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Multiple Case Study Evaluation of Postsecondary Bridging Programs for Internationally Educated Health Professionals

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The authors would like to acknowledge the seven bridging programs that participated in this study:

- Mohawk College Bridging Program for Medical Laboratory Technology (Hamilton, Ontario)
- Michener Institute for Applied Health Sciences Bridging Program for Internationally Educated Health Professionals, Radiological Technology (X-Ray) (Toronto, Ontario)
- Michener Institute for Applied Health Sciences Bridging Program for Internationally Educated Health Professionals, Medical Laboratory Science (Toronto, Ontario)
- Northern Alberta Institute of Technology (NAIT) Diagnostic Medical Sonography Bridging Program (Edmonton, Alberta)
- NAIT Medical Radiological Technology Bridging Program (Edmonton, Alberta)
- NAIT Respiratory Therapy Pilot Bridging Program (Edmonton, Alberta)
- University of Toronto Ontario Internationally Educated Physical Therapy Bridging (OIEPB) Program (Toronto, Ontario)

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Executive Summary

Bridging programs are designed for internationally educated immigrant professionals who have completed formal training in another country but who may not have the educational, professional or language requirements necessary to become licensed to practice in Canada. As Ontario's population ages, the successful integration of internationally educated health professionals (IEHPs) into the health care workforce has been identified as a strategy to address the challenges created by the shrinking labour pool and growing demands on the health care system (Finley & Hancock, 2010; Stuckey & Munro, 2013). To better understand the role of Ontario's postsecondary system in facilitating the entry of IEHPs into the health care workforce, this study analyzed seven Canadian bridging programs and obtained input from 15 key informants. The goal of the evaluation was to identify the characteristics and practices of effective IEHP bridging programs. The specific research questions addressed by the evaluation were:

1. What are the expected outcomes of effective bridging programs and how should they be measured?
2. What are the key features that contribute to bridging program effectiveness?
3. What challenges do bridging programs face in achieving their goals?
4. What is the appropriate role of regulatory colleges, government, employers and professional associations in ensuring bridging program effectiveness?

A comparative case study methodology was employed to evaluate seven postsecondary bridging programs for allied health professionals. Bridging programs for allied health professions were chosen because allied health professions are an understudied yet important part of the health workforce (Bourgeault et al., 2013). The seven bridging programs studied were:

- Mohawk College Bridging Program for Medical Laboratory Technology (Hamilton, Ontario)
- Michener Institute for Applied Health Sciences Bridging Program for Internationally Educated Health Professionals, Radiological Technology (X-Ray) (Toronto, Ontario)
- Michener Institute for Applied Health Sciences Bridging Program for Internationally Educated Health Professionals, Medical Laboratory Science (Toronto, Ontario)
- Northern Alberta Institute of Technology (NAIT) Diagnostic Medical Sonography Bridging Program (Edmonton, Alberta)
- NAIT Medical Radiological Technology Bridging Program (Edmonton, Alberta)
- NAIT Respiratory Therapy Pilot Bridging Program (Edmonton, Alberta)
- University of Toronto Ontario Internationally Educated Physical Therapy Bridging (OIEPB) Program (Toronto, Ontario)

The case studies involved document reviews, student focus groups, a student survey and follow-up interviews, and interviews with program stakeholders. Altogether, approximately 50 IEHPs and 30 program stakeholders participated in the research. To situate the case study findings and enhance understanding of issues related to postsecondary bridging programs for IEHPs, the research included key informant interviews with 15 sector experts from national government agencies, regulatory colleges and professional associations.

Key Findings

The key findings are summarized below in relation to each of the four research questions.

What are the expected outcomes of effective bridging programs and how should they be measured?

Among the bridging programs studied, all had the goal of assisting IEHPs in becoming licensed to practice in their respective province, as well as assisting IEHPs to become competent health practitioners. The key outcomes expected were that IEHPs would succeed on certification exams, increase their knowledge of the Canadian health care system and Canadian occupation-specific language, find employment after becoming certified, and that IEHPs' individual learner needs would be met. Measuring and tracking these outcomes, however, was considered to be a challenge. While the bridging programs studied had varying levels of data collection and tracking mechanisms in place, program stakeholders and key informants had suggestions for the types of indicators that should be used. These included certification exam results, the number of participants passing the orientation to the Canadian health care system course, the number of participants showing improvement on pre- and post-program language assessments, IEHP satisfaction and perceptions of the program's effectiveness, alumni engagement, the number of participants who became licensed after passing certification exams, the number of participants who gain employment in their field, the length of time to find employment, the number of years participants remain employed up to time of desired retirement, and participants' progress in the profession.

What are the key features that contribute to bridging program effectiveness?

The case studies found significant variation in the duration, timing, structure and content of bridging programs. However, a number of factors emerged as key features that contribute to program success. These are grouped into seven categories:

1. Optimized program content and delivery format
2. Focus on work readiness and on-going support
3. Access to resources, facilities, and funding
4. Flexibility
5. Effective assessment
6. Faculty and administrators experienced with IEHPs
7. Communication among the program, regulator and employers

What challenges do bridging programs face in achieving their goals?

The bridging programs studied faced four key challenges. The first was securing clinical placements for students. While not all of the bridging programs offered clinical placements, those that did faced significant difficulty finding placement sites for students and the programs that did not offer clinical placements cited difficulty securing sites as a key reason that placements were not offered as part of the program. The bridging programs found that they are often competing with regular, full-time programs for placement sites and that employers that have not worked with an IEHP before often are reluctant due to an assumption that providing a placement for an IEHP will require more work than providing a placement to a Canadian-trained student. When placement sites are secured there is the added challenge of ensuring that the clinical supervisors have the appropriate knowledge and skills to work with IEHPs.

A second key challenge is financial sustainability. Many programs are started with pilot funding, which supports the work needed to develop a bridging program, but when these dollars end, the program is expected to become self-sustaining by turning to cost-recovery models that rely on student tuition fees. However, the financial situation of many IEHPs means that tuition fees can pose a significant hurdle to

enrolment. Student demand also impacts sustainability. Many of the programs studied experienced fluctuating enrolment numbers, and student demand is often influenced by factors outside of a program's control, such as labour market demand and immigration policies.

The third challenge is related to curriculum development. Conceptualizing and developing a comprehensive program that addresses a variety of knowledge gaps for participants with different educational backgrounds and levels of experience can be difficult for institutions. Programs must balance the need to ensure that participants meet the core competencies necessary for licensure with the recognition that IEHPs have already completed an educational program in their home country.

The fourth challenge is determining how, where and when to deliver the bridging program. The bridging programs studied varied in relation to program length, when classes were offered, whether courses were offered online or in-person, and the type of credential graduates receive, demonstrating the lack of consensus about the most effective options for each of these elements. There are strengths and limitations to each approach. For example, evening and weekend classes can accommodate IEHPs who have work commitments, but this typically extends the length of the program, meaning that it is longer before IEHPs will be licensed and able to work in their profession. Online classes are typically more cost-effective to deliver and provide access to geographically dispersed populations, but they limit opportunities for personal interaction as well as the ability to build networks with the instructors and other participants. Currently, each bridging program is sorting out these issues on their own.

What is the appropriate role of regulatory colleges, government, professional associations and employers in ensuring bridging program effectiveness?

Bridging programs require the input of numerous organizations for their development and delivery, including regulatory colleges, government, professional associations and employers. However, the appropriate role of each of these organizations is not always clear. One of the most contested areas is the level of involvement of regulatory colleges. Regulatory colleges are responsible for setting professional standards and ensuring that regulated health professionals meet the training and education standards necessary to practice; therefore, many see the regulatory colleges as key players in the design and delivery of bridging programs. Given regulatory colleges' experience with prior learning assessments, they are well positioned to help postsecondary institutions understand the most common gaps in IEHPs' knowledge and practice and how these can be addressed. Regulatory colleges can also refer IEHPs to appropriate bridging programs. However, regulatory colleges are not mandated to provide education, so there is typically little room in their budgets to act in an advisory capacity to bridging programs. Funding to enable the participation of regulatory colleges should be considered as part of the budget for developing and operating bridging programs.

With regard to government, federal and provincial governments can play two primary roles in bridging education: funding and coordination. Bridging programs need to have sustainable funding in place; at the very least, programs should be required to have a plan in place to secure sustainable funding to be eligible for start-up funding. The coordination role is in relation to the sharing of promising practices for bridging programs as well as coordinating the delivery of clear and accurate information to prospective immigrants through immigration services.

Employers are expected to play a role in bridging programs by providing clinical placements, job shadowing, mentoring, volunteer opportunities, or even simply by providing feedback on bridging program graduates that they have hired.

