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Mobility justice, capabilities, and medical migration: medical licensing pathways for overseas-trained doctors in Aotearoa New Zealand

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ABSTRACT

The field of medicine is traditionally associated with opportunities for training and knowledge sharing through movement and travel. Nevertheless, the contemporary migration of doctors may have negative impacts on lower-income countries. Some scholars argue for active restrictions on South to North migration of medical doctors, while others consider such suggestions as an unjustified infringement on individual rights to migrate. This paper draws on mobility justice and the capabilities approach, to conceptualise the complex dynamics of international medical migration through the example of Aotearoa New Zealand. In this context, a ‘brain drain’ of New Zealand-trained medical doctors is partially mitigated by a ‘brain gain’, with more than 40% of the medical workforce having trained overseas. However, overseas-trained medical doctors follow pathways to licensing determined by the public health indicators of their countries of training. Despite an overall ‘brain gain’, doctors who trained in the Global South experience significantly greater barriers to registration than those who trained in Global North countries. Many are unable to work as doctors, resulting in a ‘brain waste’ of their knowledge, experience, and capabilities. This may relate to (post)colonial legacies and discourses of medical competencies that underscore the hegemony of the Global North, warranting further exploration.

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Introduction

Doctors have always moved around. Migration has been embedded in medical culture for centuries, where physicians would travel for additional experience and training, and continue to do so today (Hsu 2012; Johnson 2005). However, since the Second World War, there has been a trend for medical doctors to move from lower-income countries to higher-income countries (Gaillard and Gaillard 1997), from what can also be described as the ‘Global South’ to the ‘Global North’ (McEwan 2019). Although the impacts of such migratory flows are context-dependent (Botezat and Ramos 2020), a key concern is that

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‘poorer countries have become a major supplier of health workers for the richer countries’ (Driouchi 2014, 295), to the detriment of their own healthcare systems and local people (e.g. Yeates and Pillinger 2018). This phenomenon, where there is a net outflow of highly skilled professionals, is described as a ‘brain drain’ (Gaillard and Gaillard 1997). Likewise, countries that have a large migrant workforce are said to experience a ‘brain gain’ (Beine, Docquier, and Oden-Defoort 2011).

Nevertheless, there are limited available empirical data that clearly demonstrate the impacts of medical ‘brain drain’ on Global South countries (e.g. Oshotse 2019). Any potential negative effects of ‘brain drain’ could also be attributed to resource constraints or other contextual factors (Hidalgo 2013; Yeates and Pillinger 2018), and there may even be positive consequences for countries that export a large number of doctors, such as increased remittances (Beine, Docquier, and Oden-Defoort 2011). Furthermore, medical migration does not always occur from the Global South to the Global North. South to South mobility also occurs; for example, with the global migration of Cuban-trained doctors (McLennan, Huish, and Werle 2022), or Chinese doctors temporarily migrating to parts of Africa (Hsu 2012). In addition to the North to South movement of doctors through initiatives such as ‘Doctors without Borders’ (e.g. Fox 2014), there is significant North to North migration between, for instance, Australia, the United Kingdom (U.K.), the United States of America (U.S.A.), Canada and Aotearoa New Zealand (Connell 2009).

The landscape of international medical migration is complex, context-dependent and sits at the junction between the individual rights of medical professionals to move and migrate as they choose, global dynamics that systematically favour Global North countries and former colonial powers, and the rights of the public to access quality healthcare services and outcomes. Within this context, Aotearoa New Zealand presents a noteworthy case, with overseas-trained medical doctors (IMGs¹) making up 42.2% of the medical workforce (MCNZ 2022), while also experiencing differential outcomes depending on whether they trained in Global North or Global South countries.

With no clear consensus in the literature on how to characterise or approach the complex dynamics of international medical migration, there is an opportunity to consider how different frameworks could be useful in conceptualising this phenomenon. Two such frameworks include mobility justice and the capabilities approach, which are introduced in the following section. The paper then discusses these approaches in relation to the example of medical licensing for IMGs in Aotearoa New Zealand. Overall, this paper argues that a mobility justice and capabilities analysis is useful in unpacking the complexities associated with international medical migration, highlighting the need for further research into medical licensing policies in Aotearoa New Zealand.

