

WORKING PAPER NO: 669

Exploring the Canadian Market for Indian Health Workers

Ayona Bhattacharjee

Assistant Professor (Economics)

International Management Institute (IMI New Delhi)

Qutab Institutional Area

New Delhi- 110016

ayona.bhattacharjee@imi.edu

Banantika Datta

Doctoral Student of Economics

Indian Institute of Management Bangalore

Bannerghatta Road, Bangalore – 5600 76

banantika.datta18@iimb.ac.in

Rupa Chanda

Professor of Economics

Indian Institute of Management Bangalore

Bannerghatta Road, Bangalore – 5600 76

rupa@iimb.ac.in

Year of Publication – August 2022

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Abstract

The COVID-19 pandemic has highlighted the importance of health worker availability. Shortage of healthcare workers aggravated by the pandemic resulted in policies to attract and retain foreign health workers in several receiving countries. On the other hand, countries such as India, the largest global supplier of doctors and second largest for nurses, have launched schemes to boost the supply of health workers, both to address domestic demand-supply gaps and to provide healthcare workers to potential markets and regions. One such market is Canada, where around 39% of doctors and 25% of nurses were foreign-born in 2016, but a market which does not feature among the top destination countries for Indian health workers. This paper examines the prospects for exports of health workers from India to Canada. It discusses the rising shares of Indian health workers in Canada and growing opportunities in the Canadian market. It suggests the need to explore different approaches for collaboration between India and Canada, through enhanced bilateral economic ties, including trade and mobility arrangements, that can be beneficial to the health systems of both countries.

Keywords: *Migration, International Medical Graduates, Nurses, Recognition, Bilateral Mobility, Health Services*

JEL Classification Numbers: F22, F66, L22

1. Introduction

The onset of the COVID-19 pandemic resulted in various policy reactions from governments world-wide, such as the call for retired doctors and nurses to rejoin the health workforce or the permission granted to final year medical and nursing students to start delivering health services. Several such steps were adopted by the developed and the developing countries over the last two years to overcome health worker shortages that had threatened healthcare delivery during the crisis. However, such shortages were not new. Even prior to the pandemic, many countries had reported demand-supply mismatches in human resources for health (HRH). The pandemic only aggravated such shortages, calling for immediate policy attention both at the national and international levels. As the pandemic recedes and countries focus their attention on strengthening their health systems, the importance of health worker mobility is likely to become more crucial than ever in the past.

Against this backdrop, our paper contributes to the literature by studying a potentially untapped market for one of the major global source countries of health workers. More specifically, we explore Canada as a potential destination country for Indian health workers. Given the background on India's involvement in health worker mobility globally, our focus is on the prospects for India-Canada health worker migration and the potential role for trade and mobility arrangements or collaborations in this regard. This is motivated by two factors. First, as discussions of a comprehensive agreement between India and Canada are currently under way, any discussion covering the movement of skilled workers between the two countries is timely.¹ Second, Canada is an attractive market as the remuneration of professionals in Canada is comparable to that in other developed countries and additionally, the ease of obtaining Permanent Residence in Canada has in recent years made it a much sought-after destination country for many Indian skilled workers, thus necessitating an examination of how temporary mobility of specific categories of professionals from India, can be facilitated.

The pandemic has brought to fore, the malleability of cross-country health worker mobility barriers (Dempster & Smith, 2020). Some major migration-related policy changes for health workers introduced by the OECD countries reflect the same. For instance, Canada facilitated the recognition of qualifications for foreign-trained doctors. In Ontario, international medical graduates (IMGs), who had graduated in the past 2 years were allowed to apply for 30-day Supervised Short Duration medical licenses, to support domestic health workers and meet the surge in healthcare demand. IMGs with at least two years of postgraduate training and those who had completed Licentiate of the Medical Council of Canada exams were allowed to work as associate physicians (under the supervision of certified doctors), in British Columbia.² Thus, in multiple ways, the pandemic has highlighted the need for efficient allocation of health

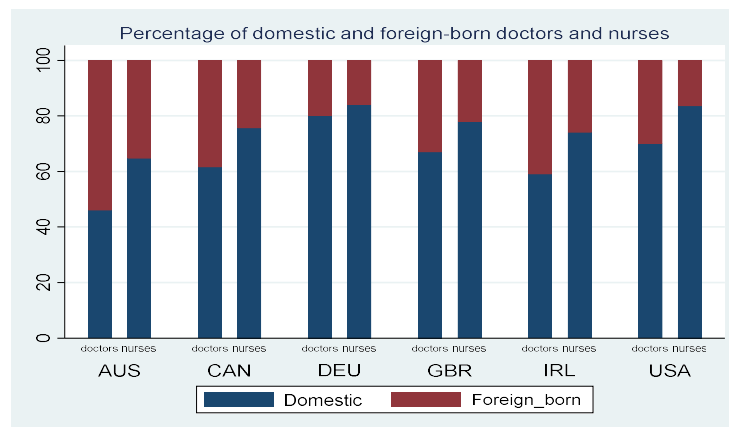
¹ Source: India-Canada second round free-trade agreement talks start next week dated 24th May 2022, https://www.business-standard.com/article/economy-policy/india-canada-second-round-free-trade-agreement-talks-start-next-week-122052401775_1.html

² Source: <https://www.gov.uk/government/publications/immigration-health-surcharge-applying-for-a-refund/immigration-health-surcharge-guidance-for-reimbursement-2020> accessed on 21 April 2022

workers and the ways to augment HRH through domestic and international recruitment policies.

Pre-pandemic data shows that the United States (US) and the United Kingdom (UK) were two major destinations for foreign-trained doctors, with more than 215,000 working in the US as of 2016 and over 50,000 working in the UK as of 2017 (OECD, 2019) (see Figure 1). However, the European nations, Canada and Australasia have been growing in importance as health worker destination countries (Yeates & Pillinger, 2018). The unique feature of the Canadian market is that Canada is often seen as a pathway to the US and provides a transit migration route for health workers. Thus, exploring the Canadian market for Indian health workers can also have implications for other migration paths.

Figure 1: Percentage share of domestic and foreign-born doctors and nurses in selected OECD countries



Note: This figure shows the share of domestic and foreign-born doctors and nurses in six major OECD destination countries. This figure is based on data from DIOC 2015/16.

Formal measurement of surpluses or shortages of health workers is complex and hard to assess. Rough estimates as provided in WHO (2006) indicate that around 57 countries at that time had critical shortages of skilled health workers, which could translate to growing deficits of millions of doctors, nurses, midwives, pharmacists, dentists, and other health workers, globally. The demand for health workers was around 48.3 million in 2013 while the supply was approximately 43.5 million, creating a shortage of around 4.8 million health workers. As per WHO (2016) projections, the demand for health workers under assumptions of no further health shocks, is estimated to be 80.2 million by 2030, while the supply will be around 67.3 million³, creating a significant deficit. Even though, the supply of health workers is expected

³ Source: Global strategy on human resources for health: Workforce 2030, World Health Organization 2016, page 40 and 45, available at https://www.observatoriorh.org/sites/default/files/webfiles/fulltext/2019/global_strategy_workforce2030_who.pdf, accessed in Nov 2021

to increase by 55% during 2013 to 2030, there will still be a significant increase in health worker shortage globally.

