



Articles

Ryerson University's Internationally Trained Medical Doctors Bridging Program: Preliminary Results from a Pilot Program

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Abstract

Although Canada is home to a large number of internationally educated health professionals, their skills and experiences are grossly underutilized in the Canadian healthcare landscape. Barriers to medical practice are pervasive, and as a result, the majority of internationally trained medical doctors (ITMDs) work in "survival" jobs significantly below their skill level. The pilot ITMD Bridging Program was developed to offer an alternative path for ITMDs by providing the skills and competencies required for non-licensed health-sector employment, ultimately aiming to improve the integration of ITMDs into the Canadian workforce. This secondary research evaluates the ITMD Bridging Program by

Résumé

Bien que le Canada soit le pays d'un grand nombre de professionnels de la santé formés partout dans le monde, les compétences et expériences de ceux-ci sont largement sous-utilisés dans le paysage des soins de santé du Canada. Les obstacles à la pratique de la médecine sont omniprésents, ce qui a pour résultat que la majorité des médecins formés à l'international (ITMD) occupent des postes dits de « survie » qui sont significativement en-deçà de leur niveau de compétences. Le programme de transition pilote des médecins formés à l'international a été conçu pour offrir une alternative aux ITMD en leur fournissant les aptitudes et compétences requises pour les emplois non agréés



assessing its impact at individual and societal, including economic, levels.

Qualitative and quantitative data were used to evaluate the program's individual and societal impact. Secondary data from participants' entry and exit surveys, as well as key informant interviews conducted with ITMDs upon program completion, were used for the analysis. The economic impact of the program and its overall utility to the economy of Ontario were assessed through a literature review and a social rate of return analysis.

ITMD program participants reported substantial improvements in skills related to each of the core courses, including health research methods, health informatics and data management, fundamentals of project management, as well as healthcare professionals' communication and leadership skills. ITMDs also perceived the program to be a viable option to address wasted human potential, enhance the economy, develop individual capacity building, and alleviate frustrations associated with labour market exclusion. The program is economically viable at the societal level and represents a 6.52% rate of return.

The ITMD Bridging Program has demonstrated that providing non-licensed health-sector employment is a viable option for policymakers to consider in their efforts to address the current waste of expertise in the Ontario healthcare sector. Bridging programs similar to the ITMD Bridging Program have the capacity to impact individual outcomes for ITMDs, the economic landscape in Ontario, and Canada at large.

du secteur de la santé, ciblant au bout du compte l'amélioration de l'intégration des ITMD parmi les travailleurs du Canada. Cette recherche de synthèse évalue le programme de transition pilote des médecins formés à l'international en mesurant ses effets à l'échelle individuelle et sociétale, en passant par l'échelle économique.

Des données qualitatives et quantitatives ont été utilisées pour évaluer l'effet individuel et sociétal du programme. Des données secondaires provenant des enquêtes d'arrivées et de départ auprès des participants, de même que des entrevues de témoins privilégiés tenues avec des ITMD une fois leur programme complété, ont été analysées. Les répercussions économiques du programme et son utilité générale pour l'économie de l'Ontario ont été analysées par une recension des écrits et une analyse du taux de rendement social.

Les participants au programme ITMD ont rapporté une grande amélioration des compétences liées à chaque cours obligatoire, incluant les méthodes de recherche en santé, l'informatique médicale et la gestion de données, les fondements de la gestion de projet, de même que les aptitudes en communication et en leadership des professionnels de la santé. Les médecins formés à l'international percevaient également le programme comme une solution viable au gaspillage du potentiel humain, à l'amélioration de l'économie, au développement du renforcement des capacités individuelles et à la réduction de frustrations associées à l'exclusion du marché de l'emploi. Économiquement viable au niveau sociétal, le programme représente un taux de rentabilité de 6,52 %.



Le programme de transition ITMD a prouvé que le fait d'offrir des emplois ne nécessitant pas d'agrément dans le secteur de la santé constitue une solution viable que les décideurs politiques peuvent prendre en considération dans leurs efforts pour contrer l'actuel gaspillage d'expertise dans le secteur des soins de la santé en Ontario. Les programmes de transition semblables au programme de transition ITMD ont la capacité d'influencer les résultats individuels des médecins formés à l'étranger, le paysage économique de l'Ontario et le Canada dans son ensemble.