Mobility justice, capabilities, and medical migration

As medical migration involves individual migratory choices, global development and health outcomes, and the ability of doctors to maximise use of their skillsets, both mobility justice and the capabilities approach offer valuable insights in conceptualising this phenomenon. Mobility justice theorisations are helpful in considering how systems and institutions have established, maintained, and encouraged migratory flows that

may result in differential outcomes for lower- and higher-income countries and their populations. The capabilities approach further considers how these structures of power may impact on what individuals can be and achieve. This section provides a theoretical overview of these approaches and how they intersect, before applying this to the international migration of medical doctors and a localised example later in the paper.

Mobility justice

Mobility justice is situated within a broader discourse known as the ‘new mobilities paradigm’. This paradigm, and associated research, brings together ‘social’, ‘spatial’, and ‘cultural’ concerns (Sheller 2021) to posit that the systematic movements of people, resources, and ideas have largely been minimalised in the social sciences (Sheller 2018a; 2021; Sheller and Urry 2006). As such, mobilities research does not suggest that movement, circulation, and uneven access to mobilities should be considered as a new phenomenon. Rather, historical and contemporary ‘constellations of mobility’ (Cresswell 2010) – interwoven patterns, representations and ways of practising movement – are produced by social formations such as race, class, or gender, while also being productive of such hierarchical systems. Mobilities, and social structures and constructs, are mutually constitutive. Mobility justice theorisations thus suggest that more prevalent theories of justice are inadequate because they tend to prioritise historical and/or social factors at the expense of geographical or mobile concerns. In contrast to ‘spatial justice’, which emphasises greater awareness of spatial and geographical elements of justice (Soja 2010), a mobility justice approach argues that emphasis should not only be placed on the spatial, but the mobile (Sheller 2018a; 2018b).

Mimi Sheller, a key proponent of the mobility justice approach, argues that mobility (in)justices do not simply occur after people or objects enter a ‘space’, such as a car or new country. Rather, (in)justices transpire via the processes in which these ‘unequal spatial conditions and differential subjects are made’ (Sheller 2018a, 21) and consequently require consideration of ‘longer histories of colonial, racial, imperial, and military mobility’ (Sheller 2018b, 29). These contextual factors and processes determine whose freedom of movement is ‘a manifestation of liberty, and should therefore be maximized, and those whose freedom is a problem, and should therefore be tightly regulated’ (Kotef 2015, 100). In other words, mobility (in)justices can be formed when structures of power or ‘mobility regimes’ (Sheller 2018a; 2021) dictate who does and does not have the right to move.

Constitutive of the concept of mobility, therefore, is the ability or *potential* for movement. This involves the uneven distribution (Adey et al. 2014) of ‘network capital’ (Elliott and Urry 2010), or mobility capacity and capability, across multiple scales, from the microbial to the individual/body, urban, (inter)national, and planetary (Sheller 2018a). More privileged groups tend to have greater access to, and the potential for, mobility, known as ‘motility’ (Kaufmann, Bergman, and Joye 2004). Mobilities are uneven and never free, and are instead ‘channelled, tracked, controlled, governed, under surveillance and unequal’ (Sheller 2018a, 10). While freedom of movement is a basic human right, in practice this exists in relation to other immutable characteristics, such as class or nationality, which impact motility and mobility at all scales (Sheller 2018a). Hence, it is possible to view mobility justice as ‘an overarching concept for

thinking about how power and inequality inform the governance and control of movement' (Sheller 2018a, 14).

The capabilities approach

The mobility justice framework is designed to be broad in scope, multi-scalar and with room for growth (Sheller 2018a). Medical migration involves not only the potential physical (in)ability of doctors to move internationally, but also the transferability of knowledge, skills, and abilities across borders. To this end, this paper considers how a mobility justice lens that further incorporates and emphasises a capabilities approach could be useful in exploring international medical migration.