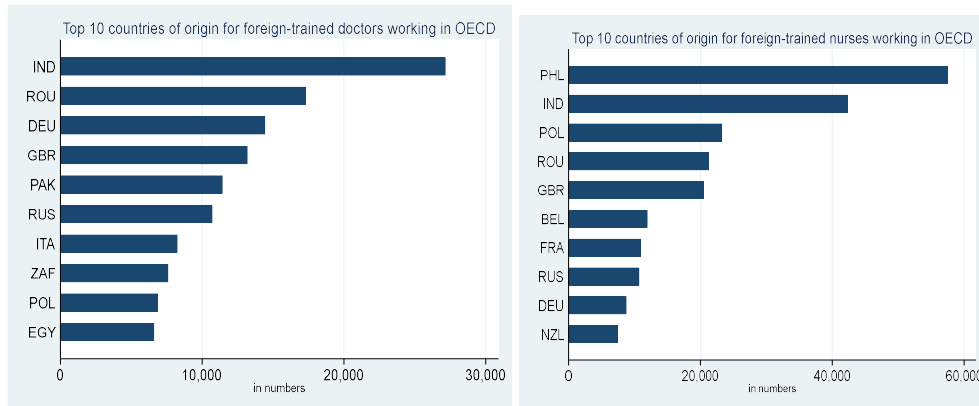
Traditionally, HRH shortages in any country have been addressed through an increase in the number of medical colleges, adding to the pool of graduating students, or at times, increased reliance on the immigration of foreign-born/foreign-trained health professionals (OECD, 2019). The existing literature on professional migration reports certain push and pull factors, which are also applicable in case of migration of health professionals (HPs). The commonly cited push factors include poor remuneration, poor working conditions, limited training and education opportunities, and unclear or poor career prospects. The pull factors are usually attributed to the shortages of personnel in destination countries, better remuneration, better working conditions, career advancement opportunities, and better quality of life.

Around one-third of all foreign-born or foreign-trained doctors and nurses originate from within the OECD countries such as France, Poland, the UK, etc.; another one-third is from non-OECD upper-middle-income countries and the remaining one-third from low-middle income and low-income countries like India and the Philippines.⁴ Figure 2 shows the major source countries of health professionals working in the OECD countries. In 1990s, India ranked 6th in terms of the number of nurses applying for US nursing licenses, but since 2003 Indian nurses have been the second largest applicants, next only to the Philippines. In Ireland and the UK, Indian nurses surpassed the number of Filipino nurses in 2005 (Matsuno, 2009). As of 2017, there were 69,000 Indian doctors and 56,000 Indian nurses working in the UK, US, Canada, and Australia.⁵ India has thus been one of the leading source countries for migrant health workers.

⁴ Source: <https://www.oecd.org/coronavirus/policy-responses/contribution-of-migrant-doctors-and-nurses-to-tackling-covid-19-crisis-in-oecd-countries-2f7bace2/>, accessed 18 April 2022

⁵ <https://www.migrationpolicy.org/article/global-demand-medical-professionals-drives-indians-abroad>

Figure 2: Foreign-trained doctors and nurses in OECD countries
from 10 major countries of origin



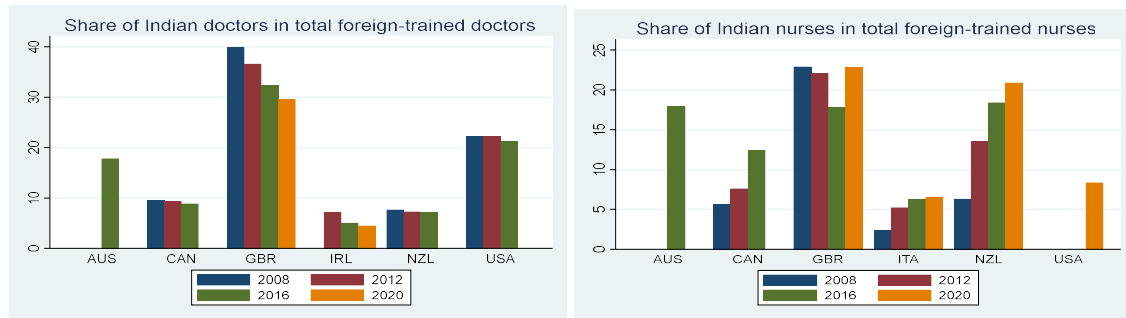
Source: *OECD Health Statistics 2019*.

Note: It shows the number of foreign-trained doctors and nurses working in OECD countries from top 10 origin countries where the country codes are – AUS: Australia, CAN: Canada, DEU: Germany, GBR: United Kingdom, IND: India, ITA: Italy, IRL: Ireland, NZL: New Zealand, USA: United States of America, PHL: Philippines, ROU: Romania, PAK: Pakistan, RUS: Russia, ZAF: South Africa, POL: Poland, EGY: Egypt, BEL: Belgium, FRA: France.

2. India as a major supplier of health workers

India has emerged as a global supplier of doctors and nurses over the past few decades and the recent pandemic has made India an even more preferred source of health workers. Major destination countries for Indian health workers have been the US, UK, Australia, Canada, and the Gulf Cooperation Council (GCC) countries. It is worth noting that the US reports the highest number of Indian doctors while the UK reports the highest number of Indian nurses. Although, in absolute terms the largest destination country for Indian doctors has been the US, in percentage terms, India-trained doctors are highest in the UK. Figure 3 shows that the share of India-trained doctors as a percentage of total foreign-trained doctors working in the UK has decreased from 40% to around 30% from 2008 to 2020. However, it is still higher than in the US, where around 20% of the foreign-trained doctors are from India. As of 2016, around 18% of the foreign-trained nurses in Australia and more than 10% in Canada were from India. In 2020, more than 20% of the foreign-trained nurses in the UK and New Zealand were trained in India.

Figure 3: Share of Indian-trained doctors and nurses in selected OECD countries



Source: *Health Workforce Migration, OECD Health Statistics 2019*.

Note: It shows the share of doctors and nurses trained in India as a percentage of total foreign-trained doctors and nurses working in these OECD countries. Italy is not included in case of doctors and Ireland is not included in case of nurses as, data is missing for all years considered in this graph for respective countries.

During the recent pandemic, the demand for Indian nurses increased around the globe including in Malta, Saudi Arabia, Belgium, the UAE, and Ireland. Dubai had doubled the salary of Indian nurses and the UK offered free accommodation for the first three months to Indian nurses⁶. Many Gulf countries relaxed the entrance exams and certification requirements for Indian nurses and issued special visas. To cater to the rising global demand, certain public initiatives were adopted to increase the supply of health workers in India. The Ministry of Skill Development and Entrepreneurship (MSDE) in India has identified 300,000 jobs in healthcare sector - doctors, nurses, and allied health personnel in countries like Australia, Germany, Canada, Japan, Singapore, and Sweden (Kumar, 2021). The Government of India (GoI) is also standardising guidelines and curricula, increasing the number of seats for medical and nursing education⁷.

