some found this to be too challenging and described only putting in minimal effort to get to know their new team-mates. The authors conclude that the amount of dwell time on service directly contributed to residents' abilities to transition effectively.

Resident participants consistently described their first days on each new rotation as hectic and chaotic. Both resident and nurse participants admitted to experiencing

negative emotional effects in the early days of each rotation change and that these negative emotions created barriers to "communication, personal well-being, decision making, and the management of day-to-day tasks" (Bernabeo, Holtman, Ginsburg, Rosenbaum, & Holmboe, 2011, p. 595). Despite this, participants accepted the negative emotions associated with transitions as "the way it is" (p. 593).

Transitions may also affect how residents progress in their training. Residents are given increased responsibility when their faculty supervisors deem they are ready. Bernabeo et al. (2011) identified that lack of dwell time contributed to decreased engagement by faculty preceptors in resident teaching. Frequent rotation changes then can limit the amount of time each faculty supervisor has with a trainee, which could lead to less confidence in residents' abilities and thus lessen the likelihood that residents will be entrusted with increasing professional responsibility.

The tension between knowledge and practice performance as described by Teunissen and Westerman (2011b) was also identified by Angus et al. (2014) who surveyed 282 Internal Medicine program directors in the US to determine which skills were identified as being most required of incoming residents. Their respondent identified that the highest priority skills (as identified by over 80% of their respondents) were:

1. The ability to work in teams:
    a. Knowing when to seek assistance;
    b. Being able to communicate effectively with nurses;
2. Practice skills
    c. Time management
    d. Information management & prioritization

3. Communication skills: communicating in a culturally sensitive manner

They asked the program directors each to submit two additional high priority items; the top two were (a) organization/prioritization/time management skills (102 submissions) and (b) clinical skills/history and physical examination (100 submissions). The item *core medical knowledge* was ranked 13th of 22 submitted items.

The Learning Environment

The clinical environment in which internationally educated family medicine residents find themselves is integral to their success. Unfortunately, new residents often find themselves in unsupportive learning environments.

Two Canadian studies conducted in the early 2000s revealed high rates of distress amongst residents. Cohen and Patten (2005) conducted a survey (Happy Doc) of members of the Professional Associations of Residents of Alberta during the 2002-2003 academic year; participants were enrolled in either Family Medicine or Royal College specialty programs. Seventy-one percent of respondents identified time pressures as their greatest source of stress. Almost three quarters (73%) of respondents indicated that they had experienced intimidation and harassment during training. The sources of intimidation and harassment were, in decreasing order of frequency, nursing staff (55%), patients and family members (45%), staff physicians (42%), residents in other specialties (25%) and residents in own specialty program (7%). Fourteen percent of respondents contemplated a change of specialty and 22% would consider a career other than medicine given the opportunity to start afresh.

Cohen et al. (2008) repeated the Happy Doc survey in 2004-05 with participants at all Canadian medical schools in association with the Canadian Association of Interns and Residents, with slightly reduced rates of distress. Almost half (49%) of respondents identified time pressures as their greatest source of stress. Slightly over half (52%) of respondents reported experiencing intimidation and harassment. The sources of intimidation were the same as those identified in the original study: nurses (54%), patients and family members (45%), staff physicians (39%), residents in other specialties (29%), residents in the same specialty (9%) and program directors (8%). Subgroup analysis by location of medical school training revealed that internationally educated residents perceived less stress overall but more discrimination (65%; 13/20). The authors do not further sub-divide this group into immigrant-IEPs and CSAs.

In contrast to the findings of Cohen and Patten (2005) and Cohen et al. (2008), at the University of Manitoba, residents are more likely to name other residents as the source of mistreatment. In 2012, the Professional Association of Residents and Interns of Manitoba conducted a study of the learning environment at the University of Manitoba. They found considerable evidence of resident mistreatment, as 57% of respondents identified witnessing mistreatment and 40% stated that they themselves had been the recipients of mistreatment. When participants witnessed mistreatment, other residents were the primary cause (47%), followed by clinical faculty (21%), nursing and administrative staff (15%) and medical students (10%). When residents were the direct recipients of mistreatment, the identified sources were clinical faculty (28%), nursing and administrative staff (16%) and other residents at 10% (Berg & Ziesman, 2013, July). This study provides evidence of widespread resident mistreatment at the University of

Manitoba of Manitoba and raises concern about the wellbeing of residents working in teaching hospitals affiliated with the University of Manitoba.

Challenges with Transitions Specific to Internationally Educated Physicians

Wong and Lohfeld (2008) conducted a phenomenological study with 12 International participants that had previously practiced medicine abroad (range < 1 year to 20 years of medical practice). Although they do not divide their participants into I-IEPs and CSAs, it would seem reasonable to expect that the majority of their participants were I-IEPs (completed medical education before becoming Canadians) given their lengthy medical practice abroad. Only six participants were able to enter residencies congruent with their prior medical training or practice. The remaining six entered family medicine (3), psychiatry (1), pathology (1) and radiology (1). These first three disciplines have traditionally been less attractive to Canadian medical graduates and as a consequence, seats are often available to IEP applicants (Canadian Resident Matching Service, 2013).

Wong and Lohfeld's participants identified a three-phase process in becoming physicians in Canada: loss, disorientation and adaptation. Loss was the predominant theme of their early training, and included both personal and professional domains. The authors described loss in the professional domain as "particularly profound and was often expressed in poignant terms" (p. 56). As half of their participants had changed specialties upon entering residency, one can appreciate that this may have contributed to their loss of personal and professional identity.

Participants also described feeling disoriented in their early months of training; they did not understand their new roles as trainees in the Canadian medical education system, the expectations of faculty and hospital staff, as well as differences in culturally appropriate behaviours.

Participants identified several coping strategies that were effective in helping them adapt to their training such as "blending in" (Wong & Lohfeld, 2008, p. 57), avoiding calling attention to themselves and trying to focus on the long-term positive outcomes after residency. They also found that having designated faculty as mentors, IEP-peer mentors and sufficient time spent in training were helpful in getting through their training.

Chen, Nunez-Smith, Bernheim, Berg, Gozu and Curry (2010) conducted interviews with 25 IEP physicians practicing in primary care in the U.S. who had also completed residency there.[8] Their participants identified subtle verbal and non-verbal communication barriers that persisted for many years post-graduation. Additionally, they described both overt and subtle biases, from comments made regarding their prior training or level of performance in residency, to being expected to fill voids in the US medical system upon graduation. Their participants perceived that they had "outsider status" (p. 951) both in residency and in practice. In a follow-up article, Chen, Curry, Bernheim, Berg, Gozu, and Nunez-Smith (2011) concluded that IEPs must "simultaneously navigate dual learning curves as immigrants and as residents" (p. 1385).

Meghani and Rajput (2011) have examined one aspect of differences in medical practice between physicians trained in the US and South-East Asia. They analyzed the differences in pain management, from the perspectives of medical education curriculum,

[8] Internal Medicine, Paediatrics and Family Medicine are considered primary care specialties in the USA.

medical practice and systemic barriers in accessing narcotic analgesics in the US, India, Pakistan and the Philippines.

They noted that most medical education curricula in Southeast Asian countries do not provide any instruction in pain management or in the pharmacology of analgesics beyond simple anti-inflammatory medications. They cite a report by the Human Rights Watch (2009) that outlined a significant gap in the delivery of adequate pain management across India and a survey by Abbas et al. (2004) that described how fewer than 50% of surveyed Pakistan hospital-based physicians and surgeons could identify any oral medication for the treatment of terminal cancer pain. Meghani and Rajput (2011) call for the development of educational strategies to assist IEPs in acculturating to American medical practice such as mapping the medical curricula in the countries that provide the most IEPs to the US physician workforce and for the development of enhanced faculty development for teachers working with IEPs.

Similarly, Sockalingam, Hawa, Al-Battran, Abbey, and Zaretsky (2012) conducted a needs analysis of IEPs in five Canadian psychiatry residency programs. Their participants identified challenges in understanding the Canadian healthcare system, expectations for medical documentation and evidence-based medicine, consistent with other studies. In addition, those participants whose first language was not English reported that social isolation and language barriers negatively affected their transition into residency.

The Learning Needs of Internationally Educated Physicians

The current body of literature on IEPs' learning needs has focused primarily on visa-trainee or immigrant internationally educated physicians (I-IEPs). Walsh, Banner, Schabort, Armson, Bowmer and Granata (2011) have identified that there are wide variations in language skills and the degrees of familiarity with Canadian culture and Canadian medical education cultural norms amongst IEPs. Where possible, the learning needs of CSAs will be differentiated from those of I-IEPs.

Communication. Medical educators have identified that challenges with communication figure prominently. These include language skills, communication with patients and healthcare team members and patient-centred care. Each of these domains will be examined in greater detail.

Language skills. English may not be the first language of many I-IEPs. Although some I-IEPs have completed their medical education in English, many I-IEPs struggle to understand patients or medical team members and to be understood. In their critical appraisal of the current literature, Pilotto, Duncan and Anderson-Wurf (2007) identified that medical educators need to understand that I-IEPs enter training with high English language learning needs. They additionally identified that medical educators need to assist I-IEPs in developing their language skills.

Dorgan, Lang, Floyd and Kemp (2009) conducted qualitative interviews with IEP residents enrolled in FM residencies in East Tennessee, to explore their perspectives on challenges in dealing with the American medical culture and in communicating and interacting with American patients. Their participants noted that, although they spoke

and understood Standard English[9], they struggled with understanding local accents and slang. Similarly, Fiscella, Roman-Diaz, Lue, Botelho and Frankel (1997) noted how foreign medical school instruction in Standard English did not prepare these graduates for practice in the American context. They also noted that IEPs found it difficult to understand non-verbal communication cues such as facial expressions and body language. Hall, Keely, Dojeiji, Byszewski and Marks (2004) similarly reported that IEPs struggled with non-verbal communication skills.

Narumoto, Schultz and Merenstein (2012) cite Hirsch et al. (2002) in describing the language challenges experienced by I-IEPs as, "they may have the words but not the meaning" (p. 55). It is not yet certain to what degree language barriers will affect the ability of CSAs to communicate with patients, as many of them will have grown up in Canada.

Communicating with patients and members of the health care team. Effective health care requires communication between patients and their physicians and between physicians and other members of the health care team. Canadian medical schools introduce communication skills early in the medical curriculum (generally in the first year of training) with reinforcement during clinical clerkship in the 3rd and 4th years.

In the University of Manitoba undergraduate medical education curriculum, students receive instruction in Clinical Skills, composed of Clinical Interviewing and Physical Examination Skills.

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[9] Definition: "English that with respect to spelling, grammar, pronunciation, and vocabulary is substantially uniform though not devoid of regional differences, that is well established by usage in the formal and informal speech and writing of the educated, and that is widely recognized as acceptable wherever English is spoken and understood" (Standard English, 2015).

> This course is presented in Med I and II and is designed to assist students to develop skills in patient interviewing including information sharing (process and content), and physical examination (knowledge and techniques). Clinical skills will also assist students to become competent, caring, ethical physicians with the ability to think critically and to be accountable to their patients and to society. Throughout the course, emphasis is placed on the patient-centred approach while bearing in mind medical ethics, cross-cultural sensitivity, and an awareness of patient diversity. (University of Manitoba, 2014b, para. 6-7)

Med 1 students receive 14 hours of communication skills instruction in small-group settings (Communication Skills 1, 2 & 3 and Abuse and Neglect) while Med 2 students receive 7 hours of individual and small-group instruction (Comprehensive Patient Assessment, Reproductive History Taking and Sharing Bad News; University of Manitoba, 2014b).

Instruction in communication skills varies across the many institutions at which IEP residents have trained; they may have had some, little or no instruction in this domain. IEPs participating in the Dorgan et al. (2009) study shared that they had not been taught communication skills during their medical education. The participants revealed that it is challenging to both work with Standardized Patients (actors trained to portray patients) and to receive feedback on their performance. Similarly, IEP participants in the Hall et al. (2004) study had not received any training in patient communication skills during their medical education and highlighted this need as one benefit of participating in orientation training.

Eva, Wood, Riddle, Touchie and Bordage (2010) evaluated how the language in which patient information was presented affected IEPs' performances on standardized examinations. They found that the subset of poorly performing IEPs relied heavily on medical terminology, thus concluding that some IEPs' poor language skills and their reliance on medical terminology may interfere with their understanding of their patients' illnesses. This may, in turn, contribute to difficulties in diagnosis and setting appropriate management plans.

These communication difficulties may present barriers to patients but also exact a toll on the IEPs themselves. Fiscella et al. (1997) described how IEPs became frustrated when they were unable to communicate effectively with patients while Narumoto et al. (2012) found that some IEPs became frustrated and anxious when presenting patient information to faculty physicians after patient encounters, to the extent of giving up attempts at communicating. These findings are not confined to Canada or North America. Similar concerns have been identified in Australia, New Zealand and the U.K. (Dahm, 2011; Haines & Browne, 2007; Narasimhan, Ranchord, & Weatherall, 2006; Slowther, Lewando Hundt, Purkis, & Taylor, 2012).

Malau-Aduli (2011) has identified that international medical students (non-Australian students attending medical schools in Australia) experience challenges with communication skills during their medical school education in Australia. Through qualitative interviews with 3rd and 4th year medical students in a 5-year program in Tasmania, Australia, she identified that their adaptation depended upon the degree of similarity between their home languages and cultural patterns of socializing and Australian norms. This suggests that communication challenges faced by CSAs in their

training abroad may interfere with their communication skills when they enter Canadian medical residencies.

The depth and breadth of communication skills taught to IEPs depend upon the medical education systems in which they trained. The participants in the above articles[10] identified deficiencies in their abilities to communicate effectively with patients. This suggests that both I-IEPs and CSAs will enter residency training with weaker communication skills. The extent to which CSAs' fluency in English can overcome this deficit has not yet been examined.

Patient-centred medicine. One of the main tenets of patient-physician relationships in Canada is Patient-Centred Care (PCC). The Institute of Medicine defines PCC as "providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions" (Institute of Medicine, 2001). Canadian medical students begin their training in PCC upon their entry into medical school and further develop their skills during their clinical clerkship rotations. The ability to communicate clearly, effectively and compassionately is essential to the practice of patient-centred care.

In the June, 2014 issue of Canadian Family Physician, Dr. Wayne Weston, one of the first Canadian physicians granted Certification by the College of Family Physicians of Canada, reflects upon the discipline of Family Medicine and the central role of patient-centred medicine in medical practice.

[10] Countries of training: Caribbean, Columbia, Costa Rica, Denmark, Egypt, Germany, Greece, Hong Kong, Hungary, India, Iran, Ireland, Italy, Japan, Kenya, Korea, Libya, Malaysia, Nigeria, Pakistan, Peru, Poland, Russia, Saudi Arabia, Singapore, Spain, South Africa, Taiwan, Thailand and the United Arab Emirates.

> We need to do our best to listen to whatever the patient brings us in order to understand their needs, their values, and their goals in life," says Dr. Weston. "It doesn't mean we do whatever they want. But neither do we take over. Rather, we give them the benefit of our expertise and together work out a course of treatment that reduces the impact of the disease on what really matters to the patient." Most of all, medical students and residents "need to realize the complexity of communication," says Dr. Weston, "and if they can develop those skills, what a big difference it will have on the health and outlook of their patients. (Glenn, 2014, p. 560)

Many studies have identified that IEPs do not receive training in PCC, potentially leading to further challenges when communicating with patients. Dahm (2011) identified that IEPs' prior biomedical-centric education did not prepare them for patient-centred practice while Dorgan et al. (2009) identified that despite the high values placed on medical education abroad, IEPs did not receive training in patient communication skills.

Chen et al. (2011) provided six recommendations for medical educators of IEPs; instruction in patient-centred medicine was the top ranked recommendation. Dahm (2011) conducted observations of previously practicing physicians from Asia and South-East Asia participating in an Australian medical communication skills course. She identified that despite their expert status in bio-medical knowledge, the participants displayed novice level patient-centred communication skills. Dorgan et al. (2009) also identified a lack of patient-centeredness as a barrier to IEPs' communication with patients. Although the participants in the above studies were born abroad and internationally educated, CSAs likely do not receive instruction in PCC in their

international medical school education and thus will also struggle to practice PCC during their residencies.

As with communication skills, instruction in patient-centred medicine varies by country of training. IEPs entering residency without this instruction will struggle to communicate effectively with their patients. Again, it is not known how quickly CSAs will be able to learn and apply patient-centred care in their residency practice.

Mental and sexual health. In the psychiatric medical education literature, there has been a great deal of focus on IEPs' knowledge of mental health and more recently, sexual health. Searight and Gafford (2006) conducted qualitative interviews with IEP Family Medicine residents at an American university. Their participants identified that they had not received any education in the behavioural sciences prior to starting their residencies. Furthermore, participants identified that many of the issues which would have been ascribed a mental health diagnosis in the US would have been attributed to the rigors of daily living in their home countries.

In the same year, Kales et al. (2006) explored the perspectives of practicing IEPs, both family physicians and psychiatrists. They found that, compared to practicing US medical graduates, the IEPs were less likely to diagnose late-life depression and to prescribe anti-depressant therapy. They postulated that IEPs' previous education and personal cultural norms might affect their clinical practice of behavioural medicine. Similarly, Sockalingam, Hawa, Al-Battran, Abbey and Zaretsky (2012) report that psychiatry residents who were recent immigrants to Canada reported lower medical knowledge levels with respect to psychotherapy.

Sciolla, Ziajko and Salguero (2010) conducted a literature review of IEPs' education in sexual health. They found that, as a group, the IEPs were less likely to have received any instruction in sexual health and called for the inclusion of this topic in educational curricula. It is not known whether CSAs will have received instruction in sexual health during their medical school training and to what degree prior instruction in reproduction health during their Canadian primary and secondary school education will mitigate this gap.

Evidence based medicine and computer literacy. Medical education in Canada and the US has shifted greatly in the past 15 years to embrace the concept of evidence-based medicine (EBM). Sackett, Rosenberg, Gray, Haynes and Richardson (1996) provide this definition:

> Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence based medicine means integrating individual clinical expertise with the best available external evidence from systematic research. (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996, p. 71)

This definition was later refined to include patient values as one of the three key tenets (Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000). Skills essential in the practice of EBM include the ability to search medical databases for relevant articles, to critically appraise articles for evidence, to evaluate the evidence looking for systemic or analytical bias and to decide if the evidence is sufficiently rigorous to inform decision-making in individual clinical cases. Additional skill is required to effectively

communicate this information to patients and to incorporate patients' values in shared decision-making.

Evidence-based medicine is taught in the undergraduate medical school curriculum in the pre-clinical years at the University of Manitoba; it is reinforced during the clinical clerkship as medical students search for and apply the medical literature to the care of their patients. Medical educators in other parts of the world have been slowly moving to adopt this concept in undergraduate medical education (Majumder, D'Souza, & Rahman, 2004).

Allan, Manca, Szafran and Korowynk (2007) reported on their survey of IEPs in Family Medicine residency at the University of Alberta. Their participants reported that their medical education was substantially lacking in EBM. Lockyer, Fidler, De Gara and Keefe (2010) identified that lack of knowledge of clinical practice guidelines (one aspect of EBM) as one of the educational challenges IEPs face.

One of the skills necessary to practice EBM is the ability to rapidly search for medical information. Although many medical journals continue to publish paper versions, the most efficient way to access medical information is through medical on-line search engines such as Pub-Med, Scopus or Med-Line. This requires a working knowledge of computers and the ability to search within databases. Allan et al. (2007) report that older IEPs struggle with computer literacy. In a follow up study reported five years later, Allan et al. (2012) observed family medicine residents at work in an Alberta teaching clinic and did not detect any differences between IEPs and CMGs in their abilities to access electronic resources for answers to their clinical questions. The relative proportions of I-IEPs and CSAs in the 2012 study is not reported but the difference

between these two studies may reflect the increasing numbers of CSAs in Canadian residencies in the past decade, the rapid expansion of computer technology across the world or both. This likely represents a generational difference in which older I-IEPs will continue to struggle to adapt.

The Culture of Medical Education and its Impact on Internationally Educated Physicians' Education

The concept of culture has been defined severally as:

> The customary beliefs, social forms, and material traits of a racial, religious, or social group;
>
> The set of shared attitudes, values, goals, and practices that characterize an institution or organization;
>
> The set of values, conventions, or social practices associated with a particular field, activity, or social characteristic. (Culture, 2014, para. 1)

Culture, then, is composed of shared meanings and acquired through experience; it is context specific. The knowledge of these values, conventions or practices may be explicitly shared with group members or may be held as tacit knowledge.

Becker, Geer, Hughes and Strauss (2003) examined medical culture from the perspective of medical students at the University of Kansas Medical School. Through observations of medical students' experiences, they revealed aspects of medical culture that apply equally to residents. Becker et al. (2003) posited that students did not adopt the culture of medicine as much as they selected aspects of the culture and incorporated aspects of their prior cultures to create a unique student culture. Becker and Geer (1960)

proposed that, "people carry culture with them; when they leave one group setting for another they do not shed the cultural premises of the first setting" (p. 305). They adopted Gouldner's terms of *manifest* and *latent* culture to identify the culture of the new setting and the culture of the first setting, respectively.

Medical residents inhabit the space at the intersection of three cultures: (a) the prevailing (manifest) Canadian culture in which their patients reside, (b) the manifest culture within the institutions involved in teaching medical learners (the University of Manitoba, the academic hospitals and outpatient teaching clinics) and (c) the latent culture of their personal lives and prior educational experiences. The ease with which a particular resident will navigate this space depends upon his or her familiarity with the new cultures and the limitations imposed by his or her prior cultural experiences.[11]

Concerns that IEPs must understand the cultural contexts of their training and practice are not new. Cole-Kelly (1994) wrote eloquently about these challenges in recommending that residency-training programs consider the cultural diversity of their residents and the challenges they face in adapting to residency training in the US. Misra-Herbert (2003) cited Gardenswartz and Rowe's 1998 work on diversity in health care in describing how (a) culture affects interpersonal interactions, (b) culture is not overt and is not discussed until a problem arises and (c) people are unconsciously ethnocentric and thus may not be aware of causing offense. These principles can create challenges both for IEPs in understanding the norms of the workplace and for their teachers in recognizing that IEPs may not be aware of tacit cultural norms. Narumoto et al. (2012)

[11] The culture of independent medical practice in the Manitoba is not included in this discussion. Residents will transition into this culture upon graduation from their residency training programs.

described how their participants perceived their experience of a "sense of forced acculturation" in adjusting to the prevailing norms and values (p. 483).

This is not to suggest that IEPs are unaware of the gaps between their latent cultures and the manifest culture in Canada. Curran, Hollett, Hann and Bradbury (2008) found that IEPs recruited to practice in Newfoundland and Labrador were cognizant of the importance in understanding local cultural values and beliefs. They identified that it was important for IEPs to develop "an enhanced understanding of the population, sociocultural values and beliefs, and awareness of population health characteristics" (p. 166) to improve their integration into the rural communities in which these IEPs would practice.

However, Hall et al. (2004) found inconsistent agreement between their IEP participants and program directors in specific domains of culture. Both groups agreed that IEPs needed to better understand the nature of Canadian multi-culturalism and cultural differences in discussing end-of-life issues and disclosure of medical issues to patients and their families. The IEP participants identified that they needed to know more about general cultural issues while the program directors did not identify this as an area of need. The program directors identified that IEPs needed to better understand the differences between patients' and their attitudes and values whilst the IEPs did not identify this as an issue. These differing understandings of IEPs' needs may create barriers to their effective transition to residency.

Participants in the study reported by Lockyer et al. (2010) study felt that much of their struggles were due to tacit medical cultural expectations. They perceived that their

Canadian colleagues did not recognize that the IEPs did not understand local culture, and that the IEPs needed assistance in gaining this understanding.

It has been already been noted that some IEPs experience challenges in communicating with their patients. Cultural issues may contribute to these communication barriers. Cordella and Musgrave (2009) identified that culture plays a role in how IEPs display empathy in response to patient distress while Fiscella et al. (1997) described how gendered roles and boundaries prevented some IEPs from comforting patients.

Culturally gendered roles also contribute to some IEPs' knowledge gaps. In some cultures, physicians do not examine or treat patients of the opposite gender; physicians who trained in these cultures must rapidly learn to do so upon entry to residency training programs. Cultural norms may also affect patients' expressions of illness or disease and physicians' receptiveness to complaints of illness (Kales et al., 2006; Meghani & Rajput, 2011; Searight & Gafford, 2006) as well as physicians' willingness to communicate difficult information to patients and family members (Hall, Keely, Dojeiji, Byszewski, & Marks, 2004; Mobeireek et al., 2008). Neiterman and Bourgeault (2008) have explored how gender affects the performance of other internationally educated health care professionals as well as physicians, both as individual practitioners and as members of health care teams.