The 'capabilities approach'² to human development and wellbeing begins with the premise that focusing exclusively on the economic aspects of life overlooks a multitude of factors that influence what people are 'actually able to do and to be' and the 'real opportunities available to them' (Nussbaum 2011, p. x). Capabilities, known also as 'substantial freedoms' (Sen 2009), are opportunities to choose and to act. Put simply, a capability is a means, not an end and, as a result, represents a potential opportunity rather than the active realisation, or 'functioning' (Nussbaum 2011), of a capability. 'Combined' capabilities result from the interaction between someone's abilities and the opportunities afforded to them by their environment (Nussbaum 2011), while 'conversion factors' refer to the ability to subsequently convert capabilities into 'functionings' or outcomes. These can relate to personal factors such as gender or physical condition, social factors such as policies and norms, and environmental factors such as one's location and available infrastructure (Robeyns 2017).

Nussbaum (2011) and Sen (2009) are two of the most well-known proponents of capabilities approaches to justice. While Sen (2009) supports elements of Rawls's distributive justice theory (e.g. Rawls 2003), he proposes that the focus should not be on distributing primary goods, but rather the 'just' distribution of human capabilities. For Sen (2009), it is important to reduce capability inequalities to promote equality of opportunities, but any list of basic capabilities and minimum thresholds must be culture- and context-dependent. Nussbaum (2011), however, supports the idea of a universal baseline of central capabilities that any state should guarantee for its citizens, even if the specifics are context-dependent. These baseline capabilities include an entitlement to life, health and bodily integrity, freedom of movement, and political and material control over one's environment. Capabilities provide freedom of choice and, for Nussbaum (2011), a capabilities approach to justice involves the protection of freedoms central to maintaining human dignity.

Robeyns (2017), another leading scholar in the capabilities sphere, reflects on discourse around capabilities and how the concept has evolved and been applied since its development by Amartya Sen from the late 1970s (e.g. Sen 1979; 1984). She notes a distinction between what she terms the 'capability approach' – referring to an open-ended, pluralistic framework with multiple applications – and more precise capabilities 'theories'. For Robeyns (2017), there is just one capability approach, but multiple capabilities theories. Nussbaum's work on capabilities and justice (e.g. 2011) would thus be considered one iteration – albeit much more extensive than others – of the many theories that can be developed from the starting point of focusing on capabilities as measures of what people can

truly 'be' and 'do'. This is echoed by Pereira, Schwanen, and Banister (2017), who explain that the capabilities approach is not intended as a full theory of justice, nor as one single theory, but rather aims to put human capabilities 'at the heart of justice concerns' (175). As such, there is an opportunity to explore and address the concerns raised by some scholars regarding, for example, the prioritisation of the individual over the collective (e.g. Schlosberg 2012; Stewart 2005), or limited attention to Indigenous (Bockstael and Watene 2016) and intergenerational perspectives (Watene 2013), through the applications of this broad approach to different theories and contexts.

An opportunity for growth

One such opportunity for growth is to bring capabilities more explicitly into mobility justice conceptualisations. The distinction Robeyns (2017) draws between the capabilities 'approach' and capabilities 'theories' is similar to the relationship between the 'new mobilities paradigm' and 'mobility justice'. The capabilities approach and the new mobilities paradigm both refer to a particular area that the approach's key proponents believe has been overlooked in earlier theory and discourse. On the one hand, the capabilities approach is concerned with shifting away from the emphasis on economic factors as measures of development or wellbeing, focusing instead on what people are actually able to 'be' and 'do'. On the other hand, mobilities approaches challenge the way that bounded places and spaces are prioritised as the 'fundamental basis of human identity and experience and as the basic units of social research' (Sheller and Urry 2006, 208–209), conceptualising mobility on multiple, interactive scales as an integral, 'normal' aspect of human life and society. Both approaches therefore promote a general shift away from a perceived theoretical norm, encouraging scholars to consider more encompassing ways of viewing people, spaces, and places.

Justice theorisations exist within these broader paradigms of mobilities and/or capabilities, while drawing on interdisciplinary theoretical insights. There is some existing overlap between the ways these approaches have been applied in relation to justice. Sheller (2018a; 2018b), for example, incorporates elements of the capabilities approach in her conceptualisation of mobility justice. On the one hand, she mentions 'uneven freedoms of mobility and unequal capabilities' (2018a, 43) as distinct concepts, while mentioning elsewhere (25) that mobility may be a capability in itself. 'Motility', or the potential for movement (Kaufmann, Bergman, and Joye 2004), may also be considered as a capability. Pereira, Schwanen, and Banister (2017) argue that mobility can be viewed as a capability, but that the concept should be expanded and reframed as 'accessibility', a combined capability referring to both the ability to move freely as well as the ability to convert mobility into access to other resources. In this way, the capability for mobility and/or motility can be distributed, while also being responsible for the production and distribution of other capabilities and resources.