Finally, professional associations have a limited role to play in bridging programs. The associations are funded by members, so assisting internationally educated professionals is outside of their mandate until an individual is licensed. However, a few suggestions for professional association involvement were offered by program stakeholders and key informants, including communicating the availability of bridging programs to potential participants; promoting the value of diversity to association members; supporting learners in bridging programs by providing scholarships, employment information, mentors; and offering continuing professional development opportunities to ensure that newly employed professionals are successful.

Recommendations

Based on the research findings, six key recommendations are made.

1. **Hybrid theoretical/practical program content** – Bridging programs should include a combination of theoretical learning and practical application, including an opportunity to apply skills and learn about the Canadian workplace in a clinical placement or simulated learning environment. This would involve components that support developing occupation-specific language skills, an understanding of the Canadian health care system, experience in a Canadian workplace, and preparation for writing the certification exam. The development of language and cultural skills is key to certification and finding work. Bridging programs should also support IEHPs by offering assistance with the work search process such as résumé writing and interview skills, support to help IEHPs with their job search and first year of employment, and formal or informal mentoring to help IEHPs build networks.
2. **Flexible program delivery** – Bridging programs should be made available in flexible, modular formats so that IEHPs can choose to take only those courses that address their specific gaps. Offering evening and weekend sessions, online or self-study components and compressed programs is also important given that many IEHPs are working and dealing with family pressures in addition to the bridging program. However, caution should be exercised in moving to entirely online formats as IEHPs find significant benefits to in-class sessions in areas including peer support, language skill development and cultural competencies. Decisions about delivery methods also need to be balanced with financial issues to ensure sustainability. There are increased costs to customizing programs and offering different configurations of courses, and it makes budgeting for the program more complex. These factors cannot be ignored. Bridging programs could draw on economies of scale by developing common elements that can be used across programs and/or institutions.
3. **Faculty sensitive to the needs of IEHPs** – Bridging program courses should be taught by instructors who have experience working with IEHPs or who have received thorough professional development/teacher training. Hiring IEHPs who have become integrated into the Canadian health care system as instructors could help to motivate students. The most important aspects, however, are that instructors have the ability to adapt the curriculum to students' learning needs and have an understanding of the particular challenges IEHPs face in integrating into the Canadian workforce.
4. **Inclusion and coordination of key stakeholders** – Bridging programs need input and support from all levels of government, employers, regulating bodies, professional associations, postsecondary institutions and settlement agencies that work with immigrants. IEHPs face challenges in dealing individually with each stakeholder, such as completing numerous administrative processes. Greater cooperation between stakeholders and more standardized processes would assist applicants in navigating the systems.
5. **Centralized registry** – Bridging programs tend to be offered sporadically, move between institutions, and are often discontinued once pilot funding ends, contributing to a lack of accurate and comprehensive information on current bridging programs. An up-to-date registry of bridging programs

within Canada should be established and maintained. This could be housed on the Citizenship and Immigration (CIC) website, with the information maintained by the licensing bodies.

6. **Sustainable and coordinated funding** – Long-term government funding for bridging programs is a key element to ensuring sustainability. Federal-provincial cost sharing as a way to fund bridging programs should be considered. This could reduce costs from duplicating programs and could involve immigration, health, employment and social development, and education ministries.

1. Introduction

As Ontario's population ages, the successful integration of internationally educated health professionals (IEHPs)¹ into the health care workforce has been identified as a strategy to address the challenges created by the shrinking labour pool and growing demands on the health care system (Finley & Hancock, 2010; Stuckey & Munro, 2013). In addition, with immigration accounting for two-thirds of Canada's population growth over the last decade, the full workforce participation of IEHPs is vital to the delivery of culturally competent care within increasingly diverse Ontario communities. To better understand the role of Ontario's postsecondary system in facilitating the entry of IEHPs into the health care workforce, a multiple comparative case study evaluation of postsecondary IEHP bridging programs was conducted with funding from the Higher Education Quality Council of Ontario (HEQCO). The project is part of an overall HEQCO initiative to evaluate alternative pathways to postsecondary education.

Bridging programs are designed for internationally educated immigrant professionals who have completed formal training in another country but who may not have the educational, professional or language requirements necessary to become licensed to practice in Canada. Since 2003, the governments of Canada and Ontario have together invested more than \$240 million to support Ontario bridging programs for approximately 50,000 internationally trained individuals (Government of Ontario, 2013). The programs provide occupation-specific and context-specific training about the Canadian and provincial health care systems and other supports to help internationally educated professionals meet formal competency standards to prepare for licensure and employment in regulated occupations or to get the training and experience required to work in highly skilled, non-regulated professions. Bridging programs may be offered by colleges and universities, regulatory bodies (referred to as regulatory colleges), community agencies or other organizations. This evaluation focused on allied health bridging programs delivered at postsecondary institutions, as these are an understudied yet important venue for bridging programs (Bourgeault et al., 2013).

The goal of the evaluation was to identify the characteristics and practices of effective IEHP bridging programs and their potential for transfer to other programs and related professions. This report is structured as follows:

- Section 2 provides a brief overview of the academic literature on IEHPs and bridging programs.
- Section 3 describes the methodological approach for the research undertaken for this report.
- Section 4 integrates the case study findings with the perspectives of key informants to provide insights into measuring outcomes and indicators, key success factors for bridging programs, challenges and the appropriate role of external stakeholders.
- Section 5 puts forward policy recommendations and suggestions for further research.
- Appendix 1 presents the bridging program case studies. The case studies provide detailed information about the program initiation and development, recruitment, admission, delivery, stakeholder involvement, evaluation, sustainability, strengths and challenges. The experiences of bridging program participants are also included to explore the effectiveness of bridging programs in helping IEHPs gain certification and enter their profession.

¹ While a significant number of Canadians complete health programs abroad, particularly in medicine, the focus of our report is foreign-born IEHPs.

2. Literature Review

It is predicted that within the next decade, immigrants will account for all net labour force growth in Canada (Drummond, 2012). By 2031, it is estimated that one-third of labour market participants will have been born outside of Canada, with higher proportions of immigrants in Ontario and British Columbia (Martel et al., 2011). Immigrants bring a diverse array of talents, abilities and skills to Canada, yet experience higher levels of unemployment and underemployment than those born in Canada (Alboim, Finnie & Meng, 2005; Martel et al., 2011). If Canada is to benefit from immigrants' full potential and meet its need for a skilled work force, internationally educated workers must be better integrated into the Canadian labour market (Alboim & The Maytree Foundation, 2002; Finley & Hancock, 2010).

In Ontario, an aging workforce and misaligned recruitment and training have resulted in forecasts of health professional shortages (Baumann & Blythe, 2009; Stuckey & Munro, 2013). IEHPs have the potential to play an important role in addressing these pressures and are vital to providing culturally competent care to Canada's diverse population. In addition, the successful integration of IEHPs into the Canadian labour market is essential for their integration into Canadian society and for promoting social equality (Finley & Hancock, 2010; Omidvar & Richmond, 2003).

The literature outlines significant challenges faced by IEHPs in transitioning to Canadian practice. These include the validation of education credentials, achieving language fluency, obtaining clinical experience, passing certification exams and learning the culture of the Canadian health care system (ACCC, 2011; Baumann, Blythe & Ross, 2010; Bourgeault et al., 2010). The failure rate of IEHPs on national exams in many professions is significantly higher than the Canadian average and clinical experience is difficult for IEHPs to obtain. For example, in 2008 and 2009 only 34% of internationally educated Medical Radiation Technologists (MRTs) were successful in writing the Canadian Association of Medical Radiation Technologists (CAMRT) certification exam compared to a success rate of approximately 92% for Canadian-educated MRTs (Blais & Darling, 2009). Research about medical graduates and nurses suggests that language and cultural competencies are barriers to IEHPs' success on certification exams (Bourgeault et al., 2010).

These barriers have received public recognition, as the media highlight stories of IEHPs working in low-skill jobs instead of practicing their profession. At the federal and provincial levels of government, several initiatives have been introduced to promote IEHP integration, including web portals to provide online information to skilled immigrants, provincially run bridging programs and bursaries to assist with education costs. In Ontario, the government has funded research projects, introduced new policy measures and enhanced financial support in an effort to increase IEHP access to professions. Initiatives include the Health Force Ontario Access Centre for IEHPs, which provides information and service to those intending to apply for licensure to work in their field, and funding for IEHPs through the Ontario Bridging Participant Assistance Program (OBPAP).²

IEHPs in regulated professions face additional challenges to those in unregulated professions as registration with the regulatory college is necessary before an IEHP can practice in Canada.³ Regulated health

² OBPAP provides bursaries of up to \$5,000 to cover direct education costs (tuition, books and equipment) for participants attending non-OSAP approved Ministry of Citizenship and Immigration (MCI)-funded bridging programs offered by Ontario colleges, universities and institutes.