Differences between the culture of origin and Canadian culture may affect how IEPs perform during their training. Physicians from cultures in which it is inappropriate to question a superior may be perceived as too reticent in Canadian contexts (Laroche, 2011; Wong & Lohfeld, 2008). Worse yet, educators may perceive residents' silence as a

sign of lack of knowledge (Pilotto, Duncan, & Anderson-Wurf, 2007; Porter, Townley, Huggett, & Warrier, 2008). Differences in non-verbal communication styles and in particular, differences in patterns of eye contact, also contribute to some educators' negative impressions of IEPs' abilities (Fiscella, Roman-Diaz, Lue, Botelho, & Frankel, 1997; Malau-Aduli, 2011).

There are differences in the way IEPs and medical educators perceive constructive feedback on IMGs' performance. Some authors have identified that some IEPs may misinterpret negative feedback as positive (Laroche, 2011; Tan, Hawa, Sockalingam, & Abbey, 2013). For example, when given negative feedback couched in diplomatic language, some IEPs may not recognize it as negative. Laroche (2011) attributes this to the typically Canadian practice of sandwiching negative feedback between two examples of positive feedback. In the perspective of the recipient, two instances of positive feedback cancel out the one instance of negative feedback. In contrast, some IEPs may perceive any feedback as an indication of a bad evaluation (Fiscella et al., 1997; Narumoto, Schultz, & Merenstein, 2012). Laroche (2011) has described how variations in cross-national cultural characteristics affect recipients' interpretation of feedback as negative, neutral or positive and how this can accentuate or diminish recipients' response to feedback in comparison to home-nation recipients. It is these cross-national cultural differences in the interpretation of feedback that contributes to variations in IEPs' response to feedback.

Patients' culturally grounded expectations may also affect physician-patient interactions. In their study of African-American patients' satisfaction with participatory decision-making in health care, Cooper-Patrick et al. (1999) noted that patient

satisfaction parallels concordance with patients' and physicians' ethnicity. This suggests that tacit understandings of cultural norms contribute to the patient-physician relationship.

Culture may also contribute to IEPs' perceptions of intimidation, harassment and discrimination. Crutcher, Szafran, Woloschuk, Chatur and Hansen (2011) and Hall et al. (2004) both reported that IEPs were more likely to perceive discrimination based on their cultures of origin compared to CMGs. International participants in the Hall et al. (2004) study concluded that faculty members needed to recognize that IEP trainees experienced discriminatory attitudes from some patients.

The challenge for CSAs and I-IEPs as they transition to their family medicine residency at the University of Manitoba will be in navigating the intersection of three potentially unfamiliar cultures. It is not yet known to what degree their prior latent cultural experiences may assist or hinder them in this journey.

Understanding the Learning Needs of Internationally Educated Physicians

Although there is agreement between IEPs and medical educators in identifying some of their learning needs, there are areas of striking differences. Hall et al. (2004) found that although both I-IEPs and medical educators agreed on the need for improvement in IEPs' language skills and in the need to use common language instead of relying upon medical terminology, the I-IEP participants did not recognize how their accents created communication issues for some patients and members of the health care team. In addition, program directors and allied health personnel identified that the IEPs' written work needed significant improvement in clarity, legibility and completeness.

Zulla, Baerlocher and Verma (2008) conducted interviews with CSAs, I-IEPs and program directors in their study of IEPs enrolled in residencies at the University of Toronto. Their findings demonstrated that IEPs identified their learning needs in terms of knowledge (knowledge of the Canadian healthcare system, pharmaceuticals and hospital formularies and hospital systems) while programs directors identified their learning needs in terms of clinical performance (communication with patients and team members and basic clinical skills). This discrepancy reflects the clash in educational orientations identified by Teunissen and Westerman (2011b) and suggests that some IEPs have not adapted to the performance orientation expected of them in residency.

Lockyer et al. (2010) provides another example of the knowledge/performance gap in reporting that IEPs who directly entered practice in northern and rural Alberta health regions desired more information about the Alberta healthcare system, pharmaceuticals and clinical practice guidelines. In contrast, medical leaders (Clinical Vice Presidents of several regional health authorities, representatives from the College of Physicians and Surgeons of Alberta and one chief of medical staff of a remote health region) identified concerns with how IEPs managed chronic illnesses, practiced within clinical practice guidelines and understood the requirement for scrutiny in medical credentialing as part of gaining medical privileges to undertake additional procedures (e.g. obstetrical or anesthesia services). Tellingly, the medical leaders stated that IEPs' medical practices could be improved with readily available information (internet resources and clinical practice guidelines) and through the assistance of colleagues while the IEP participants noted that neither information nor colleagues were readily available to them.

One of the recommendations in the Future of Medical Education Postgraduate Medicine document was to "develop a pan-Canadian approach to resident orientation that includes assessment and supplementary learning modules for IEPs, as needed, to ensure their readiness to begin PGME" (Association of Faculties of Medicine of Canada, 2012, p. 20). Currently, there is no such national approach although the six Faculties of Medicine in Ontario and the Government of Ontario have collaborated in developing an orientation and evaluation program for all IEPs who match to residencies in one of the six Ontario medical universities (Centre for the Evaluation of Health Professionals Educated Abroad, 2011).

Porter, Townley, Huggett, and Warrier (2008) report the results of a short orientation program for internationally educated physicians developed at Creighton University, Nebraska. They provided a combination of didactic instruction, clinical skills in gynecological examinations with standardized patients and clinical shadowing with senior residents on hospital wards. They found improvements in participants' scores on clinical note-writing and discharge prescription writing and recognized that participants required more exposure to clinical practice in the orientation period (Porter et al., 2008).

Chen et al. (2011) provided recommendations to assist IEPs in navigating these dual learning curves: include workshops in "patient-centered care, cultural sensitivity and patient interviewing" (p. 1384) into residency orientation programs, develop the means of connecting incoming IEPs with other IEPs in training or practice as well as members of the immigrant community to promote mentorship and support and to revise workplace discrimination policies.

Additionally, Walsh et al. (2011) recommended that programs provide orientation and support in four areas: language skills, communication skills, negotiating Canadian culture and assisting with the expectations regarding behaviour, attitudes and relationships in healthcare teams. They further recommend that residency programs consider "a pre-residency period . . . [to] allow IMGs a period of time to become acclimatized to the Canadian environment prior to taking on the level of responsibilities expected of a resident" (p. 13). This recommendation is based upon the observation that residency-trained IEPs do not achieve the same rate of success on certification exams as do their Canadian medical graduate counterparts and that a two year clerkship-type training program prior to starting residency can improve IEP residents' passing rates on the College of Family Physicians of Canada Certification Examination[12] (MacLellan, Brailovsky, Rainsberry, Bowmer, & Desrochers, 2010; MacLellan, Brailovsky, Miller, & Leboeuf, 2012). It is not known if pre-residency training of shorter durations confers similar benefits. Additionally, I have not found any studies that evaluate the impact of pre-residency training on the IEPs' transitions into Family Medicine residencies.

Residency Training at the University of Manitoba

The College of Medicine, University of Manitoba, provides postgraduate residency training as accredited by the College of Family Physicians of Canada and the Royal College of Physicians and Surgeons of Canada. For the 2015 CaRMS cycle, 140 residents will be accepted into first year residency seats (57 into Family Medicine

[12] It appears that IEPs who complete Royal College of Physicians and Surgeons of Canada training programs achieve success rates on their certification examinations equal to the success rates of CMGs (MacLellan et al., 2012). It suggests that the additional length of Royal College training programs confers a benefit to IEPs in achieving success on their certification examinations.

programs and 83 into Royal College programs; Canadian Resident Matching Service, 2015).

Before entering their residency programs, all residents must participate in one or more orientation programs. Internationally educated physicians must attend an IMG Orientation, as described below. After completing this orientation, residents will complete a one-day orientation program run by the Postgraduate Medical Education Office and as well as orientations directed by individual residency programs.

The IMG Orientation. The College of Medicine Postgraduate Medical Education at the University of Manitoba provides a mandatory one-month orientation to all IEP residents prior to the commencement of their residency training (see Appendix A). It is offered each June for all incoming CaRMS residents and again each January for residents in the Medical Licensure Program for International Medical Graduates (MLP-IMG) and the International Medical Graduate Assessment for Conditional Licensure (IMG-ACL) programs (University of Manitoba, 2014c).

The IMG Orientation provides didactic instruction in Canadian and Manitoban health care systems, ethical and legal considerations to medical practice, forms and documents used in health care, an introduction to library services, an introduction to First Nations health issues and other clinical topics. These sessions total 120 hours of instruction.

The program includes an additional eight hours of hands-on clinical skills sessions: two clinical sessions in teaching female pelvic exams and male genital examinations in the Canadian context and one session on applying casts. Participants are provided with instruction in Basic and Advanced Cardiac Life Support, if they have not

yet taken these courses. The IMG Orientation currently does not include workplace-based clinical practice or shadowing sessions. In the first few years of implementation, attendees did spend one or two afternoons shadowing residents on an Internal Medicine ward although it currently appears as though that shadowing experiences are no longer included.

The Family Medicine Residency Curriculum at the University of Manitoba. The Family Medicine clinical curriculum at the University of Manitoba is based on a rotational format. There are 13 clinical periods in an academic year, which runs from July 1st - June 30th. Family Medicine (FM) residents spend half their clinical time in family medicine (Family Medicine Block Time or FMBT); the other half of their time is spent in external rotations, called "off-service" rotations. When they are in FMBT, FM faculty teach FM residents; when they are in off-service rotations, FM residents are taught by the faculty attached to those services (e.g., Emergency Physicians teach in the Emergency rotations, Paediatricians teach in the Pediatric rotations, etc.).

Currently, in their first year most Family Medicine residents spend 6 periods in Family Medicine and six periods in off-service rotations (Obstetrics, Internal Medicine, Pediatric Wards or Emergency Medicine, Adult Emergency Medicine). In their second year, most residents will spend 5-6 periods in Family Medicine and another 6-7 periods in off-service rotations. This creates multiple transition points during each resident's training: the transition into residency, transitions into Family Medicine and into each of the off-service rotations and the transition into independent practice. Internationally educated residents will potentially experience three additional transitions: their return to Canada, their move to Manitoba and the transition into the IMG Orientation rotation.

Summary

The literature reviewed presents a picture of complex learning needs, from communication challenges, knowledge gaps, IEPs' understanding of the Canadian cultural and medical education contexts and the challenge in making the transition from the knowledge focus of undergraduate medical education to the performance expectations of medical residencies. A summary of those needs as identified from the literature reviewed for this thesis proposal is presented in Table 4.

Table 4. Learning Needs of Immigrant-IEPs and CSAs.

Identified need	**I-IEPs**	**CSAs**
Knowledge-based needs		(By inference)
Evidence-based Medicine	Yes	Yes
Computer literacy skills	Some	Possibly some
Medical knowledge gaps	Yes	Yes
Understanding the Canadian health care system	Yes	Yes
Understanding expectations re: medical documentation	Yes	Yes
Communication-based needs		
English Language skills	Some	Unlikely
Communicating with patients	Some	Some
Communicating with healthcare team members	Yes	Some
Patient-centred care	Yes	Yes
Culturally-influenced needs		
Understanding Canadian culture	Yes	Unlikely
Understanding culture of medical education system in Canada	Yes	Yes
Accepting feedback on performance	Yes	Some
Adapting to loss of prior status	Yes	Some

The challenge remains to identify the learning needs of CSAs when there is little published literature surrounding this group; wherever possible their needs have been inferred from available information. Although it is likely that IEPs present along a continuum of learning needs, with those whose medical education, medical practice and primary cultures are least similar to those manifest in Canada at one extreme and those whose prior experiences most closely match the Canadian medical education and cultural contexts at the other, the grouping of IEPs into I-IEPs and CSAs could serve to identify the needs specific to members of each group.

Despite the large body of literature examining IEPs' learning needs, there has been little research into how they experience the transition to a family medicine residency program. Furthermore, there is a gap in understanding CSAs' learning needs and the ways in which they experience the transition to family medicine residency. In this chapter, I explored the challenges experienced by members of both groups during their transitions to residency training. In Chapter 3, I shall present the thesis research questions and the methodology employed to develop an understanding of participants' experiences.

Chapter 3: Methodology

In this chapter, I shall set out the theoretical and conceptual frameworks informing my research, the processes by which I chose a qualitative, phenomenological approach and how I situated myself in the research and bracketed my experiences. I shall then describe the processes I employed in recruiting participants, conducting interviews, preparing transcripts and coding the data. I shall also present several tables which present participants' characteristics that are relevant to the interpretation of the data.

Theoretical & Conceptual Frameworks

The discipline of medical education has not yet been unified under one educational theory. Teunissen and Westerman (2011b) conducted a systematic review of the medical education literature on transitions. In reviewing 73 articles, they identified three categories of research on transitions. The first was objectifying research, which aimed "to assess the level of change students or doctors face during transitions" (p. 46); the second was clarification research that "aimed to develop understanding of how the transition process works under different circumstances" (p. 46); the third group was composed of articles that either "describe[d] novel educational intervention[s]" (p. 46) or justified, that is "evaluates the intervention" (p. 46).

Few articles presented information on underlying conceptual models to inform the study of transitions in medical education. Teunissen and Westerman (2011b) highlighted frameworks from organizational sociology and psychology as possible conceptual models. They encouraged educators to explore models of learning theory from the educational literature, citing Vygotsky's Zone of Proximal Development as a potential

explanatory model.

Wijnen-Meijer, Kilminster, Van der Schaaf and ten Cate (2012) also recognized the relevance of Vygotsky's zone of proximal development as the "constructive friction" (p. 923) in which learning can occur. Merriam, Caffarella and Baumgartner (2007) have written that learning may be socially constructed between individuals. They credit Vygotsky "with developing the foundation of this view because he proposed that learning is socially mediated through a culture's symbols and language, which are constructed in interaction with others in the culture" (p. 272). It must be acknowledged that Vygotsky proposed his learning theories in the context of children's education. Although the zone of proximal development is a compelling model, it does not incorporate other elements such as workplace-based learning that permit us to better understanding transitions and residency training.

Hawkins and Shohet (2006), in writing about learning in the helping professions and building upon Hawkins' earlier work examining learning in business, have developed a model of learning that appears to draw on Vygotsky's work. They use the image of three concentric circles to describe three zones of learning. The centre circle encompasses the comfort zone, where automatic functioning happens. The middle circle that circumscribes the comfort zone is the discomfort zone or the learning zone. "In our learning zone, we are always working at the edge, at the boundary between what we already know and what is waiting to be learnt" (p. 17). The outermost circle is the panic zone, where "we are too far out of our competence and capacity depth, so we panic and retreat to safe ground of being in control, or in known territory" (p. 17). They go on to state, "learning requires us to be able to tolerate not knowing, being vulnerable, risking

looking foolish or making mistakes. These states potentially can trigger feelings of powerlessness, inadequacy, shame, inferiority and anxiety, all of which take us into the panic zone" (p. 17). I propose that Hawkins' model provides us with the means of understanding how participants perceived their transitions into residency training.

Illeris (2003) has proposed a three dimensional learning model which also may be applied to understanding medical education. He states, "learning will always include three integrated dimensions, which may be termed the cognitive, the emotional, and the social-societal dimensions" (p. 170). These three dimensions are represented as points of a triangle, set within a circle that represents society. Learning takes place on a continuum, with lines connecting cognition, emotion and the environment. Challenges or pressures on one or more of the three dimensions can impede or enhance learning. He states, "very special and demanding situations, often with a crisis-like character, can lead to deep and comprehensive transformative learning processes" (as cited in Merriam, Caffarella, & Baumgartner, 2007, p. 99). This has particular relevance to workplace based learning, as medical residencies may be considered as apprenticeships supplemented with group-based didactic teaching and self-directed learning. I will demonstrate in the following chapters how participants' experiences demonstrate the interplay of Illeris' three dimensions.

I approach this research from a perspective of *social constructivism*, as described by Creswell (2007): in social constructivism, "individuals seek understanding of the world in which they live and work. They develop subjective meanings of their experiences" (p. 20). Willis (2007) further develops how meaning in constructed in proposing, "making meaning is a group or social process. Humans in groups, and using

the tools and traditions of the group (including language) construct meaning and thus are able to share their understanding with other members of the group" (p. 97).

I perceive that, although each participant experiences the transition to residency individually as informed by their prior life experiences, it is as a group that internationally educated residents will generate an understanding of their collective experiences. It is the role of the researcher to interpret these experiences and the participants' understanding of them in constructing the description of the phenomenon.

I perceive this work to be exploratory in nature, as there has been little prior research into IEPs' lived experiences. As my research progressed and I analyzed participants' interview transcripts, as well as my field notes and analytic memos, I searched for explanatory theoretical frameworks to assist me in understanding participants' experiences. I was exposed to Hawkins' framework through a presentation at the 2012 Canadian Conference of Medical Education and subsequently explored the work of Hawkins and Shohet (2006). This model seemed to explain the cognitive dissonance which participants experienced as they entered their clinical rotations (presented in Chapter 4).

The work of Erving Goffman was familiar to me from earlier readings in educational sociology. The experiences shared by the participants brought to mind Goffman's theories on the presentation of self through impression management and his work on stigmatization as a sociological phenomenon. After identifying these concepts from participants' shared experiences, I searched for an educational model that would bring together the personal factors and social contexts in which participants found themselves. It was in reviewing foundational educational theories as presented by

Merriam, Caffarella and Baumgartner (2007) that Illeris' work presented itself as a potential unifying model that could conceptualize the work-place based training of physicians in postgraduate medical education.

Determining the Qualitative Approach

In approaching this topic, I wondered how did IMG residents experience their transition to residency? I recognized that residents moved through several states: (a) endeavoring to secure a residency-training seat; (b) becoming a resident; and (c) performing as a fully functioning resident. This then became my focus of inquiry: the phenomenon of becoming a resident. What was the essence of becoming a resident from the perspective of our IEP residents?

As this research question is designed to develop an understanding of residents' perspectives, it is most appropriate to choose a qualitative approach to answer these questions.

Creswell (2007) identifies five major approaches to qualitative research: narrative research, phenomenology, grounded theory, ethnography and case study.[13] I shall briefly discuss the five methodologies as identified by Creswell (2007) and explain why I chose a phenomenological approach.

Narrative research intends to recount the life histories or significant portions of participants' lives. Employing interviews and document review, the researcher constructs a chronological recounting of the period under analysis. The intent of narrative research is to accurately capture participants' stories for the audience. The intent of my research is

[13] This list is far from complete as Willis (2007) includes historiography, cooperative inquiry, participatory action research, emancipatory research and critical emancipatory action research as potential qualitative methodologies.

to understand how participants collectively experienced their transition to the Family Medicine residency program and what it means to them; the narrative approach does not lead to this depth of understanding.

Ethnographic research intends to "interpret the shared patterns of culture of a group" (Creswell, 2007, p. 78). Through extensive fieldwork and interviews, the researcher seeks to describe how this group shares their culture. Being in the field would have permitted me to observe how residents interacted during clinical rotations but there are several impediments that rule out the ethnographic approach. Firstly, the conditions set forth in the ethics application limit participation to graduates of the Family Medicine residency program, thus I would not be able to observe them as residents. Secondly, as an attending physician, my presence in the field would likely alter the patters of resident behaviour, as residents would potentially be constrained by the presence of a stranger and authority figure. Given these constraints, an ethnographic approach could not provide me with the information I seek.

Case studies are well used in medicine as a research methodology. Typically the researcher presents one or more cases that have a common theme (e.g., congestive heart failure, measles, depression, etc.). A case study involves examining multiple sources, interviews or surveys, document review, observations in the field and the examination of artifacts. This approach could have provided me with a comprehensive understanding of IEPs' transition into Family Medicine. However, with little prior research on the transition of IEPs to guide me, I decided against using this approach at this time. Additionally, the amount of time required to properly conduct a case study of IEPs' experiences would have exceeded the time available to me.

Grounded theory intends to develop theory about one's research from the participants' experiences. I am drawn to this approach, as there are gaps in the medical education literature on the theoretical constructs underpinning transitions in medical education. However, Creswell (2007) recommends a sample size of between 20-60 participants. Given the time constraints in completing my thesis, I did not select this approach. I remain most interested in building upon my current research to develop a grounded theory on the development of stigmatization in medical education.

Creswell (2007) identifies phenomenology as a methodology that seeks to understand the essence of a lived experience. Through detailed interviews with participants, the researcher first describes the phenomenon (in this instance, the transition of IEPs into a Family Medicine residency). Subsequently, the researcher interprets participants' experiences to uncover the essence of the phenomenon. As my research is exploratory in nature, and as there has been little research into the lived experiences of IEPs, I selected phenomenology as my preferred methodology.

Moustakas (1994) has described three essential elements in conducting phenomenological research: "Epoche, Transcendental-Phenomenological Reduction and Imaginative Variation". Moustakas (1994) cites Husserl in characterizing Epoche as being freed from suppositions. It is in letting go of prior thoughts and opinions that the researcher will be ready to understand the perspective that participants bring to the question. As Moustakas states, "the task is that of describing in textural language just what one sees, not only in terms of the external object but also the internal act of consciousness, the experience as such, the rhythm and relationship between phenomenon and self" (p. 90) so as to create a comprehensive, sympathetic description of the

phenomenon, a representative *what* of the phenomenon. Finally, through Imaginative Variation, the researcher may "derive structural themes from the textural descriptions" (p. 99). It is through imaginative variation that the researcher portrays the essence of the phenomenon and the meaning it implies to the participants, identifying how the phenomenon came to be, or the *how* of the phenomenon. Thus the researcher develops a description of what the participants experienced and how the participants experienced the phenomenon. These two descriptions are then interwoven into a summary of the essence of the phenomenon (Creswell, 2007; Moustakas, 1994).

Situating Myself in the Research and Bracketing my Experiences

It is because of my work with internationally educated physicians as an academic family physician that I am drawn to this exploration of how IEPs experience becoming a resident in Family Medicine. In 1984, I graduated with my Medical Degree from the University of Manitoba. My experiences as a medical student and intern at the Health Sciences Centre did not include working with IMGs. At the time of my medical school training, the medical student body was composed almost exclusively of students of European descent.

Although Winnipeg was then and still is a very multi-cultural community, those cultures were almost all drawn from the peoples who immigrated to Manitoba from the 1850s to the 1970s: Scots, British, Irish, French, Germans, Dutch, Icelanders, Ukrainians, Jews from the European diaspora amongst others. Indeed, as late as 2006, the top ten ethnic groups based on self-identified ethnicity in Manitoba were: English, German, Scottish, Canadian, Ukrainian, Irish, French, North American Indian, Polish and Métis

(Manitoba Immigration and Multiculturalism, 2010). Manitoba was almost entirely peopled by descendants of the original aboriginal peoples and immigrants from Western and Central Europe.

Additionally, the concept of foreign-trained physicians training in Canada was equally unknown to me. All of my medical school classmates were Manitobans; almost all of the interns and residents I encountered in training were Manitobans or Canadians from other provinces. The few internationally trained physicians I encountered in my early years of practice were almost exclusively Scottish, British, Irish or South African physicians who had immigrated to Canada.

After nearly two decades of community-based practice, I joined the Department of Family Medicine in 2001 as an academic family physician at one of the Family Medicine teaching clinics. I quickly realized that the medical student body of 1984 in no way resembled the resident body of 2001. In addition to residents who had graduated from the University of Manitoba and other Canadian universities, there were a large number of residents who had graduated from medical schools around the world. These were identified to me as International Medical Graduates or IMGs; as previously noted, these residents will be referred to in this work as Internationally Educated Physicians (IEPs).

In working with these residents, I became intrigued by the stories they told about the effort required to secure residency training seats in Canada and the great sacrifices that many of them had made in order to do so. Leaving home countries for some, leaving Canada to study abroad for others, all shared the experience of having to overcome barriers in finding a residency program that was willing to accept them.

As time passed, I noticed that, although residency was a challenging time for all residents, some IEP residents struggled in finding their way through the complex systems in which they found themselves. These struggles often manifested in academic difficulties, difficulties in managing personal or professional stressors or the need for extended training. The reasons behind their difficulties were not easily identified. These were physicians from other countries, many of who had held positions of authority or who had extensive prior medical experiences. They had beaten the odds in securing highly sought after residency-training seats.