Mobility thus appears to be a capability (a means to achieve a 'functioning'), a 'functioning' (an ends in and of itself), as well as a key factor in the production, maintenance, and distribution of other capabilities and resources. In other words, mobility is both an ends and a means to (in)justice, where it is both a capability and a 'functioning', as well as both distributed and distributive. Such a conceptualisation allows for a more intersectional approach to understanding mobility throughout this paper, which considers the

international mobility, transferability, and recognition of capabilities associated with education, training, and skills, within wider global dynamics. This is complemented by the capabilities approach's prioritisation of the non-tangible elements of life, emphasising the importance of allowing and enabling people to achieve the goals that are of importance to them in leading a satisfactory life (Nussbaum 2011; Sen 2009).

Nevertheless, 'capabilities', 'motility', and 'mobility' should be considered 'value neutral' concepts (Robeyns 2017; Sheller 2021). Not all capabilities, such as the capability to inflict harm on others, should necessarily be considered valuable – just as not all forms of mobility, such as commuting several hours per day on public transport, are considered valuable. While mobilities and mobility justice approaches often view the freedom to move as a fundamental good that should be available to more of the population, the capabilities approach also sees the freedom to move without restriction positively (Nussbaum 2011). However, it should not be assumed that greater mobility in one's daily life is always associated with greater privilege and hence more opportunities or capabilities. Rather, as Sheller (2018a) notes, some forms of mobility are privileged over others. Furthermore, an unlimited capability for mobility (motility) through travel and transportation would result in disastrous consequences for the environment and negative daily impacts through increased congestion (Sheller 2018a). Greater capabilities or opportunities for mobility at one scale – in this case the 'body' or the individual – do not automatically translate into enhanced mobility justice at other scales – in this case, the planetary. Theories of justice can thus help to identify which capabilities and mobilities are more 'valuable', and how these should be fairly distributed or accessed, in order to support individuals and societies in navigating and overcoming structural inequalities.

This paper does not attempt to create a new theory of justice in relation to mobilities and capabilities, but rather considers how one might further build on the elements of the capabilities approach that exist in mobility justice theorisations, in order to unpack the dynamics of medical migration. The paper, therefore, reflects on how patterns of unequal mobility and motility – in relation to both people, and more-than-human elements such as resources and information – interact with opportunities and freedoms at different scales to produce (in)justices that may prevent some people from leading the lives they wish to live. The aim is to put human capabilities not 'at the heart of justice concerns' (Pereira, Schwanen, and Banister 2017, 175), but at the heart of *mobility* justice concerns, by exploring the phenomenon of medical migration.

Medical migration

Medical migration involves processes of creating subjects with differential motility and uneven mobilities. Consequently, a key theme of medical migration literature is the consideration of who should or should not have the 'right to move'. Medical migration is a mobility justice and capabilities issue, therefore, due to the intersection between the rights of free movement (specifically, the right for doctors to emigrate), the factors that impact the way migrant doctors can 'convert' their professional capabilities into 'functionings' in a new place, and the rights of populations to lead healthy lives and access adequate healthcare.

This is often framed in the literature as a conflict between the rights of the 'individual' compared to the rights of the 'collective' (e.g. Benatar 2007). The challenges of this lie in

reconciling the rights of individual doctors to migrate, with the potential negative impacts on people from source countries with an inadequate medical workforce to meet their needs. One of the core principles of Sheller's (2018a) mobility justice framework is the 'rule of mutuality', in that one can move freely as long as it does not inflict harm on others. However, the 'harm' of medical migration is inconclusive, as there is no definitive consensus on the cause-and-effect relationship between resource poor healthcare systems and emigration of healthcare professionals (e.g. Hidalgo 2013; Metz 2017; Oshotse 2019). Furthermore, the quality of local healthcare systems can be a strong 'push' factor for doctors to move to other countries, making it difficult to measure how much of an impact this emigration has on already suboptimal systems (Oshotse 2019).