Keywords: *ITMDs, capacity building, non-licensed employment, social and economic impact, new immigrant health professional, Ontario*

Introduction

Ontario is home to a large number of internationally trained medical doctors (ITMDs). Data from 2014 indicate that Ontario may have 6,000 ITMDs (Lofters, Slater, & Thulien, 2013; Taghizadegan, 2013). Despite the influx of highly educated ITMDs, a multitude of barriers prevent ITMDs from securing employment as medical doctors. Medical school enrolment has increased to address the healthcare workforce shortage, yet initiatives to address the intake and integration of international medical graduates (IMGs) into Canadian practice have largely been inadequate and unsuccessful (Islam, 2014; Taghizadegan, 2013). Most IMGs are required to complete a residency training program before becoming licensed to practice in Canada; however, very few residency positions are available for IMGs, and thus few are able to obtain licensure (Bourgeault, Neiterman, LeBrun, Viers, & Winkup, 2010; Campbell-Page et al., 2013). Obtaining a residency position has become increasingly difficult over the last several years. In 2008, 23% of IMGs successfully obtained a residency position, but only 6% were able to do so in 2011 (Thomson & Cohl, 2011). Other barriers, such as lack of language proficiency and lack of Canadian experience, can prevent IMGs from obtaining employment (Bourgeault et al., 2010; Rudenko, 2012). As a result, many ITMDs and IMGs face unemployment or engage in an occupation that is below their skill level. Unemployment or occupational over-qualification can negatively impact immigrants' mental health (Chen, Smith, & Mustard, 2010; Dean & Wilson, 2009).



Bridging programs have been recognized as effective means to facilitate professional integration (Bourgeault et al., 2010). Such programs can provide participants with relevant skills and education, as well as experience pertinent to the Canadian context that many ITMDs lack (Lum, 2009). The Bridging Program for ITMDs at the Chang School for Continuing Education, Ryerson University was developed in response to the societal need for better integration of IMGs/ITMDs into the Canadian workforce. The program provides students with skills and knowledge to pursue employment in the non-licensed healthcare sector. The pilot phase of the program involved four cohorts between 2014 and 2017, each with 14–20 students. Students in the pilot program completed twelve weeks of courses, including Health Research Methods (CKHS 100), Health Informatics and Data Management (CKHS 110), Fundamentals of Project Management for Health Professionals (CKHS 120), and Health Professional Communication and Leadership Skills (CKHS 140). After finishing the courses, students completed an optional four-week practicum to apply their skills and gain relevant Canadian experience.

The aim of this study is to examine the development and pilot testing of a bridging program by assessing the impact of the program at the individual level (capacity building for ITMDs to gain employment) and at the societal level (economic development). Greater understanding of the individual- and societal-level impacts of this bridging program can help with the development of strategies to facilitate ITMDs' transition into the non-licensed healthcare sector to address the health workforce shortage in Canada. Increased understanding of the role of this bridging program in addressing the underemployment of ITMDs can also inform potential opportunities to scale up or grow the program.

Methods

The ITMD Bridging Program is part of the Chang School of Continuing Education at Ryerson University in Toronto, Ontario. As of April 2017, a total of four cohorts were included in the pilot study (n=67). This study analyzed secondary data from program evaluation reports, key informant interviews, and a literature review.

Characteristics of Participants

Each cohort was composed of diverse participants. An overview of the participants' demographic characteristics can be found in Table 1. Five men and nine women from 10 different countries were in cohort 1 (n=14). Cohort two (n=14) consisted of eight men and six women from 11 different countries. The third and fourth cohorts were slightly larger, with 12 men and seven women from 11 different countries in cohort three (n=19) and eight men and 12 women from 10 different countries in cohort four (n=20).



Table 1: Demographic Characteristics of internationally trained medical doctors (ITMD) Students (Cohorts 1, 2, 3, and 4)

Cohort	Regions (Countries) of Origin	Gender Profile
Cohort 1 (n=14)	Africa (1)—Nigeria Americas (1)—Jamaica Europe (2)—Ukraine (1), Serbia (1) Middle East (7)—Egypt (3), Iran (3), Iraq (1) South Asia (3)—Bangladesh (1), India (1), Pakistan (1)	Men (5) Women (9)
Cohort 2 (n=14)	Africa (1)—Ethiopia Europe (1)—Armenia Middle East (4)—Egypt (2), Syria (1), Lebanon (1) South Asia (8)—India (2), Bangladesh (2), Sri Lanka (1), China (1), Afghanistan (1), Nepal(1)	Men (8) Women (6)
Cohort 3 (n=19)	Africa (1)—Nigeria Middle East (6)—Egypt (4), Saudi Arabia (1), Palestine (1) South Asia (12)—India (2), Bangladesh (3), Sri Lanka (1), Pakistan (2), Iran (2), Vietnam (1), Afghanistan (1)	Men (12) Women (7)
Cohort 4 (n=20)	Africa (2)—Nigeria (1), Libya (1) Europe (1)—Russia Middle East (7)—Egypt (3), Iran (3), Syria (1) South Asia (10)—Bangladesh (3), India (1), Pakistan (4), Philippines (2)	Men (8) Women (12)