Additionally, increasing numbers of residents identified themselves as Canadians who had gone abroad for their medical education. These participants appeared like, for all intents and purposes, graduates of the University of Manitoba medical school. But they too experienced challenges in adapting to the Family Medicine residency. I conversed with other clinician-educators, attended faculty development sessions on medical education, reviewed the medical education literature and eventually entered post-graduate training in a Masters of Education program in search of answers.

In 2012, I assumed the role of program director for the Department of Family Medicine residency program at the University of Manitoba. One of responsibilities associated with this role is the selection of residents through CaRMS. For the 2013 CaRMS application cycle, for example, the Family Medicine program received over 1100 applications from IEP candidates, each vying for one of our 11 IMG-designated first iteration seats. Reading the applications and reviewing references, transcripts, exam scores and personal letters was heart wrenching as I knew too well that only a small few had any likelihood of securing a residency seat.

As program director, I met with many of our Family Medicine residents. They shared the challenges they faced in their transition to the residency. Many of the IEPs shared stories of how they were treated on the clinical wards, stories that spoke of mistreatment at the hands of other residents and attending physicians. Few were willing to make formal complaints. All were concerned about jeopardizing their futures in medicine. Working with these residents and hearing them share their struggles helped clarify my research question. I recognized, however, that my knowledge and understanding of their transition was limited to my perspective. Only in hearing from the residents themselves would my understanding be expanded.

Although my experiences as a faculty member helped me to develop my research question, these experiences in turn created challenges in my ability to bracket out my perspectives from those of my participants. The question "Why is this happening and how can this situation be improved" was my constant companion as I conducted interviews and analyzed the data. I struggled to step outside of my role as a Family Medicine educator so as to be a researcher. My mind turned too quickly to developing solutions to the problems identified by my participants. It required great effort to concentrate on their perspectives, not mine. I thank the members of my thesis committee for their thoughtful comments on my earlier work, which helped me to reframe my writings to better reflect the perspectives of my participants.

My research question upon entering this course of inquiry was "How do Internationally Educated Physicians perceive the process of becoming a Family Medicine resident?" This was further informed by the questions:

1. What have you experienced in becoming a Family Medicine resident at the University of Manitoba?

2. What contexts or situations have typically influenced your experience of becoming a Family Medicine resident?

3. From your perspective, in what ways might the transition to residency be improved?

Power Differentials Exposed by this Study

I have held several administrative roles in the Department of Family Medicine including that of Program Director in Family Medicine from 2012-2014. In that role, I was responsible for all resident education, promotion, graduation, recommendation for certification examinations and discipline as defined by Faculty Postgraduate Medical Education of the College of Medicine, University of Manitoba and the College of Family Physicians of Canada. This created a significant power differential between potential resident participants and me. Accordingly, only former residents who have graduated, who have been recommended for their CFPC examination and who have been recommended for licensure to the regulatory authorities were recruited as participants. I believe this recruitment strategy helped mitigate this power differential, as any authority over these graduated residents ended with their graduation.

Sampling and Interviewing Strategies

The proposal for this thesis was accepted on July 4, 2014. Ethics approval by Education & Nursing Research Ethics Board was received on Aug 21 2014.

Recruitment Strategy. I sought to recruit 18-20 participants, with roughly equal numbers of CSAs and Immigrant-IEPs. This was to provide an adequate sample to elucidate themes common to both groups yet reveal differences in the experiences between groups, if possible.

Polkinghorne (as cited in Creswell, 2007) has recommended that a sample size of approximately 5-25 participants would be sufficient to adequately explore issues and themes as contributed by the participants, with the expectation that the final number of participants would be determined once a rich contextual understanding of the phenomenon has been obtained. As the IEP resident body is composed of CSAs and Immigrant-IEPs, I hoped to recruit a sufficient number from each group so that any differences in their experiences may be identified to develop an understanding of the phenomenon from the perspectives of both CSAs and Immigrant-IEPs.

The Department of Family Medicine maintains an alumni database of all graduated residents dating back to the early 1980s. This alumni database is housed in the Departmental Business office, located at the Seven Oaks General Hospital, Winnipeg and is maintained by staff members. With the approval of the Departmental administrators, I arranged for a staff member to develop a study database of IEPs who had entered residency between July 1, 2008 and July 1, 2012 with completion of training by September 15, 2014. The staff member initiated all recruitment email communication; my contact information was provided to participants in the recruitment letter (Appendix B). Potential participants could respond to the Department of Family Medicine email address or contact me directly.

I selected the year 2008 as the earliest date for enrollment as it was in this year that the Postgraduate Medical Education Office of the Faculty of Medicine established the first orientation program for all IEP residents entering postgraduate training at the University of Manitoba in July 2008. They and all subsequent residents completed this orientation program, ensuring a common starting point for each resident.

Recruitment began on September 16, 2014; three successive recruitment emails were sent out (September 16, October 1, October 15, 2014). Twenty graduates expressed an interest in participating out of 95 potential participants.

Following each mail out, I notified the department staff member of the names of participants who had responded; these names were removed from subsequent mail outs. Eight graduates responded to the first recruitment email; seven to the second email and five responded to the third and last email. It appears that some participants recruited others in a snowballing technique, as this information was shared during several interviews. I was approached by several additional graduates at the November 2014 Family Medicine Forum (the national meeting of the College of Family Physicians of Canada) who expressed their interest in participating. Regretfully, these last offers were declined due to the tight deadlines required to complete this thesis within the requirements of the Faculty of Graduate Studies.

One email was returned as undeliverable; a printed copy of the recruitment letter was sent by regular mail to the mailing address on file in the alumni database. One graduate requested that he/she not be contacted for this study after the first round of email invitations and his/her name was removed from follow-up recruitment.

Participant Characteristics. Between July 1, 2008 and July 1, 2012, 206 residents entered the Family Medicine residency program and had graduated from the program by Sept 15, 2014. Of these, 95 graduates were identified as IEPs; 92 of the 95 IEPs were invited to participate in the study (1 email bounced back as undeliverable and 2 confirmed after the recruitment deadline they were in fact IEPs and had been originally misidentified in the database). Respondents were overwhelmingly CSAs (18 of 20) with 2 Immigrant IEPs responding.

Table 5. Resident Numbers 2008-2012 Who Completed Training by Sept 1, 2014

	U of M graduates	Graduates of other Canadian medical schools	IEPs	Total	IEPs as a percentage of incoming resident cohort	# of IEPs participating in study (% of IEP cohort participating)
2008	10	4[a]	17	31	55%	5 (29.4)
2009	16	2	18	36	50%	5 (27.8)
2010	27	3	18	48	38%	3 (7.5)[b]
2011	22	2	22	46	47%	
2012	21	4	20	45	36%	7 (35)
Total	96	15[c]	95[d]	206[e]	46%	20
Percentage	46.6	7.2	46.1	100		

Note: Data adapted from the Department of Family Medicine alumni database. Permission to use granted by B. Catchpole, Admin Director, Department of Family Medicine, February 18, 2015.

[a] Includes one USMG

[b] Data for the 2010 & 2011 cohorts were merged to provide increased anonymity for the small number of participants from these cohorts; the three participants represent 7.5% of the IEPs in the two cohorts

[c] 6 of these 15 CMGs are Manitoban who studied at Ottawa University or Université de Sherbrook

[d] 92 of the 95 IEPs were emailed (1 email bounced back as undeliverable and 2 confirmed after the close of recruitment they were in fact IEPs and had initially been misidentified). One graduate asked to be removed from the mail-out after the first round of email invitations to participate but was included in number of residents in the year of admission and in the number of total participants.

[e] 206 residents with start dates of July 1, 2008 or later (who have graduated). Residents who withdrew from training or that had yet to complete their residency by Sept 15, 2014 were not included in this list (even if their start date was 2008 or later).

Over twenty percent of all eligible IEPs participated in this study, as shown in Table 5. All years are represented in the study, with participants being largely drawn from the first two years and the last year of the study period. Collectively, participants represented Canadians from many ethnic ancestries, originating from diverse regions of the world. The geographical regions in which participants completed their medical education are shown in Table 6. Consistent with the CaRMS data presented in Chapter 2, the majority of participants came from Europe and Oceana & the Pacific Islands.

Table 6. Participants' place of training, by CaRMS-designated regions

Location of Training	Number of participants
Europe (including Ireland and United Kingdom)	10
Oceana/Pacific Islands (including Australia)	5
Africa/Middle East/South-east Asia	3
Caribbean and Central America	2
South America	0

Note: Data adapted from the Department of Family Medicine alumni database. Permission to use granted by B. Catchpole, Admin Director, Dept. of Family Medicine, February 18, 2015.

All CSA participants were able to secure elective rotations in Canada during their medical education. The average length of elective time was 12.5 weeks with a range of 8-26 weeks of electives. This is quite remarkable as many international medical students report they are unable to secure elective positions in Canada due to competition with Canadian medical students.

It is possible that participants' ability to secure Canadian elective experiences contributed to their success in matching to the University of Manitoba Family Medicine residency program. Many of the Family Medicine program descriptions listed on the

CaRMS website indicate a preference for applicants who have undertaken Canadian electives. The potential impact of participants' Canadian elective experiences will be explored in Chapter 4.

As noted in the CaRMS 2010 Report on Canadians Studying Abroad, most CSAs expressed their intent to return to Canada for residency training, following the completion of their medical school education abroad (Canadian Resident Matching Service, 2010a). In Table 7, I report the number of participants who undertook postgraduate training abroad before residency. The majority of CSA participants in this study (twelve of eighteen) entered residency training directly from medical school. The remaining six CSAs undertook international postgraduate training of variable durations before starting their residencies (generally shortened by their acceptance into residency) while the two immigrant-IEP participants had been in independent practice abroad before coming to Canada and commencing their residencies.

Table 7. Postgraduate Training and Practice Abroad Prior to Entering Residency

Post-graduate training before entering FM residency	Number of participants
None	12
1-6 months[a]	2
7-12 months	3
13 + months	1
Postgraduate training and independent practice	2

Note: Data adapted from the Department of Family Medicine alumni database. Permission to use granted by B. Catchpole, Admin Director, Dept. of Family Medicine, February 18, 2015.

[a] Medical students graduate in December from Oceana/Pacific Islands medical schools due to the differences in the timing of the summer and winter seasons between the southern and northern hemispheres. Some participants were able to begin postgraduate training programs abroad while applying for CaRMS residency seats.

It must be noted that none of the CSA participants had fully completed their postgraduate training abroad. None had begun postgraduate training in Family Medicine abroad, thus none of the CSAs were able to practice independently abroad. In contrast, the two immigrant-IEP participants had completed their postgraduate training abroad and were able to practice independently for some years before immigrating to Canada.

The presence and duration of gaps between participants' medical school graduation, postgraduate training or medical practice abroad and the commencement of their residencies is reported in Table 8. The average length of time away from training was 1 year for CSAs and 8.5 years for Immigrant-IEPs. This indicates that the majority of participants matched to and entered residency shortly after completing their training and thus could be considered to be up-to-date with medical practices.

Table 8. Time Lag Between Graduation, Postgraduate Training or Clinical Practice and the Start of Residency Training

Time lag	Number of participants
Residency start immediately following graduation, postgraduate training or clinical practice (0-6 months)[a]	14
7-18 months after graduation/training/practice	4
19-30 months after graduation/training/practice	0
31+ months after graduation/training/practice	2

Note: Data adapted from the Department of Family Medicine alumni database (University of Manitoba, 2014a). Permission to use granted by B. Catchpole, Admin Director, Dept. of Family Medicine, February 18, 2015.

[a] Medical students graduate in December from Oceana/Pacific Islands medical schools due to the differences in the timing of the summer and winter seasons between the southern and northern hemispheres. As the start date for all Canadian residency programs is July 1, current year graduates from Oceana medical schools must wait 6 months before starting residency, in contrast to medical school graduates from northern hemispheres who graduate in April or May and commence residency in July. Thus I have set the first category to include those who enter training between 0-6 months after graduation from any international medical school.

In summary, participants were overwhelmingly CSAs, with the majority of these CSAs graduating from medical schools in Europe and the Oceana/Pacific Islands. Sixty percent of the participants entered training directly after completing their medical school education while 40% completed some postgraduate medical training before starting residency. Most of the participants (70%) entered residency without any gaps between the start of residency and their medical education or clinical practice.

Participant Interviews

All 20 respondents committed to being interviewed; interviews were conducted between September 25 and November 18, 2014. I conducted all interviews; the majority of interviews were held by telephone or via Skype (an online audio-video communications tool), predominantly for those participants who were no longer in Manitoba. Several interviews were held in person, in the meeting rooms of the Neil John Maclean library, located at the Bannatyne (medical) campus. Interviews ranged in length from 1.25-2.4 hours; the average length was 1.5 hours. In total, the interviews generated 29.9 hours of data.

A series of preliminary questions were identified from the review of the literature to explore the residents' perceptions of their experiences as they entered their FM residency. Some of the issues that were explored included:

1. Participants' journeys in becoming Family Medicine residents at the University of Manitoba;
2. Their understanding of their roles and responsibilities as first year Family Medicine residents;

3. Barriers and challenges faced in the early months of residency along with any potentially aggravating or mitigating factors;
4. Recommendations of ways in which transitions could be improved for future residents;

The interview questions were reviewed for content and clarity by several faculty members of the Department of Family Medicine. Their feedback helped further refine the questions on participants' journeys to enter the Family Medicine residency at the University of Manitoba and their experiences of any intimidation, harassment and discrimination during their residencies. Semi-structured interviews were conducted using this interview guide (Appendix C). Participants were encouraged to raise additional topics for discussion during the interviews.

The semi-structured interview guide was organized in a roughly chronological order, inviting participants to share their journey in entering Family Medicine, from the decision to enter Canada or to go abroad for medical education, through the application processes, orientation program and transition into residency and the transitions between the rotations they had experienced in their first year of residency.

Data Analysis

Interviews recorded on an Olympus VN-702PC digital voice recorder and downloaded as .mp3 files onto a password protected laptop and USBs for backup. The interviews professionally transcribed by a transcriptionist. Transcripts were edited for clarity, removing pauses and fillers employed during pauses in speech (ums, yeas, you

know, etc.) as well as fillers used by the interviewer to encourage the participants to continue speaking.

Table 9. Example of the Process Used in Editing Participant Transcripts

CSA-13
Original transcript:
P: Exactly.
I: over the past few years.
P: Yea.
I: Yea.
P: And so that's why I went.
I: OK.
P: And I just, after three times, like you just get so devastated each year you're being rejected. That. And then they keep telling, oh just reapply, reapply. But by this time I was 30 years old when I started medical school. So…
I: OK.
P: It's like I need to get this, get going.
I: Just get on with that. OK.
P: Need to get on with life. So it was, yea.
I: So rejection's a theme that's coming out in the number of the interviews. How did that rejection affect you?
P: Um. It was pretty devastating. Like each year, you know, you have that build-up to now you're putting together application, your practicing for interviews, you get it, you do the interviews, you think they went OK, and then you wait for that day
I: Right.
P: when it's going to (…) on the computer, like green or red or yellow. And then I would get that yellow that you're wait listed so I'd wait the whole summer.

I: OK.

P: And I think the hardest part about that is you put your life on hold pretty much.

Edited version sent to participant and returned as approved:

P: Exactly. Yea. And so that's why I went. You just get so devastated each year you're being rejected. And then they keep telling, oh just reapply, reapply. But by this time I was old and medicine was a second career for me, a huge step, and I had to look for opportunities outside of Canada to make medicine happen for me. It's like I need to get this, get going.

I: Just get on with that. OK.

P: Need to get on with life.

I: So rejection's a theme that's coming out in the number of the interviews. How did that rejection affect your?

P: It was pretty devastating. Like each year, you know, you have that build-up to now you're putting together application, you're practicing for interviews, you get it, you do the interviews, you think they went OK, and then you wait for that day when it's going to be posted on the computer, like green or red or yellow. And then I would get that yellow that you're wait listed so I'd wait the whole summer. And I think the hardest part about that is you put your life on hold pretty much.

Quotation in text:

You just get so devastated each year you're being rejected. And then they keep telling [you], "Oh just reapply, reapply." . . . . It was pretty devastating. You wait for that day when it's going to be posted on the computer, like green or red or yellow. And then I would get that yellow, that you're wait listed so I'd wait the whole summer. And I think the hardest part about that is you put your life on hold, pretty much.

Individual transcripts were sent to each participant asking for further edits and their approval (member checking). All participants returned their transcripts as approved.

The approved transcripts were downloaded into NVivo for Mac and coded. Likewise, field notes and analytic memos were downloaded into NVivo and coded.

I began to code inductively by closely examining what participants were saying. This led to the use of detailed line-by-line coding, as exemplified by Initial Coding (Saldana, 2010). In coding the first few interviews, I was struck by participants' use of emotive language as they spoke of their sense of rejection and of the emotional impact of their life-journeys. This led me to incorporate Emotion Coding into the first cycle of coding transcripts and field notes.

Over 70 codes were generated through first cycle coding. Codes included themes of system issues, clinical rotations both within and outside of Family Medicine, differences in training, lack of experience with clinical decision-making and autonomy for patient care, rejection, intimidation, harassment and discrimination, stigmatization, coping strategies and contributing to the welfare of future internationally educated residents at the University of Manitoba. Individual codes were grouped into categories based on similarities between coded. For example, the codes *ambivalence, anxiety, confidence, desperation, excitement,* etc. spoke to the emotions experienced by the participants, and were grouped into the category *Emotions*. Similar groupings led to the generation of the categories *Clinical rotations, Coping strategies, Differences in training, Orientation, Coming/returning to Canada* and *Stigma*. Table 10 lists the codes and categories, along with the number of sources in which each code is found and the number of times it was referenced.

These codes were reviewed and collapsed into larger categories through second cycle Pattern Coding, which led to two major themes: the practice gap and stigmatization of internationally educated residents (Miles, Huberman, & Saldana, 2014).

Table 10. Categories and Codes Identified Through First Cycle Coding

Category	1st level codes	2nd level codes	Number of sources	Number of references
Advice			20	36
Clinical Rotations			24	418
	Barriers		4	7
	Expectations		12	37
		Clear Expectations	10	15
		Lack of clear expectations	8	10
	FMBT		21	87
		Mentors & Mentorship	14	29
		Negative experiences	7	14
		Timing of FMBT	11	16
	Off-service rotations		21	117
		Adult Emergency Medicine	11	14
		Internal Medicine	20	41
		Obstetrics	19	28
		Peds Emergency	8	11
		Peds Wards	12	23
	Struggling residents		6	7
Coping Strategies			24	182
	Additional study		6	9
	Attitudes		9	21
	Conflict avoidance		6	8
	Family supports		10	11
	Impression management		5	14
	Internalizing		5	8
	Peer support		21	62
	Physical activity		1	1
	Rationalization		7	10
	Supports in training		6	13
Differences in training			24	119
	Clinical decision-making		21	62
		Loss of autonomy or status	2	4
		Medical school-provided clinical decision-making	1	2
		Medical school- no clinical decision-making	16	34
		Postgraduate training	9	19
	On-call issues		1	1
	Positives of medical school abroad		5	5
Emotions			24	133
	Ambivalence		1	1
	Anxiety		16	34
	Confidence		17	38
		Lack of confidence	11	20

	Desperation		2	3
	Excitement		5	9
	Exiled		1	1
	Fear of failure		4	9
	Frustration		6	12
	Gratitude		1	1
	Relieved		3	5
	Validation		11	16
Motivation for participation			15	19
Orientation			21	154
	Recommendations		21	64
	Negative comments		21	41
	Positive comments		17	45
Returning/coming to Canada			22	263
	CaRMS		20	200
		Access to seats	20	73
		Aware of challenges in matching through CaRMS	4	11
		Back-up plans & safety nets	11	25
		Canadian electives	19	26
		Preparations	18	51
	Choice of Manitoba		9	12
	Financial costs		8	16
	Luck		9	18
	Moving to Canada		4	5
	Risks		5	11
Stigma			24	283
	Intimidation, harassment & discrimination		18	141
		Hierarchy of residents	7	12
		Negative comments by faculty or staff	13	35
		Visibility & invisibility	23	49
	Rejection		20	89
		Outsider status	1	1
		Rejection by Postgraduate Medical Education systems	10	19
		Rejection by FM peers	5	8
		Rejection by host country	8	13
		Rejection by Canadian medical schools	16	45
Taking charge of future			17	43
	Choice of Family Medicine		5	8

In the following chapters, I shall present the research findings and the central themes emerging from this research. These include the perspectives of the participants around the lack of graduated clinical responsibility and their experiences of stigmatization.

Chapter 4 The Clinical Practice Gap

Participant interviews revealed two major themes describing how participants experienced their transitions to the Family Medicine residency program. In this chapter, I shall present the first major theme: that of participants' lack of experience with graduated clinical responsibility for patient care. As CSAs constitute the majority of participants, their experiences will form the majority of the discussion. Wherever possible, the experiences of the two immigrant-IEPs will be incorporated. The second major theme, the stigmatization of IEPs, will be presented in Chapter 5.

Medical Education Abroad

The medical education systems in which these participants found themselves share a great deal with the Canadian medical system. All provide didactic instruction in the physical sciences, instruction in models of health and illness and taught medical students physical examination skills. Yet, there are significant differences. In the Canadian model, medical students are expected to take on clinical responsibilities as a member of the health care team during their third and fourth years in medical school. For example, the University of Manitoba Faculty of Medicine policy on the Supervision of Medical Trainees provides this guidance:

> Medical students, physician assistant students and postgraduate trainees must be given opportunities to observe and actively participate in clinical interactions to acquire the knowledge, skills, behaviours, attitudes and judgment required for future practice. This occurs through a process of graduated responsibility,

> whereby learners are expected to assume increased responsibility as they acquire greater competence. (University of Manitoba, Supervision of Medical Trainees, 2013)

In general, clinical clerks (as the medical students are referred to during their clinical rotations) are assigned hospitalized patients to admit and follow through their hospitalization. They will perform and document the admitting history and physical exams, and will write up the admitting orders with supervision by an attending physician or resident from the same clinical service. They will see their patients daily, report on their patients' progress at hospital rounds and make changes to patients' management plans, again with supervision. Depending upon the clinical rotation, clinical clerks may observe or assist at surgery and take part any in medical procedures required by their patients. They are expected to take call (remain in hospital overnight to provide care for a roster of hospitalized patients), as supervised by residents or attending physicians.

In contrast, the majority of participants were educated in Irish and Australian medical systems. Although there are some differences in the length of the undergraduate medical programs for their own nationals (e.g., four years in Australia, five-to-six in Ireland), both countries offer four-year graduate entry programs for international students that have previously completed an undergraduate degree. These systems also introduce clinical responsibility at the level of the medical school graduate. In Ireland, medical school graduates enter one year of hospital-based internship before applying to one of the specialty colleges for further training. The Irish College of General Practitioners accredits four years of specialty training and provides the specialty certification examinations. In Australia, medical school graduates also complete one year of a

hospital-based internship, though most undertake a second year before applying for specialty training. The Royal Australian College of General Practice accredits the general practice training programs and offers fellowship examinations in General Practice. In both systems, medical students are present on the wards to learn through observation whilst interns, house officers and specialty registrars are on the wards to learn through work.

This difference in when medical learners are provided with graduated clinical responsibility creates a practice gap. One of the greatest challenges in their transition to resident, as identified by participants, was the lack of clinical responsibility expected of them as medical students abroad. In their host medical education systems, as medical students, the respondents were not expected to actively participate in the care of patients. Participants described their clinical role as observers with the responsibility for patient care being assumed by interns and house officers (first and second year post-graduate trainees). Seventeen of the eighteen CSA participants reported that they were not expected to assume any direct responsibility for patient care as a medical student[14]. One participant described the expectations made of them as medical students.

> Medical students don't need to take a very proactive role in taking care of patients. They're supposed to study and do very well in their physical exams and history taking . . . . Not so much like running a ward or taking care of a patient all by yourself. It was more so the opposite. It was all about knowing your theory and being very good at doing your physical exams but that was about it . . . . So our job is basically, read a book, learn your theory, go to the bedside. There was

[14] The eighteenth participant trained at a medical school affiliated with several American medical schools and undertook a clinical clerkship at American university hospitals.

> definitely a lot of bedside teaching but it was a very passive way of teaching, like 10 to 12 people around a patient and all look at their signs for liver disease and things like that. So they were very prolific about the theory and your skills in terms of the medical examination. But not in terms of making decisions about the patient care or anything like that, no. (CSA-10)

Similarly, a participant described the role of medical students as,

> We were expected to be an observer. So we wouldn't be putting in orders. Quite certainly, we wouldn't be making decisions . . . . We were certainly expected to be observers so we would be quizzed and we would answer questions. But no, we would not be making decisions about patients nor participating in a team. Not patient care, we were there to learn and observe. (CSA-14)

Through informal connections to Canadian medical students, some participants identified that they would not enter residency training with the same clinical experiences, as would Canadian medical graduates.