Studies on future projections state that there will be 2.23 million skilled Indian health workers by 2025 and 2.65 million by 2030, compared to the baseline value of 1.77 million in 2019 (Karan, et.al., 2021). Another study estimates the annual supply of public health professionals to be around 22,318 in 2026 compared to the baseline value of 11,159 in 2017 (Tiwari, Negandhi, & Zodpey, 2019). The MBBS and M.Sc. Nursing seats have been increased to address the supply bottlenecks. The rapid increase is evident from the rise in the number of Auxiliary Nurse and Midwife (ANM) schools from 298 in 2000 to 1949 in 2021; from 285 General Nursing and Midwifery (GNM) schools in 2000 to 3275 in 2021; a rise in BSc. Nursing colleges from 30 in 2000 to 2127 in 2021; increase in the number of MSc. Nursing colleges

⁶ Source: <https://www.orfonline.org/expert-speak/exporting-indian-healthcare-workers-world/>, accessed on 5 April 2022

⁷ Source: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1744362>, accessed on 9 Feb 2022

from 10 in 2000 to 701 in 2021.⁸ Additionally, the GoI has taken steps to increase the availability of healthcare professionals by allowing the establishment of medical colleges in Public-Private Partnership mode, and relaxed norms concerning requirements for faculty, staff, bed strength and other infrastructure, necessary for establishing medical colleges. In addition to these initiatives on the domestic front, the GoI has also signed partnerships in healthcare, to facilitate and manage the flow of health workers. Such bilateral arrangements help in regulating health worker mobility by streamlining recruitment procedures, market access, and harmonization of standards, in a way that best serves the interest of both countries. This also highlights the fact that countries may diversify and strengthen their ties with partner countries with which they have significant engagement through the migration of professionals.

3.1 India's trade agreements regarding health worker mobility

According to the GoI, international cooperation in healthcare encourages capacity building, training, exchange of information, and enhancement of skills through mobility of experts, in a mutually beneficial manner. As of 2018, the GoI has memoranda of understanding (MoUs), memoranda of cooperation (MoCs) and agreements in the healthcare sector with 53 countries.⁹ These partnership arrangements are with countries like Australia, Japan, Maldives, UK, Poland, Germany, Italy, Netherlands, Qatar, Oman, Saudi Arabia, Vietnam, Myanmar, Cuba, and Egypt.

India and Korea signed a Comprehensive Economic Partnership Agreement (CEPA) in 2009 whereby Korea allowed mobility of veterinary service providers and certain categories of health workers from India, subject to conditions on practice.¹⁰ In 2011, India signed a Comprehensive Economic Cooperation Agreement (CECA) with Malaysia, allowing Indian skilled professionals like accountants, engineers, and doctors to work in Malaysia. It also encouraged relevant authorities to work towards mutual recognition of qualifications and experience obtained, for medical doctors, dental and nursing.¹¹ India entered into a Mutual Recognition Agreement (MRA) in nursing services with Singapore in 2018. It established mutual recognition of educational qualifications and work experience to facilitate the mobility of registered nurses. It identified 7 training institutions from India and 4 from Singapore. Nursing graduates from these recognized institutions were to be allowed to practice in the host country and to be monitored to ensure standards.¹²

⁸ Source: Indian Nursing Council Annual Report, 2020-21, available at:

<https://indiannursingcouncil.org/uploads/annualreports/16367119461059.pdf>

⁹ Source: <https://eparlib.nic.in/bitstream/123456789/779430/1/AS356.pdf>, accessed on 20 April 2022

¹⁰ Source: <https://dot.gov.in/sites/default/files/India%20Korea%20CEPA%2007.08.2009.pdf>, accessed on 21 April 2022

¹¹ Source: <https://dot.gov.in/sites/default/files/India%20Malaysia%20CECA%2001.07.2011.pdf>, page 56, accessed on 21 April 2022

¹² Source: <https://www.indiannursingcouncil.org/uploads/pdf/16001723668534003245f60b14e8d7c1.Pdf>, accessed on 21 April 2022

3.2 India's health worker mobility agreements in the post-Covid world

India signed an MoU with Denmark in July 2021¹³, with the Republic of North Macedonia in Dec 2021 and with the US in Sept 2021 in the fields of health and biomedicine.¹⁴ Another MoU was signed with Suriname in December 2020, which entailed the exchange and training of medical doctors and setting up of medical facilities.¹⁵ India signed an MoU with the UK in May 2021, where the UK agreed to offer information for facilitating recruitment and immigration of skilled workers from India, including nurses and health care professionals.¹⁶ India signed an MoC with Japan in January 2021, to enable mobility of skilled workers under 14 categories, including nursing care professionals, from India to Japan. This provides employment opportunities on a contractual basis to workers who meet the skill requirement and clear Japanese language tests. Additionally, India and Japan signed a "Technical Intern Training Programme" in 2017, allowing Indian youth to avail internships in Japan in several fields including healthcare.¹⁷

Given the growing number of government initiatives as well as the push to boost India's health worker supply to cater to both domestic and global markets, it is time to identify potential untapped destination markets. One such market identified by MSDE is Canada, where around 54% of doctors and 26% of the nurses are foreign-born but which is yet to be one of the top destinations for Indian health workers. In a detailed analysis, presented more than a decade ago, Dumont et al. (2008) highlighted how the composition of source countries for foreign HPs in Canada had been changing with rising shares of physicians from South Africa and India, replacing the high shares of HPs from the UK and Ireland. India and Canada launched negotiations towards a Comprehensive Economic Partnership Agreement (CEPA) in 2010 and this is thus an opportune time to revisit the issue of temporary mobility of workers within the larger context of trade in services between the two countries.¹⁸

4. The untapped market: Canada

Canada has implemented the WHO Global Code of Practice on the International Recruitment of Health Personnel. The Government of Canada's departments, Employment and Social Development Canada (ESDC) and Immigration, Refugees and Citizenship Canada (IRCC) facilitate fair treatment of foreign trained workers in Canada, including appropriate wage payments. Also, temporary foreign workers in Canada have the same rights to workplace

¹³ Source: <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1735378>, accessed on 18 April 2022

¹⁴ Source: https://www.mea.gov.in/Uploads/PublicationDocs/34894_MEA_Annual_Report_2021-22.pdf accessed on 18 April 2022

¹⁵ Source: https://www.pmindia.gov.in/en/news_updates/cabinet-approves-mou-between-india-and-suriname-on-cooperation-in-the-field-of-health-and-medicine/, accessed on 17 April 2022

¹⁶ Source: <https://www.gov.uk/government/publications/migration-and-mobility-partnership/mou-on-migration-and-mobility-partnership-between-india-and-the-united-kingdom>, accessed on 21 April 2022