All the same, potential mobility injustices can be seen at both the 'individual' and 'collective' level in relation to medical migration. For example, one strategy for mitigating 'brain drain' is to inhibit doctors' rights to leave or emigrate, through mandatory public service for medical graduates or contracts that require medical students to work in their home countries for a minimum period of time after graduation (Benatar 2007). Some support these approaches, arguing that the state has a right to limit the ability of their talented professionals to leave the country, or impose taxation on emigrants, due to their moral obligation to serve their home nation (e.g. Brock 2017). Blake (2017), on the other hand, argues that it is never morally permissible to restrict the 'right to exit' and movement enshrined in the Universal Declaration of Human Rights, as it is not the responsibility of people from lower-income countries to contribute to the development of these countries simply because they were born there. Consequently, methods of addressing 'brain drain' that involve limiting the ability of certain individuals to migrate and move, could be seen as a form of mobility injustice.

However, when high-income countries create or support mobility regimes that facilitate the immigration of overseas-trained doctors (IMGs), particularly from the Global South, they deprive these countries of a resource and also do not have to invest in additional medical training to expand their own workforce (Johnson 2005). This is reminiscent of colonial resource extraction, with Brock and Blake (2015) arguing that 'the countries from which [brain drain] occurs are, most frequently, those that have been most brutalised by Western powers' (3). Irrespective of the inconclusive nature of data relating to the impacts of 'brain drain' from Global South countries on population health outcomes, strong historical ties to (post)colonial structures and mobility regimes remain intertwined with the international migratory flows of doctors. The loss of potential in Global South countries – in terms of the capabilities these individuals could contribute to already low resource health contexts – may thus produce mobility injustices. In this way, mobility injustices may be seen in both the active encouragement of physician migration from Global South to Global North countries, as well as in the potentially unjust restrictions on movement placed on doctors from the Global South who still maintain the right to 'exit' their countries.

Furthermore, if a high-income country put measures in place to restrict medical immigration specifically from the Global South, this would result in a mobility regime where doctors would have differential physical and/or work-related mobilities and capabilities, depending on the development indicators of their country. This might play out, for instance, in the under-utilisation of migrant doctors' skills, provision of lower wages,

or poorer working conditions (Motala and Van Wyk 2019) for doctors from the Global South. This would reflect a breach of mobility justice principles by ‘unevenly applying temporal or spatial limits on mobility’ (Sheller 2018a, 173) and may also result in ‘brain loss’ (Connell 2009), ‘brain waste’ (Pang, Lansang, and Haines 2002), or ‘brain wastage’ (Dovlo 2005). Brain ‘waste’ refers to the factors that prevent healthcare systems from maximising the use of available resources due to administrative challenges, unemployment, inefficient resource allocation, or professionals shifting to different sectors (Dovlo 2005). For example, migrant doctors around the world experience barriers to licensure, such as confusing, slow, expensive, and bureaucratic registration processes that produce ‘brain waste’ (e.g. Motala and Van Wyk 2019; Russell 2021). ‘Brain waste’ therefore describes a situation where the ability to convert one’s professional capabilities into functionings is limited by power structures and factors such as public policies and norms.

The dynamics of global medical migration are nuanced, and the issues discussed here only touch on the surface of the layers and complexities of what constitutes mobility justice and capabilities approaches in this context. In order to further explore this phenomenon, a specific case is presented below. Aotearoa New Zealand has been chosen because it provides a working example of how dynamics of brain ‘drain’, ‘gain’, and ‘waste’ play out in a contemporary context, while offering the opportunity to elaborate on the relationship of medical migration to mobility justice, and individuals’ capabilities and functionings.

Medical licensing in Aotearoa New Zealand

Aotearoa New Zealand is a notable case to explore and unpack the conceptual issues around international medical migration through a mobility justice and capabilities lens. Alongside being a high-income country that experiences ‘brain drain’, ‘brain gain’, ‘brain waste’, and on-going workforce shortages, pathways to medical licensing for IMGs in Aotearoa New Zealand actively and openly impose significantly greater barriers for medical doctors who trained in the Global South, compared to the Global North. Consequently, there are mobility justice implications in this context in relation to mitigating ‘brain drain’ from Global South countries, the healthcare needs of the local population, and the restrictions on mobilities and capabilities experienced by IMGs residing in Aotearoa New Zealand with limited opportunities to practise their profession.