> When I was in med school in [country], I had friends in med school here. And they would tell us stories about their Internal Medicine rotations and . . . the decisions they had to make. And I was sitting there thinking, well if we're at the same level, there's no way that I'm equipped to make decisions or look after patients. (CSA-8)

Although six of the eighteen CSAs undertook postgraduate training abroad before entering residency, their experiences did not provide them with the same levels of clinical responsibility expected of Canadian medical students. In some settings, these

responsibilities were divided between the intern and house officer years that graduates would complete in their first and second years of postgraduate medical training.

> In my intern year in medicine, even then you didn't make any decisions as an intern. You weren't allowed to sign for anything. All you did was grunt work. You weren't even a clerk. An intern's job was putting catheters in, putting IV lines in, being the first one there. I don't know why, because you couldn't make any decisions if things should happen. (CSA-11)

This participant identified that the internship clinical experiences, although much-needed, did not provide the same degree of responsibility as would a Canadian clerkship.

> There was not nearly as much autonomy in our internship year, which I guess would be considered clerkship, as there is as a 4th year medical student in Canada. You would generally run through any management decisions with the senior resident; [you] would hardly make decisions alone. (CSA-3)

Three participants completed twelve or more months of internship/house officer posts abroad. These participants clearly identified this extra year as being most helpful in their transition to residency. "I was happy that I did that year. I thought for me that year was very beneficial. I knew I [had] that autonomy for a year, you know, and so that made me feel a little bit more comfortable being on the wards" (CSA-17).

> I decided to do [an] internship, which is a year-long program and I did it in [country]. I think that was surely important in how I transitioned back. I didn't really know that maybe, at the time . . . . I think it helped me prepare significantly because the medical school in [country] it's a bit less hands on, or less responsibility than what it's like in Canada. And so I think having that experience

> in an internship program, you do then have the responsibilities similar to what it's like in Canada. (CSA-7)

One of these three CSAs was able to take part in a second year of postgraduate training. This afforded increased autonomy in patient care, which this participant identified as contributing to improved confidence upon entering residency in Canada.

> The first year was like a rotating internship. So it was very similar to how it used to be here . . . . And the second year, you're Junior House Officer and most of that I did just nights on general medicine. I had my own prescribing number . . . . I had just done 3 months of GP work. [I] was going to nursing homes on my own and doing everything. And it was only at the end of the day that you would just mention if you had an issue. Supervision was just different at that stage of my training. (CSA-2)

When asked if these experiences assisted in the transition to residency, this participant agreed, "One hundred per cent. I think I would have been very underprepared and insecure had I not had that experience" (CSA-2).

Unfortunately, most CSAs will no longer be able to undertake internship or house officer training in their host countries. Following the economic downturn of the late 2000s, many of these countries have limited the number of postgraduate training posts offered and have prioritized their own citizens for these positions (University of Sydney, Sydney Medical School Internship and Professional Registration, 2013; New South Wales Government, Health Education and Training Institute, 2014).

In summary, the vast majority of CSAs are not expected to assume clinical responsibilities during their medical school training. A small number of CSAs were able

to undertake additional training abroad before returning to Canada; this training provided them with some experience that approximates the training of Canadian medical students but not this is consistently achieved. As host countries limit the number of postgraduate training positions abroad, it appears that the number of CSAs who might profit from this postgraduate experience in the future will be limited.

In the following section, I shall describe how participants experienced their transition into clinical training at the University of Manitoba.

Transitioning into Residency

Prior to commencing residency, all IEPs took part in the IMG Orientation arranged by the Postgraduate Medical Education Office of the College of Medicine.

IMG Orientation. Beginning with the 2008 cohort, all IEP trainees entering the Faculty of Medicine attend four weeks of IMG Orientation. This orientation, or "IMG Boot Camp" as several participants have described it, is intended to assist new residents integrate into the University of Manitoba. The curriculum (Appendix A) covers a wide range of topics. But the most commonly identified benefit of attending IMG Boot Camp was the opportunity to connect with other IEP residents.

> It helped me in a non-medicine way, if that makes any sense. Because it gave us, like, a chance to meet people for one, because you're coming into a place where you know no one. So I made a lot of good friends. (CSA-13)

Participants also benefitted by getting themselves settled into Manitoba before their residencies began on July 1st.

> It allowed me that month to just get settled, so you know all of the, like, getting medical insurance set up, disability insurance, getting a pager, like that kind of

> stuff . . . . And then, of course like finding accommodation, just getting life set up. I think they gave me the time to do that. (CSA-13)

Years after completing their residencies, participants were able to recall some components of the orientation that were beneficial. Many described the hands-on, experiential teaching sessions as being particularly helpful. "Cast clinic was good because I hadn't casted very much in the past" (CSA-5).

> But I do recall there being, there was some clinical modules, right, that I thought were quite helpful. There was one like doing like a pelvic exam, you know. There was a digital rectal component. There was some other teaching. Like hands on teaching. That was helpful. (CSA-6)

Participants also appreciated the opportunity to hear directly from IEP residents currently in training and to hear their perspectives on transitioning to residency. "In terms of like some of the stuff that was talked about, I think it was useful when residents came in [from] first or second year and they answered questions. That was really useful, I remember" (CSA-13).

But apart from being afforded the opportunity to create social networks, to become settled in Manitoba and to take part in the few hands-on teaching sessions, participants found little else of benefit. "We definitely came out of that experience with like great friendships but in terms of did we learn anything? I don't know. I think there were some things" (CSA-10). CSA-6 stated, "I think if you were a doctor that did not train or did not do any clerkships in Canada, then I mean, maybe it was helpful, I don't know."

In contrast, there were many aspects of the orientation program that were identified as negative. Participants identified that, having grown up in Canada, they were already comfortable with Canadian customs and values. At times, they were offended by the subject matter. As CSA-10 shared, "I think that we literally were told to shower every day . . . . We would joke about it. We used to tell [each other] . . . 'Make sure you shower.' "

> I'm sure you've heard other people talk about this, like I don't need a one-day lecture on the role of women in society in Canada. That's not useful to me. The daylong talk on the fact that we have transgender[ed] individuals in Canada. Again, I know that. (CSA-9)

Participants identified that although the information presented might be useful to new Canadians, it was not helpful to them.

> It just felt like it was really geared towards IMGs that weren't Canadian-born. So a lot of it was like, this is the history of the Canadian health care system, and this is a map of Canada and this is where you are, that kind of stuff which I think wasn't as useful for us. (CSA-13)

What participants identified as potentially useful, but lacking, was information on how to function within the Canadian medical system.

> We need to know, where are the wards? Where do we show up the first day? Where are we supposed to go? How do we get scrubs? Like things like that, that's what we need to know. I think that was a pretty universal feeling. (CSA-8)

Participants recognized that they had much to learn about the Canadian medical system.

> But like how do the hospitals run here? Because I came from a system in [country], like, there's interns and then there's house officers and then there's

> registrars and then there's specialty registrars and then there's a consultant. And everybody has like all these jobs that they do and there's this huge hierarchy. So, I have no idea how hospitals run here. Like, what do nurses do here, because the nursing skills and what they do here are completely different than what nurses do in [country]. Like in [country], nurses don't put Foleys in. That's the intern's job . . . . Nurses don't put IVs in. That's the doctor's job. So, totally, just different things. Like, who does what? Well, I don't know. (CSA-9)

Participants identified that what they really needed was to gain firsthand experience of the Canadian medical system. CSA-2 stated, "You're going to learn more in that first day where you have to make a decision and figure something out on your own."

> But I mean I don't think you can teach someone to be a resident. Do you know what I mean? Like, you can't teach someone how to work on the ward unless they're working on the ward. I think that sometimes the only way to really learn stuff is just to figure it out while you're doing it, for real. (CSA-13)

Although the IEPs recognized that the IMG Orientation month provided them with the opportunity to develop a social support system and the experience of some hands-on learning, in retrospect they identified that this training did not provide them with the clinical experience they needed as they entered residency. As I shall describe in the following section, this lack of graduated clinical practice would have negative repercussions for participants as they began their clinical rotations.

Performing as a resident. Having completed their medical education abroad, and having sat through the month-long IMG Orientation, how did the new residents describe their transition to residency? Despite the introduction to medical education in Canada provided by the IMG Orientation, they struggled to understand the medical system in which they worked. CSA-16 shared that, "I think the biggest struggle for me was learning the system. Not necessarily the knowledge but learning the system was the biggest challenge for me." Similarly, CSA-9 observed, "It's not my medical knowledge that was deficient. My issue, it was my knowledge of the system that was deficient…. My knowledge is fine. I just don't understand the system and what's expected of me."

Not only did participants not understand the system, they recognized that this lack of knowledge created barriers to their progression during training. "It wasn't a lack of medical knowledge. It was my inability to function in the system that was really kind of holding me back" (CSA-4). Similarly, CSA-12 perceived a similar challenge. "When we started any rotation, for me it was definitely a challenge to learn not only the medicine but also where things go, where do you refer to; that was a learning curve for sure. And it slows you down quite a bit initially" (CSA-12).

This participant's first rotation was in Emergency Medicine. At the mid-point of the rotation,

> [The supervising physician] said that . . . the other doctor came to him and said, something along the lines of "You know, we shouldn't be hard, [name] really doesn't know our system . . . . This is not [a] lack of medical knowledge. It's the system [name] doesn't understand." And he said, "I didn't realize that you didn't know that." (CSA-15)

Participants further identified that their lack of prior experience with graduated clinical responsibility was stressful. "A higher level of autonomy was something I really had to get used to. It's like clerkship in fast-forward, the first month – gaining the confidence in your decision-making skills" (CSA-3). This participant identified how the nature of the medical education system abroad created challenges in adopting the mindset of a resident.

> At that time I had no experience in the residency program per se. So I came in more with the medical student mentality. Even at that, the medical students, that I was, here, I found out that was quite different from the medical student [there]. The system I trained was designed to, in such a way that the attendings, because of [the] times, were like the bosses. And then others . . . were just like errand boys and girls. . . . And that was something that was really, really different here. It was so different that it took me some time to adjust to that. (I-IEP-1)

For some participants, their first encounters with Canadian medical students came during their Canadian clinical electives. For others, it came after they entered their residencies. Participants related being surprised by the degree of clinical responsibility expected of Canadian medical students.

> I started [with] my off service rotations and I think [on] Internal Medicine, there were three medical students on the team in their final year and they have patients. And they were on call by themselves; there were two medical students and me for three wards. And it was just like, oh my God, they're actually working. (CSA-1)

Participants also described feeling unprepared, as first year residents, to supervise medical students, some of who would already have had more experience with clinical

responsibility than would the IEPs. "I felt like the medical students knew more than me or they were way more confident than me. And here I was, having to sign off on their orders. It was embarrassing" (CSA-4).

In other instances, participants described turning to medical students for guidance on how to manoeuver within the system. Several participants identified that they would have been lost when starting on some of their clinical rotations if it were not for the medical students on rotation with them. They recognized that their clerkship rotations provided medical students with a good understanding of the medical system. "If I hadn't done my electives in Canada, from what I knew, I would not have know that Canadian medical students were playing a much more active role. So, I only gathered that from doing my electives, which helped me" (CSA-18).

A further difference between participants' experiences as medical students and those as residents was in assuming on-call duties. As medical students abroad, they either had limited or no on-call responsibilities. "I think the hardest thing for me was getting used to the call schedule . . . because I was never in a 30-hour shift situation before. So I think for me it was the call, getting used to that, was the hardest for me" (CSA-16).

All CSA participants were able to schedule electives in Canada during their medical education, with the average length of elective time undertaken being of 12.5 weeks' duration.[15] This provided them with some understanding of on-call duties, but did not fully prepare them. "I had some experience from doing my electives because I would be on call during my electives in Canada. But in [country] you do not do call; you do not get that same amount of autonomy" (CSA-1).

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[15] The immigrant IEPs were not eligible for electives, as they had already completed their medical education abroad before coming to Canada. Only medical students or residents currently enrolled in training are eligible for electives in the Canadian medical system.

Understanding expectations. Participants identified that receiving clear expectations at the beginning of each rotation was essential to creating successful transitions. When provided, this allowed participants to understand the learning goals of each rotation.

> You know, when [name] sits you down on day 1, [and says], "Some of you aren't going to pass, some of you are going to struggle. This is what we expect." That was like the one rotation [Internal Medicine] where, at Health Sciences anyways, where [as] difficult and intense and long and draining and tiring as it was, they were very clear with what they wanted you to get out of the experience. (CSA-2)

Participants recognized the importance of clear expectations in creating a positive learning environment.

> And I think looking back, the rotations that I did really well on and the rotations I really enjoyed were the ones where everything was laid out for me right from get go. This is what we expect of you . . . . Those rotations that provided that at the beginning, I found, just laid the ground at the beginning, were absolutely, absolutely by far my favourite rotations. (CSA-4)

When expectations were not clearly provided at the outset, participants struggled to learn what was expected of them. At times, peer residents from the University of Manitoba helped them understand the implicit expectations.

> Of the residents that were there that we did Internal Medicine together, let's see, two of us were IMGs, and then one I think one went to med school in BC. So like, it wasn't until, I think, my second month there that people came in that had actually gone through the U of M program. And you're like, "Oh, that's what

> they want." Because you see there's a whole group of us of course, but none of us knew what to do because we're all from out of province. (CSA-9)

Not only were Family Medicine residents transitioning into residency and from one rotation to another, residents in other programs were also moving from rotation to rotation.

> And the senior on the team also had just changed, so again I knew he went through a transition so it's a little tough when everyone's transitioning. All of us really, you show up and you're suddenly in rounds and that's that. Trying to talk about it at the end of rounds, about what you're expected to do. But it's never very clear. (CSA-7)

The failure to provide clear expectations to IEPs as they moved from one clinical rotation to another made it difficult for them to transition smoothly during their first year.

Starting with Family Medicine Block Time. Participants clearly identified that the preferred option was to begin their residencies with Family Medicine Block Time (the Family Medicine clinical rotation). Even those who had completed post-graduate training abroad before residency were pleased to start with the Family Medicine rotation. "Well, I sort of had put some thought into it knowing that it would be a big adjustment and I had requested to do my family medicine block first during that year" (CSA-7). When asked what made the transition easier, CSA-2, replied, "Well, starting on [Family Medicine] block time; I'm glad that that worked out. I think I would have been really overwhelmed and felt almost out of depth, had I started, you know, on Internal or something like that on July 2nd" (CSA-2). Participants clearly identified that starting with Family Medicine Block Time was crucial to their success. "But when I got into

residency, I think the only reason that I like I survived it, and made it through, was because I had Family Medicine first" (CSA-9).

Just as clearly, participants identified that starting with off-service rotations, particularly heavy-service rotations such as Internal Medicine or Ward Paediatrics was challenging. "Of all the rotations, Internal medicine was the one I most apprehensive about" (CSA-11). As this participant relates, beginning residency with off-service rotations was difficult. "That's exactly how I described my residency in Manitoba. Sink or swim" (CSA-15).

> I think it was a lot harder and more of a shock to come from being a med student, a CSA, just to be on call like July 1st for an Internal Medicine rotation when you have expectations to be managing patients fully and you've never done that before. You're just thrown in there. (CSA-13)

Those who began their rotation with on-call duties were particularly stressed. "I mean, I did start July 1st with Internal Medicine on call at HSC on Internal Medicine so I was kind of at the beginning running around like a chicken with its head cut off" (CSA-16).

Developing confidence. At the beginning of their residencies, the participants shared that they did not feel very confident about their abilities. "I felt others were more confident in their knowledge than I was. People do not divulge their feelings of inadequacy too readily. So I feel like [I] wasn't typical because I always felt like I was behind. I felt like I had a lot more to learn than everyone else" (CSA-11). In contrast, they perceived that CMGs were much more confident as they began their residencies.

> I'm thinking the Canadian grads, . . . maybe their transition was less of a transition. I think they just felt like maybe, maybe my opinion of them is that they appeared to be more confident and competent because they kind of had their bearing already. And maybe that's just how I interpreted it as them being almost, like, better because they had done it before so it seemed to me like it seemed that they were more confident. (CSA-10)

Despite the challenges the participants faced, they all developed confidence as they moved through their rotations.

> Pretty much the first week of every block was kind of like, OK, I'm back to knowing nothing. And I don't know the patterns here. And you just got used to that. So the first kind of couple of days, every block you knew, just kind of, [would] be ridiculous. And I'm just going to go from there and by the end you'll be perfectly fine. (CSA-1)

With time and with the confidence gained by successfully completing rotations, most participants found it easier to move from one rotation to the next.

> I think after that first month in the Family Medicine block time, it took longer in that first month but I remember feeling in residency right before each rotation, like right before each new block, I'd be nervous. I'd have butterflies. But it got shorter each time. So, you know, it got better each time. It was probably a couple of days to really realize exactly what was expected of me and just sink into it and then just to just move forward. (CSA-8)

Others, though, found the frequent switches between rotations to be disruptive. "You know, you're getting comfortable . . . at the half way point where you're really

getting into it, you're really enjoying it, and then all of a sudden, you have to switch over to something else" (CSA-17).

Participants recognized that dwell time or time on rotation was needed in order to learn what was expected of them and to be able to demonstrate their competence, as Bernabeo et al. (2001) describe. Longer rotations were generally identified as better. "I think if it [Family Medicine Block Time] was all together it would have come out a lot quicker as opposed to broken up. Just because you get used to it, you understand it and you're still in that one position before you have to go to another rotation when you're just learning the ropes" (CSA-12).

As reported by Hurst et al. (2013), participants' confidence built over the course of the first year. CSA-3 recounted, "I think it was just a matter of maybe just building up the confidence to make your own decisions, which we really didn't have in [country]. And then I think by time, you know, 5 or 6 months down the road I think I was able to do that".

The challenge of assuming clinical responsibilities. Participants described that at the beginning of residencies assuming clinical responsibilities was onerous. "I think the reason it comes across so strongly, probably not just with me but for other people, is because that was probably one of the most difficult times in most of our lives. That was so stressful" (CSA-4). Participants described experiencing anxiety and apprehension. "I think I was nervous because I didn't have a lot of autonomy before and now I was suddenly expected to manage all these things" (CSA-3). Uncertainty prevailed. "I guess it was really stressful at the beginning. Just trying to figure out what was expected of me and what I had to do" (CSA-9).

Participants began to doubt themselves, their knowledge and their abilities. "It's challenging. You're very nervous, right? You have a lot of self-doubt. Like, oh, I'm an international student. I probably don't know nearly as much as any of these other people" (CSA-5).

Calling to mind the participants in the Legassie et al. (2008) study, these participants also described feeling like imposters. "So I was always waiting for everyone to say, 'Oh yea, you need to totally improve because you're going to fail,' but that's never happened" (CSA-3). CSA-4 described feeling "like an imposter up until, like, the last probably 8 months of residency. I felt like an imposter. Until I felt, wow, how's this happening? I'm actually passing." Participants indicated that the evaluations they received, although positive, didn't reflect how they felt about their performance. "I felt like, am I not getting enough constructive criticism because I don't have as much confidence . . . as this evaluation says I have? Right? Like if they could get inside my brain, they wouldn't be writing that" (CSA-5).

Thus, not having been provided with graduated clinical responsibility during their medical school education created significant distress for participants.

Coping strategies. Participants described employing multiple coping strategies to get through stressful rotations. They sought support from other IEPs in training and from mentors. They reframed their experiences and employed impression management as further coping strategies.

Peer support. All participants identified that having peer support was essential to coping with the challenges of residency. The support groups generated through participating in the IMG Orientation were essential. "I mean the one thing I find here

that is difficult is that all my med school friends are in [country]. So your support group, being an international student here, my friends were my family" (CSA-8). Participants recognized that local graduates were advantaged by having already developed a peer support group.

> The Manitobans that had been to school together all knew each other; they had a kind of a friend base already whereas we didn't. None of us did. So it was kind of one of those things where . . . I could see a familiar face, you know. There was somebody there that I knew. (CSA-8)

Participants found that sharing difficult experiences eased their burdens.

> It really did help to have the protective factor there where at least you had some people that you were going through the same thing with, who were suffering just as much as you. And were as miserable as you and were on call with you and sharing the scary things as well. (CSA-3)

Canadian medical graduate residents were also identified as supports, both other Family Medicine residents and those from other specialty programs with whom the participants worked. "You're just part of group because you're a Family Medicine resident. So that actually really nice because I think a lot of us coming in were a little worried about how we would be accepted" (CSA-1). Many participants identified that having good senior residents and supportive resident teams on their clinical rotations played a key role in making the transition easier. "I had a great senior resident, just wonderful. I had a very good team, you know, I enjoyed it. I really did. I think it was a really good way to start residency" (CSA-17).

> I had an excellent senior . . . who was just really, really great. Bright. Calm, positive. Helpful guy. So the fact that he was going to be on my team for most of my time there, and that I knew a couple of the other residents from other programs who were also there, I felt quite comfortable. (CSA-2)

Participants found that working alongside other IEPs was supportive.

> The other residents on my family block time, I met them in IMG training [orientation], so I had colleagues who were all in the same situation as me. So when I said, "I'm lost, I have no idea what's going on," they kind of said, "Well, I'm lost too." And that's very reassuring. (CSA-14)

Unfortunately, not all participants felt welcomed by University of Manitoba residents, even by those in Family Medicine. I shall expand upon this theme in the following chapter on the stigmatization of IEPs.

Mentors. Participants identified a need for mentorship early in their residency training. Sometimes they sought mentors amongst senior Family Medicine residents whilst at other times, senior residents sought them out.

> It kind of naturally happened in my cohort. Just because there was [sic] a couple of R2s. [Name] naturally acted as a mentor to us. And I found people that I could go to that I had to something say in common with. Like [name], she was an IMG and she happened to be at the same site. So I ended up finding people that I could identify with. (CSA-14)

Family Medicine faculty supervisors were identified as sources of support.

> I remember saying to my attending, "you know I feel like I'm bugging you a

> lot . . . and I think it's just because I don't have the confidence." And he said to me, "You know, that's OK because we know the system you were in was a little bit different. It won't take you long. (CSA-8)

Supervisors who had worked with IEPs previously were often described as excellent mentors.

> I was also lucky because my preceptor had had IMGs previously and within the first week we had talked about how, as an IMG, I would seem like I was not at the same level as everyone else. My knowledge was at the same level but my trajectory would be not straight like everyone else's, it would be kind of like this [made a whooshing sound and drew an exponential curve in the air with hand]. And we had that talk and that was great. (CSA-1)

Several participants recommended that a structured mentoring program should be established to connect new international residents with other IEPs amongst the senior Family Medicine residents.

Rationalization. Often, participants were able to normalize their experiences as being part of their professional growth. "Sometimes it helps to see another resident fumble a little bit. Like, not big blunders or anything. But like, be shaky putting that suture in, right? It's like, oh yea, yea. No, no, this is just normal" (CSA-5).

Participants took pride in their personal growth despite the challenges of the heavy rotations.

> It [Internal Medicine] really was an amazing experience, after the fact. I am so glad I went through it; it was one of the hardest rotations and 2 months of my life but I gained so much more than I suffered and that is saying something. (CSA-3)

Impression Management. Goffman (1959) described how individuals endeavor to give off signals to convey an impression to others, to leave them with a more favourable impression than one might necessarily provide (Goffman, 1959 in Newman & O'Brien, 2010). This has been described as impression management. Participants described ways in which they worked to leave a good impression during rotations.

> That's why I've always tried to be very well prepared. I've tried to be on top of my readings. I've tried to be on top of everything so that I can prove myself . . . . So, I think that one of the biggest drivers for me is to show that I had very good training. (CSA-16)

At times, participants felt the need to overcompensate with personality.

> I was the one that contemplated being nice and pleasant and getting along with people. Because I kind of felt like I had to do that to compensate for all of the other things that I feel I didn't have . . . . Because I felt like maybe I wasn't 120% confident in my knowledge, so that I had to kind of put all the other kind of fluff around it. (CSA-10)

Some participants managed impressions by working around faculty physicians or senior residents. "I knew who I got along with. I knew whom I learned from. I knew what personalities to avoid" (CSA-2). In formulating advice for incoming residents, CSA-10 provided the following advice on how to give off the best impression,

> Don't shy away from work or being busy. They need to look like they're, you know, just bright eyed and bushy tailed and just oh so excited to be there. And even if you did have to pretend, I think that's the attitude that you need to take to do well in residency. (CSA-10)

Although Canadian medical graduates likely strive to create good impressions during their residencies, participants perceived that they needed to work harder to counter any negative perceptions based on their international location of training.