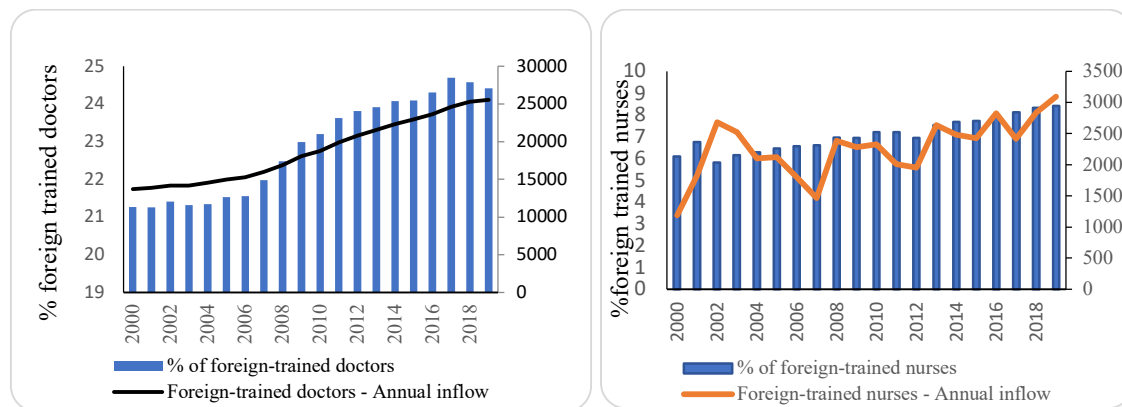
¹⁷ Source: https://www.mea.gov.in/press-releases.htm?dtl/33394/Signing_of_the_IndiaJapan_Memorandum_of_Cooperation_on_Specified_Skilled_Workers, accessed on 21 April 2022

¹⁸ Source: <https://commerce.gov.in/international-trade/trade-agreements/indias-current-engagements-in-rtas/india-canada-comprehensive-economic-partnership-agreement-cepa/>

protection as Canadians and permanent residents. These make the Canadian market a desirable destination for skilled professionals, including different types of health workers.

Canada follows a specific classification for health workers, of which data is available for 30 categories. Such data reveals that historically, Canada has been reliant on international medical graduates (IMGs), with the IMG shares hovering around 25.6% in 2014 and rising to 26.4% in 2018. The corresponding share of family physicians increased from 28.6% in 2014 to 29.9% in 2018 and the share of specialists remained stable at around 22% during 2014–2018 (CIHI, 2018)¹⁹. **Error! Reference source not found.**4 presents the stock and flow of foreign-trained doctors in Canada, depicting a steady increase over the last two decades. Relative to the case of physicians, there is a widening gap between the number of domestic and foreign-trained nurses in Canada.

Figure 4: Share and annual inflows of foreign-trained doctors and nurses in Canada



Source: OECDSTAT Health Workforce Migration Database

(https://stats.oecd.org/Index.aspx?DataSetCode=HEALTH_WFMI#), accessed on 10th June 2022. Note: The % foreign-trained doctors (nurses) is the number of foreign-trained physicians as a share of total number of doctors (nurses) in a particular year.

There are two distinct ways in which foreign health professionals can enter the Canadian healthcare market – either as a student or as a professional. First is a two-step migration model as the migrants can convert from study to work visas (Hou, Crossman, & Picot, 2020). In the nursing profession, while the students enrol in nursing programmes, the provincial nursing regulatory agencies can process their applications so that when required, they can complete the entry-to-practice tests or such other specific tests (Hillmann, 2005). Evidence shows that the number of study permit holders in Canada has doubled during the last decade. During 2009 to 2020, most international students registered in health sciences in Canada were reported to be from India (Statistics Canada, 2019).

¹⁹ Source: https://secure.cihi.ca/free_products/physicians-in-canada-2018.pdf, accessed on 13th June 2022.

Despite variations across territorial requirements, the usual entry eligibility criteria for IMGs in Canada include holding a medical degree from medical schools recognised by the World Directory of Medical Schools or from a Canadian/U.S. medical school accredited by the Liaison Committee on Medical Education/the Committee on Accreditation of Canadian Medical Schools. This is to be followed by certain entrance examinations. They may achieve full licensure only if they have a recognised medical degree and are a Licentiate of the Medical Council of Canada (LMCC). The latter is granted by the Medical Council of Canada (MCC) to medical graduates who: (i) pass the Medical Council of Canada Qualifying Examination (MCCQE) Part I and Part II (or an acceptable clinical assessment deemed comparable to the MCCQE Part II) (ii) have satisfactorily completed at least 12 months of acceptable postgraduate training or an acceptable equivalent.

Each Canadian province/territory has a medical regulatory authority that is responsible for setting the licensing criteria for that province. The regulatory bodies in each province are responsible for overseeing the actions of their members.²⁰ For instance, to practise medicine in Ontario, there are different options available to the IMGs, depending on their level of qualification. Those who meet the College of Physicians and Surgeons of Ontario (CPSO) requirements can enter practice directly, while others require additional assessment or training.²¹ IMGs who have completed specialty training from specified institutions in approved jurisdictions of Australia/New Zealand, Hong Kong, Singapore, South Africa, Switzerland or UK can directly apply for training assessments.²²

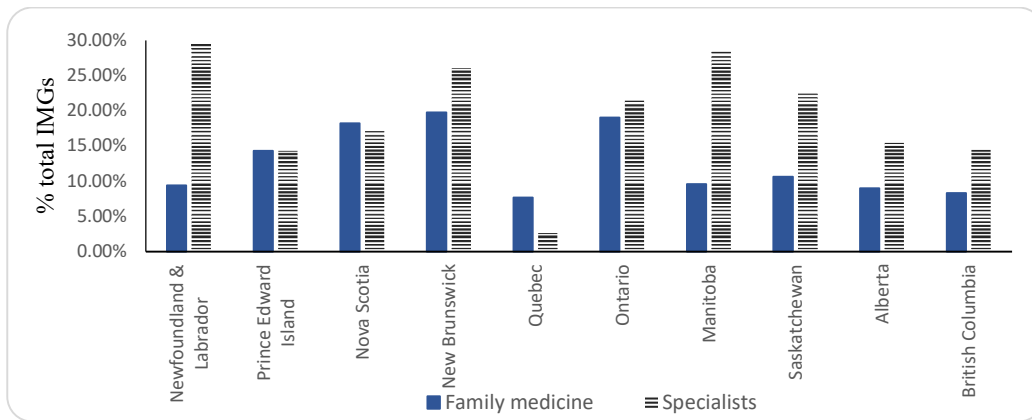
When considering the flow of health professionals from India to Canada, we find that the share of India-trained physicians and nurses migrating to Canada has been rising sharply with wide variations across the provinces. Latest data shows that Newfoundland and Labrador have the highest share of India trained family physicians while Manitoba reports the highest share of India trained specialists. Overall, with the shares of family physicians and specialists combined, New Brunswick reports the highest share among all the provinces (see Figure 5). The share of India-trained nurses has been steadily increasing over time, with significant increases in the share of licensed practical nurses (LPNs).