Up to 40% of New Zealand-trained doctors trained in the early 2000s now live overseas (MCNZ 2022), often migrating to other Global North countries for enhanced employment or training opportunities (ASMS 2017). Although retention of New Zealand-trained doctors has improved in the past decade, the country still relies on a ‘brain gain’ of migrant doctors, with 42.2% of the 2022 medical workforce in Aotearoa New Zealand having trained overseas (MCNZ 2022). Nevertheless, Aotearoa New Zealand continues to experience chronic medical workforce shortages (e.g. Shahtahmasbi 2021; Trigger 2022), and not all IMGs residing in Aotearoa New Zealand are able to practise medicine.

The licensing experiences and outcomes for IMGs differ depending on their background. Te Kaunihera Rata o Aotearoa | Medical Council of New Zealand (MCNZ) offers four broad pathways to registration for non-specialist³ IMGs:

1. the Australian medical graduates (AUS) pathway;
2. the ‘competent authority’ (CA) pathway;
3. the ‘comparable health system’ (CHS) pathway; and
4. the ‘New Zealand Registration Examination’ (NZREX) pathway.

Australian medical graduates on the AUS pathway generally become licensed in the same way as New Zealand medical graduates (MCNZ 2023d), working under supervision in either Australia or Aotearoa New Zealand for 2 years after graduation, in order to gain full registration (MCNZ 2023d). This is very similar to the CA pathway, which is reserved for individuals who trained in the U.K. or Ireland (MCNZ 2023b). The key requirement of these pathways is the country of origin of the IMG’s primary medical qualification, and there are different licensing options depending on the extent of the individual’s clinical experience.

Doctors on the CHS pathway, in comparison, are required to demonstrate recent clinical experience in a country that is considered to have a ‘comparable health system’ (MCNZ 2023a). The onus, therefore, is on the location of an IMG’s clinical experience rather than their primary qualification. MCNZ determines whether a country’s health system is ‘comparable’ by using public health indicators such as life expectancy and mortality, the number of doctors per person in the population, the similarity of the registration system, and public health expenditure per capita (MCNZ 2023a). There is an implied link between these indicators and a country’s human and economic development status. The result is that doctors who trained in the Global South usually undertake the fourth licensing pathway – NZREX – which is much more costly and time-consuming to the practitioner than the AUS, CA, and CHS pathways (MCNZ 2023f). Doctors who become registered as specialists, or on the AUS, CA, and CHS pathways, can often apply directly for New Zealand residency (Immigration New Zealand 2023). However, NZREX candidates do not usually experience any immigration benefits and are unlikely to be able to successfully register as doctors without already having the right to work and reside in Aotearoa New Zealand.

IMGs on the NZREX pathway must also complete additional international examinations, as well as the New Zealand Registration Examination (NZREX). They are then required to complete 2 years of supervised work alongside New Zealand medical graduates to obtain their full licensure. However, first-year supervised House Officer positions, known as Postgraduate Year 1 (PGY1), are rarely offered to NZREX applicants because the limited number of PGY1 places roughly corresponds with the medical students graduating from local universities,⁴ and New Zealand medical graduates are given priority (e.g. Shepherd 2022). As a result, many IMGs who are already residing in Aotearoa New Zealand and have met MCNZ standards are unable to work as doctors (Fenton and Chillag 2022; Russell 2021). There is, thus a critical bottleneck in the NZREX pathway that does not exist for the CA and CHS licensing pathways. What looks possible on paper is not viable in practice for many NZREX candidates.