Participants in this study described their entry to their Family Medicine residency as challenging. Not having been provided with graduated clinical responsibilities during their medical school education, they entered their residencies with a practice gap. They looked to the IMG Orientation as an opportunity to learn the requisite skills needed as residents during their clinical rotations. They also wanted to learn how to function within the Manitoban medical education system.

Despite their extensive prior elective experiences in Canadian settings, participants did not identify that these electives provided them with adequate experiences in graduated clinical responsibilities. However, those who had completed postgraduate training abroad identified that this helped them considerably in transitioning to their Family Medicine residencies.

Participants struggled to understand what was expected of them during their clinical rotations. They were not always provided with a clear understanding of these expectations and turned to medical students and other residents for assistance in learning how to maneuver through new medical systems.

The strain of navigating dual learning curves, that of acquiring the skills to manage patients while also learning to function in new medical systems created considerable distress. Participants described being anxious and apprehensive and experienced doubts about their abilities. They described feeling like imposters.

They employed several coping strategies. The support groups created by taking part in the IMG Orientation were identified as essential. They sought the advice of resident and faculty mentors. They worked hard to manage the impressions they gave off to counter any negative impressions of IEPs. With repeated successful transitions from one rotation to the next, their self-confidence increased. They had successfully made the transition into the clinical residency.

Summary

In this chapter, I have described what participants experienced as they transitioned as new residents into their clinical rotations. In this study, I have found that most of the participants entered residency without prior experiences in assuming graduated clinical responsibilities. This has been characterized as a clinical practice gap. This practice gap presented them with significant challenges. In Chapter 5, I shall discuss the second theme revealed by participants' interviews: the stigmatization of IEPs.

Chapter 5. The Stigmatization of Internationally Educated Physicians

In Chapter 4, I presented what participants experienced as they transitioned into the clinical rotations of residency. In this chapter, I shall present what they experienced from the learning environment and how the learning environment at the University of Manitoba was primed to stigmatize them.

Stigma is present in all societies, and was first recorded in ancient Greece, where slaves' faces were tattooed to make visible their slave status to Greek citizens (Goffman, 1963/1986). Unlike the visible stigma of ancient times, stigma today may be invisible to the naked eye, and may be based on attributes or states of being.

Participants in this study perceived that being an IEP was to be stigmatized. "Being an IMG makes you feel like an outsider sometimes" (CSA-8). CSA-16 clearly perceived, "there definitely is a stigma attached to being an IMG. That we are not as smart as Canadian Grads", while CSA-14 states, "there's an arrogance. And I can see the arrogance, right? And [this] arrogance is, you're an IMG so you're not as good as us, automatically. There's a stigma, absolutely."

CSA-4 discerned that this stigma developed because CSAs were not accepted to medical schools in Canada.

> The stigma revolves around the facts that we were unsuccessful in getting in our own province . . . . I feel like a lot of people have a very narrow minded view of what other country's abilities or capacities to train medical professionals. My medical school's been around for longer than Canada's been a country . . . . I don't think a lot of people realize just how difficult a journey it is for a lot of these

> Canadian students who study abroad. All they see are people who didn't get into Canada and they've gone through the back door . . . . That's kind of the stigma that I think most Canadian students who study abroad have to fight against . . . . And that is actually a kind of a cross to bear for the rest of your career. (CSA-4)

Participants perceived there was bias against the training IEPs receive abroad.

> There's this stigma where it's you're not trained the same. You don't have the knowledge that people do here. Because you didn't go to school in Canada. And I think there's [sic] some people, some of the older generation understand because they've worked with people from different training backgrounds. They understand that that's not necessarily the case. But a lot of people hear "IMG" and they think, it's almost like you're associated with this little shack in the middle of nowhere that you've somehow attained a medical education and the training is not anywhere near [how] the training is here. And I don't think that's fair . . . . Their training is not necessarily that much different than here. It's just a different system. (CSA-8)

The stigmatization of participants began even before they entered the Family Medicine residency at the University of Manitoba; for most, it began with the decision to go abroad.

Rejection

Participants revealed that they had experienced multiple sources of rejection, beginning even before they chose to study abroad, continuing through their return to Canada and during their residencies.

Going abroad- the decision to leave Canada. For Canadians hoping to become doctors, the greatest hurdle is being accepted into medical school in Canada. As demonstrated in Table 1 (Chapter 1), acceptance rates across Canada range from 10-20%.

It has become quite common for prospective students to apply repeatedly to medical school. Indeed, many of the CSA participants had applied up to four times, often to several schools and in multiple provinces. Many had been wait-listed[16] on one or more occasions. These participants described the decision to go abroad as the only way in which they could achieve their goals of becoming physicians.

> I went abroad because I had applied to medical school in [province] three times. I was wait listed three times. And I was 100% sure I wanted to become a doctor . . . . And I had heard about medical schools in [country]. So I applied, I had my interview and I got in so I went. I just went. (CSA-13)

After trying repeatedly to gain entry to Canadian medical schools, participants came to the conclusion that the only way to become physicians was to go abroad.

> I did not go abroad exclusively by choice. I went by circumstance and that was that I had tried to get into a number of medical schools a number of times and was not getting any younger and was losing my confidence at each rejection because that's what it was; it was a rejection regardless of being put on the waiting list or not. I believed in myself enough that I knew that this was what I wanted to do and I was capable of doing it. I decided to invest in myself and go. (CSA-2)

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[16] Medical schools will make offers of admission to candidates between April and June of each year. As some candidates receive multiple offers, the schools maintain a list of alternate candidates who may be offered a seat should a prior applicant decline their offer of admission. Offers may go out as late as the day before classes start each fall.

For other participants, the decision to go abroad for medical school was more straightforward. Four of the 18 CSAs chose to go abroad without submitting any applications to Canadian medical schools. Several related the experiences of family members who had unsuccessfully applied to Canadian medical schools as a key factor in their decisions to go abroad.

> I didn't apply to the US or Canada because I felt that I had seen my cousin apply and try and I knew her grades were slightly higher than mine. And she had had interviews and gone through the process and still didn't get a position. So I thought well, if she isn't getting it, then I didn't think my chances were very high either. And so I just decided to go. (CSA-16)

Participants who had been unable to gain a seat Canadian medical schools before going abroad described feeling a sense of rejection by the Canadian medical education system. Despite the passage of time, speaking about these episodes brought back painful memories.

> I mean I'm not going to lie; I think there was a little bit of bitterness initially. You know, I thought, well OK, they're not going to pick me I'm just going to [go]. Like I don't necessarily have to come back because [country], it's a developed country just like Canada is, right? (CSA-17)

Several contemplated not returning to Canada.

> When I came to [country] for the first time, I had such a bad taste in my mouth and I was so jaded that I was fully prepared to do all my training in [country] . . . . And have my career here and never look back. I was so disheartened by everything. (CSA-4)

Many of the participants were wait-listed by Canadian medical schools. For these participants, the sense of rejection was even more intense.

> This one year, I had an interview and I was wait listed. And then the next year when they just said no, I think I was really more being very disheartened and disappointed and, you know, just like how, how can one year I be good enough and the next year I'm not good enough? (CSA-8)

> You just get so devastated each year you're being rejected. And then they keep telling [you], "Oh just reapply, reapply." . . . . It was pretty devastating. You wait for that day when it's going to be posted on the computer, like green or red or yellow. And then I would get that yellow, that you're wait listed so I'd wait the whole summer. And I think the hardest part about that is you put your life on hold, pretty much. (CSA-13)

For most participants, the theme of rejection began with their unsuccessful quest to enter medical school in Canada. As I will demonstrate in the following sections, rejection is a recurring theme throughout participants' experiences.

Coming home- the journey to residency. As noted in Chapter 1, CSAs must complete postgraduate residency training in Canada to become licensed independent practitioners. In this section, I shall describe the journeys taken by participants in their quest to enter Canadian residencies.

All participants, both CSAs and immigrant-IEPs applied for residency positions through CaRMS. Participants described that their preparations for CaRMS began early in their medical school years; some described starting their preparations almost from the

beginning of the medical school training. The majority of the CSA participants applied for residencies in Canada immediately after completing their training abroad.

The ability to complete elective rotations in Canada was identified as an important part of a candidate's application. Participants worked hard to cultivate networks of contacts in order to secure elusive elective rotations. They gleaned information from senior medical students and passed their contacts on to those coming behind them; "the networking from the people who had matched the year before you was always huge" (CSA-13). Participants devoted considerable time and attention to securing electives. "I started years in advance. Planning, strategizing, gosh what didn't I do for CaRMS? I mean my entire life for 5 years in [country] was dedicated to making myself more competitive for that one application" (CSA-4).

Participants recognized that Canadian electives would be essential to crafting a superior application. Not only were electives and references needed for a candidate's CaRMS application, they needed to be in the best locations, with the right supervisor; one who could provide a reference letter with perceived influence on one's file evaluation.

> There was a definite need to get letters and getting elective times in Canada, in institutions that were recognized, so such as [university] or [university] . . . to get reference letters from them . . . . And preferably from Program Directors or someone who's in the teaching aspect as opposed to any random family physician. (CSA-12)

Ideally, electives would be in a location where a candidate might have a better chance of matching.

> All of the Canadian students in [country] were very aware that we definitely had to be very proactive about it . . . . And doing an elective in a place that you are likely to get into or places that have like available spots. For example I didn't really do many electives, if at all, in [province] because to me that probably wouldn't necessarily help my chances because it was hard to get back to residency in [province] so that's why I pre-emptively organized things in Saskatchewan and Manitoba because those were the places that I knew, by the time that I had applied, that they had just one stream of applicants. (CSA-10)

Most of the six participants who chose to remain abroad after graduating from medical school did so with a view to their future. Gaining additional clinical experience abroad was seen as important as was the opportunity to solicit valuable reference letters.

> I thought it would help me to do one year of a rotating internship in [country]. So I figured that I would get extra work experience and also get reference letters and create a reputation with my attendings who would have had probably more direct contact with me during the rotating internship than during my 2 years of clinical in med school. (CSA-17)

By the end of their medical school years, participants were very aware of the limited prospects to return to Canada for residency training. They recognized that they had taken a huge gamble in going abroad. "You really have to ace all of your exams. Ace every single one of your medical school examinations. Have glowing letters of reference. And cross your fingers and hope for the best they look better than the other 3,000 applicants" (CSA-4).

Participants perceived a second rejection through the CaRMS application process. They identified the limited numbers of programs open to them as a rejection. They also identified that they were less welcomed in certain provinces.

> B.C., Manitoba and, I think, Saskatchewan came over and talked to us about coming back to Canada . . . . So at the time there were probably close to 200 students who were North American in last two years of medical school in [country]. [The] Saskatchewan and Manitoba people got up and said, you know, we really are interested in having you in our program . . . . And then the guy from B.C. stood up and said, "Yea, we don't have a doctor shortage. We really don't need you." And that was it . . . . That was a huge slap in the face. (CSA-1)

Participants perceived that Manitoba was more welcoming than most other provinces. They identified the open competition for seats in the first iteration of CaRMS as evidence that, "Manitoba was different . . . . It was very equal in Manitoba. Manitoba never separated out the two. Like you never made a distinction. It was always, I think, a fair competition in Manitoba" (CSA-6).

As a group, these individuals were thrilled to have matched to the University of Manitoba. They perceived that they were welcomed as IEPs. In particular, they were proud of having competed equally with Canadian medical graduates and having won their seats fairly.

Rejection by Family Medicine residents. Some IEPs perceived further rejection by some Family Medicine residents. As noted in Chapter 1, beginning in 2007, IEPs were able to compete directly with Canadian medical graduates for seats through CaRMS. Between 2008 and 2012, IEPs comprised 46% of the total incoming resident

cohort and in two of these years, made up half or more of the Family Medicine residents. Although historically some Canadian medical students go unmatched each year, during this period, large numbers of medical students went unmatched in 2008 (13; 14.8% of the University of Manitoba medical school graduating class) and 2012 (10; 9.1% of medical school graduates). This created great concern amongst the graduating Manitoban medical students and left many with the perception that IEPs had stolen residency seats from local graduates. In contrast, the incoming IEPs perceived that they had competed on a level playing field and had been accepted as the best candidates.

> Well, I think at the time that we applied there weren't two different streams so . . . most of us felt that, I think I really liked the fact that we would be considered the same. I mean, only the best applicants will be chosen. (CSA-10)

As a result, some University of Manitoba graduates in Family Medicine were hostile to incoming IEPs. "It's so tangible. It's like such a, 'us versus them' " (CSA-10). Some IEPs were not the direct recipients of rejection but did perceive a chill in the interactions between IEPs and U of M graduates.

> I never actually even got like openly discriminated against by CMGs but I think there were some in my program that were upset that we matched in Family [Medicine] in first iteration and they didn't . . . . It was never open hostility, but maybe not warm and fuzzy either. (CSA-5)

By the end of participants' residency programs, the hostility had eased but not completely disappeared. "At the end of the day, we came out, most of us being like friendly to each other but a number of people, I felt like they never quite got around to getting over it" (CSA-10).

For one participant, the repercussions of this hostility surfaced years after completing residency.

> I actually was in [city] and I met a U of M graduate, who brought this up with me, and I was like, "Oh my goodness", years later, there was still this, he clearly was upset about it. He still talked about it . . . . And I said I had done my residency in Winnipeg. And he said, "yes so was I, I was there too." But he had done his residency somewhere else; he was [from] the same year as me. And then, he said, "Oh wait, where did you go to med school" and I said, "Oh, I went to [country]" and then the whole tone of the conversation totally changed based on that. (CSA-18)

Thus, CSA participants experienced three levels of rejection: firstly, in not being accepted to medical schools in Canada; secondly, in competing to secure seats in residency programs after completing their medical education and thirdly, from fellow University of Manitoba Family Medicine residents after having matched to residency. In the following sections, I will describe the perceptions of the study participants that they were stigmatized at the University of Manitoba.

Stigmatization of Internationally Educated Physicians

The rejection perceived by the study participants would be experienced by any IEP trying to secure a Canadian residency position. Yet, the sociopolitical circumstances unique to Manitoba created an environment that was hostile to these newcomers. In this section, I shall describe how the learning environment was primed to stigmatize IEPs.

Participants were taken aback by the reception they received both from attending physicians and other residents whey they started their clinical rotations. Having matched through an open competition, they felt they would be welcomed into the University of Manitoba.

> I feel like this is something that I didn't necessarily expect. I found, like from day one everybody was like, "Oh like where did you go to school?" "Oh, you're an IMG." Like, Oh my God. Like, I heard that like twenty hundred million times during my residency. (CSA-10)

Being asked about the location of one's training might not be considered as negative but for the fact that participants perceived a sense of stigma associated with being an IEP.

> Every time I started a rotation or every time I met an attending, I knew residency was going to come up. Yea. And again and again. So that part was, it almost like brought all those feelings back to life. It's like, oh yea, I'm an IMG so you can have like certain connotations about me and I'm going to have to, you know, try extra hard. (CSA-10)

Throughout their clinical training, participants identified that they were labeled as IEPs, which required them to prove themselves repeatedly.

> I felt like I had to, I had to prove myself in every rotation and overcome the IMG label. Without a doubt, like within the first like 30 minutes of any rotation, it would come out that I was an IMG somehow . . . . That label would eventually resurface again and you'd have to kind of fight it, like you're here to prove yourself again and again. (CSA-4)

A unique Manitoban perspective contributes to this line of inquiry. Historically, few medical graduates from other Canadian medical schools have matched to residency programs at the University of Manitoba. As demonstrated in Table 5 (Chapter 3), only 7.2% of the residents accepted into the Family Medicine program between 2008 and 2012 were graduates of other Canadian medical schools. This creates a unique situation in which the resident body is almost completely divided into two groups: University of Manitoba graduates and IEPs.

As one participant pointed out, "They usually put two and two together and figure out you're an IMG pretty quick . . . . I mean the reality is very few people from other medical schools in Canada come to Manitoba to do residency, right?" (CSA-4). This reality creates, in essence, two resident bodies, one composed of local graduates, well known to each other and to attending physicians, and the other composed of IEPs. This sets the stage for residents to be divided into insiders and outsiders.

Verbal mistreatment. In addition to being repeatedly asked where they had trained, participants reported that they were frequently the recipients of dismissive comments. These came from attending physicians, hospital staff and other residents.

> Someone specifically said to me, they said something to the effect like, how come you had to go to med school in [country]? Like, why didn't you get in here? Why were you such a failure that you couldn't get into med school here? (CSA-13)

This participant shared one incident when nursing staff intervened.

> So on rounds I was always asked questions, tons and tons of questions. And so [the charge nurse] said, "Why are you always asking [name] the questions? Why

> aren't you asking anybody else? . . . . [You've] got all these other residents, ask them." (CSA-15)

Sometimes the comments were directed to residents as IEPs while other comments targeted them as Family Medicine residents. "He did say something that really irked me, because I was a Family Medicine resident. And he said something that, about how Family Medicine doctors are useless. And that's why their patients all end up in hospital" (CSA-17).

> Like, the nurses on Peds were awful but I think they're awful to anyone that wasn't a Peds resident. It had to do with the fact that I was a Family Medicine resident. And they didn't know I was an IMG. It was just the general kind of policy, like this is how that rotation runs. They were awful to anybody who wasn't a Peds resident. (CSA-13)

At times, participants were criticized for not knowing how to practice according to the established norms for Winnipeg teaching hospitals. As described in Chapter 4, this reflects the practice gap with which participants entered residency.

> I remember some consultant trying to explain it to me once after I had been on call all night. And of course I didn't do call properly because no one had told me how to do call properly. And how to do admissions and of course it's like 12 noon and I'd been up for a day and a half. And he's like, yelling at me because I haven't done the admission properly. I haven't followed up on such and such properly. And like, "You can't leave until this is done!" I can't think right now! (CSA-9)

Sometimes, residents experience difficulties in their personal lives that affect their performance in the workplace. In one participant's experience, the impact of personal stressors was unfairly attributed to being an IEP.

> My preceptor just said, "Well, I think it's because you're an IMG that you are behind." I just wonder what if there was a Canadian grad in my situation, what would have been said to him? Would they have said, "Well it's because you went to University of Manitoba for your undergrad, that's why this is happening?" I just don't know what the response would have been. (CSA-16)

Such negative comments created a climate of fear for some participants.

> And I was deathly afraid of the person who was going to be filling my evaluation out. Because he had not once, like, said positive words or encouragement. Never was given any feedback other than like, "Oh you're stupid." I mean, I was repeatedly being told by my attendings that, "You just don't get it. You just don't get it do you? Like your knowledge is great. You know, the details are there. Like you understand medicine, [your] medicine is sound. But you just don't get it." (CSA-4)

Sometimes participants felt the only way to survive was to behave as negatively as did other residents.

> My first month [on Internal Medicine] was horrible. My second month was better. I figured out more what I had to do and how I had to manage people properly. And I just accepted the fact that like you just kind of needed to be angry to function. Because if you're not, you're just bullied all the time and you're just,

> everyone's always very aggressive towards you so you have to be aggressive back or you just kind of get walked over. (CSA-9)

Others described witnessing belittling comments or behaviours while on clinical rotations. "Just the response[s] from the attendings. They might not take them seriously or kind of ridicule them or just not treat them with the respect that they deserved" (CSA-14).

One participant recalled witnessing a particularly poignant episode in which another IEP resident receive a tongue-lashing from an attending physician.

> She was really struggling with seeing someone in the triage for preeclampsia, like what investigation[s] to order, what questions to ask, really basic stuff. And so, anyway she called the consultant, one of the consultants who is notorious . . . . This person, I don't want to wake her up. So anyways, she called Dr. [name] who basically was screaming at her on the phone. I could actually hear because I was right next to her on the phone trying to help her do her history. But of course I can't speak to her, because I wasn't the one, you know. So anyways, basically the resident was crying. It was really hard to deal with. Oh my goodness. (CSA-3)

Visibility & Invisibility. Many participants identified that being born or raised in Canada conferred an advantage. They could blend in with the Canadian medical graduates and thus could be invisible. Invisibility depended upon sounding "Canadian", looking "Canadian" and acting "Canadian". Invisibility was protective.

> This was probably, you know, my background. Like I'm from [city]; English is my first language. I blended in with the rest of the U of M graduates. I didn't

> maybe have a lot of certain negative experiences. So it was, I mean, less difficult for them to pick or sort of pin something on that. (CSA-7)

Some participants perceived that being of Anglo-Saxon background conferred an additional advantage. "I would say the fact that I am not a visible minority definitely worked to my advantage" (CSA-13). Participants recognized that their invisibility was tenuous; they could be discovered at any time. "You can get away with it, yes, until somebody asks you. Until somebody asks you where you're from" (CSA-12). On occasion, a slip of the tongue could give away one's status as an IEP.

> I remember, one time I asked for a torch on Obstetrics. You know, asking a nurse, "Can you hand me a torch?" and she's like, "What?" It was like, "Oh yea, we say flashlight in Canada." She's like, "What is that?" "Oh, I went to med school in [country]." . . . . People figured it out pretty quickly. (CSA-13)

Not all residents could be invisible. Just as the CSAs identified they could be invisible, other residents were identified as being visible IEPs. "But the experience of the intimidation based on being different, would probably be restricted to a few. Non-white. Non Canadian-bred person[s]" (I-IEP-1).

> I can't speak for them. But I think it would be different [for them] than the people that were invisible IMGs. I think they had more challenges probably, but not just because they're IMGs, but because of other things like language, culture; all of those things that came along with that, as well. I didn't actually experience anything personally. But I did see it happen to others; let's call them more visible IMGs. I probably saw it everywhere. (CSA-14)

What was it that made an IEP visible? Participants identified that language was the primary identifying feature, with ethnicity and skin colour as secondary features. "If you had an accent, you're a little bit different in terms of ethnicity. Even the way you maybe dress or whatever, people would definitely treat you different. Especially with accents and especially with difficulty with English. One hundred per cent!" (CSA-12).

This participant identified that ethnicity could contribute to IHD. "I would like to say skin colour wouldn't matter but sometimes it did. There's a few in our program [who] were certainly treated poorly. And it was based on what they looked like" (CSA-15).

Not all participants perceived a difference in treatment based on visibly identifiable features. As CSA-9 states, "They don't care what you look like, it's are you competent or not? Prove to us that you're competent." In this case, being visible meant being labeled as a less competent IEP.

Some participants found that having other more visible residents on clinical rotations with them could be protective.

> When I was doing Internal Medicine, you know, it almost seemed like my transition was easier because there was [sic] two other residents who were clearly, you know, they looked different. Were older. Spoke differently. And it almost [was] like they got the short end of the stick and it almost made my transition a little easier because all of a sudden I wasn't, like, at the bottom of the pack. (CSA-10)

English as an acquired language. Difficulty in communicating in English was felt to be the most common way that residents could be identified as IEPs. Those IEPs

with language issues faced many challenges. "The person that I was on Internal [Medicine] with was a visible minority. English wasn't [her] first language. And [she] had a rough time. . . . [She was] a very smart person but it just didn't come across when presenting. Like [she] couldn't present in the standard way" (CSA-13). As noted in Chapter 2, language fluency is essential for effective communication, both between physicians and their patients and between members of the health care team. Participants were acutely aware of the challenges facing IEPs who were not fluent in English. "Accent does not equal stupid. Or lack of knowledge" (CSA-15).

> And I feel bad because like I think most of it was like, you know, just the language barrier . . . . I definitely remember there was a couple of times they just had trouble with English and with maybe their interaction[s] with the nursing staff. (CSA-10)

Lack of fluency with English created more barriers than just with communication. Participants witnessed episodes in which other residents were excluded from clinical experiences, undermining their learning opportunities.

> If their language skills were poor . . . there was a lot of, you know, not giving them the complicated cases, taking away some of their learning opportunities or really excluding them from discussions or not really making accommodations for them, for their learning. (CSA-4)

Despite the challenges the participants experienced, they expressed concern for other residents.

> I know what it's like to come into a new system and not know how anything really works and try to figure out as you go but then not being able to actually

> speak the language completely fluently while doing this would be very challenging. (CSA-4)

As noted in Chapter 2, communication skills have been identified as a challenge for IEPs. But based on the perceptions of participants in this study, it appears that communication challenges contribute to the stigmatization of IEPs.

Vulnerable MLP-IMG residents. As much as participants felt they experienced difficulties, they readily recognized that there were others who suffered more than they. Residents in the MLP- IMG [17] program were identified as being the most visible and vulnerable of residents.