²⁰ The regulatory authorities for RNs are: British Columbia College of Nursing Professionals, College and Association of Registered Nurses of Alberta, Saskatchewan Registered Nurses Association, College of Registered Nurses of Manitoba, College of Nurses of Ontario, Ordre des infirmières et infirmiers du Québec, Nurses Association of New Brunswick, Nova Scotia College of Nursing, College of Registered Nurses of Newfoundland and Labrador, Registered Nurses Association of the Northwest Territories and Nunavut, Registered Nurses Association of the Northwest Territories and Nunavut, Yukon Registered Nurses Association

²¹ Source: <https://extranet.who.int/dataformv3/index.php/nri/module/index>

²² Source: <https://www.royalcollege.ca/rcsite/credentials-exams/assessment-international-medical-graduates-e#jur>

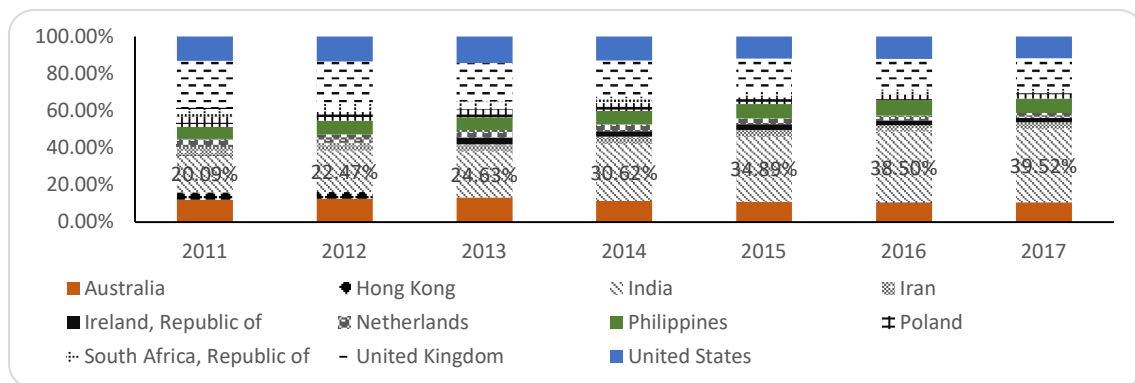
Figure 5: Canadian province-wise share of India-trained Physicians (as % of total IMGs in the province), 2018



Source: Supply, Distribution and Migration of Physicians in Canada, Canadian Institute for Health Information, (CIHI, 2018). Note: Yukon, Northwest Territories and Nunavut are not represented as zero India-trained physicians were reported in those provinces in 2018.

Apart from the migration of physicians and nurses from India to Canada, as discussed in Bhattacharjee (2022), several other categories of health workers trained in India also hold significant shares in Canadian health workforce. For instance, Figure 6 shows India’s position in the employment of physiotherapists in direct care in Canada. The figure shows that among the source countries of graduation, India’s share has been steadily rising from around 20% to 40% during 2011-17, surpassing the contributions of the UK and the US. Currently, the share of physiotherapists trained in India is the highest among all other source countries of graduation.

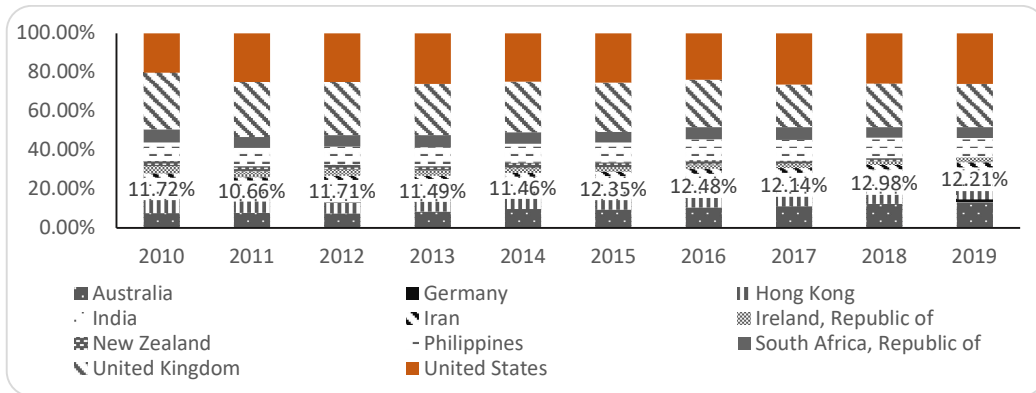
Figure 6: Share of India-trained physiotherapists employed in Canada, during 2010-19



Source: Health Workforce Database, Canadian Institute for Health Information (<https://www.cihi.ca/en/health-workforce-database-metadata>).

Figure 7 shows that the occupational therapist workforce employed in direct care, by top countries of graduation, provinces/territories. It shows that India's share has been stable at around twelve percent. The major shares in this segment by any foreign-trained workforce has been held by the US and the UK.

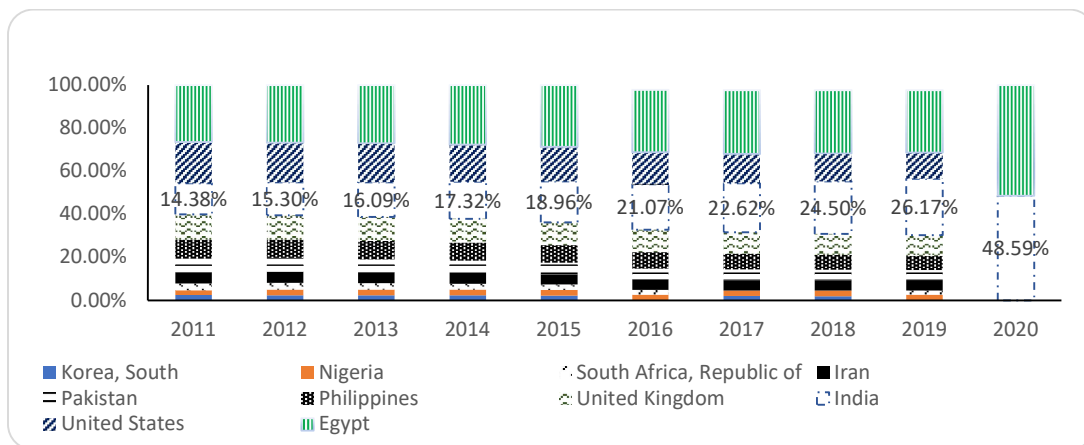
Figure 7: Share of India-trained occupational therapists in Canada, during 2010-19



Source: Health Workforce Database, Canadian Institute for Health Information (<https://www.cihi.ca/en/access-data-and-reports>).

Figure 8 shows the growing role of pharmacists employed in Canada with graduation degrees obtained from India. The shares have been rising steadily.

Figure 8: Pharmacist workforce employed in direct care, by top countries of graduation



Source: Health Workforce Database, Canadian Institute for Health Information (<https://www.cihi.ca/en/health-workforce>).

The existing literature also suggests a rising demand for positions in elderly care in Canada. Entry into the unregulated personal support worker (PSWs) positions for elderly care in Canada

has been emerging as a potential route for entering the Canadian health sector (Williams et. al., 2015; Walton-Roberts, 2019). There is growing demand for nurse aides, orderlies and patient service associates who assist nurses, hospital staff and physicians in Canada.²³ They mostly work in nursing, residential care facilities and in hospitals (23%) or facilities providing individual and family services and other health care establishments. In 2016, more than a third of the 245,500 people employed as nurse aides, orderlies and patient service associates in Canada, were foreign professionals (Turcotte & Savage, 2020). This share was higher than the share of foreign professionals in all other occupations in Canada and was also growing faster than the share of foreign professionals in any other occupation. For instance, between 1996 and 2016, the proportion of immigrants in the occupations of nurse aide or orderly and patient service associate increased from 22% to 36%, while the share in other occupations increased from 19% to 24% over this same period. Major source countries for these positions are from Southeast Asia, the Caribbean and Bermuda and sub-Saharan Africa. These prospects entail the need for exploring how Indian professionals could be a source of geriatric workers, nurses aides, and other such less skilled health workers. Thus, the critical part of linking India and Canadian health markets through health worker mobility has implications not only for the highly skilled HRH but also for the relatively lesser skilled health workers.