Component 1: Entry and Exit Surveys

Pre-data and post-data were collected to evaluate students' comfort levels with skills related to the program prior to and after its completion. Students were given a list of "core skills" corresponding to each course component and were asked to rate their skill level according to a five-point Likert scale. A score of five indicated participants were "very comfortable" with their skill level, while a score of one indicated participants were "not very comfortable." The ratings for each skill level were averaged and compared between entry and exit to highlight skills acquired, using a weighted average approach. Related skill levels were compiled to provide an overall average change in confidence level for each of the four courses offered.



Component 2: Key Informant Interviews

Key informant interviews were conducted to gain an understanding of students' perceptions of the program, and their impression of the state of ITMD integration in Canada. Interviews were semi-structured, and responses were summarized. Content analysis of interview transcripts highlighted key trends.

Component 3: Potential Economic Impact

The social rates of return metric represents the costs and benefits to society of investment in education (Emery, Crutcher, Harrison, & Wright, 2006; OECD, 2003). An income-based approach was used to assess the social rate of return of investing in the educational training of ITMDs. For this analysis, the gain to society from training opportunities that facilitate the entry of ITMDs into non-licensed healthcare occupations was represented by the gain in income that ITMDs earn as non-licensed healthcare professionals over what they would have earned in their next best alternative occupation.

Results

Component 1: Entry and Exit Surveys

Between entry and exit, students in cohort one gained significant confidence in their skills for each course. Students in cohort one gained an average of 38.8 percentage points in CDCE 400/CKHS 140, 40.0 in CKHS 120, 18.8 in CKHS 110, and 44.3 in CKHS 100. In cohort two, similar gains in skill levels were also found; students gained 32.2 percentage points in CKHS 140, 48.0 in CKHS 120, 21.9 in CKHS 110, and 40.0 in CKHS 100. Gains in cohort three were 35.0 in CKHS 120, 26.0 in CKHS 100, 31.0 in CKHS 110, and 23.0 in CKHS 140. Lastly, in cohort four, students gained 48.0 percentage points in CKHS 120, while 43.0 were gained in CKHS 100 and CKHS 110 and 36.0 in CKHS 140. Figure 1 displays the average skills acquired for each course between cohorts one and four.

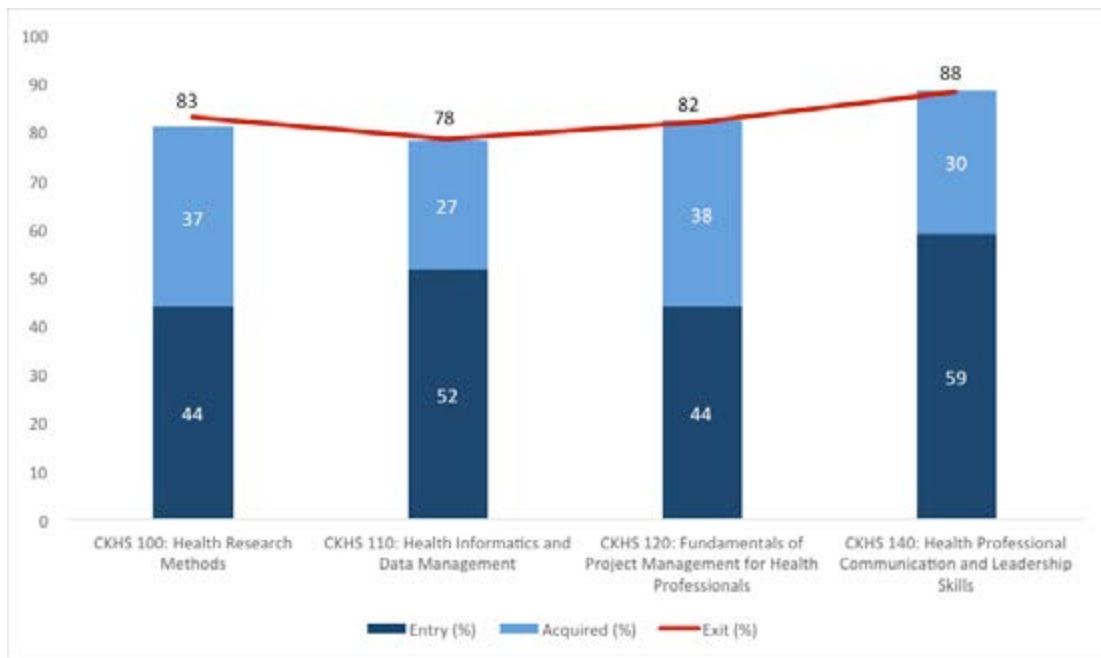


Figure 1. Average skills acquired pre and post program evaluation, cohorts 1–4.