MCNZ provides publicly available updates on the status of NZREX candidates, which have been used to understand the current state (MCNZ 2023e), and these have been compiled by the author since April 2020⁵ to produce Figure 1. Between March 2014 and September 2022, 358 individuals successfully passed the NZREX examination. As of May 2023, 267 of these candidates have obtained provisional registration. This means that

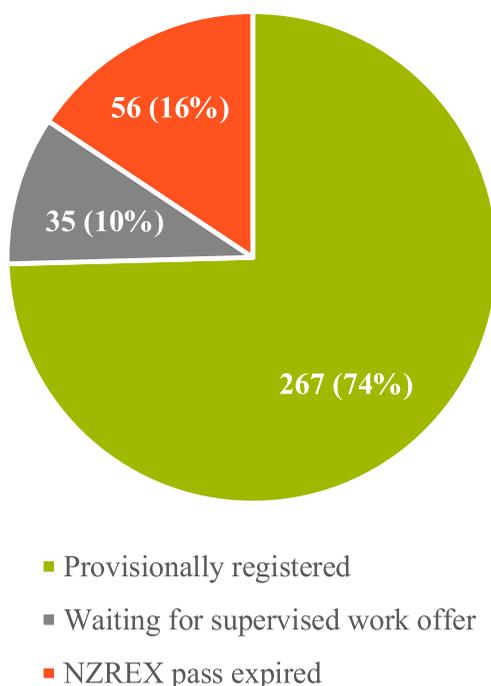


Figure 1. Status of candidates who have passed NZREX between March 2014 and September 2022 (as of May 2023).

they have been offered a full or partial PGY1 position at one of the public hospitals around Aotearoa New Zealand. However, 32% of the cohort who successfully passed the NZREX between March 2014 and June 2018 never managed to achieve provisional registration before their NZREX pass expired after 5 years. Meanwhile, 35 candidates with valid NZREX passes from 2018–2022 are still waiting in the PGY1 bottleneck for the opportunity to work as a doctor in Aotearoa New Zealand.

While the number of NZREX doctors waiting for PGY1 positions has been decreasing with each data update – from 71 in April 2022, to 54 in November 2022, to 35 in May 2023 – this trend is deceptive. For example, there are no data available yet on the IMGs who sat the NZREX examination in March 2023. Based on previous average pass rates, however, it is possible to estimate that around 20 additional IMGs have passed NZREX and are likely to be waiting for PGY1 positions, meaning there may currently be at least 50 IMGs caught in this bottleneck.

Furthermore, Sheller (2021) notes that mobility justice approaches are particularly suited to focusing on the impacts of crises such as COVID-19, as disasters in general allow inequalities to be ‘reproduced in the wake (and in the name) of such crises’ (Sheller 2018a, 8). In this context, COVID-19 restrictions have exacerbated the disadvantages NZREX candidates face in Aotearoa New Zealand. First, COVID-19 has presented a serious disadvantage to individuals with a valid NZREX pass, with additional delays in obtaining PGY1 positions during lockdowns putting them at further risk of their pass expiring before they achieved provisional registration. Second, the NZREX examination was previously offered three times annually. However, four examinations were cancelled

during COVID-19 (March and June 2020, November 2021, and March 2022) and only two will take place in 2023 (MCNZ 2023f). As there was a 9–12 month waiting list to take the NZREX examination *prior* to the pandemic, these reduced examination offerings are likely to have resulted in even longer waiting times. In other words, some of the bottleneck from the limited PGY1 positions has now shifted back to those waiting to take the NZREX examination, for which there is no publicly available data.

Therefore, in addition to the visible bottleneck of at least 35 IMGs who have passed the NZREX and are waiting for PGY1 positions, there is also an invisible, immeasurable, yet very real blockage for dozens, if not hundreds, of IMGs residing or hoping to reside in Aotearoa New Zealand, who are waiting to take the examination. Although it is impossible to provide an accurate estimate of this invisible bottleneck, even just 100–200 of these individuals could make a substantial difference to a country that only has 18,000 medical doctors in total (MCNZ 2022). These bottlenecks thus represent a loss of potential – a loss of realised capabilities or ‘functionings’. While many individuals can successfully exercise physical mobility in migrating, or moving back, to Aotearoa New Zealand, the capabilities associated with their education, skills, and experience are not always able to be converted into functionings, or to ‘move’ with them in an actionable way. As such, Aotearoa New Zealand is an example of a ‘brain drain’ of New Zealand-trained doctors, a ‘brain gain’ of IMGs (primarily those on the specialist, AUS, CA, and CHS pathways), and a ‘brain waste’ for many individuals on the NZREX licensing pathway.