4.1 Canada's trade agreements & Health worker mobility

The Canadian Occupational Projection System (COPS) shows the future trends in job openings and for job seekers at different occupational levels in Canada. The projections show a steadily rising demand for different classes of health workers in Canada (see Table 1). Given the rising share of foreign-trained health professionals attracted by the rising opportunities for health-related job opportunities in Canada, there is a need to analyse labour mobility clauses in its free trade agreements.

Canada is party to several international trade agreements and forums such as the General Agreement on Trade in Services (GATS); North American Free Trade Agreement (NAFTA, in partnership with the United States and Mexico); the Canada-European Union Trade and Investment Enhancement Agreement; the Asia-Pacific Economic Cooperation; and several other bilateral agreements, reflecting its interest in negotiating trade liberalization in services. It has specifically undertaken different commitments under the GATS except for the health, public education, social services and cultural services sectors.

²³ See Health Care Assistant in Canada, available at <https://www.jobbank.gc.ca/marketreport/jobs/15778/ca>, accessed on 27th July 2022.

Table 1: Future projections of the employment opportunities in Canadian Health system

Occupation Name	2024	2025	2026	2027	2028
Managers in health care	34900	35500	36100	36700	37400
Medical administrative assistants	79700	80800	81800	82900	84100
Nursing co-ordinators and supervisors	41800	43000	44200	45500	46700
Specialist physicians	59700	61500	63200	65000	66800
General practitioners and family physicians	92400	95100	97800	100600	103400
Dentists	29100	29500	29900	30300	30700
Veterinarians	11400	11500	11600	11600	11700
Optometrists, chiropractors and other health diagnosing and treating professionals	39700	40700	41700	42700	43700
Pharmacists	46200	46600	47000	47400	47800
Dietitians and nutritionists	14400	14700	14900	15200	15600
Audiologists and speech-language pathologists	11100	11300	11500	11700	12000
Physiotherapists	33600	34500	35200	36000	36800
Occupational therapists & Other professional occupations in therapy and assessment	31500	32300	33100	33900	34800
Medical laboratory technologists & Medical laboratory technician and pathologists' assistants	54200	55000	55800	56600	57500
Animal health technologists and veterinary technician	23300	23800	24100	24600	25000
Respiratory therapists, clinical perfusionists and cardiopulmonary technologists; Medical radiation technologists & Medical sonographers	51200	52200	53300	54400	55500
Cardiology technologists and electrophysiological diagnostic technologists, n.e.c. & Other medical technologists and technician (except dental health)	63100	64000	64800	65700	66600
Technical occupations in dental health care	38300	38800	39200	39700	40100
Opticians	11800	12000	12200	12400	12600
Practitioners of natural healing; Massage therapists & Other technical occupations in therapy and assessment	71100	72200	73100	73800	74500
Licensed practical nurses	88000	89400	90800	92200	93700
Paramedical occupations	30300	30700	31100	31500	31900
Dental assistants	34500	35000	35500	36000	36600
Nurse aides, orderlies and patient service associates & Other assisting occupations in support of health services	376700	385900	394900	404300	413900
Psychologists	26200	26800	27300	27800	28300
Registered nurses and registered psychiatric nurses	376200	386300	396300	406600	417100
Health occupations	1664500	1701500	1737300	1774400	1812400

Source: Canadian Occupational Projection System (COPS) - 2019 to 2028 projections (<https://open.canada.ca/data/en/dataset/e80851b8-de68-43bd-a85c-c72e1b3a3890>), accessed on 25th July 2022.

Canada is party to some bilateral and regional agreements for international recruitment and migration of health personnel. The one between Canada, US, Australia, Ireland, and UK promotes circular migration of doctors by recognising their training and certificates, even if obtained from outside Canada.²⁴

The *NAFTA*, superseded by the Canada–United States–Mexico Agreement (CUSMA) in 2020, allows citizens of a member country to qualify for temporary entry into another member country as a professional. Over sixty occupations (including healthcare services) are to be considered for entry provided the candidates meet the minimum education requirements. As per the agreement, professionals are not subject to any Labour Market Impact Assessment (LMIA) but require work permits to practise in Canada. In this regard, Table 2 shows the minimum educational requirements for the entry of health professionals. Temporary workers authorized to enter Canada under the NAFTA can temporarily work either in a temporary or permanent position but are not allowed to indefinitely remain in Canada.²⁵

Table 2: Entry criteria for health professionals as specified in the NAFTA (CUSMA)

Profession	Minimum education requirements and alternative credentials (in a related field or profession)
Dentist	D.D.S., D.M.D., Doctor en Odontologia or Doctor en Cirugia Dental; or state/provincial license
Dietitian	Baccalaureate or Licenciatura Degree; or state/provincial license
Medical Laboratory Technologist (Canada)/ Medical Technologist (Mexico and the U.S.)	Baccalaureate or Licenciatura Degree; or Post-Secondary Diploma or Post-Secondary Certificate, and three years' experience (A business person in this category must be seeking temporary entry to perform in a laboratory chemical, biological, hematological, immunologic, microscopic or bacteriological tests and analyses for diagnosis, treatment or prevention of disease)
Nutritionist	Baccalaureate or Licenciatura Degree
Occupational Therapist	Baccalaureate or Licenciatura Degree; or state/provincial license
Pharmacist	Baccalaureate or Licenciatura Degree; or state/provincial license
Physician (teaching or research only)	M.D. or Doctor en Medicina; or state/provincial license (Physicians may not enter for the purpose of providing direct patient care. Patient care incidental to teaching and/or research is permissible.)
Physiotherapist/Physical Therapist	Baccalaureate or Licenciatura Degree; or state/provincial license
Psychologist	State/provincial license; or Licenciatura Degree
Recreational Therapist	Baccalaureate or Licenciatura Degree
Registered Nurse	State/provincial license; or Licenciatura Degree (To be authorized to enter Canada as a registered nurse, a licence issued by the province of destination is necessary)
Veterinarian	D.V.M., D.M.V. or Doctor en Veterinaria; or state/provincial license

Source: <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/operational-bulletins-manuals/temporary-residents/foreign-workers/international-free-trade-agreements/north-american.html>

²⁴ Source: <https://www.cfpc.ca/en/education-professional-development/examinations-and-certification/alternative-pathways-to-certification-in-family-me/recognized-training-in-certification-outside-canad>

²⁵ Source: <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/operational-bulletins-manuals/temporary-residents/foreign-workers/international-free-trade-agreements/north-american.html>

Note: The Minimum Educational Requirements and Alternative Credentials indicated for the above-mentioned profession are minimum criteria for entry and do not necessarily reflect the educational requirements, accreditation or licensing necessary to practice a profession in Canada.