> I did have some residents [with me] when I was on Obstetrics. They [the Obstetrics residents] would never call some of them. Because they weren't able to make just general chitchat with other Obstetric residents, with English being their second language. I was really concerned about their wellbeing. (CSA-16)

Others perceived that "in certain situations and [with] certain attendings, they [MLP-IMG] would kind of just be dismissed as not knowing anything. It's just, "You're an IMG, I don't have time" (CSA-1).

As well, participants recognized that having an MLP-IMG resident on service with them could be protective.

> This might sound bad because when I did my Internal [Medicine rotation], there were a couple of the foreign IMG residents [MLP-IMG] . . . . And I feel bad saying this; it was almost like they made me look better. I feel like I almost was

[17] Residents in the MLP-IMG program are predominantly immigrant IEPs with prior medical practice abroad. They undertake one year of retraining in return for which they provide four years of service to underserved areas of Manitoba.

> like hiding in their shadow a little bit . . . . All of a sudden I wasn't in the IMG group. (CSA-10)

Participants were able to use their clinical experiences from their Family Medicine home program as a way to enhance their knowledge of the medical system. However, residents in the MLP-IMG program do not have a home program. Instead, they spend twelve months in rotating through clinical teaching services. CSA-7 made these observations during the Obstetrics rotation:

> I can remember the other IMG residents [MLP-IMG] that just did the one-year program. And oh my goodness, did they flounder . . . . And you could just see the difference between us; at least we'd done some deliveries during our Family Medicine Block [Time]. We sort of knew the hospital. We were sort of familiar with some of the attendings. And no one really, sort of, was there to look after the foreign IMGs through the one-year program and they really struggled. (CSA-7)

The Resident Hierarchy. Based upon their experiences, participants perceived the existence of two hierarchies of residents at the University of Manitoba. Similar to the dual learning curves they needed to navigate as they entered clinical practice, IEPs recognized the presence of dual hierarchies, one based on status of one's residency program and the other based on the country of one's international medical education.

They identified that residents in Royal College programs occupied the top rung. As CSA-12 describes it, "you're kind of looked a little bit differently, no offense, but, with other residents I think there was definitely a little bit of a hierarchy, especially with specialist ones." Family Medicine residents were perceived to hold a lower status than

Royal College residents. As this participant discovered, "I think probably that was the first rotation where I got the feeling of, 'You're just a family medicine resident' " (I-IEP-1).

Furthermore, they perceived that IEPs held lower status than Canadian medical graduates. Some participants perceived that all IEPs occupied the same level of status, "It's just you're an IMG and you're kind all in one pool" (CSA-9), while others identified a clear distinction between the status of Family Medicine IEP residents and that of those IEPs in other programs.

> Once people did learn that I was a Canadian student who studied abroad, there would be a label with that, but it wouldn't be nearly as bad as like the label that people would get if they were like IMG-IMG [MLP-IMG]. As bad as I had it, it's not nearly as bad as some of those guys. They weren't given many chances to succeed before they were considered a failure, if you know what I mean. (CSA-4)

How did IEPs recognize the existence of a hierarchy? They perceived it from the body language displayed by attendings and residents during ward rounds, "there would be a lot of eye rolling" (CSA-4), from the lack of opportunities provided to IEPs, by "not giving them the complicated cases" (CSA-4) or by not calling them to attend deliveries while on Obstetrics rotations.

The degree to which the hierarchy was felt varied between participants and by the type and location of the clinical rotation. As this participant describes, "I mean it's really hard to make a blanket statement because certain rotations I would feel that way and other ones I wouldn't" (CSA-12). Off-service rotations were identified as being the predominant location, "it's more in the off-service rotation[s]" (CSA-9), although it could

be perceived in Family Medicine rotations as well. Participants most frequently identified those off-service rotations with high clinical demands, such as Internal Medicine, Obstetrics and Paediatrics, as the locations where they most often perceived the existence of a hierarchy. "I felt it on Internal, [from] the residents" (CSA-12). As this participant notes, "there was always that air of superiority with the Obstetrics residents" (I-IEP-1).

Some participants described instances in which University of Manitoba medical students reinforced the hierarchy.

> There were three U of M final med students and myself. And Dr. [name] was great about evenness, but they, all three of them, said, "You're an IMG." It was like, OK . . . . One of them was very helpful. The other two kind of said, "Oh", and dismissed me. So it was very frustrating. (CSA-1)

Other participants found otherwise, as did CSA-12. "But I never felt it from med students. So it's different. Why? I don't [know] why I felt the difference between them and residents, because they're essentially the same people, you know" (CSA-12). By the time University of Manitoba medical students become residents in Manitoba, many appear to have accepted the validity of resident hierarchies and to contribute to their perpetuation.

> And I think probably that was the first rotation where I got the feeling of you're just a Family Medicine resident. Like you're probably a second-class resident. There were times when the senior resident would send me to get her lunch bag. And now looking back, it's not appropriate. I shouldn't have been getting a lunch bag. I'm not here to do that. (I-IEP-1)

Participants themselves identified a secondary hierarchy which ranked IEPs based on the country in which they completed their medical school education. "To be perfectly honest, there seemed to be some stigma associated with people going to medical school in certain parts of the world; less so in other parts of the world" (CSA-4).

> I do feel depending on which school you went to as well, the level of discrimination and harassment changed. Yea, so definitely the people who went to the Islands [Caribbean] felt a lot more discriminated against compared to people who went to Australia and UK. (CSA-17)

This seemed to strike some participants as inherently unfair.

> This is a horrible thing to say, but I've heard it said by people, "Oh you're an IMG; oh, but you're from, oh, you went to [country]; that's different, you know. Oh, you know, you're an IMG, but Oh well that's OK, that doesn't count." But yea, I'm still an IMG. (CSA-8)

This hierarchy by country of training was reinforced by comments from attending physicians, but "more so from the residents" (CSA-17).

> There are tons of international medical schools, very different in level of medical education. Generally the Irish, English schools tend to be close to the Canadian kind of standard . . . . Poland, Caribbean are not quite as good. This is not my personal opinion, it's just been, I've asked doctors after I've worked with them, and this is the sense I've gotten back. (CSA-1)

Most participants identified their medical school as being one of the better schools, regardless of where they trained. This may have been one means of preserving their self-esteem during times of perceived lower status.

The hierarchy of residents contributed to the expression of stigma, in the perspective of some participants. “There was definitely a difference like if they knew you were from (a) IMG, (b) Family Medicine and then (c) from the [name of specific FM] program. I think all of those had some kind of weird stigma to them for other people” (CSA-12).

Not all participants felt they were personally stigmatized. “I know that it is out there for people. I’m not pretending that it doesn’t exist. It just didn’t exist for me” (CSA-5). As this participant shared,

> It depends on the individual I guess. But there is a general feeling that IMGs who are older in age and appearance are very distinct from either the Canadians studied abroad or Canadian IMGs. Most of them feel that they are discriminated. But personally, harassment [and] intimidation are things that I did not personally experience. (I-IEP-2)

In contrast, CSA-12 felt that some of the stigma comes from IEPs themselves.

> I think a lot of it isn’t just stigma literally from University of Manitoba people but from ourselves, especially if you have that sense of rejection . . . . You already have that kind of built up to a certain extent. You’re inferior, you know . . . . An issue is your own stigma about yourself being an IMG. So it’s partly on ourselves [sic], as well, as IMGs to make sure that you prove yourself too. (CSA-12)

It appears, then, that some participants have internalized their stigmatization to the degree that they have accepted this as the norm.

The Impact of Stigmatization

What was the impact of these stigmatizing experiences on participants? They shared that they had felt depressed mood, self-doubts and loss of self-esteem.

> You know, you can blend [in] and look the same. But I still felt like, at some point or another, it always came up. It just did. And someone was going to ask me or maybe do or say something . . . and it was almost like you would bring up all those feelings, those like [feelings of] inadequacy all over again. (CSA-10)

For CSA-7, stigmatization was "feeling not validated or appreciated, not acknowledged for how much it takes, I guess, to get where people are." Some participants internalized negative comments to the detriment of their self-esteem.

> I always respect my preceptors and I appreciate my preceptors' evaluations so I actually took it to heart. And thought, "Oh maybe this is what's wrong. Maybe [it's because] I am an IMG. So I think that it actually ruined my self-confidence. (CSA-16)

The verbal torment and the anxiety it caused them adversely affected participants' wellbeing.

> I mean Internal Medicine . . . wasn't a very positive experience. No. And I remember every time, every time post-call, I would get panic attacks before I had to go on round[s] because it meant I had to present patients . . . . But you started to, well, . . . fear presenting patients, kind of, because you just thought "What's going to happen?" (CSA-15)

They recognized the impact not only on themselves but also on those IEPs in other programs.

> I think one guy was pretty depressed in his first year. Not in Family Medicine but outside. And you know, [he] was basically told, you know, "We should never have taken you into this program. You're not good enough. You're not doing well enough . . . . And you know, like next year we're going to revisit if we actually want to take IMGs into this program or not." (CSA-17)

Participants perceived that others, such as CMG residents and attending physicians did not understand what they were experiencing. "I don't know if . . . people really know how difficult it can be. You don't know it sometimes until you go through it" (CSA-17).

Coping strategies. How did participants cope with the stigmatization they experienced? They employed a number of coping strategies. Some participants chose not to dwell on their experiences.

> Humans are not perfect. Like there's no perfect situation, no perfect environment. And I try not to dwell on those aspects of the whole treatment. I mean, I saw that discrimination and I just found a way to get around it without necessarily dwelling on it. And that's often what I've done in similar situations. (I-IEP-1)

Some chose not to take things personally. Rather, they recognized that other individuals might be flawed. "Generally, I would l say I'm very agreeable with preceptors, so even the ones that are a little bit jerk-ish. You know, it's just their personality, not taking it personally" (CSA-5).

Some found strength in being a member of a large group. As CSA-10 reports, "Like every time they would ask us, "Oh you're an IMG?" I would reply, "Oh yea, me and half my class." Others would challenge those who were critical of IEPs.

> But I think I was always quite open about the fact that I was an IMG. Because you'd hear what they talk about like, "Oh the IMGs," . . . something disparaging. It's like, "I'm an IMG," right? [What] are you going to say now to me now that you know that I'm an IMG?" (CSA-9)

A number of IEPs tried to remain invisible. "I didn't really tell anyone that I was an IMG, for one thing. Definitely, not on Internal. Not on Obs" (CSA-13).

Others turned to the social supports they made coming into the IMG Orientation. "It's really important to get through this with friends" (CSA-5). And CSA-4 identified, "I only really started to thrive in residency once I started asking questions of residents around me and getting their suggestions and help and support."

Keeping low and avoiding conflict was frequently employed. Some avoided conflict by not making complaints. "Coming in as an IMG, I didn't want to make problems. And I didn't want anyone to ever label me as "Oh, that IMG is making problems" (CSA-16). Others found it best to internalize their experiences so as to remain focused on the residency. "I think, to some extent, I've made myself comfortable [by] keeping all my memories and everything to myself and just moving on" (I-IEP-1).

Although participants recognized that these comments and behaviours were wrong, they were not comfortable in reporting them. Many, but not all, were aware of the system for reporting intimidation, harassment and discrimination at the University of Manitoba. When asked if they would have had confidence in the official reporting system, most replied in the negative. "Not at all. It would have been pretty obvious who was making the formal complaint and word gets around. The medicine community's a small community" (CSA-4).

> I don't think so. Because trying to analyze the situation and trying to take it to the next level is just about blowing it up. And I tend to shy away from that. So I don't believe anything would have come out of that (I-IEP-1).

As this participant shared, the fear of consequences prevented IEPs from speaking out against IHD.

> I probably could have done more speaking up. I think the fear is that, if I looked at myself now, and I looked at myself in the Health Sciences [Centre], like [in] the ER and Internal Medicine, would I have spoken up, probably not. But I did speak [up] near the latter part of my training. (CSA-15)

The responses of these participants echo the findings from the PARIM (2012) study that revealed the lack of confidence University of Manitoba residents expressed in making complaints of intimidation, harassment and discrimination within the university (Berg & Ziesman, 2013, July).

As described in Chapter 4, participants worked on managing the impressions they gave off during their rotations. When it came to dealing with stigmatization, participants did not want to create any negative impressions.

> There definitely is a stigma attached to being an IMG, one that we are not as smart as Canadian Grads. And again that's why I've always tried to be very well prepared. I've tried to be on top of my readings. I've tried to be on top of everything so that I can prove myself and I won't ever have to hear that. (CSA-16)

Developing and maintaining a good reputation was essential to maintaining a good impression.

> You want to create a good reputation. You don't want to be evaluated negatively because . . . you don't want to be failed. And that's why you don't talk back, especially on those off-service rotations, right . . . . I was scared about saying anything. (CSA-17)

Thus, conflict avoidance also contributed to impression management for participants.

Waning Stigmatization with the Passage of Time

Although the focus of this study was on how participants experienced the transition into residency, some participants did speak about their experiences in their final year of residency, particularly in regard to the stigmatization they had experienced during their entry into residency. They indicated that this stigmatization lessened with time. "There were some situations where, yea, I was very pleasantly, like, treated as an equal. But it wasn't until the later part of residency that I was really treated as an equal" CSA-4. I-IEP-2 perceived that residents were better treated during second year rotations. "And especially if the atmosphere of the place was, friendly like, surgery, which was my last rotation. I mean, people said it's very tough. I found it a very relaxed and very useful learning experience with no hiccups, no problems" (I-IEP-2).

And, as CSA-18 describes, the perception of rejection of IEPs by other Family Medicine residents disappeared with increasing time spent working alongside University of Manitoba graduates who were also Family Medicine residents.

> I can say that when we got there, it was IMGs vs. the Canadian grads and I remember showing up in Family Medicine thinking there are two distinct groups

> here, but we really dissolved that by the end. Not even at the end, by halfway through the first year. (CSA-18)

Having completed their training and having entered independent medical practice, did participants perceive that they were no longer stigmatized? Unfortunately, some participants perceived this stigmatization continued after graduation. As CSA-2 stated, "You don't actually ever get over it." This participant found that the label of IMG persisted when applying for a license to practice. "You never really get over it because even applying for registration here in [province] I am still an IMG. And I still had to go for an IMG orientation. So, it's a label. It's stuck" (CSA-1). Not all participants perceived the stigma after graduation.

> Certainly not now, not with the colleagues that I work with now and not the patients that come [sic] in to see me . . . . Most, I guess, don't know that I was an IMG . . . . But no, no, I don't feel like there's a stigma. Not anymore, anyways. (CSA-5)

Similarly, I-IEP-2 stated,

> "I've heard a lot of complaints from the IMG stream, about discrimination and intimidation in the wards. I strongly disagree. Maybe individual cases, isolated, sporadic. But I strongly feel that is not a general policy or anything otherwise, why select these people and let them come into the system? It doesn't make sense. (I-IEP-2)

These two participants had not perceived that they were discriminated against during their residencies nor did they perceive that they were stigmatized as IEPs. This suggests that those who were most affected by discrimination and stigmatization during

their training may continue to experience it in their professional lives while those who did not have escaped unscathed.

Countering Stigmatization for Future Residents

Participants appeared motivated to help improve the learning environment for future Family Medicine residents at the University of Manitoba.

I asked participants what motivated them to take part in this study. They shared that it was important to them that the stories of their struggles, and those of others, be shared widely. "I think I wanted just to talk about this because I know that there are people that did have a really rough time. And I think I didn't, so I just wanted to make sure that was heard" (CSA-13).

> People see somebody who didn't get in and I've, you know, "weaseled" my way into the back door. Well, that weaseling process was so unbelievably hard and risky that I think it deserves a little bit of respect. And if only people actually knew what Canadian students who've studied abroad have gone through to get to this point, just to set foot on the hospital and on the ward . . . . People really didn't understand all the extra challenges that we face. So if we can somehow fight that stigma, I think it would go a long way in helping IMGs feel more welcome and motivated and succeed. (CSA-4)

Participants were motivated as champions for future IEPs.

> It's been a hard journey. It's not been easy. Sure it's different when you come at it from the other side, but it takes a lot of blood, sweat and tears to learn the system. Learning not just the system, but [also] a different way of learning . . . .

> And if my insight[s] can somehow help somebody else, then that's what I want to do. (CSA-3)

CSA-1 described a sense of relief at knowing IEPs' experiences were being examined. "Oh my God, thank God someone's finally looking at this. Actually paying attention. The system that's [been] put in place is not necessarily working for all of us" (CSA-1). Others felt it was important for other potential CSAs to understand the barriers they would face in attempting to return to Canada for future training.

> I just feel like I'm kind of an advocate for IMGs because I think it's important for people here to understand what it's like and to understand the barriers that people face if you're maybe not lucky enough to get a medical school spot here. And so you've done what you feel you need to do to get where you want to be in your career but then there's all kinds of roadblocks that you had no idea you were going to hit. So I think it's kind of, it's important for people to know [about] that problem now. Because it used to be that the bottleneck was med school. And the bottleneck is not med school anymore because you can go overseas. The bottleneck is residency. (CSA-8)

Some identified that IEPs have been a neglected group. "I wanted to help other people. It's admirable to be able to look and help a group of people who other people may not want to help as much, for lack of a better way of saying it' (CSA-3). Others felt an obligation to give back to the program.

> I felt like a responsibility first of all, as an IMG. I definitely feel, you know, an obligation but happily wanted to do it. You know it [residency training] is

> something that's been given to me to get me where I am today so obviously I want to give back as much as I can. (CSA-12)

Some described wanting to improve the system for future IEPs. "I think anything that can be done that can make it better for other people is worthwhile" (CSA-9). CSA-4 felt that "If people would understand our background, I think it would go a long way into us being welcomed into the system and integrated into the system" (CSA-4).

I asked participants what advice they would like to provide to future IEP Family Medicine residents? Their answers revealed their concern for the wellbeing of their future colleagues. "Form a support group, especially when things first start off and you get pretty busy and don't see each other all that much" (CSA-4).

> Make sure you have a good group of people that are going to be supportive around you because there are going to be times when you are isolated and the only time you're going to see someone is if you call them up . . . . And take care of yourself. Ultimately, you can't help other people if you can't help yourself. (CSA-3)

They identified that incoming residents must understand the challenges they will face in learning to function as residents in a new system and that with perseverance, they would succeed.

> I would say, this is a steep learning curve when you're learning the mechanics of something. Know that you have to learn a lot of the nuts and bolts and the mechanics of it. It doesn't reflect on it how well you know medicine. You've just got to get through that. (CSA-11)

> I would do what Dr. [name] did for me. And say, this is your trajectory. You are going to feel like you don't belong here and that you're not good enough at the start. But you will end up the same as everyone else. It's just going to be, your journey is going to be a little different than everyone else's. (CSA-1)

CSA-9 shared this advice to incoming IEP Family Medicine residents: "Realize that you are going to work harder and be more frustrated than you've ever been frustrated in your life. But you just kind of have to suck it up and do it and you will survive" (CSA-9).

Participants identified incoming residents must have a clear understanding of what constitutes abusive behaviours.

> I would make sure that the resident knows, or I would suggest that resident really read up on what constitutes normal interactions and behaviour, versus what is actually abuse from coworkers. What can be done about it and who to talk to about it, [to] know what the limits should be? (CSA-4)

Summary of participants' experiences

The participants in this study related multiple sources of rejection in their journeys to residency. They perceived that they had been rejected by the Canadian medical system, both through their attempts to enter medical schools in Canada and in attempting to enter residencies after completing their medical education abroad. Despite the passage of time, the emotional effects of this rejection were still fresh for these participants, particularly for those who had been wait-listed for seats in Canadian medical schools.

Participants described their experiences in the learning environment at the University of Manitoba as stigmatizing. They described their excitement at having been accepted into the Family Medicine residency program and their pride that they had earned their seats through an open competition with Canadian medical graduates. They described being unprepared for the hostile reception afforded them by University of Manitoba residents once they finally began their clinical rotations.

As CSAs, many of the participants could be invisible at times by blending in with the graduates of Canadian medical schools. However, their invisibility was always at risk of discovery. Questions surrounding where they studied medicine or the inadvertent use of non-Canadian terms could reveal them as IEPs.

Yet some residents in training could not be invisible. Those who had immigrated to Canada, those who spoke English with an accent or as an acquired language and those who appeared to be different always stood out. They were reported to be the most poorly treated of residents: denigrated, denied learning opportunities and ostracized by other residents.

Participants perceived that University of Manitoba residents, some within Family Medicine but particularly within the Royal College programs of Internal Medicine, Obstetrics and Paediatrics, were most hostile towards them. They perceived the presence of a residency hierarchy with Royal College residents at the apex, Family Medicine residents one rung lower and IEP residents occupying the lower rungs. Those residents in the MLP-IMG program held the lowest status and were perceived to be the most vulnerable of residents in training.

The impact of this stigmatization extracted a toll on participants. They experienced depressed mood, low self-esteem and high levels of self-doubt. They employed various coping strategies, foremost of which was the peer support provided by other IEPs in training. Impression management was also employed, both to avoid being revealed but also to avoid giving off any impression of being unprepared or not fully competent. Conflict avoidance was employed as an additional coping strategy. Although participants knew how to report mistreatment, they avoided doing so both for fear of discovery and because they perceived there would be little change.

With the passage of time, some participants perceived that their stigmatization lessened while others perceived that it continued throughout residency, persisting even as they established themselves in practice. Despite their negatives experiences, participants expressed an interest in improving learning conditions for future residents. They indicated they were motivated to be advocates for future IEPs and expressed a wish that future IEP residents would not have to experience similar stigmatization.

Chapter 6 Stigmatization and the Clinical Practice Gap

In this chapter, I shall explore participants' experiences of stigmatization and the clinical practice gap in proposing how they experienced the phenomenon of transitioning into the Family Medicine residency. I shall relate these experiences to the medical education literature and identify gaps that exist in our understanding of the transitions of IEPs into Family Medicine residency training. I shall discuss some approaches that might mitigate the clinical practice gap. Finally, I shall identify areas for future research.

The Stigmatization of Internationally Educated Physicians

Although stigmatization has likely been practiced for millennia, it was Erving Goffman who brought it to our attention as a sociological phenomenon. In his seminal 1963 work *Stigma: Notes on the Management of Spoiled Identity*, he established the foundations for the critical study of stigma. According to Goffman, a stigma is "an attribute that is deeply discrediting" (Goffman, 1963/2009, p. 12).

> An individual who might have been received easily in ordinary social intercourse possesses a trait that can obtrude itself upon attention and turn those of us whom he [sic] meets away from him, breaking the claim that his other attributes have upon us. He possesses a stigma, an undesired differentness from what we had anticipated. (Goffman, 1963/2009, p. 14)

But his work did more than just identify stigmatizing attributes. He discerned that it is important to understand the relationship between the attribute and how others perceive those who possess it.

Goffman identified that "society establishes the means of categorizing persons and the complement of attributes felt to be ordinary and natural" (Goffman, 1963/2009, p.15) and "social settings establish the category of persons likely to be encountered there" (p. 15). With these criteria thus established, society then transforms the anticipated categories into "normative expectations, into righteously presented demands" (p. 16). Thus an individual, who enters that society without meeting the established normative expectations, is likely to be viewed as different, as not belonging.

Such an individual may initially appear to meet the normative expectations and thus be expected to belong. But he or she is at risk of being discovered, or is "discreditable" (Goffman, 1963/2009, p. 116).

> The issue is not that of managing tension generated during social contacts, but rather that of managing information about his [sic] failing. To display or not to display; to tell or not to tell; to let on or not to let on; to lie or not to lie; and in each case, to whom, how, when and where. (Goffman, 1963/2009, p. 117)

In concealing evidence of one's discreditable status, the individual is said to be passing. Whether an individual can pass depends upon the visibility or apparentness of the stigma and the degree to which it is evident to others.

Link and Phelan (2001) built on Goffman's work in conceptualizing that stigmatization occurs at the intersection of five components. Firstly, they identify that some feature must be labeled as being different. They chose the term "label" instead of attribute as a label is externally affixed by others and may or may not be valid. Link and Phelan state that, "the second component of stigma occurs when the labeled differences are linked to stereotypes . . . with the label linking the person to a set of undesirable

characteristics that form the stereotype" (p. 368-9). The third component of stigma entails separating people into them and us, labeling the stigmatized people as the other. This makes it possible to further differentiate the stigmatized because being labeled denotes a flaw; the flaws assign the stigmatized to a stereotype and those with the stereotype are not like us, but different.