³ Canada's system of self-regulation allows professionals to establish self-governing colleges, usually through provincial legislation, with members of the public representing the interests of health care consumers. The regulatory colleges for Ontario's regulated health professions govern more than 256,000 health professionals and are mandated to protect the public interest by ensuring that practitioners deliver services in a competent, safe and ethical manner (Federation of Health Regulatory Colleges of Ontario, 2014).

professions typically assess three qualities to determine whether an IEHP meets Canadian licensing requirements: professional credentials, language proficiency and professional competence. When gaps are identified in the latter two in particular, IEHPs must upgrade their knowledge and skills. Bridging programs exist to help close these gaps.

Most bridging programs include an assessment of newcomer education and skills, clinical and workplace experience, certification examination preparedness, profession-specific language training and individual learning plans to address gaps and additional training needs. They may be offered to IEHPs whose foreign academic and professional credentials meet Canadian equivalency standards, as well as to those who do not meet Canadian standards for practice. The type of support available varies by profession and by the bridging program being completed (Bourgeault et al., 2013).

There is a growing body of research to demonstrate the value of bridging programs for IEHPs (ACCC, 2011; Austin & Dean; Bourgeault et al., 2010; Bourgeault et al., 2013; Grant, 2009; SP Consulting & The Whetstone Group, 2008). Bridge training has been shown to increase the likelihood that IEHPs will obtain employment in their chosen profession (SP Consulting & The Whetstone Group, 2008). Completion of a bridging program can shorten the time required for workforce entry and may offer advantages in successfully completing certification requirements (Grant, 2009). Bridge program participants have reported reduced feelings of isolation, an enhanced sense of community and increased opportunities for professional networking (Austin & Dean, 2006). At the same time, concerns have been raised that bridging programs may be developed in an ad hoc fashion, with content and structure that is not well suited to the needs of IEHPs, and that bridging programs often lack the sustainable funding required to ensure accessibility (ACCC, 2011; Bourgeault et al., 2010; Bourgeault et al., 2013; Metropolis Project, 2004).

Currently, however, there are limited data and research available to make comparisons across bridging programs and evaluate best practices (Bisnar & Martin, 2007). Further, much of the existing research has focused on internationally educated medical graduates and nurses (Atack et al., 2012; Baumann et al., 2006; Bourgeault et al., 2010; Broten, 2008; Conference Board of Canada, 2012). Given the importance of bridging programs for the integration of IEHPs into the Ontario labour market and the significant investment of resources required, evaluation and study are needed to identify promising practices and the common characteristics across programs and professions that contribute to their effectiveness. This study addresses a gap in the research by examining the experiences of IEHPs in five allied health professions.

3. Study Overview

A comparative case study methodology was employed to evaluate seven postsecondary bridging programs for allied health professionals:

- Mohawk College Bridging Program for Medical Laboratory Technology (Hamilton, Ontario)
- Michener Institute for Applied Health Sciences Bridging Program for Internationally Educated Health Professionals, Radiological Technology (X-Ray) (Toronto, Ontario)
- Michener Institute for Applied Health Sciences Bridging Program for Internationally Educated Health Professionals, Medical Laboratory Science (Toronto, Ontario)
- Northern Alberta Institute of Technology (NAIT) Diagnostic Medical Sonography Bridging Program (Edmonton, Alberta)
- NAIT Medical Radiological Technology Bridging Program (Edmonton, Alberta)
- NAIT Respiratory Therapy Pilot Bridging Program (Edmonton, Alberta)

- University of Toronto Ontario Internationally Educated Physical Therapy Bridging (OIEPB) Program (Toronto, Ontario)

These programs were included because they serve allied health professions facing current or projected workforce shortages, had not previously been the subject of comprehensive evaluations and were willing to participate in the study. Out-of-province bridging programs were included because they can provide insights for optimizing Ontario programs.

At the time of this research, four of the professions were regulated in Ontario – medical laboratory science (MLS), medical radiation technology (MRT), physiotherapy (PT) and respiratory therapy (RT). Diagnostic medical sonography (DMS) was unregulated.⁴ All were listed as eligible occupations on the 2013 federal skilled worker list, which determines eligibility to immigrate to Canada as a Federal Skilled Worker (Government of Canada, 2014). Table 1 provides information on the number of professionals in Ontario and the proportion who are internationally educated for each of the regulated professions.⁵

Table 1: Regulated Health Professionals in Ontario, 2010⁶

Profession	Number of professionals	Proportion internationally educated ⁷
Physiotherapy	6,835	19%
Medical laboratory technology	7,706	14%
Medical radiation technology	6,643	8%
Respiratory therapy	2,685	3%

The research questions addressed by the evaluation were:

- What are the expected outcomes of effective bridging programs and how should they be measured?
- What are the key features that contribute to bridging program effectiveness?
- What challenges do bridging programs face in achieving their goals?
- What is the appropriate role of postsecondary institutions, governments, regulatory colleges, professional associations and employers in ensuring bridging program effectiveness?

A case study protocol was developed and approved by the research ethics board at Western University. The protocol involved focus groups with current and past bridging program participants and structured interviews, held in-person and by telephone, with instructors, faculty, administrators, employers and partners at each of the participating institutions. Focus group participants were provided with a \$50 honorarium in recognition of their time and contribution to the research. Data for the Mohawk College, Michener Institute for Applied Health

⁴ The Ontario Health Professionals Regulatory Advisory Council (HPRAC) was requested by the Minister of Health to review the issue of self-regulation of medical sonographers. This review is in progress.

⁵ Recent, accurate data were not available for diagnostic medical sonography.

⁶ Health Force Ontario (2012).

⁷ This includes Canadian-born individuals educated outside of Canada.

Sciences and University of Toronto case studies were collected between September and November 2012. Data for the NAIT case study were collected in January 2013. Details of the data collection activities conducted at each case study site are provided in Table 2.

Table 2: Case Study Data Collection Summary

Institution	Program stakeholders interviewed	Focus group participants	Focus group format	Survey participants	Survey format	Follow-up Interviews
Mohawk College	2 coordinators 1 employer 1 regulator (MLS) 1 administrator 3 instructors	6 graduates	In person	11 students	Paper	1 graduate
Michener Institute	1 coordinator 2 instructors (MLS) 2 instructors (MRT) 1 employer	6 students (MLS) 5 graduates (MLS) 2 graduates (MRT)	In person	19 students (MLT) 2 students (MRT)	Online	5 graduates (MLS)
NAIT	3 coordinators 2 regulators (RT, MRT) 1 instructor (MRT) 1 provincial government representative 2 administrators	3 graduates (MRT) 2 graduates (DMS)	Online	4 students (MRT) 2 students (DMS)	Online	1 graduate (DMS) 1 graduate (MRT)
University of Toronto	2 coordinators 3 instructors 1 administrator 1 advisory committee member 1 program staff	10 students	In person	6 students	Online	3 graduates

Current bridging program participants were also invited to participate in an online or paper-based survey about their experience.⁸ Survey respondents (n=44) were asked for permission to be contacted in the future to participate in a follow-up telephone interview. IEHPs who consented to be contacted were interviewed by telephone in late 2013 to assess whether they completed their professional registration and to discuss their

⁸ The format of the participant survey was changed from in person to online at the University of Toronto and the Michener Institute to avoid encroaching on class time. At NAIT, the bridging program is offered through distance education, so the participant survey was conducted online rather than in person. Conducting the survey online at the Michener Institute, NAIT and the University of Toronto resulted in much lower response rates for these institutions than the in-person survey at Mohawk College. A total of 44 responses were received but the sample size was too small to draw valid conclusions within each case; therefore the survey results are not presented in the case studies. The limited survey data appeared to support the qualitative information gathered through the focus groups and interviews.

subsequent labour market participation and satisfaction with their current employment situations. A total of 11 interviews were completed.

To situate the case study findings and enhance understanding of issues related to postsecondary bridging programs for IEHPs, key informant interviews were also conducted with 15 sector experts from the following organizations:

- Alberta College of Medical Diagnostic and Therapeutic Technologists (ACMDTT)
- Canadian Alliance of Physiotherapy Regulators (CAPR)
- Canadian Association of Medical Radiation Technologists (CAMRT)
- Canadian Information Centre for International Credentials (CICIC)
- Canadian Physiotherapy Association (CPA)
- Canadian Society for Medical Laboratory Science (CSMLS)
- College of Medical Radiation Technologists of Ontario (CMRTO)
- College of Respiratory Therapists of Ontario (CRTO)
- Colleges Ontario
- Foreign Credential Referral Office, Citizenship and Immigration Canada
- International Credential Assessment Service of Canada (ICAS)
- University of Toronto

A modified version of a tool developed by the Pathways to Prosperity project to evaluate promising practices was used to structure the key informant interview script. Promising practices are defined as practices that are particularly effective in achieving their stated aims, empirically measured as outcomes of the practice.