Canada is a member of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (*CPTPP*) with Australia, Japan, Mexico, New Zealand, Singapore and Vietnam, which came into force in 2018. As part of this agreement, Canada grants entry to business people from other member countries without the need for an LMIA. The agreement allows temporary entry of several categories of business visitors, intra-company transferees, investors, professionals, and technicians to enter each member country without being subject to quotas or economic needs test. While the agreement allows entry, it makes an exception in the case of a few professions including healthcare.²⁶

The Comprehensive Economic and Trade Agreement (*CETA*) between the European Union and Canada came into force in 2017.²⁷ It contains provisions which grant temporary entry to business visitors, professionals, intra-company transferees and investors. It provides a framework that can allow Canada to recognise professional qualifications that are earned in the EU, and vice versa. Other requirements, such as rules limiting the number of service suppliers, the total number of service operations or the total quantity of service output, are prohibited. Canada-*Chile* (CCFTA) has been in force since July 1997, in line with the basic clauses of NAFTA. Like the NAFTA list of Professionals, over 60 professionals are identified in the CCFTA list. Changes were made to the minimum educational requirements and alternative credentials were introduced for dieticians, nutritionists, occupational therapists, physicians, physiotherapists, registered nurses, and veterinarians. Professionals are allowed to seek entry through pre-arrangements as salaried employees under personal contract with a Canadian employer or through a contract with the professional's employer in the home country.²⁸

Canada-*Colombia* FTA signed in 2008, became effective in 2011. The agreement allows the granting of temporary entry and work permits or relevant authorisation to businesspersons seeking to engage in business activities. The agreement does not cover managers in health /education/social & community services; physicians/dentists/optometrists/chiropractors/other health professions; pharmacists, dieticians, nutritionists; therapy & assessment professionals; nurse supervisors and registered nurses.²⁹ Another FTA is with Peru, effective since 2009. The chapter on *Temporary Entry for Business Persons* in this FTA has been modelled on the

²⁶ Source: <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/operational-bulletins-manuals/temporary-residents/foreign-workers/international-free-trade-agreements/trans-pacific/professionals.html#professionals>

²⁷ Source: https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/canada/eu-canada-agreement_en.

²⁸ Source: <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/operational-bulletins-manuals/temporary-residents/foreign-workers/international-free-trade-agreements/canada-chile.html>.

²⁹ Source: <https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/colombia-colombie/fta-ale/12.aspx?lang=eng>

framework of the NAFTA, using a negative list for professional mobility. The agreement states that for temporary entry of professionals, prior approval procedures, labour certification tests or other procedures of similar effect are not required. However, the agreement does not cover professionals related to health, education, and social services. The specific health-related professionals who are excluded from the agreement are - managers in health/education/social and community services; physicians/dentists/optometrists/chiropractors/other health professions; pharmacists, dietitians & nutritionists; therapy & assessment professionals; nurse supervisors & registered nurses.³⁰

An agreement between Canada and *Honduras* does not grant automatic recognition of professional degrees or the right to practise a profession. The agreement does not eliminate the nationality requirement for certain professions reserved exclusively for Honduran nationals. Service exclusions by major service categories include medical and health studies and veterinary/animal care services (including livestock services) and health and social services.³¹ Canada–*Panama* Free Trade Agreement was signed in 2010 and came into force in 2013. The temporary entry provisions in this agreement are similar to those of NAFTA. However, only the provisions for business visitors and professionals are currently in force. The agreement lists professionals who are exempted from LMIA but does not include medical personnel.³² Canada has an agreement with Korea, which has been effective since 2015. This agreement uses a positive listing of professionals. While the agreement establishes preferential access to the respective markets and facilitates greater transparency and predictability for the movement of business persons, it excludes public services such as health and public education. However, the governments remain free to enact policies and programs as and when necessary.³³

Summing up, following is a gist of the health professional related commitments/entry restrictions in the trade agreements that Canada is currently a party to (see Table 3).

³⁰ Source: <https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/peru-perou/fta-ale/12.aspx?lang=eng>

³¹ Source: <https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/honduras/fta-ale/14.aspx?lang=eng>

³² Source: <https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/panama/fta-ale/13.aspx?lang=eng>

³³ Source: <https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/korea-coree/fta-ale/12.aspx?lang=eng>

Table 3: Health-related commitments/entry restrictions in the Canada's trade agreements

Agreement	Member countries	Entry conditions/commitments for health professionals
NAFTA/ CUSMA	U.S., Mexico & Canada	Several health-related professions are eligible under the NAFTA Professionals category with minimum educational requirements
CPTPP	Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam	All NOC-0 and NOC-A occupations are permitted, <i>except</i> health, education, social services and related occupations with Australia/Japan/Mexico
CETA	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, UK	CETA includes a specific chapter providing a framework for mutual recognition of professional qualifications, to be negotiated between the EU and Canada, which covers health professions. The recognition of professional qualifications is a precondition for both temporary service supply and permanent establishment
CCFTA	Chile, Canada	Conditions similar to NAFTA
Colombia		Following professionals are <i>not covered</i> under this agreement: Physicians/Dentists/Optometrists/Chiropractors/Other Health Professions/ Pharmacists, Dieticians & Nutritionists; Therapy & Assessment Professionals; Nurse Supervisors & Registered Nurses
Peru		Professionals <i>not covered</i> are: all Health, Education, and Social Services occupations and related occupations
Honduras		Service <i>Exclusions</i> by Major Service Category: Health and Social Services
Panama		Does <i>not cover</i> the following services by entities: Medical and Health Studies; Health and Social Service
Korea		Public services such as health, public education and other social services have been <i>excluded</i> from Canada-Korea Free Trade Agreement obligations

Source: Authors' compilation from various sources

Canada has signed MoUs with certain countries which have direct implications for health professional mobility. For instance, in 2008, *France* and Quebec signed an understanding on the mutual recognition of professional qualifications to facilitate access to regulated professions. Negotiations between the respective authorities for each profession involve

signing MRAs and amendment of legislative, regulatory, and administrative standards. There are 80 such arrangements benefitting many nurses, lawyers, engineers, doctors, etc. as their skills have been recognized in France or Quebec. The Ordre professionnel de la physiothérapie du Québec (OPPQ)'s regulation, an outcome of the Agreement on the Mutual Recognition of Professional Qualifications between Quebec and France has facilitated French massage-physiotherapists to practise in Quebec as physiotherapists or physical rehabilitation therapists.³⁴ Another example is the MoU between the Department of Labour and Employment of the Government of the Republic of the *Philippines* (DOLE)³⁵ and the Department of Labour and Immigration of the Government of Manitoba Canada (LIM). Nova Scotia has launched a Physician Stream for attracting doctors to work for provincial health services. The Nova Scotia Health Authority (NSHA) and the Izaak Walton Killam Health Centre (IWK) encourage foreign-trained general practitioners, family physicians and specialist physicians to apply for positions.³⁶ Provinces such as Alberta, Saskatchewan and British Columbia have MoUs with the *Philippines* to facilitate the flow of skilled workers into these provinces. Specifically, the Alberta-Philippines MoU allows the province to deliver education programs in the Philippines as well as share labour market information. The Government of Saskatchewan signed an MoU with the Government of the Philippines to facilitate increased recruitment of Filipino workers under the Saskatchewan Immigrant Nominee Program (SINP).³⁷

Many of the recent MoUs between Canada and partner countries try to address health worker mobility in different capacities. The rising need for healthcare, more so after the pandemic in countries such as Canada has implications for the entry of medical students and foreign-trained HPs. While Canada does not explicitly include health professional mobility in most of its trade agreements, it could be worth investigating this angle in its trade relations with India. Compared to the presence of medical students or health professionals from any other country, India's share in IMGs, IENs as well as some of the other health professions in Canada have been rising steadily. Thus, formal agreements in the form of FTAs or province specific MoUs covering MRAs, entry criteria for health professional mobility between the two countries can reduce the hurdles which are currently affecting the smooth flow of HPs between the two countries.