Their fourth component describes the loss of status or experiences of discrimination. Through labeling, stereotyping and otherization, the stigmatized person experiences downward shift on the status hierarchy and may experience individual, group or systematic discrimination. Link and Phelan also note that some stigmatized individuals may suffer from depression or low self-esteem as they internalize their stigmatization. Finally, they propose that "stigma is entirely dependent upon social, economic and political power- it takes power to stigmatize" (p. 375). This power to stigmatize may be invoked to "control access to educational institutions, jobs, housing and health care" (p. 376). I shall employ Goffman's and Link and Phelan's perspectives on stigmatization in examining the experiences of participants in this study.

The learning environment. As noted in Chapter 4, participants identified the transition to residency as one of the biggest challenges in their professional career. The environment in which they found themselves contributed directly to these challenges. As Roberts (2009) identified, the workplace culture of the learning environment is crucial to how well junior physicians perform. If this culture does not recognize transitions as critically intense learning periods, learners will struggle to adapt to their new environments.

Based on the experiences of participants, the learning environment was a hostile place. Nearly all of the participants (85%) witnessed or experienced episodes of resident mistreatment. They described their experiences in harrowing terms: being intimidated, being belittled, being treated as servants and being subjected to both verbal and non-verbal abuse.

Participants identified that the culture in the teaching hospitals, particularly in rotations with high clinical demands were sites of hostility.

> But there was a lot of negativ[ity] and I think that's the culture that they have created because Internal Medicine, like I said in other places, like even in [country], I loved it. There was not this, I want to say, kind of [a] negative put-down environment. It was very much about learning and interesting [cases] . . . and putting things together and isn't this a great case? (CSA-15)

Tallentire et al. (2011) identified that the learning environment contributes to the successful transitions of medical learners. In their study, the junior physicians perceived their learning environment in militaristic terms (medical hierarchy, foot soldiers). Similarly, the participants in this study perceived the presence of resident hierarchies, in which they were assigned subordinate status.

As previously noted, the learning environment adversely affects residents' wellbeing (Bernabeo et al., 2011; Hurst, Kahan, Ruetalo, & Edwards, 2013; Roberts, 2009; Tallentire, Smith, Skinner, & Cameron, 2011). So too, did the learning environment negatively affect the sense of wellbeing of these participants. During their clinical rotations, participants experienced anxiety, depressed mood, fear, panic attacks, self-doubt and loss of self-esteem.

Visibility. Wong and Lohfeld (2008) described how their participant IEPs coped with the stresses of residency training by "blending in" (p. 57). Similarly, the CSA participants in this study found that they could be invisible, albeit with some effort. By nature of their ease with English and years or a lifetime spent as Canadians, they were indistinguishable from other Canadian residents in training. "I'm a Canadian. So I don't have an accent from somewhere else" (CSA-8). They understood local cultural references.

But their invisibility was not assured, as a slip of the tongue could trip them up. In such instances, they could be discredited, revealed as IEPs. Furthermore, Immigrant-IEPs were more likely to be visible. Their accents gave them away, as did their lack of cultural references. "I don't have a bad accent; I think I don't. And I'm into Tim Horton's but I'm definitely not into hockey. And for me to be invisible would be impossible" (I-IEP-2).

In contrast to the medical education literature identifying how IEPs experienced challenges based on language skills, none of the participants described instances in which they experienced challenges due to their language skills. Rather, they identified that other residents, particularly those in the MLP-IMG program experienced difficulties based on their language skills. Lack of fluency in English and noticeable accents were the means by which the MLP-IMG residents stood out.

In some instances, language fluency impeded effective communication with health team members. In others, it impeded the ability of the MLP-IMG residents to integrate into the general resident body. Unable to take part in casual conversations, their interactions with other residents remained purely professional. As multiple studies have

shown, communication issues create barriers to IEPs' successful integration in the workplace (Chen et al., 2010; Dorgan, Lang, Floyd, & Kemp, 2009; Hall et al., 2004). It may be that communication issues also impede Immigrant-IEPs' social integration.

Based on participants' observations, those residents who bore the worst of this mistreatment were the IEPs in the MLP-IMG program at the University of Manitoba. They were identified as the most visible of residents. Participants described them as orphaned, with no one looking out for them, and expressed concern for their wellbeing. It must be noted that residents in the MLP-IMG program were not surveyed in the 2012 PARIM study, as they are not members of PARIM. Given the mistreatment of MLP-IMG residents as observed by the participants in this study, would MLP-IMG residents have reported greater or lesser rates of mistreatment had they been included in the PARIM study?

Were participants stigmatized? I shall compare their experiences to the five components proposed by Link and Phelan. Firstly, IEPs perceived that they were labeled, as others applied this label to them. As CSA-16 recalled when being labeled as an IEP, "that was the first time I heard that phrase . . . . That was the first time I ever heard that phrase throughout my whole medical training."

Secondly, participants perceived that there was a stereotype attached to being an IEP, as they had "weaseled" (CSA-4) their way through the back door, by going abroad to study at a "little shack in the middle of nowhere" (CSA-8). They perceived that they were stereotyped as being inferior, "not as smart as Canadian Grads" (CSA-16).

Thirdly, they perceived that they were excluded as outsiders. CSA-10 recalled moving from outsider to insider status when MLP-IMG residents of even lesser status

were scheduled on the same clinical rotation. CSA-8 recalled feeling "like you're an outsider" when transitioning into residency. Fourthly, IEPs perceived that they had lower status than other residents. They described the presence of a resident hierarchy that privileges Royal College residents above Family Medicine residents, and University of Manitoba graduates above IEPs. They also perceived that residents in the one-year MLP-IMG program held the lowest status of all residents.

Link and Phelan's fifth component is also present. As noted in Chapter 1, considerable barriers impede IEPs' access to residency education. Admission criteria of IEPs to postgraduate residency education are established by the universities and administered through CaRMS. IEPs must meet additional criteria compared to Canadian medical graduates in order to be eligible for residency training. The number of seats allocated to IEPs is limited; at most universities, IEPs are no longer eligible to compete directly with Canadian medical graduates for seats in the first iteration of CaRMS. Additionally, participants described instances in which IEPs were deprived of learning opportunities. The power to control access to residency training and the power to control the opportunities to learn are vested in others, fulfilling Link and Phelan's fifth component. The learning environment in which participants found themselves at the University of Manitoba was stigmatizing of IEPs.

How did the phenomenon of stigmatization develop at the University of Manitoba?

How did this stigmatization of IEP residents develop at the University of Manitoba? Part of this answer may lie in the unique circumstances that essentially divide University of Manitoba residents into two groups: local U of M graduates and others,

almost all of whom are IEPs. This creates an insider/outsider culture with IEPs on the outside.

Indeed, when large numbers of classmates went unmatched (in 2008 and 2012), the responses of U of M graduates characterized IEPs as interlopers who had stolen residency seats from their classmates, reinforcing their outsider status. Chen et al. (2010) described both overt and subtle biases against IEPs that contributed to their outsider status. For IEPs participating in this study, there was nothing subtle about their treatment at the hands of some U of M grads.

As participants noted, some but not all U of M medical students reinforced the resident hierarchy and stigmatization of IEPs. But as the U of M medical students became U of M residents, it appears that many accepted and encouraged these concepts.

How is this perpetuated? Roberts (2009) states,

> Learning cultures are neither contexts nor sites for the application of pre-existing or separate knowledge. Instead, together with their histories, artefacts [sic] and institutions, "cultures are constituted by actions, dispositions and interpretations and exist in and through interaction and communication" (Hodkinson et al, 2008, p 34). This entails a two-way process of individuals being (re)produced by culture and cultures being (re)produced by individuals. (p. 17)

Did U of M medical students' exposures to the mistreatment of IEPs by U of M residents during their medical school clerkships cause some to accept and perpetuate these behaviours as residents? Or, did the rejection of IEPs begin first with medical students and enter with them into residency? This question is one of many to be raised by this study. It would be of value to undertake a study examining the opinions of

University of Manitoba medical students on IEPs and how they develop these perspectives.

Participants perceived greater stigmatization in heavy care clinical ward rotations. Participants frequently cited the Internal Medicine, Pediatric Wards and Obstetrics rotations as sites of stigmatization. Conversely, most participants commented positively about their Family Medicine, Adult and Pediatric Emergency Medicine and Palliative Care rotations.

What differentiates these groups of clinical rotations is the presence of resident-run wards (Internal Medicine, Pediatric Wards and Obstetrics) or attending physician-run wards and clinics (Family Medicine, Emergency Medicine and Palliative Care). In heavy clinical ward rotations, teams of residents and medical students, supervised by senior residents with little direct supervision by attending physicians, provide the majority of patient care. In contrast, attending physicians in Family Medicine, Emergency Medicine and Palliative Care generally have more direct supervision of residents during the care of their patients. Could resident-run wards create a *locker room* mentality amongst the residents that contributes to the resident hierarchy?

Several participants noted that the stigmatization they experienced waned with the passage of time. Was this related to a lessening of the clinical practice gap as the IEPs developed skills in managing patients? In second year, residents spend much less time in heavy-care ward rotations and would spend less time on resident-run wards. Could the lessening stigmatization be due to less exposure to a *locker room* mentality?

Universities exist in the sociopolitical context of their times. In the larger contexts of medicine, politics and government, IEPs have experienced systemic barriers in

becoming physicians in Canada. Although participants were less likely to name attending physicians than residents as sources of mistreatment, some poignant examples of verbal mistreatment were provided. Many of the attending physicians in medical education today came of age during the 1980s, 1990s and 2000s. Did their maturation as physicians during these times contribute to this mistreatment? A study exploring the perspectives of attending physicians on IEPs could provide us with some understanding of their attitudes towards IEPs.

Several participants shared the perception that Manitoba was more welcoming of IEPs than other Canadian provinces. Do IEPs in other Canadian residency programs experience similar stigmatization or is this the product of the unique circumstances in Manitoba? Repeating this study in other Family Medicine residency programs could provide us with answers to these questions.

Could the Clinical Practice Gap Contribute to the Perpetuation of Stigmatization?

For the participants in this research, the transition to the Family Medicine residency at the University of Manitoba was one of the biggest leaps in their medical career. Teunissen and Westerman (2011b) have identified that the transition between the learning environments of medical school education to the workplace-based environments of residency training is fraught with challenge. Additionally, Angus et al. (2014) identified in their study of American Internal Medicine program directors, that practice skills, the ability to work in teams and communication skills were the three essential skills required of beginning residents.

As all CSA participants but one identified, their medical school education did not provide them with the opportunities to take on graduated clinical responsibility for patient care. This denied them the opportunities to develop their practice skills and their abilities to work in health-care teams. In addition, two thirds of the participants in this study entered their residencies without having undertaken postgraduate training that would have provided them with these needed experiences. Participants needed to learn how to function as residents without the benefit of prior practice as medical students.

Every medical system, regardless of geographical location, has been developed to produce qualified physicians. There are differences in timing of the introduction of graduated clinical responsibilities into the medical curricula between the Canadian medical education system and that in the remainder of the world, yet by the completion of their training, each system graduates capable, practicing physicians. As previously noted, in most international medical education systems, graduated clinical responsibilities begin with postgraduate medical training.

In a sense, the Canadian and American medical systems are anomalies in expecting medical students to assume clinical responsibility for patient care during their undergraduate years. It is this difference in the timing of graduated clinical responsibility that created such a challenge for the CSA participants. They entered their residencies with a clinical practice gap. The metaphor, *switching horses mid-stream*, describes their transition.

For the participants, the transition into residency was one of the biggest challenges they had encountered in their medical career. Even those who were able to

complete some post-graduate training abroad described not feeling fully prepared to shoulder the responsibilities expected of a first year resident.

Although participants had an understanding of the clinical practice gap before starting their residencies, most were unprepared for the effort it took to address this gap and its impact upon them. Through communications with friends attending Canadian medical schools or through their experiences during their Canadian medical electives, they understood that Canadian medical students were expected to assume an active role in patient care. They hoped they would be provided with some introduction to clinical practice as part of the IMG Orientation. Many expressed the wish that they would have been provided with some shadowing or clinical experiences during their orientation period.

Tallentire et al. (2011) identified that junior house officers experienced challenges in their training based upon cognitive factors, roles and responsibilities and environmental factors. The cognitive factor identified by the participants was their lack of knowledge of the Canadian health care system. Although several participants did identify some knowledge gaps, most felt that these gaps could be closed by additional study. As CSA-12 put it, "Medicine is medicine everywhere. Like the books are the same, you know." Similarly, CSA-3 found that preparing before each rotation was helpful. "I just studied before I started the rotation to review the subject matter, and made sure I had a good practical management style book handy."

Where participants struggled greatly was in understanding what was expected of them on each new rotation and how to assume the "identity and expectations" (Tallentire et al., 2011, p. 995) of being a resident.

The challenge was in understanding "what to do?" (CSA-9). As did the participants in the Wong and Lohfeld (2008) study, these participants did not understand how to perform as residents. This participant shared feedback received during the Internal Medicine rotation:

> One of the things that they said to me early on was, "your clinical decision-making is good but you need to be able to pull the trigger a little bit more often. And you can't be scared in making decisions," you know. (CSA-3)

This participant's experiences echoed the findings of Tallentire et al. (2011), who described how junior physicians struggled with making decisions in the context of acutely ill patients. As another participant shared, not knowing how to function in the medical workplace created challenges.

> It wasn't the knowledge. It wasn't the medical stuff. It was the clerking. It was how do I order tests? How do I get my results? Where do I get my results from? You know, who [sic] do I talk to for this? Who do I talk to for that? Just the basics of clerking, we never had to in [country] and in fact most medical students across the world don't have to. (CSA-4)

Participants found their transitions to be smoother when expectations were explicitly stated and struggled when they were not. Often, medical students and other residents helped the IEPs to understand the implicit expectations of the rotation.

Although the assistance of their peers and of the medical students was appreciated, it came at the cost of self-esteem and caused participants to doubt their abilities. They experienced anxiety, fear of failure and fear of being found as less than competent. Fann et al. (2003) and Hurst et al. (2013) both found that their participants

felt excited, fearful and overwhelmed in the early months of their residency. So too, did the participants in this study. As did the participants in the Legassie et al. (2008) study, these participants experienced episodes of imposter syndrome, experiencing self-doubt and fears of being discovered as "intellectual frauds" (p. 1090). As CSA-10 related, "you mostly feel like you're the great pretender."

Participants employed various methods to cope with the challenges of residency. Hurst et al. (2013) described that residents employed cognitive, behavioural, social and self-care strategies in coping with the stresses of the first year of residency. The participants in this study predominantly sought social supports through friends and family, identifying that this support was crucial to getting through. A few identified self-care and setting boundaries as being helpful.

Health educators in international settings have identified that the transition to postgraduate training is challenging for their medical graduates. In the Progress Report on the Irish Medical Education System, the authors write,

> The intern year is an important transition and formative year, which can present some unique challenges to newly-qualified graduates as they become junior doctors. These challenges may include having to adapt rapidly to a very busy working environment in a relatively short period of time, working as part of a multi-disciplinary clinical team, often under pressure, and dealing in a professional and empathetic way with patients who may have complex clinical and personal issues. (Medical Council of Ireland, 2014, p. 40)

Yet most of the participants in this study did not have the opportunity to adapt as clinical novices abroad before entering residencies in Canada. Having matched directly

from medical school, they were expected to perform at the level of Canadian medical graduates without having assumed graduated clinical responsibilities.

How did the participants experience their transition into residency? They found it overwhelming, confusing and "one of the most difficult times in most of our lives" (CSA-4). Like the junior physicians in Robert's (2009) study, they experienced their transitions into residency as "Critically Intensive Learning Periods". Yet the participants in Roberts' study entered medical systems that expected them to perform as junior doctors, and anticipated that they would be challenged in making this transition.

In contrast, the participants in this study skipped this transition as they switched horses mid-stream. As this participant described, the early days of residency were, "like clerkship in fast-forward, the first month" (CSA-3). They were expected to perform at the level of first year residents without having had any practice with graduated clinical responsibilities. What made these transitions critically intensive was the practice gap with which the participants entered.

How did the Clinical Practice Gap Influence the Treatment of Residents?

Few IEPs had prior experience with the medical system in Manitoba before starting their residencies. Despite attending the IMG Orientation month, they were not provided with clinical experiences nor provided with information on the tacit culture of the clinical wards. From participants' comments, it was clear that they were expected to function on the wards once they started their clinical rotations. One can anticipate that attending physicians and senior residents might become frustrated with residents who did not know how the system worked. With repeated cohorts of IEPs entering residency

training, this frustration could cause them to stereotype IEPs as being inferior to Canadian medical graduates.

> People are busy and they don't want to have to slow down. I think they also want a well-oiled machine. And I can understand their frustration. You know, they want to go to work, get their work done and go home at a reasonable hour without many difficulties. And it must be frustrating for them to have to retrain a new team every month, you know. But that's the reality and that's the job. And that's medicine. (CSA-4)

This participant recognized that teaching medicine places great demands upon teachers. Could the demands of integrating IEPs with little or no prior experiences with graduated clinical responsibilities contribute to the frustrations of attending physicians and senior residents? Could this contribute to the perpetuation of the stigmatization of IEPs?

The challenge for medical educators lies in creating environments that situate learners safely in their discomfort/learning zone. Canadian medical students, with their clerkship experiences of graduated clinical responsibility, may be situated in this zone as they transition into residency training. For the participants in this study, this was not the case. Those participants who switched horses mid-stream were ill prepared for residency. Lacking prior clinical experiences upon which to draw, they struggled to learn how to take care of their patients. They described emotional responses consistent with Hawkins' model: inadequacy, inferiority and anxiety. Participants landed in Hawkins' Panic Zone (Hawkins & Shohet, 2006), well beyond Vygotsky's Zone of Proximal Development, the

zone of " constructive friction" (Wijnen-Meijer, Burdick, Alofs, Burgers, & ten Cate, 2013, p. 923) in which learning can occur.

In Chapter 3, I presented Illeris' three-dimensional model of learning (Illeris, 2003; Merriam et al., 2007). His model integrates learners' cognitive and emotional factors with the learning environment and social contexts in which they learn. The experiences of the participants in this study demonstrate the interplay of cognitive factors (the clinical practice gap), emotional factors (their responses to the stresses of practicing with a clinical practice gap and the stresses of dealing with their stigmatization) in a learning environment that was primed to reject and stigmatize them. I would encourage medical educators to consider Illeris' model in examining medical education at their institutions.

Strengths and Limitations of this Study

Through this exploratory research, I have sought the experiences of IEPs transitioning into the Family Medicine residency at the University of Manitoba. The information gleaned from their experiences should contribute to the understanding of how the practice gap with which IEP educated residents enter residency can influence their transition from medical school or prior practice into family medicine residency training in Canada.

The participants had studied in many settings around the world. As these participants were drawn from the same pool of applicants to other Family Medicine residency programs across Canada, their experiences of their journeys to Canadian

residency education are likely similar to those of IEPs matched to other Family Medicine residency programs.

However, their experiences while in training at the University of Manitoba may not be representative of those experienced by IEPs matched at other Family Medicine residency programs. Curricular and administrative differences between the University of Manitoba and other residency programs across Canada as well as socio-cultural factors, which may be unique to the University of Manitoba, may limit the generalizability of the findings. Replication of this study at other Canadian universities would be needed to draw any generalized conclusions of the experiences of IEPs in Canadian Family Medicine residency programs.

The relatively large participation rate (20 of 93; 21.5%) may be considered a strength of this study, as could the wide distribution of participants across the time period under study (2008-2012). Collectively, the experiences of the participants should have been sufficient to characterize the essence of how Internationally Educated Physicians transitioned into the Family Medicine residency program at the University of Manitoba, particularly from the perspective of Canadians Studying Abroad.

The limited response from Immigrant-IEPs makes it difficult to draw any direct conclusions about their experiences. Given the experiences related by participants in this study, they may feel more vulnerable about taking part in a study of graduates' experiences or may have chosen to compartmentalize their experiences, as did I-IEP-1. However, the 18 CSA participants worked alongside their Immigrant-IEP peers during their training and have provided their observations and stories, both directly observed and shared by other residents. This provides indirect information regarding the treatment of

Immigrant-IEPS at the University of Manitoba. Further study of the experiences of Immigrant-IEPs, both within Family Medicine and within the MLP-IMG programs is both needed and warranted.

Those motivated to participate in the study may have been moved by exceptionally strong positive or negative experiences at the University of Manitoba. This may contribute to participant bias and thus the experiences described may not be representative of the experiences of all residents.

Furthermore, this study focused only on residents who completed a Family Medicine residency. The experiences of IEPs registered in Royal College of Physicians and Surgeons of Canada training programs and of IEPs enrolled in either of the two practice readiness assessment programs (IMG-ACL and MLP-IMG) were not directly explored although participants in this study worked alongside residents in these other programs and have observed how poorly the MLP-IMG residents were treated. Their perspectives on their treatment as IEPs should be sought.

This study explored transitions only from the perspectives of IEP graduates from the University of Manitoba. Do attending physicians perceive that their IEP training enter training with clinical practice gaps? Do attending physicians perceive that IEPs experience stigmatization whilst in training? Do they perceive the presence of hierarchies of residents and possibly practicing physicians at the University of Manitoba? These question merit further study.

Additional Concerns Meriting Future Research

In addition to the questions raised in the previous section, the following questions deserve particular attention.

Could pre-residency training mitigate the clinical practice gap? What is the best means of providing Internationally Educated Physicians, both CSAs and immigrant-IEPs, with the clinical experiences they have missed by switching horses mid-stream? There is evidence that pre-residency clerkship experiences of two years' duration lead to improved success for IEPs sitting the College of Family Physicians of Canada Certification exam, although the impact of pre-residency training of shorter durations has not yet been evaluated (MacLellan et al., 2010; MacLellan et al., 2012). Walsh et al. (2011) have recommended that residency programs consider "a pre-residency period . . . [to] allow IMGs a period of time to become acclimatized to the Canadian environment prior to taking on the level of responsibilities expected of a resident" (p. 13).

All of the CSA participants were able to complete elective rotations in Canada (range 8-26 weeks; average duration 12.5 weeks). This is a remarkable achievement as it is reported by many CSAs that they are unable to secure Canadian electives. They worked alongside Canadian medical students and were taught by Canadian attending physicians. Despite considerable time spent in Canadian medical education settings, participants still perceived that their transition to residency was difficult. It appears that, for these participants, their Canadian electives did not provide them with sufficient experiences to help compensate for the lack of graduated clinical responsibility in their medical school training.

One approach that could be considered would be to incorporate shadowing experiences into the IMG Orientation month. This would provide IEPs with practice-based learning in their new medical environments.

I asked participants if they felt that a shadowing experience, where they would follow the healthcare team on the ward to observe them in action, would have helped. Overwhelmingly, all but one agreed this would have been a valuable experience. CSA-4 very strongly agreed. "Oh, preaching to the choir here. Absolutely. I would have appreciated that so much. And if it delayed me starting residency by two weeks or a month or even two months, so be it" (CSA-4). Participants recognized that the experiential learning would have been preferred to the didactic instruction provided during the orientation. "I would have gladly done something like that as opposed to sitting and doing lectures" (CSA-6). Participants were taken aback by the lack of shadowing opportunities.

> I had wished or had thought that the orientation would sort of incorporate a bit more shadowing. I think on the ground, sort of, you get a better sense of what the responsibilities are, and I guess then you're allowed to ask lots of questions and just see how the flow of work goes. (CSA-7)

A second approach could be to create pre-residency mini-clerkships, providing some period of graduated clinical responsibility for those entering without prior graduated clinical practice or for those who have been out of practice for some time. This would provide even more clinical experiences than shadowing would and could assist IEPs in their transition to residency.

I asked participants about their perspectives on a pre-residency clerkship, in which participants would function as clinical clerks alongside medical students. This would provide new residents with graduated clinical responsibility before they begin their residencies. Although there was less support for a pre-residency clerkship, with 13 of 20 respondents in favour, participants did identify that a pre-residency clerkship would provide them with the opportunity to understand the system.

> I think definitely that would help a lot better than the IMG Orientation program. I can see how that may actually be helpful because then it gets you to be at the front line and you actually get to appreciate how, like the dynamics between the members of the team and what the expectation is for you once you get started on the residency program. (I-IEP-1)

Participants recognized that those without prior experience in the Canadian medical education system would benefit the most from a mini-clerkship. This participant was of the opinion that having a mini-clerkship before beginning the residency itself would have been most helpful.