Data collected during the case study interviews, focus groups and key informant interviews were transcribed and manually coded to identify emergent key themes. It is important to note that all findings are based on the perceptions of bridging program staff, faculty, students, alumni, and key informants. Verbatim quotes are included throughout the report, and are labelled as key informant (includes the 15 sector experts noted above), IEHP (includes bridging program students and graduates), or bridging program stakeholder (includes bridging program staff, faculty and external stakeholders).

Challenges & Limitations

Postsecondary bridging programs are typically funded only for pilot implementation. The programs may be discontinued once the pilot funding ends, offered sporadically according to fluctuations in enrolment or moved to other institutions following pilot completion. The lack of an accurate and comprehensive listing of current bridging programs in Canada made it difficult to identify and secure the participation of additional bridging programs.

Bridging programs that continue after the pilot often operate with limited institutional resources, reducing opportunities for some bridging programs to participate in our research. In recognition of this, and to enable more programs to participate in the project, the planned case study research methodology was modified according to the needs and capacity of each program. Although efforts were made by the case study sites to involve employers and clinical partners in the research, relatively few employers agreed to participate in stakeholder interviews.

The Internationally Educated Physiotherapists Exam Preparation (IEPEP) Program at the University of British Columbia was also invited to participate in this project but declined due to internal evaluation research already being conducted by the program.

4. Key Findings

The research findings are organized to correspond to each of the four research questions:

- a) **Outcomes and indicators:** What are the expected outcomes of effective bridging programs and how should they be measured?
- b) **Key success factors:** What are the key features that contribute to bridging program effectiveness?
- c) **Challenges:** What challenges do bridging programs face in achieving their goals?
- d) **Appropriate role of stakeholders:** What is the appropriate role of postsecondary institutions, governments, regulatory colleges, professional associations and employers in ensuring bridging program effectiveness?

4.1 Measuring Outcomes and Indicators

All of the bridging programs studied shared a common goal of assisting IEHPs in becoming licensed to practice. The examination pass rate of students is therefore an important indicator for evaluating bridging program success. This information, however, is difficult to obtain. The regulatory bodies generally do not share this information with the programs due to confidentiality issues, so the bridging programs have to rely on past participants volunteering this information. At the same time, key informants interviewed raised concerns about focusing too narrowly on pass rates due to the variety of factors that impact examination outcomes. Many felt that examination pass rates should not be the only measure of success; bridging program effectiveness should be assessed at many different points along the pathway from credential assessment to employment. Additional outcomes to be considered include that the IEHP have increased knowledge of Canadian health care, increased knowledge of Canadian occupation-specific language and that their specific needs are met. Indicators of success in these areas can be gathered from data that most programs already collect, such as course pass rates, evaluations by clinical placement supervisors and student surveys.

Another key goal of the bridging programs studied was to assist IEHPs in becoming competent practitioners in Canada. It was noted that bridging programs aim to remediate gaps identified during the assessment process and get IEHPs licensed and working as quickly, effectively and economically as possible. It is expected that bridging programs will increase IEHPs' knowledge and understanding of practice in the Canadian health care environment in areas such as the management of patient care, collaborative practice, interprofessional communication and occupation-specific language skills. Assessments provided by clinical supervisors were regarded as one of the best ways of determining the effectiveness of bridging programs in achieving these outcomes. Pre- and post-program language assessments were also suggested, though none of the bridging programs studied conducted this form of evaluation. In addition, several indicators related to workforce entry were proposed:

- number of bridging program participants who become licensed to practice once they have passed the certification exams
- number who successfully gain employment and the level or position in which they are employed

- length of time to find employment
- number of years individuals remain employed (accounting for age at entry) and their progress through the profession

Each of these indicators would require tracking of individual bridging program participants once they have completed the program. At the time of the case study, none of the bridging programs were formally collecting this information, though many informally heard from past participants and would document their outcomes. Tracking graduates of a program is always a difficult undertaking but is important to understanding program effectiveness.

Table 3: Recommended Bridging Program Outcomes and Indicators

Individual Outcomes	Indicators
Success on certification exams	Examination results (bridging IEHPs vs. non-bridging IEHPs and Canadian trained)
Increased knowledge of Canadian health care system	Number of participants passing orientation to the Canadian health care system course
Increased knowledge of Canadian occupation-specific language	Number of participants showing improvement on pre- and post-program language assessments
IEHP needs met	IEHP satisfaction and perceptions of the program's effectiveness
	Alumni engagement
Employment	Number of participants who become licensed after passing certification exams
	Number of participants who gain employment in their field
	Length of time to find employment
	Number of years participants remain employed up to time of desired retirement
	Participants' progress in the profession

Beyond the individual learner, bridging programs were also noted to promote outcomes for the health care workforce and for postsecondary institutions. At the workforce level, it was said that bridging programs contribute to increasing the ethnic and cultural diversity of health care professions. While increased diversity can be measured through health human resources monitoring and analysis, it is difficult to attribute changes in diversity to bridging programs. It was suggested that employers providing clinical supervision for IEHPs could be surveyed before and after their experience to assess changes in attitudes towards hiring IEHPs.

Finally, one key informant noted that effective bridging programs can lead to systemic changes within postsecondary institutions. If effective, these programs can improve the responsiveness of postsecondary institutions to the needs of early to mid-career immigrant professionals who require supports.

“Historically, universities have been very comfortable saying to an immigrant professional who has been practicing for ten years somewhere else ‘Oh you want to practice in Canada? Come and do our degree, do another Master’s degree,’ instead of saying ‘What are the specific things you need in order to enter practice here and let’s assemble them for you.’ The bridging programs have really been a vehicle to help institutions focus on what this population needs, which is quite different from the usual group of high school graduates who come into university programs, who start at the beginning and work all the way through.” – Key informant

4.2 Key Success Factors for Bridging Programs

The case study findings and key informant interviews pointed to a number of factors that are important for ensuring bridging programs achieve their key goals. These factors are grouped into seven broad categories:

- Optimized program content and delivery format
- Focus on work readiness and on-going support
- Access to resources, facilities and funding
- Flexibility
- Effective assessment
- Faculty and administrators experienced with IEHPs
- Communication among the program, regulator and employers

Optimized Program Content and Delivery Format

Effective bridging programs build IEHP cultural competency and language skills by including curriculum content that addresses:

- The Canadian health care work environment (ethics, legal system, health and safety regulations, nature of consent, etc.)
- Expectations of health professionals in Canadian practice settings, and differences between scopes of practice of Canadian health care providers
- Communicating with patients
- Interprofessional communication
- Occupation-specific terminology

Considerable emphasis was placed on the ability of the bridging program to provide clinical placements or, at minimum, high-quality clinical simulations for students. With the exception of one institution, all of the bridging programs studied had a clinical placement component. Clinical placements provide IEHPs with the Canadian workplace experience needed to gain employment, improve examination pass rates and, for some professions, establish the practice hours necessary for licensing. Clinical experience is also a means of providing IEHPs with hands-on exposure to patients and enabling them to build networks with practicing clinicians.

“They have all worked, they are bringing a wealth of experience, so the delivery model has to be based on that ... straight classroom teaching is not going to work for them.” – Key informant

“Getting the Canadian experience ... and the fact that they had a clinical placement for you that they provided was really good. To actually get to work in the lab and see what they do differently from you, that was the outstanding point.” – IEHP

Although clinical placements are an important component, obtaining placement sites is a key challenge for many bridging programs. The one institution in the study that did not offer a clinical placement offered simulated experience instead. Quality clinical simulation was seen to be a good alternative for providing valuable hands-on experience.

Bridging programs also vary with regard to the program delivery format. Of the bridging programs studied, one institution offered online programming, one offered in-person programming and two took a blended approach including both online and in-person delivery. Among both the bridging programs studied and the key informants interviewed it was clear that online education is expected to become more prevalent in the coming years.

“The most important thing that internationally educated get out of these programs is the feeling that they are not alone so they make friends, and the networking that is going to help them find jobs after ... so I would love to only have face-to-face bridging programs, but the reality when you have 90% of bridging programs that run out of money in 3 years is that the online model is going to be the way of the future whether we like it or not.” – Key informant

Online or distance education can increase accessibility and cost-effectiveness and can support IEHPs by encouraging self-directed learning, which is a useful skill throughout one’s career. However, distance programs can hinder the development of interpersonal skills and networks. A few IEHPs also commented that the distance courses at times felt as though they were simply reading a book on their own, with little engagement. Blended learning, a form of program delivery in which students receive part of the instruction online and part in-person, is one solution that can offer the flexibility and cost-savings of online learning and the opportunity for face-to-face interactions.