Component 2: Key Informant Interviews

Content analysis revealed several key trends in key informant interviews. One overarching theme was that students considered the ITMD Bridging Program an opportunity to address human potential waste by providing participants with skills to facilitate their integration into the healthcare workforce. Participants also noted the potential of the program to enhance the provincial and national economies and to build individual capacity. Another key theme was the potential waste of human resources that occurs when ITMDs are unable to integrate into Canada's labour market. Further, one participant noted that "there is a high price to the individual, the society, and the country . . . due to non-utilization, and consequently unemployed ITMDs, which might affect the integrity of Canadian society in the long term." The Bridging Program provided students with a chance to develop capacity so they could successfully integrate into the Canadian labour market, which was highly valued as a means to address ITMDs' frustration with ongoing labour market exclusion.

Component 3: Potential Economic Impact

The social rate of return was calculated using the program's costs and benefits. Costs included \$7,000 (the cost of enrolling in the ITMD Bridging Program), \$14,431 (forgone earnings for immigrant ITMDs not working as physicians), and \$1,493 (forgone earnings over the course of a four-week unpaid practicum placement. In contrast, the benefits included \$49,275 (the



median annual earnings for a research analyst) and \$15,161 (the median earnings over the course of 16 weeks). The internal rate of return (IRR) of the ITMD program was calculated using the described earnings profiles. If 80% of program graduates obtained employment, the IRR would be 6.52%. Notably, conservative figures were used to estimate the IRR, so the results are likely understated. Given that a common benchmark rate of return is 4.25% for alternative financial investments, the rates of return for the ITMD program could be quite high.

Discussion

Findings from this study demonstrate the capacity of bridging programs such as the one offered at Ryerson University to develop ITMDs' skills, knowledge, and professional capacity, which are fundamental for their integration into the healthcare labour market. Students in each cohort demonstrated substantial skills improvement in research methods, health informatics, data management, project management, communication, and leadership. This finding highlights how the program developed the capacity of ITMDs to participate in the healthcare sector. As well, ITMD participants highlighted that the program can address the waste of human potential among IMGs in Canada, strengthen the provincial and national economies, and develop individuals' capacity to successfully integrate into the labour market. The high IRR of 6.52% also indicates that providing training to ITMDs is an economically viable option at the societal level and will generate high productivity gain for society.

This study has some limitations. Data were from the pilot phase of the program, so the sample size is small (n=67). Cohorts one and two had only 14 students, while cohort three had 19 students, and cohort four had 20 students. Therefore, the program participants may not be representative of ITMDs in Ontario. As well, there is the potential for selection bias, which may have resulted in the overrepresentation of students with strong views. As well, a limitation of the social rate of return is that only one possible job occupation was used in its calculation. Despite these limitations, this study provides insights as to the potential impacts of bridging programs to promote the integration of ITMDs into the non-licensed healthcare sector.

Conclusions

This study highlighted the individual and societal impacts of the pilot ITMD Bridging Program at Ryerson University. Such programs benefit individuals through capacity building and can positively impact the economy by generating a high return on investment. This bridging program also offers an opportunity to facilitate the transition of ITMDs into the non-licensed healthcare sector, thus reducing their underutilization and underemployment. Providing non-licensed health-sector employment is a potential strategy to reduce skill downgrading in the Ontario healthcare sector.



Given the small scope of this pilot study, many areas require further investigation. Additional research should engage a wider scope of stakeholders, such as ITMD program graduates, stakeholders from practicum partner organizations, major healthcare employers, and policy makers. This broadened scope should integrate multiple perspectives and thus lead to a clearer understanding of the process of integrating ITMDs into the non-licensed healthcare sector. Ongoing evaluation of the ITMD Bridging Program is also necessary to assess opportunities for program scale-up, ensure its relevance to students, and evaluate its short- and long-term impacts on the integration of ITMDs into the workforce. Future research should also conduct a long-term assessment of the social and economic rate of return of the ITMD Bridging Program to further understand its economic impact.

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Biography

Dr. Shafi Bhuiyan is an adjunct professor, School of Occupational and Public Health, and co-founder of the Internationally Trained Medical Doctors (ITMD) bridging program at the Chang School of Continuing Education, Ryerson University. He is also a faculty member of Clinical Public Health Division and Social and Behavioural Health Sciences Division, Dalla Lana School of Public Health, University of Toronto.

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