> I think like a mini clerkship would have been very helpful for people like me in order to become familiarized with the way you present cases on the rounds. With the way you write your notes in the charts. For Canadian residents it's a good thing that they come to the wards and take equal responsibility as students from third year onwards. So for them, it is a repetition of the same process when they were in, as residents. So it was like smooth sailing. But for me to actually adopt the style that was expected, in writing notes, in presenting cases during the rounds, was a bit of a challenge because I had never done that . . . . For somebody

> having studied a long time back, having done residency [a] long time back, not used to the Canadian system, the only way to adapt is to learn the presentation style from other residents and students. It was something that I had to learn on my own. And I learnt it the hard way. (I-IEP-2)

Interestingly, this participant expressed a preference for a mini-clerkship over shadowing, acknowledging there would be little clinical responsibilities or expectations placed on the shadowing resident. In this regard, the mini-clerkship would provide IEPs with practice-based experiences before commencing residency.

Several participants felt that a mini-clerkship wasn't needed, given they had been successful in completing their residencies. Some recognized, though, that they would have accepted the opportunity for graduated clinical responsibility had it been offered to them at the beginning of residency.

> Now that I've graduated and passed the exams, well I'd say no way, that's ridiculous. Who wants to spend more time, you know? Probably if you would have offered that to me before starting residency, I would have taken it. More experience in a, you know, facilitated sort of way would have been probably welcomed, I think. (CSA-5)

Others were torn between not wanting to be perceived as medical students again and recognizing the value of clinical experience in Canada.

> Part of me wants to say no because I'd end up being another med student again. Could be difficult. I don't know. Yea, I don't know. I don't know if they'd need exactly the same clerkship but I think it goes back to kind of that shadowing thing, right? I'd be interested to see if the person had time to shadow certain

> disciplines within medicine, kind of what the results would be. But, yea, I don't know how to answer that. Because . . . I could see that being of value . . . . With my personality, would I really want to go back and do another year of clerkship to get into residency? In my gut, I would say, no I wouldn't want to. So I don't know what the answer is. (CSA-15)

Participants recognized that despite their prior Canadian electives as medical students, they needed to navigate dual learning curves. "You're learning the system…. You leave more time to learn and absorb the subject matter that the consultants are trying to teach you on the job as opposed to trying to do two things at once" (CSA-3). Participants also identified that the lack of experiential learning during orientation made it difficult to incorporate this into their practice once they started on their clinical rotations.

> I'm pretty sure, when I think back, that they did tell us those things during the one month, but in theory. Unless you are doing them yourself, you're not quite picking them up. You're just kind of passively being told that this is how you do things. (CSA-10)

However, participants were concerned that such a clerkship could have negative consequences for their residency training or that supervisors and other trainees would perceive them negatively. Many were concerned that a clerkship would further stigmatize IEPs, by implying that "You aren't actually good enough to just be a resident" (CSA-1).

These concerns were echoed by CSA-14. "I mean when I looked at programs that had that, I just feel like you were basically put in a whole different category. Like, 'Oh

you're an IMG; you have to go through this special training' " (CSA-14). They also recognized that such a clerkship could be stigmatizing to IEPs. As this participant stated, "Doing the shadowing or the clerkship thing . . . might be difficult to de-stigma[tize], but I think that would be helpful" (CSA-12). Additionally, there were concerns that such a clerkship could be converted to a means of assessing residents' suitability for entry to residency, as is done in Ontario.

> It probably would be helpful but my fear is that can turn out into an assessment program and making it that you pass or fail on completion. And I don't think going to a program where you can either fail or pass and that would [be used] to determine whether you move on or not will be helpful. (I-IEP-1)

This participant expressed concerns that a pre-residency training program could contribute to ongoing stigmatization.

> The medical community in Manitoba is small; I am sure some supervisors may judge all IMGs based on mistakes they make in their mini clerkship or use it to target them later. Some of my IMG colleagues in Ontario had mixed feelings about it. A lot of them couldn't wait to actually start [their] "real residency" while in the Assessment Verification Period[18]. Some felt they were treated well, others didn't feel that way. (CSA-3)

Could a pre-residency program be constructed in such a way as to not further stigmatize IEPs? Have pre-residency training programs mitigated the clinical practice gap

[18] IEPs matched through CaRMS to Ontario residency programs must successfully complete a 12-week assessment program in order to begin their residency programs. IEPs who are not successful may be provided with an additional 6-week period of extended assessment. IEPs who are unsuccessful in completing this additional assessment are not permitted to commence their residency programs.

for IEPs in other settings? Could this provide a means to reduce the stigmatization IEPs? These questions merit further consideration.

How prevalent is the clinical practice gap? The clinical practice gap has not previously been described in the medical literature. As the number of Canadians Studying Abroad who enter residencies continues to grow, and the numbers of those able to obtain postgraduate training abroad shrinks, one may anticipate that the numbers of CSAs entering training with clinical practice gaps would increase.

Have Family Medicine educators in other residency programs identified similar challenges facing IEPs at their institutions? In particular, do those provinces with pre-residency assessment programs, such as Ontario, Alberta and British Columbia, perceive less of a clinical practice gap in the IEPs accepted to their programs? Do these pre-residency assessment programs provide IEPs with a means of filling the clinical practice gap or do they select for those IEPs who have already have experience with graduated clinical responsibilities?

Do IEP residents in Royal College training programs experience challenges with clinical practice gaps? Does the additional length of Royal College training programs (four to five years in contrast to Family Medicine training programs of two years' duration) provide them with the opportunities to fill this gap?

What are the learning needs of CSAs? Despite the extensive medical education literature surrounding IEPs and their identified knowledge gaps, the learning needs of CSAs have been little studied. In Chapter 2, I attempted to deduce CSA's learning needs from the literature. In discussing the challenges they faced in transitioning into their Family Medicine residencies, participants did not identify knowledge gaps as a

significant barrier to their progress. Rather, they identified they needed to understand the medical education system and how to function as residents.

This should be considered as an area for future research. What are the learning needs of CSAs? Are they entirely practice and system-based or do they enter residency with knowledge gaps? A follow up study of participants exploring these questions could provide additional information. As well, the perspectives of attending physicians and residents who teach CSA Family Medicine residents should be included to triangulate the data.

Conclusion

Through this thesis, I have explored the interplay of sociopolitical forces affecting health care funding and changes to immigration and licensing policies that present multiple barriers to Internationally Educated Physicians hoping to practice medicine in Canada. These systematic barriers have been present for the past forty years and will likely remain for decades to come.

The only feasible route for most IEPs seeking licensure as physicians in Canada is through securing seats in Canadian residencies. Most IEPs will not succeed in gaining admission as the limited number of postgraduate residency seats compared to the ever-growing numbers of IEPs creates a bottleneck. It appears that, as the numbers of CSAs returning from abroad increase, CSAs have and will continue to displace Immigrant-IEPs from residency seats for the foreseeable future.

I have reviewed the medical education literature to discern the learning needs of IEPs and of CSAs. Despite a large body of literature, the learning needs of IEPs have

been described mostly as knowledge gaps. There has been little written about the specific learning needs of CSAs.

There is a growing recognition of the challenges faced by medical trainees in transitioning through their medical education years. In transitioning from medical students to residents, learners must adapt to the performance orientation of the workplace. Educators have identified that the workplace culture of the learning environment is instrumental in junior doctors' success in making transitions. It has also been recognized that in order to be successful, incoming residents must be skilled at medical practice, must be able to work in teams and possess good communication skills. Three models of learning, that of Vygotsky's Zone of Proximal Development, Hawkins' model of learning in the helping professions and Illeris' three dimensional model of practice-based learning may inform our understanding of how residents learn.

Through qualitative interviews with 20 recent graduates from the University of Manitoba, the perspectives of IEPs on the transition to a Family Medicine residency were explored. Two major themes emerged: the clinical practice gap with which most participants entered residency and the stigmatization of IEPs at the University of Manitoba.

This clinical practice gap, which has not been previously described in the medical education literature, was created by curricular differences between the Canadian and international medical education systems. The Canadian medical curricula introduce graduated clinical responsibilities during the medical school years whilst international curricula defer this to the postgraduate training years. The phenomenon of the clinical

practice gap may not be isolated to the University of Manitoba as IEPs undertake residency training at all Canadian medical universities.

Additionally, participants in this study perceived they were stigmatized as IEPs. Some aspects of this stigmatization may be shared with IEPs training in other Canadian universities, such as rejection by the Canadian medical education system, whilst others, such as rejection by University of Manitoba graduates, the presence of a resident hierarchy and mistreatment based on their degree of visibility may be limited to the University of Manitoba. Unique sociological forces were identified at the University of Manitoba that may have contributed to the development of this stigmatization.

As this research was exploratory in nature, more questions were raised than were answered. Several avenues of potential research which may further our knowledge as educators, such as elucidating the learning needs of CSAs, improving our understanding of the clinical practice gap, identifying novel curricula that could mitigate the clinical practice gap and furthering our understanding of resident stigmatization and how best to counter it, were proposed.

In closing, I cite the thoughtful wish expressed by this participant: “Hopefully it can, all this information and all these stories, can be put together to help actually make the system work better” (I-IEP-1).

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Orientation Schedule - June 3 to 28, 2013 - *Revised June 21, 2013*

DAY	TIME	GROUP	WEEK 1 June 3 - 7	GROUP	WEEK 2 June 10 - 14	WEEK 3 June 17 - 21	GROUP	WEEK 4 June 24 - 28
MONDAY			**June 3 (Theatre C - All Day)**		**June 10 (Theatre B -All Day)**	**June 17 (Location TBA)**		**June 24**
	AM	**ALL**	8:30-8:35 - Introduction - Director IMG Program 8:35-8:45 - Welcome - Associate Dean PGME 8:45 -8:55 Welcome - Associate Dean CPD 8:55-9:05 - Welcome - Manitoba Health 9:05-9:35 - Introduction of students, using ice breakers 9:35-9:45 - Welcome - Administrator, Resident Employment 10:00-11:45 - IMG Support - Advice from a fellow IMG	**ALL**	10:00-11:30 - Critical Thinking and Clinical Reasoning Skills	**Library Orientation 9:00-11:00 am** (Group1 & 2 - See Lists) **BLS (1:00-4:30 pm) Location: TBA** (Group 1-4 - See Lists)	**ALL**	**Library Orientation 9:00-11:00am** (Group 3 & 4 - See Lists)
			LUNCH 11:45-1:00 - Lunch provided on 1st day!		**Income Tax Overview for IMGs 11:30am-1:00pm - Lunch Provided**			**LUNCH 11:00-1:00 (204 Brodie)**
	PM	**ALL**	1:00-3:00 - CPSM & CLEO 3:00-3:15 - BREAK 3:15-4:45 - Teacher-Learner Conduct and Mistreatment	**ALL**	1:00-2:15- Palliative Care Team & Pain Management 2:15-2:30 - BREAK 2:30-3:30- Palliative Care Team & Pain Management Cont'd **6:30-8:30 - CTA Session - CLSF** (Group 3 - See Lists)		**ALL**	1:00-3:00 CMPA - Dr. Ellen Tsai 3:00-4:30 CPSM & CLEO
TUESDAY			**June 4 (Theatre C - All Day)**		**June 11 (Theatre B - All Day)**	**June 18**		**June 25**
	AM	**ALL**	**8:30-12:00 - Resident Photos Taken**		8:30-10:00 - Working with Sexual & Gender Minorities 10:00-10:15 - BREAK 10:15-12:00 - Working with Sexual & Gender Minorities Cont'd	**ACLS** (Group 1 - See Lists) **Location: Neil John MacLean Health Sciences Library** **EPR Training at SBGH Location: Room N2057 Education Bldg. at 8:30 am - 4:00pm** (Group 1 - See Lists)		**9:00-12:00 - MURTA Session** (Group 3 & 4 - See Lists)
			LUNCH 12:00-1:00		**LUNCH 12:00-1:00**			**LUNCH 12:00-1:15 (204 Brodie)**
	PM	**ALL**	1:00-2:00 - Critical Incidents 2:00-2:15 - BREAK 2:15-3:15 - History Taking & Physical Examination Review 3:15-3:30 - BREAK 3:30-4:15 - Physical Examination Review Cont'd 4:15-4:45 - Orientation to CTA Pelvic Exam **6:30-8:30 - CTA Session - CLSF** (Group 1 - See Lists)	**ALL**	1:00-3:00 - CervixCheck Manitoba 3:00-3:15 - BREAK 3:15-3:30 - Orientation to MURTA 3:30-6:30 - RBC Presentation and Dinner	**1:00-2:00 - HSC Computer Orientation** (Grp. 1-See Lists) **2:00-3:00 - HSC Computer Orientation** (Grp. 2-See Lists) **6:30-8:30 - CTA Session - CLSF** (Group 5 - See Lists)		1:15-2:30 - EKG Review 2:30-2:45 - BREAK 2:45-3:45 - BreastCheck Manitoba **4:30-7:30 - Casting Review** (Group 2 - See Lists) **6:30-8:30 -CTA Session - CLSF** (Group 7 - See List)
WEDNESDAY			**June 5 (Theatre C- All Day)**		**June 12 (Theatre B - All Day)**	**June 19**		**June 26 (Theatre A)**
	AM	**ALL**	9:00-10:30 -Structural Overview of the Healthcare 10:30-10:45 -BREAK 10:45-12:00 - Challenges of Rural and Remote Medicine	**ALL**	8:30-9:25 - Breaking Bad News 9:25-9:35 - BREAK 9:35-10:30 - CancerCare Manitoba 10:30-10:45 - BREAK 10:45-12:00 - ColonCheck Manitoba	**9:00-10:00 - HSC Computer Orientation** (Grp.3-See Lists) **10:00-11:00 - HSC Computer Orientation** (Grp.4-See Lists) **ACLS** (Group 1 - See Lists) **Location : Neil John MacLean Health Sciences Library** **EPR Training at SBGH Location: Room N2057 Education Bldg. at 8:30 am - 4:00 pm** (Group 2 - See Lists)	**ALL**	**9:00-4:00 PGME NEW RESIDENT ORIENTATION (Frederic Gaspard Theatre)**
			LUNCH 12:00-1:00		**LUNCH 12:00-1:00**			
	PM	**ALL**	1:00-2:00 - Patient Safety Issues 2:00-2:15 - BREAK 2:15-3:45 - The First Nations Culture	**ALL**	1:00-2:00 - Charting and Beyond 2:00-3:00 - Radiology Review 3:00-3:15 - BREAK 3:15-4:40 - Government Offices and Forms **6:30-8:30 - CTA Session - CLSF** (Group 4 - See Lists)			
THURSDAY			**June 6 (Theatre E - Morning)**		**June 13 (Theatre B)**	**June 20**		**June 27**
	AM	**ALL**	8:30-9:00 - Collaborative Patient Care Workshop 9:00-10:20 - Panel of Teams Role & Referral System 10:20-10:30 - BREAK 10:30-12:00 - Panel of Teams cont'd	**ALL**	8:30-9:30 - Evidence Based Medicine 9:30-9:45 - BREAK 9:45-11:15 - Mental Health Services and Psych Review	**1:00-2:00 - HSC Computer Orientation** (Grp.5-See Lists) **2:00-3:00 - HSC Computer Orientation** (Grp. 6-See Lists) **ACLS** (Group 2 - See Lists) **Location : Neil John MacLean Health Sciences Library** **EPR Training at SBGH Location: Room N2057 Education Bldg. at 8:30 am - 4:00 pm** (Group 3 - See Lists)	**ALL**	**Program Specific Orientation Time Report to your Home Program**
			LUNCH 12:00-1:00 (PM: Theatre C- Afternoon)		**LUNCH 11:15-1:00**			
	PM	**ALL**	1:00-1:45 - CanMEDS Roles & Four Principles of CFPC 1:45-2:20 - Evaluation vs. Feedback 2:20-2:30 - BREAK 2:30-3:10 - How to receive feedback 3:10-4:00 - How to be an effective learner **6:30-8:30 - CTA Session - CLSF** (Group 2 - See Lists)		**1:00-4:00 - MURTA Session-CLSF** (Grp. 1 & 2-See Lists) **4:30-7:30 - Casting Review** (Group 1 - See Lists)	**6:30-8:30 - CTA Session - CLSF** (Group 6 - See Lists)		
FRIDAY			**June 7 (Theatre B - All Day)**		**June 14 (Theatre B - All Day)**	**June 21**		**June 28 (Theatre B- Morning)**
	AM	**ALL**	8:30-10:15 - Patient Centered Communication Skills 10:15-10:30 - BREAK 10:30-11:15 - Community Resources (AFM) 11:15-11:30 - BREAK 11:30-12:15 - Pain Management & Prescription Drug Abuse	**ALL**	9:00-10:15 - Diabetes in Manitoba 10:15-10:30 - BREAK 10:30-12:30 - Pediatric Ward Orientation & Tour	**9:00-10:00 - HSC Computer Orientation** (Grp. 7-See Lists) **10:00-11:00 - HSC Computer Orientation** (Grp. 8-See Lists) **ACLS** (Group 2 - See Lists) **Location : Neil John MacLean Health Sciences Library** **EPR Training at SBGH Location: Room N2057 Education Bldg. at 8:30 am - 4:00 pm** (Group 4 - See Lists)	**ALL**	8:30-9:30 - How to Survive the ER 9:30-9:45 - BREAK 9:45-10:45 - Community Resources (Child Protection Centre) 10:45 -11:00 - BREAK 11:00-12:00 - Community Resources Cont'd (Osborne House)
					LUNCH 12:30-1:30			**LUNCH 12:00-1:00 (204 Brodie - Afternoon)**
	PM	**ALL**	12:15-12:45 - WRHA Employment Package - Laura Kryger **12:45-4:00 Self Study**	**ALL**	1:30-2:30 - Roles and Rights of Women in Society **2:30-4:00 -Self Study**		**ALL**	1:00-2:00 - Orientation Conclusion

Appendix B

Participant Recruitment Letter

UNIVERSITY OF MANITOBA | Faculty of Education

September 15, 2014

This email is being sent to you by the Department of Family Medicine on behalf of Dr. Cavett because you were an international medical graduate resident (Immigrant IMG or Canadian Studying Abroad) in the Family Medicine residency program between 2008 and 2014.

Principal Investigator and contact information:

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204-474-6786

This research has been approved by the Education/Nursing Research Ethics Board. If you have any concerns or complaints about this project, you may contact Dr. Cavett, Dr. Renaud or the Human Ethics Coordinator (HEC) at 204-474-7122 or by email at Margaret.Bowman@umanitoba.ca**.**

UNIVERSITY OF MANITOBA | Faculty of Education

September 15, 2014

Dear Family Medicine alumnus,

As a recent graduate of the Family Medicine residency at the University of Manitoba, you may be interested in participating in this research project examining the experiences of international medical graduates who have completed their Family Medicine residency at the University of Manitoba. This research project is being conducted as part of my Master of Education thesis.

I would like to explore what the experience of starting residency was like for you and other international medical graduates who have completed their Family Medicine residency at the University of Manitoba.

The transition from medical student to resident represents a major step in the development of a physician. It represents the change from being a medical learner to becoming a medical practitioner; for many it is a time of intense learning but also a time of great pressure. Many Canadian medical students describe feeling unprepared for this transition despite undertaking their medical education in Canada. Given the many different countries in which our international medical graduate residents have completed their medical education, some international medical graduates may feel better prepared or may feel less prepared than Canadian medical graduates.

Additionally, those physicians who have practiced medicine before returning to residency may experience further challenges in adapting to the role of a resident. Although transitions in medical education are now being actively explored at many levels, there is little investigation underway into how international medical graduates experience this transition.

Participating in this study would entail an interview (in person or via telephone or Skype); this would roughly take 1-1 ½ hours of your time. You would be invited to

provide your feedback on content and accuracy on the transcript of your interview a few weeks after this has been completed. You will be provided with a study code for identification purposes; you will not be identified by name in the thesis or any subsequent publications flowing from this research.

You are under no obligation to participate, but if you are interested in taking part in this study, please contact Dr. Teresa Cavett at Teresa.Cavett@umanitoba.ca or by phone at [redacted]. If you do not wish to be involved in this study, please send an email to dfm@med.umanitoba.ca (the Department of Family Medicine communications email address) to be excluded from future mail outs. You will not be contacted again.

Kindest regards,

Teresa Cavett BSc MD CCFP FCFP
Assistant Professor, Departments of Family Medicine and Medical Education
College of Medicine, Faculty of Health Sciences, University of Manitoba

Appendix C Semi-structured Interview Guide

Thank you for taking part in this interview. We have already discussed the consent form, which you have signed, before starting the interview.

(Confirm consent for recording interview) I will be recording this interview and will have it transcribed for you to review within two weeks.
You may choose not to answer any question as we go through the interview and may end this interview at any time.
Do you have any questions before we begin?

1. Could you tell me about your journey to the Family Medicine residency program at the University of Manitoba?

    Probing questions:

        1a. Why did you go abroad?

        1aa. Where did you take your medical school training?

        1b. When did you graduate?

        1c. Did you take part in any residency training abroad?

        1d. Did you practice medicine abroad before starting your residency?

        1e. How did you prepare yourself to be competitive in CaRMS? What was the CaRMS experience like?

        1f. Did you feel "rejected" by the system in Canada and if yes, did this affect you in any way during your training or in your transition back to Canada?

2. Your class took part in the IMG orientation offered at the U of M. Do you think this helped you as you began your residency?

    Probing question:

        2a. Some residency programs have implemented a period of pre-residency training with modified clinical responsibilities, like a mini-clerkship. Do you think this might have helped you with your transition to residency?

3. What has your experience in becoming a Family Medicine resident at the University of Manitoba been like?

Probing questions:

3a. Thinking back to the beginning of your residency, how would you describe the early months?

3b. What were some of the challenges or barriers that you experienced as you entered your FM residency? How did you overcome them?

3c. Did you understand what was you were expected to do as an FM resident? At what point in your training did you understand this?

3d. What might have made this transition easier for you? Is there anything you wished you had known before starting your FM residency?

4. In addition to the transition involved in entering the residency itself, there were many transitions as you moved from rotation to rotation. What were your experiences of these transitions like?

Probing questions:

4a. Were some rotations easier to transition into? If yes, what made these transitions easier for you?

4b. Were some rotations more challenging in the transition? If yes, what made it challenging?

5. Do you think your experiences were typical of those experienced by other (i.e. Canadian Medical Graduates) Family Medicine residents? If not, why?

6. What were some of the system factors that helped or hindered your transition, either into residency or from one rotation to another? (Hospitals, clinics, faculty supervisors and senior residents, support staff and Interprofessional faculty, patients)

7. Is there anything else related to your experiences as an internationally educated Family Medicine resident that you would like to discuss?

    7a. When you received the email invitation, was there something that you wanted to share or unload, that you haven't had the chance?

8. Were there any questions that you had hoped would be included in this interview, but weren't?

9. What advice would you give to other IEPs about to begin their FM residency at the University of Manitoba?

If you have any additional thoughts after today that you would like to include, please get in touch with me by email at Teresa.Cavett@umanitoba.ca or by phone at [redacted]

(Confirm consent for follow-up questions.) Would you be willing to be contacted if I have any further questions after I have reviewed the transcript from today? What is the best way to reach you?

Thank you for taking part in this study. I will send you the transcript of this interview within the next two weeks. How would you like me to send it to you (mail or email)? If I don't hear back from you within two weeks of sending you the transcript, I will assume that you consider the transcript to be accurate.

Again, my thanks.

Appendix D Research and Ethic Approval

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OF MANITOBA

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Research Ethics and Compliance

Office of the Vice-President (Research and International)

APPROVAL CERTIFICATE

August 19, 2014

TO: Teresa Cavett (Advisor R. Renaud)
Principal Investigator

FROM: Loma Guse, Chair
Education/Nursing Research Ethics

Re: Protocol #E2014: 107
"How do International Medical Graduates matched to Family Medicine at the University of Manitoba perceive the transition to becoming a Family Medicine resident?"

Please be advised that your above-referenced protocol has received human ethics approval by the Education/Nursing Research Ethics Board, which is organized and operates according to the Tri-Council Policy Statement (2). This approval is valid for one year only.

Any significant changes of the protocol and/or informed consent form should be reported to the Human Ethics Secretariat in advance of implementation of such changes.

Please note:

If you have funds pending human ethics approval, please mail/e-mail/fax: (261-0325) a copy of this Approval (identifying the related UM Project Number) to the Research Grants Officer in ORS in order to initiate fund setup. (How to find your UM Project Number: http://umanitoba.ca/research/ors/mrt-faq. html#prO}

if you have received multi-year funding for this research, responsibility lies with you to apply for and obtain Renewal Approval at the expiry of the initial one-year approval; otherwise the account will be locked.

The Research Quality Management Office may request to review research documentation from this project to demonstrate compliance with this approved protocol and the University of Manitoba *Ethics of Research Involving Humans.*

!The Research Ethics Board requests a final report for your study (available at: http://umanitoba.ca/research/orec/ethics/human_ethics_REB_forms_gui delines.html) in order to be in compliance with Tri-Council Guidelines.