Focus on Work Readiness and On-going Support

Given that employment outcomes were said to be an important indicator of bridging program success, it is not surprising that a focus on work readiness was noted to be a key success factor. This includes:

- Job search, résumé writing and interview skills
- On-going support to help IEHPs with their job search and first year of employment
- Formal or informal mentoring to help IEHPs build networks (especially with other internationally trained IEHPs who have gone through the process and understand the challenges faced by IEHPs)

Many of the bridging programs studied integrated some of these factors into their language or communications courses, having IEHPs develop their English language skills by working on job-related materials such as writing a résumé or cover letter, or practicing for an interview.

“We use some different material at that time and we are doing a lot of stuff, resume writing, cover letters and how to function in a job interview. Because a lot of them have never done a job interview, some of them have never written a cover letter before so they need help with that.” – Bridging program stakeholder

“The bridging program was also, it was made to help you through the beginning until the end, until you find a job. They even practiced with me, for example, the interview skills. They even helped with the resume. Any and every component from the beginning until the end was covered....” – IEHP

Access to Resources, Facilities and Funding

Locating bridging programs within institutions that also offer regular, full-time programs in the same field enables resource sharing between the programs and provides students with greater access to relevant equipment and learning materials. For example, the University of Toronto OIEPB was originally developed at Ryerson University due to Ryerson’s experience delivering strong bridging programs. However, Ryerson does not have a regular physiotherapy program. When the bridging program was moved to the University of Toronto, many cited significant benefits of co-locating the programs, including access to state-of-the-art equipment and labs, engaged faculty, and long-standing relationships with hospitals and clinics. Ensuring IEHPs have access to broader institutional resources, such as libraries and institutional services and supports (e.g., the career centre, counselling) was also said to promote bridging student success.

“The students are eligible to take books from the library, they can be mailed to them.... They can also contact the IT division if they have any difficulties with their connectivity, so that helps.” – Bridging program stakeholder

“Once I was in the program, the program gave me all the resources that I needed. Through the university, we had a library so whatever we needed was either online or we could get books from the program itself.” – IEHP

In addition to facilities and resources, access to funding is paramount. Many IEHPs work in low-income jobs and have family responsibilities that make paying the bridging program tuition difficult.

“I think one of the key challenges is money, always money. You know the students themselves they are busy people, they are not kids, they have families. [...] They are working full time trying to feed their families, coming to class at night and then they are coming to class all weekend so one of the key challenges is the students themselves are in situations of trying to live and upgrade their knowledge such that they can pass this national certification exam and then look for jobs. And money I mean they have to pay to do the program so where is that money coming from, I know there is some subsidy from the government but you know maybe it could be better so that it wouldn’t be such a financial burden on the students.” – Bridging program stakeholder

“Based on our income, and it’s going to be unique in each and every student, but for me, working as a nanny here it wasn’t easy.” – IEHP

The Ontario Bridging Participant Assistance Program (OBPAP), which provides bursaries of up to \$5,000 to cover education costs for attending an approved bridge training program, is a key resource for students. It is vital for students that bridging programs be on the OBPAP approved program list and that this funding continue to be offered.

Flexibility

Given that bridging programs are accommodating learners with a variety of backgrounds, languages and cultures, flexibility in the programming was identified as a success factor in meeting IEHP needs. While the IEHPs may be new to the Canadian context, they come to programs with previous experience and

knowledge. Ideally, bridging programs would be made available in flexible, modular formats so that the IEHP can choose to take courses that address specific gaps. However, this is difficult to achieve on a program-wide level from an administrative standpoint given the need to have adequate numbers of students within courses to make them financially viable. Having a core curriculum with additional options is one alternative. Bridging programs can also be flexible by adjusting the teaching within courses to reflect the current students' knowledge level and needs.

“For me, that was their biggest strength, that they were able to push the program forward according to the students. If we were stronger they would make the program more appropriate and harder and more demanding. It made us learn all the time.” – IEHP

The need to be flexible is also important to accommodate the additional responsibilities that IEHPs often have. As noted previously, many are employed and have family obligations that require time and energy outside of the training program.

“Take into account the socio-economic circumstances of the IEHP because some people are coming in and have to support their family, some people have another job, so the format should take into account that people have different resources and different abilities to access the program.” – Key informant

“Newcomers obviously have, you know, it's not like dealing with the 22-year-old coming out of university. They have family obligations, survival jobs, so a program that recognizes that they need to be flexible for the students I think is really key.” – Key informant

Schedule and delivery methods of courses can affect accessibility. In some cases, program length could be a barrier to completion and thus approaches such as modular programming; flexible schedules with evenings, weekends and distance options; and simulations were offered as potential solutions. Customized training modules were also suggested.

“It is really critical that higher education says this population doesn't need that whole degree program, this population needs these three or four or five courses, let's bundle them in a way that they can access them. So accessibility to appropriate curriculum without forcing people to take a bunch a stuff they don't need is a really critical part of the whole accessibility question.” – Key informant

The purpose of bridging programs is not to replicate existing training programs. They are an opportunity for colleges and universities to provide specialized access to the programming that the immigrant professional needs.

Effective Assessment

Another contributing factor to bridging program success is having assessment systems in place. First, pre-assessment is helpful to understand the individual gaps of the IEHPs coming in to the program and ensuring that there are resources to address the gaps.

“Some bridging programs have been set up assuming a particular base level of knowledge of applicants who get into the program and the experience has been ... that the individuals have needed some more remedial work on some of the stuff that they had assumed would have been there as a base.” – Key informant

All of the bridging programs studied required that applicants had gone through a prior learning assessment process with the respective regulatory body, and three of the institutions used additional assessment processes. These included in-person interviews, clinical assessments, and written assessments. The pre-assessment helps to identify the needs of the IEHPs and to better understand their prior knowledge. It is also important to continue to assess their learning throughout the program to ensure that participants are able to reach the qualifications required for the program.

“If your profession exists internationally and it very closely resembles the profession here in Canada you are going to have good success in a bridging program guaranteed. But if you are trying to take people from 20 different backgrounds and try to follow them all through one common program it is sort of the nature of the beast that you are going to have some challenges and the success rate is going to be lower unless you’ve got a rock solid assessment process.” – Key informant

The assessment process should occur throughout the training program to provide students with regular feedback.

Faculty and Administrators Experienced with IEHPs

Many of the bridging programs included in this research cited the strength of the program team as a key factor in their success. Having individuals with the appropriate skills and who are personally committed to the mission of the program is important. Ideally, program administrators, faculty and clinical supervisors will have experience working with immigrants and an understanding of the particular challenges that IEHPs face in integrating into Canadian society. When this is not possible, at a minimum program administrators, faculty and clinical supervisors should receive specialized cultural sensitivity training. This can be especially important for faculty, who must be flexible, able to adapt the curriculum to students’ learning needs and employ different pedagogical strategies for linguistically and culturally diverse students. Students appreciated when faculty were currently practicing professionals or had recently practiced and when faculty were available by phone or email outside of class hours to offer support.

“I believe the best thing about this program is that the people or the teachers who are really doing it are professional people who are practicing in real life.” – IEHP

“All our teachers are fantastic [...] They offered extra time even for example if the subject is done they will tell us okay you can call, you can email with whatever questions you have.” – IEHP

Communication among the Program, Regulator and Employers

Bridging programs need to have ongoing communication with regulators and employers to ensure that the program is effectively preparing IEHPs to be qualified for work in Canada. All of the bridging programs studied received input from employers, government and the regulatory college, and many had formal advisory committees in place that also included student or alumni representation. Through these advisory committees, the programs received current information on the degree of need for new graduates as well as feedback on the curriculum to ensure that it addresses all entry-to-practice requirements. This collaboration is needed from the outset; employers and the regulatory college should be involved in the very early discussions when developing a bridging program.

Bridging programs should also have a good understanding of the labour market conditions and the demand for professionals in their field.

“A really important component or determinant of success is around employment demand – Do we need people in this profession? – This information helps us in shaping our message to employers in terms of helping people get placement opportunities and helping them get employment [...] it is important that a program have the capacity to do that kind of analysis.” – Key informant

Communication between employers, regulators, and programs can enable bridging program administrators to be aware of current trends and local needs and communicate these to students. Strong relationships with employers were also said to help sensitize employers to the learning needs of IEHPs and secure placement opportunities for students.

4.3 Challenges

Bridging programs face a number of challenges to long-term, successful operation. Four key challenges are securing clinical placements for students, financial sustainability, curriculum development and program delivery.