5. Conclusion

There is enough evidence that the number of health workers and their quality are correlated with positive health outcomes like infant and maternal mortality, immunization coverage and even cardiovascular diseases (WHO, 2006). Healthcare being a labour-intensive sector, wherein the health workers serve as critical assets for shaping health systems, efficient HRH

³⁴Source: <https://oppq.qc.ca/en/become-a-member/arm-quebec-france/>;
<https://www.diplomatie.gouv.fr/en/country-files/canada/france-and-quebec/>

³⁵ Source: http://www.sice.oas.org/trade/cancr/English/text_e.asp#X

³⁶ Source: <https://www.immigration.ca/lmia-exemption-to-help-fill-shortage-of-quebec-doctors>

³⁷ Source: <https://www.cicnews.com/2008/10/alberta-joins-canadian-provinces-actively-recruiting-filipino-skilled-workers-10686.html#gs.jattj3>; <https://www.saskatchewan.ca/government/news-and-media/2006/december/18/government-signs-immigration-agreement-with-the-philippines-to-bring-more-skilled-workers-here>

allocation not only in individual countries but also across countries is important. Furthermore, health worker density has been ranked as the most important criterion required for achieving Universal Health Coverage (Reid, et.al., 2020). The long-standing importance of human resources for health is evident from the high share of foreign-born doctors and nurses in countries like the UK, Australia, and Canada even before the pandemic and its significance has been further highlighted by the Covid-19 pandemic with countries facing acute shortages of health workers and taking steps to facilitate the inward mobility and stay of health workers. In this context, bilateral agreements have emerged as an important tool towards achieving this objective, by facilitating the mobility of health workers in a mutually beneficial manner between sending and receiving countries. Such agreements reduce uncertainty, by increasing transparency in recruitment procedures and by specifying qualification and language requirements and address issues of return, welfare, and working conditions, including institutional mechanisms for managing bilateral mobility.

India has been a major source country for doctors and nurses in the world and has signed several bilateral agreements, MoUs and MRAs with different countries to facilitate the mobility of HPs. Some of these have been signed during the pandemic. Additionally, the Government of India has undertaken several initiatives to increase the domestic production of health workers which serves a dual objective of not only meeting India's domestic needs but also maintaining India's role as a major global supplier of health workers. While certain countries figure as major destination markets for Indian health workers, some markets, such as Canada, remain untapped. The share of Indian HPs in Canada is not large, although it has been rising steadily. Given the fact that Canada has signed bilateral agreements with some countries to facilitate the recruitment of foreign-trained HPs, but not yet with India despite India being a major source country globally and its growing importance as a source country for HPs in Canada, there is a strong case for the two countries to engage in a bilateral mobility agreement. Against the backdrop of the ongoing India-Canada Free Trade Agreement negotiations, such a bilateral mobility framework as well as broader collaboration in the health sector would be most timely to pursue. Stronger trade and mobility linkages between the two countries in the health sector can significantly contribute to the strengthening of their health systems.

References

- Bhattacharjee, A. (2022). Analysing Health Professional Mobility from India to Canada. . In *In India Migration Report 2022* (pp. 25-42). Routledge India.
- Statistics Canada, (2019). *International students in Canadian colleges in health-related programs 1992–2016*. In: Postsecondary Graduates, By Institution Type, Status of Student in Canada and Sex.
- Dempster, H., & Smith, R. (2020). Migrant health workers are on the COVID-19 frontline. We need more of them. *Center for Global Development (Blogpost)*.
- Dumont, J. C., Zurn, P., Church, J., & LeThi, C. (2008). *International mobility of health professionals and health workforce management in Canada: myths and realities*.
- Hillmann, F. (2005). Migrants' care work in private households, or the strength of. . *Care and social integration in European societies*, 93.
- Hou, F., Crossman, E., & Picot, G. (2020). Two-step immigration selection: Recent trends in immigrant labour market outcomes. *Statistics Canada= Statistique Canada*.
- Karan, A., Negandhi, H., Hussain, S., & al., e. (2021). Size, composition and distribution of health workforce in India: why, and where to invest? *Human Resources for Health*, 19(39). Retrieved from <https://doi.org/10.1186/s12960-021-00575-2>
- Kumar, S. (2021). Exporting Indian healthcare workers to the world. Retrieved from <https://www.orfonline.org/expert-speak/exporting-indian-healthcare-workers-world/>
- Matsuno, A. (2009). *Nurse Migration: The Asian Perspective*. ILO/EU Asian Programme on the Governance of Labour Migration Technical Note.
- OECD. (2019). *Recent Trends in International Migration of Doctors, Nurses and Medical Students*.
- OECD. (2020). *Contribution of migrant doctors and nurses to tackling COVID-19 crisis in OECD countries*.
- Reid, M., Gupta, R., Roberts, G., Goosby, E., & Wesson, P. (2020). Achieving Universal Health Coverage (UHC): Dominance analysis across 183 countries highlights importance of strengthening health workforce. *PLoS ONE*, 15(3).
- Statistics Canada (2019) International students in Canadian colleges in health-related programs 1992–2016. In: Postsecondary Graduates, By Institution Type, Status of Student in Canada and Sex.
- Tiwari, R., Negandhi, H., & Zodpey, S. (2019). Forecasting the future need and gaps in requirements for public health professionals in India up to 2026. *WHO South-East Asia Journal of Public Health*, 8(1), 56-65.
- Turcotte, M., & Savage, K. (2020). The contribution of immigrants and population groups designated as visible minorities to nurse aide, orderly and patient service associate occupations.
- Walton-Roberts, M. (2019). Asymmetrical therapeutic mobilities: Masculine advantage in nurse migration from India. *Mobilities* 14(1):, 20-37.
- WHO. (2006). *The world health report 2006: working together for health*. Geneva: World Health Organization.
- Williams, K., Williams G., A., A., Walton-Roberts, M., & Hennebry, J. (2015). International students in Ontario's postsecondary education system, 2000-2012: An evaluation of changing policies, populations and labour market entry processes. *Higher Education Quality Council of Ontario*.
- Yeates, N., & Pillinger, J. (2018). *International healthcare worker migration in Asia Pacific: International policy responses*. Asia Pacific Viewpoint, 59(1), 92-106.