Securing Quality Clinical Placements for Students

As previously noted, bridging programs that include clinical placement opportunities experience continual challenges securing placement sites. Employers often have requests to host students from multiple institutions, and many already have long-term partnerships in place with regular, full-time programs. Among employers that have not worked with an IEHP before, there is often a reluctance to provide placements due to uncertainty about the educational and work experience backgrounds of program participants. There is an assumption that providing a placement for an IEHP will require more work than providing a placement to a Canadian-trained student. For bridging programs with distance education, finding placements near the IEHP's home community is even more daunting, as it may involve making cold calls to employers with which the institution does not have a relationship. When placement sites are secured there is the added challenge of ensuring that the clinical supervisors have the appropriate knowledge and skills to work with IEHPs.

Strategies to overcome these challenges used by some of the bridging programs studied were to schedule clinical placements off-cycle from regular, full-time programs to decrease competition for sites; seek placement sites in rural or underserved areas; and involve employers in a program advisory capacity to promote greater understanding and investment in the program.

Financial Sustainability

Sustainability is a core issue for bridging programs. Many programs are started with pilot funding, which supports the work needed to develop a bridging program, but when these dollars end, the program is expected to become self-sustaining. For many programs, this means moving towards cost-recovery models that rely on student tuition fees. The financial realities for many IEHPs, however, mean that high tuition fees can pose a significant hurdle to IEHPs enrolling in a bridging program.

The sustainability of programs is also impacted by student demand, which is influenced by many factors outside of the programs' control, such as labour market demand and immigration policies. Many of the bridging programs studied experienced fluctuating enrolment numbers, making long-term program planning difficult. A program that is designed to support learners through one-on-one personal attention can become too costly if demand increases. Similarly, low enrolment numbers may require the program to be offered less frequently or in a modified format to support a smaller number of participants. Conducting solid market

research on potential program demand was recommended, as was effectively marketing the program and building flexibility into the program to be able to adapt to changing enrolment numbers. With regard to marketing the program, when the profession is regulated, the regulatory college is an important vehicle for sharing information with potential participants. Another strategy is to coordinate the delivery of online bridging programs across provinces. This approach reduces duplication and is most appealing when enrolment numbers are low within any one province.

Curriculum Development

Conceptualizing and developing a comprehensive program that addresses a variety of knowledge gaps for participants with different educational backgrounds and levels of experience can be difficult for institutions. IEHPs come to bridging programs with different expectations and desires. Programs must balance the need to ensure participants meet the core competencies necessary for licensure with the recognition that IEHPs have already completed an educational program in their home country. Students do not want to duplicate what they already know, but knowledge levels can vary significantly from one student to another. Offering programs in a modular format is one option for allowing customization based on student need. Three of the seven bridging programs studied offered modular programming, in which students could choose to take only those elements they needed to address their specific knowledge gaps. This was seen as an effective and efficient way of delivering bridging education, though is more challenging for the institution to manage in relation to both enrolment planning and budgeting.

Program Delivery

Bridging programs must decide on the program length, when to offer classes, whether to offer courses online or in-person, and what type of credential graduates should receive. Among the bridging programs studied, programs ranged from four months to one year in length, courses were offered at various times of the week, and some programs offered all courses in person, others all online and others had blended delivery. The variety of approaches found among the bridging programs studied demonstrate the lack of consensus about the most effective options for each of these elements. Determining the appropriate mix can be challenging, as there are strengths and limitations to each option. For example, evening and weekend classes can accommodate IEHPs who have work commitments, but this typically extends the length of the program, meaning that it is longer before IEHPs will be licensed and able to work in their profession. Online classes are typically more cost-effective to deliver and provide access to geographically dispersed populations, but they limit opportunities for personal interaction as well as the ability to build networks with the instructors and other participants. Another challenge for institutions is deciding how to recognize participants who complete a bridging program. The bridging programs studied offered varying forms of recognition: some offered no formal recognition, one offered a diploma and another offered a continuing education certificate. The merits of different approaches were not probed with key informants and bridging program stakeholders interviewed, though one bridging program stakeholder mentioned that the certificate was not a compelling motivation for IEHPs to complete the program, while another felt that when there is no credential awarded there is less motivation to complete all of the assigned program work. These differences need to be teased out in greater detail.

Delivering bridging programs through postsecondary institutions was itself seen as a challenge by some key informants and program administrators. Colleges and universities are designed primarily to meet the needs of students with no or little previous postsecondary education who complete full-time programs, and many noted that it can be difficult to introduce systemic change within a higher education institution to better meet the needs of one particular population. Postsecondary funding systems offer little incentive for an educational institution to enrol students in a customized, short-term program. The funding and program structure

encourage enrolling all students in the same program rather than offering tailored or modular programs that accelerate students to the workplace, and institutional policies and procedures can hamper program responsiveness. Nonetheless, bridging programs located within postsecondary institutions are able to draw on existing resources, such as experienced faculty, specialized equipment, employer relationships and student services, making them a logical choice for delivering bridging education. Study participants noted that bridging program administrators need to find ways to work creatively within their institutional structure.

4.4 Role of Stakeholders

Numerous stakeholders play a role in developing and delivering bridging programs including regulatory colleges, government, employers and professional associations. The appropriate role of each of these stakeholders in the design and delivery of bridging programs is addressed in this section.

Regulatory Colleges

The appropriate role and level of involvement for regulatory colleges in the delivery of bridging education is a contested area. Regulatory colleges are responsible for setting professional standards and ensuring that regulated health professionals meet the training and education standards necessary to practice; therefore, many stakeholders see the regulatory colleges as a key player in the design and delivery of bridging programs. However, regulatory colleges are not mandated to provide education. As one key informant noted, the regulatory colleges at times feel pressure to become more involved in the delivery of bridging education:

“We have taken some criticism about the fact that we are not in the education business, we set the standards and we issue licenses for practice, we handle quality assurance for the people who are licensed to practice in Ontario and we have a complaints and discipline process and that’s it. So we are stretching our mandate a little to run and administer and oversee bridging programs. ... Purely on a policy level I think that is a role for government and not regulatory agencies and the fact that Quebec has taken such a strong move in that direction I think sets the bar quite high and I would like to see Ontario move in the same direction.” – Key informant

While the direct delivery of bridging programs is not within the mandate of regulatory colleges, many key informants felt that they should be active participants in the design of bridging curriculum.

“They need to be participating in advisory groups to make sure that every step of the way the programming, the learning outcomes all reflect the needs of someone being able to enter into the regulated profession.” – Key informant

“Regulatory bodies should be initiating the development of bridging programs because they know best what their client base needs. Unless you’ve got regulatory bodies telling you what curriculum to develop it’s likely that even after the individual goes through the bridging program they won’t have learned what they need to learn and they will still do poorly on the exam.” – Key informant

Given regulatory colleges’ experience with prior learning assessments, they are well positioned to help postsecondary institutions understand the most common gaps in IEHPs’ knowledge and practice and how these can be addressed. Regulatory colleges can also refer IEHPs to appropriate bridging programs. Current privacy rules prevent regulators from sharing the names of IEHPs with bridging programs, but in the future, regulators could be reimbursed for the expense of contacting IEHPs on the program’s behalf or application forms could be revised to include consent for sharing this information. In addition, the human resources

needed to act in an advisory capacity to bridging programs, such as attending meetings with postsecondary institutions, tax regulatory colleges' limited resources. Funding to enable the participation of regulatory colleges should be considered as part of the budget for developing and operating bridging programs.

Government

Key informants felt that federal and provincial governments can play two primary roles in bridging education: funding and coordination. First, federal and provincial governments need to clearly state their position on the extent to which it will help cover the costs of bridging.

“We should either be funding traditional bridging programs fully or not funding them at all.” – Key informant

The current approach of providing start-up funding for bridging programs results in effective operation while the funding is in place, but programs are often unable to sustain themselves after funding is discontinued. There needs to be sustainable funding in place, or at the least a requirement that programs have a plan in place to secure sustainable funding to be eligible for start-up funding.

Since the federal government sets immigration policy and has prioritized attracting internationally educated professionals, there is a belief that the government needs to continue to support these professionals until they are licensed to work in Canada.

“If government allowed these individuals to enter the country and really has a Fairness Commissioner in place and has an expectation that the individuals will be able to become licensed – and the federal government has been particularly vocal about this, they really view the regulatory agency as being a barrier to entry – I do find it odd that the members of the regulatory body are the ones that are being held financially accountable for addressing the gaps.” – Key informant

The Office of the Fairness Commissioner has helped keep regulatory colleges focused on improving licensing processes that support international applicants. This approach is useful for supporting internationally educated professionals.

“[The Fairness Commission is a] really valuable mirror for all agencies working with international applicants because it really does get pushed to the forefront of your mind the principles of transparency, objectivity, impartiality and fairness ... so that is a really good role for government.” – Key informant

Another important role that can be aided by government ministries or agencies is the sharing of promising practices for bridging programs, such as practices around recruitment, program development, program delivery and evaluation:

“I understand that HEQCO is funding this research so this is a perfect example of a government agency that is doing something useful to provide the sector with some information about what makes an effective bridging program, what kind of things you should think about as you are developing them, how should you measure success ... that is a very useful and thoughtful thing for government to do.” – Key informant

“I think there is lots of money being applied to research, develop resources for bridging for IEHPs but it's been a scattered approach and we therefore may be spending money, you know, redundantly

instead of focusing in and having a really good mechanism of sharing what is being developed from province to province.” – Key informant

Immigration services of the federal and provincial governments can also provide clear and accurate information to prospective immigrants prior to immigration regarding what is needed to become licensed in Canada and about the bridging programs available.

Employers

Employers that hire IEHPs may be able to assist bridging programs by providing feedback about the specific gaps and issues they encounter. They can also provide access to clinical placements, which help IEHPs better understand the Canadian health care system and how interprofessional teams function. Even if an employer cannot provide a placement, they could help by offering job shadowing, mentoring or volunteer opportunities. These opportunities would assist IEHPs in developing their professional networks and workplace readiness, and employers would benefit by investing in potential future employees.

Health professionals who serve as clinical educators for placements during the bridging program should receive training to develop the competencies and the degree of understanding and flexibility required to support IEHPs. Providing a placement for an IEHP often involves very different learning needs and expectations compared to supervising a Canadian student. Very few clinicians have formal training as educators, yet they are often expected to address IEHPs' knowledge gaps encountered during the placement. This training should be offered by the institution offering the bridging program, but would benefit from employers being involved in developing the training and providing employees time to participate.

Relationships must be developed with the employers that will provide the clinical training to IEHPs in their bridging programs. Developing these relationships takes time and human resources, but this is vital to ensuring that the program that students receive includes placement opportunities so that IEHPs are well prepared for the workforce. Bridging program administrators interviewed noted that they often built on existing employer relationships they had in place for their full programs. Involving employers in the program's advisory committee was also noted as a method for building relationships with employers and encouraging their investment in the program.

Employers would benefit from financial incentives to offer placements that could offset the costs involved with assigning clinical instructors to work with students. Taking on students can impact productivity and has workload implications for staff. Employers may also be hesitant to provide clinical training because of insurance rules. There are legal issues and WSIB concerns when uninsured professionals are working with patients. Bridging programs need to be cognizant of these potential concerns and work with employers to encourage their participation. However, employers need to recognize that they also benefit from providing clinical placements as it results in better trained health professionals.

Professional Associations

Key informants noted that professional associations have a limited role in bridging programs. The associations are funded by members, so assisting internationally educated professionals is outside of their mandate until an individual is licensed. They may be able to support bridging programs by communicating the availability of bridging programs to potential participants. They can promote the value of diversity to association members and help share information specific to the profession by working with the Foreign Credential Recognition Office.

Professional associations may be able to support learners in bridging programs by providing scholarships, employment information or mentors. After professionals complete a bridging program, key informants noted that professional associations can assist by offering support via continuing professional development opportunities to ensure that newly employed professionals are successful. This could include post-bridging integration supports, as well as offering ongoing professional development that reflects the needs of both new Canadians and Canadian-educated professionals.

5. Conclusion

Bridging programs are designed to help IEHPs prepare for their certification exams and for working in the Canadian healthcare sector. While each bridging program has its own unique features, based on the research conducted for this study there are common themes that should be considered in providing bridging programs for IEHPs.

5.1 Recommendations

Hybrid Theoretical/Practical Program Content

Bridging programs should have a combination of theoretical learning and practical application, including an opportunity to apply skills and learn about the Canadian workplace in a practicum or clinical placement. Components that support developing language skills, an understanding of the Canadian health care system, experience in a Canadian workplace and preparation for writing the certification exam are all important for becoming certified and finding work.

While some students would prefer to focus on reviewing material for their certification exams, learning about Canadian workplace culture is invaluable for successful employment after certification. It may be beneficial to make this content mandatory. Currently, it often does not appear immediately useful or financially viable, and time pressures may lead students to overlook these courses to their detriment as potential employees.

IEHPs come from different countries and have different experiences in both their work and education. Thus programs with content that can be personalized to address the learning needs and levels of students are valuable and more effective than one-size-fits-all approaches.

Bridging programs can also support IEHPs by offering assistance with the work search process and potentially bridging them into employment and providing post-employment supports.

Flexible Program Delivery

Flexibility in the delivery of programs such as an online format provides greater access for learners, particularly outside of major urban centres. However, many students found significant benefits in meeting and developing peer-support networks with other IEHPs and recognizing that they shared the same concerns. In-class sessions also aided language skills development and understanding of the social and cultural dimensions of various Canadian workplaces. Nonetheless, programs should offer accommodated scheduling with consideration that mature students may also be working and dealing with family pressures. Options include offering evening and weekend sessions, online or self-study components, and offering compressed programs to allow participants to return to work more quickly. It must be noted, however, that decisions about delivery methods need to be balanced with financial issues to ensure sustainability. There are increased costs

to customizing programs and offering different configurations of courses, and this also makes budgeting for the program more complex. These factors cannot be ignored.

Bridging programs could draw on economies of scale by developing common elements that can be used across bridging programs and/or by sharing resources with existing full-time programs at the institution. Existing examples are the *Orientation to the Canadian Health Care System, Culture and Context* offered through the University of Toronto and *Understanding the Canadian Health Care System: A Course for Internationally Educated Health Professionals* offered by HealthForceOntario. Another example is the innovative Multijurisdictional Midwifery Bridging Program (MMBP), developed and offered collaboratively by the Canadian Midwifery Regulators Consortium and multiple postsecondary institutions across the country (Bisnar & Martin, 2007).⁹

Developing assessment of previous education and experience using competency-based assessment rather than evaluation of credentials is one suggestion to get accurate and timely information about the skills and gaps of IEHPs. This approach is currently used for internationally trained midwives and it can be used successfully with a small pool of applicants. Competency-based assessment may be less sustainable with larger number of IEHPs applying for assessment.

Faculty Sensitive to the Needs of IEHPs

The best faculty for bridging programs are skilled professionals who are sensitive to the learning needs of IEHPs. The ability to adapt curriculum to students' learning needs, employ different pedagogical strategies for linguistically and culturally diverse students, and be attuned to the realities of IEHPs' daily lives are all valuable qualities in faculty. Hiring IEHPs who have become integrated into the Canadian health care system as instructors could help to motivate students. It is important that all instructors receive thorough professional development/teacher training in working with IEHPs.

Inclusion and Coordination of Stakeholders

Effective bridging programs include collaboration among and input and support from all levels of government, employers, regulating bodies, professional associations, postsecondary institutions and settlement agencies that work with immigrants. IEHPs face challenges in dealing individually with each stakeholder, such as completing numerous administrative processes. An additional issue is the complexity of registration and certification systems, which vary from province to province and profession to profession. The lack of a national system and standardized process leads to confusion among applicants. A more seamless system with greater cooperation between stakeholders and more standardized processes would assist bridging program applicants in navigating the system.

Another consideration is to work with employers to ensure that bridging program graduates who have completed the certification exam are prepared for the Canadian workplace. Involving employers may help to promote greater understanding of IEHPs, create opportunities for work experience during the bridging program, and ensure that graduates of the program have the skills they need to begin working in Canada.

⁹ Perhaps a sign of the challenges of multi-jurisdictional approaches, the MMBP website currently has the following statement on their website: "The MMBP is temporarily closed while midwifery regulatory and educational partners in the MMBP continue discussions with their respective government ministries to find a collaborative way for the assessment and bridging of internationally-educated midwives (IEMs) into practice in Canada to continue to be offered" (Multi-jurisdictional Midwifery Bridging Program, 2014).

Centralized Registry

At present bridging programs tend to be offered sporadically, move between institutions, and are often discontinued once pilot funding ends, contributing to a lack of accurate and comprehensive information on current bridging programs. Therefore, a central recommendation is the need to establish and maintain an up-to-date registry of bridging programs within Canada. This could be housed on the Citizenship and Immigration (CIC) website, with the information maintained by the licensing bodies.

Sustainable and Coordinated Funding

As noted, most bridging programs are developed with pilot project funding. In many cases, these pilot programs are not sustainable after the funding ends. In order to make the programs financially sustainable, a greater number of students would need to be recruited and/or the cost of tuition would rise. Increased recruitment would be highly preferable to a tuition increase, as many students must work or rely on savings to complete the program. Long-term government funding for bridging programs is a key element to ensuring their sustainability, especially for smaller professions where economies of scale are more difficult to achieve. Federal-provincial cost sharing as a way to fund bridging programs should be considered. This could reduce costs from duplicating programs and would require the involvement of immigration, health, employment and social development, and education ministries.

5.2 Future Research

Further research about bridging programs is needed in relation to the following areas:

- Analysis of key elements of bridging programs that contribute to IEHP success. There are a variety of approaches to bridging with little standardization across programs. Empirical research exploring the connection between specific bridging program elements and IEHP success is needed. For example, the benefits and limitations of clinical placements could be studied, with a focus on how they impact IEHP learning outcomes, certification and workforce entry.
- The sustainability of bridging programs in Canada and other countries to identify successful funding models.
- Employer attitudes towards hiring IEHPs. This research could examine employer concerns and ways to address these concerns, providing recommendations for developing relationships between bridging programs and employers.
- Explore how IEHPs learn about bridging programs to identify the best ways to provide information about these programs. This research should also examine how having access to information about bridging programs at different stages of the immigration and certification processes impacts IEHPs in getting certified and finding employment.
- Long-term longitudinal research following bridging program graduates through their work search and during employment in their field to help further identify the successes and gaps of bridging programs and other supports.

References

- Alboim, N., Finnie, R., & Meng, R. (2005). The Discounting of Immigrants' Skills in Canada: Evidence and Policy Recommendations. *IRPP Choices*, 11(2), 1-26.
- Alboim, N., & The Maytree Foundation. (2002). *Fulfilling the Promise: Integrating Immigrant Skills into the Canadian Economy*. Ottawa: Caledon Institute of Social Policy.
- Association of Canadian Community Colleges (ACCC). (2011). *Sustaining the Allied Health Professions: Research Report*. Ottawa: Association of Canadian Community Colleges.
- Atack, L., Cruz, E. V., Maher, J., & Murphy, S. (2012). Internationally Educated Nurses' Experiences with an Integrated Bridge Program. *Journal of Continuing Education in Nursing*, 43(8), 370-378.
- Austin, Z., & Dean, M. R. (2006). Bridging Education for Foreign-trained Professionals. The International Pharmacy Graduate (IPG) Program in Canada. *Teaching in Higher Education*, 11(1), 19-32.
- Baumann, A., & Blythe, J. (2009). *Integrating Internationally Educated Health Professionals into the Ontario Workforce*. Toronto: Ontario Hospital Association.
- Baumann, A., Blythe, J., Rheame, A., & McIntosh, K. (2006). *Internationally Educated Nurses in Ontario: Maximizing the Brain Gain*. Hamilton: Nursing Health Services Research Unit.
- Baumann, A., Blythe, J., & Ross, D. (2010). Internationally Educated Health Professionals: Workforce Integration and Retention. *HealthcarePapers*, 10(2), 8-20.
- Bisnar, D., & Martin, W. (2007). *Research Phase: Best Practice Report*. Winnipeg: Canadian Midwifery Regulators Consortium.
- Blais, P., & Darling, P. (2009). *An Analysis of the Performance of Internationally Educated Medical Radiation Technologists (IEMRTs) on the CAMRT Radiological Technology Certification Examination*. Ottawa: CAMRT.
- Bourgeault, I. L., Neiterman, E., LeBrun, J., Viers, K., & Winkup, J. (2010). *Brain Gain, Drain and Waste: The Experiences of Internationally Educated Health Professionals in Canada*. Ottawa: University of Ottawa.
- Bourgeault, I. L., Neiterman, E., Covell, C., Quartaro, A., & Kienapple, K. (2013). Synthesis of the Canadian Literature on Internationally Educated Health Professionals. *CHHRN Knowledge Synthesis Series*. Summary available at http://www.hhr-rhs.ca/images/stories/docs/features/iehp_one_page.pdf
- Brotten, L. (2008). *Report on Removing Barriers for International Medical Doctors*. Released by the Parliamentary Assistant of the Ontario Minister of Health and Long-Term Care.
- Canadian Association of Medical Radiation Technologists (2006). *A Situational Analysis and Recommendations for Internationally Educated Medical Radiation Technologists*. Ottawa: CAMRT.
- Canadian Society for Medical Laboratory Science (2009). *Bridging Programs for Internationally Educated Medical Laboratory Technologists: A Business Case*. Hamilton: CSMLS.

- Cargill, M. (1996). An Integrated Bridging Program for International Postgraduate Students. *Higher Education Research & Development*, 15(2), 177-188.
- College of Respiratory Therapists of Ontario (n.d.). *Pre-Registration Guide for Applicants Educated outside Canada*. Toronto: CRTO.
- Conference Board of Canada (2012). *CARE Centre for Internationally Educated Nurses*. Ottawa: Conference Board of Canada.
- Drummond, D. (2012). *Commission on the Reform of Ontario's Public Services*. Toronto: Queen's Printer for Ontario.
- Expert Roundtable on Immigration (2012). *Expanding our Routes to Success: The Final Report by Ontario Expert Roundtable on Immigration*. Toronto: Queen's Printer for Ontario.
- Federation of Health Regulatory Colleges of Ontario (2014). *Who We Are*. Retrieved from <http://www.regulatedhealthprofessions.on.ca/WHOWEARE/default.asp>
- Finley, D., & Hancock, D. (2010). *Report on the Pan-Canadian Framework: Foreign Credential Recognition*. Ottawa: HRSDC. Retrieved from http://www.esdc.gc.ca/eng/jobs/credential_recognition/foreign/progress_report2010.shtml
- Government of Canada (2014). *Specific Eligibility Criteria – Federal Skilled Workers*. Retrieved from <http://www.cic.gc.ca/english/immigrate/skilled/apply-who-instructions.asp?expand=jobs#jobs>
- Government of Ontario (2011). *Breaking the Cycle: Ontario's Poverty Reduction Strategy*. Retrieved from <http://www.children.gov.on.ca/htdocs/English/breakingthecycle/report/2011/progress.aspx>
- Government of Ontario (2013). *Helping Skilled Immigrant in Ontario Succeed*. News Release. Retrieved from <http://news.ontario.ca/mci/en/2013/11/helping-skilled-immigrants-in-ontario-succeed.html>
- Grant, M. (2009). CSMLS Prior Learning Assessment Clients – A Snapshot. *Canadian Journal of Medical Laboratory Science*, 71(5), 194-203.
- Guo, S., & Andersson, P. (2006). *PCERII Working Paper Series: Non-recognition of Foreign Credentials for Immigrant Professionals in Canada and Sweden: A Comparative Analysis*. Working Paper No. WP04-05. Retrieved from <http://www.ualberta.ca/~pcerii/WorkingPapers/WP04-05.pdf>
- Health Force Ontario (2012). *Health Professions Database 2010 Stat Book*. Toronto: Ministry of Health and Long-Term Care. Retrieved from <http://www.healthforceontario.ca/UserFiles/file/PolicyMakersResearchers/HPDB-2010-stat-book-en.pdf>
- Johnson, K., & Israel, N. (2011). *Towards a Pan-Canadian Bridging Program for Internationally Educated Applicants*. Montreal: National Alliance of Respiratory Therapy Regulatory Bodies.
- Martel, L., Malenfant, É. C., Morency, J.-D., Lebel, A., Bélanger, A., & Bastien, N. (2011). Projected Trends to 2031 for the Canadian Labour Force. *Canadian Economic Observer*, August 2011. Retrieved from <http://www.statcan.gc.ca/pub/11-010-x/2011008/part-partie3-eng.htm>

Metropolis Project (2004). *Current Success and Continuing Challenges of Foreign Credentials Recognition Conversation Report*. Ottawa: HRSDC and the Metropolis Project.

Multijurisdictional Midwifery Bridging Program (2014). *Your Bridge to Practicing Midwifery in Canada*. Retrieved from <http://cmrc-ccosf.ca/node/213>

Omidvar, R., & Richmond, T. (2003). *Immigrant Settlement and Social Inclusion in Canada*. Working Paper Series on Social Inclusion. Toronto: Laidlaw Foundation.

SP Consulting & The Whetstone Group (2008). *Financial Assistance for Immigrant Training (FAIT)*. Ottawa: Authors.

Stuckey, J., & Munro, D. (2013). *The Need to Make Skills Work: The Cost of Ontario's Skills Gap*. The Conference Board of Canada. Retrieved from http://www.conferenceboard.ca/temp/39a39159-71a0-48fe-a910-f1140a982d1f/14-032_skillsgap_rpt.pdf



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