Licensing pathways, mobility regimes, and exclusions

In defining the principles of mobility justice, Sheller (2018a) proposes that: ‘There should be fairness and equity in determining the freedom of movement across borders without arbitrary exclusion of entire categories of persons on the basis of race, religion, ethnicity, nationality, sexuality, health status, or socioeconomic status’ (174). As such, it is important to ask *why* the pathways for IMGs hoping to work in Aotearoa New Zealand are structured in a way that encourages and relies on the ‘brain gain’ of some IMGs, while limiting the abilities of others to convert their capabilities into functionings, thereby contributing to ‘brain waste’.

With regards to the CA pathway, MCNZ provides a list of criteria to determine a ‘competent authority’, including having systems in place to ensure doctors are fit for practise, confirming that local and foreign medical graduates meet required standards, regularly reviewing ongoing practice standards, accreditation of postgraduate training and qualifications, monitoring of first-year medical graduates, and a publicly available register of all licensed medical doctors (MCNZ 2023b). Such broad criteria are common to many regulatory medical councils and boards globally – for example, compulsory internships are in place to monitor IMGs after arrival in India (Teri 2023), while all licensed medical doctors in Peru are listed on a publicly available register (Colegio Médico del Perú 2023). Systems are in place in the U.S.A. to ensure doctors are ‘fit to practise’ (e.g. Bramstedt 2016) and ongoing practice standards are regularly reviewed and debated in Norway (e.g. Vandvik 2018). Nevertheless, only the U.K. and Ireland are recognised as having met these criteria, allowing British and Irish medical school graduates to register to work in Aotearoa New Zealand on the CA pathway (MCNZ

2023b) and be eligible for New Zealand residency (Immigration New Zealand 2023). While there are likely to be other nuances and factors that inform this licensing pathway behind the scenes, it could be argued, according to the publicly available criteria, that the CA pathway restricts mobilities and represents an ‘arbitrary exclusion’ of the capabilities of entire categories of persons based, in this case, on the country where they studied medicine.

MCNZ’s (2023f) list of countries with ‘comparable health systems’, on the CHS pathway, may also generate ‘arbitrary exclusions’. A combination of public health, practice environment, and registration indicators are used to determine the ‘comparability’ of a country’s health system, with given examples including the similarity of the registration system, the percentage of medical practitioners per head of population, total per capita public health expenditure, and life expectancy and mortality indicators (MCNZ 2023a). Many of these indicators relate more directly to a country’s level of human and economic development than its health system or the competency of its doctors. In other words, this medical licensing pathway relies on an assumption that suboptimal health indicators and lower healthcare budget correlate with poorer medical training, competency, and capabilities. Nevertheless, it is now widely accepted that 80–90% of health outcomes are believed to result from social determinants of health, with only 10–20% determined by healthcare and, thus, related to the competency of medical professionals (Adler 2018). Furthermore, reliance on country-level health system indicators does not consider intranational variation in health systems, health outcomes, or medical education. For example, many public health indicators, such as infant mortality rates, are as contrasting between the Indian states of Kerala and Uttar Pradesh as they are between Aotearoa New Zealand and Sub-Saharan Africa (e.g. Roy 2021; WHO 2023). Therefore, it is unclear – at least from the publicly available data around the CHS licensing pathway structure – how such indicators provide relevant information on the ability of a medical doctor from a particular country to practise competently in Aotearoa New Zealand.

Mobility justice and capabilities conceptualisations also encourage the consideration of intersectional approaches that include more-than-human mobilities and capabilities. Sheller (2018a) notes that innovations and forms of knowledge from the Global South are commonly perceived as less valuable than those from the Global North. IMGs may share a broad knowledge base with those in their fields of expertise and yet social and geographical factors such as migratory status, citizenship, and country of origin and/or education may limit an IMG’s ability to convert these capabilities into professional functionings. In Aotearoa New Zealand, the overseas clinical experience of IMGs from ‘comparable health systems’ is considered acceptable and, in fact, necessary to support their medical registration (MCNZ 2023a) and subsequent residency visa application (Immigration New Zealand 2023). In contrast, overseas experience is extraneous for doctors on the NZREX pathway, who must all begin at the level of a New Zealand medical graduate (MCNZ 2023f). The acceptance of individuals with primary medical qualifications from Australia, the U.K., and Ireland, almost irrespective of experience, illustrates that knowledge from certain Global North countries is also considered more legitimate in this context. Although Escobar (2018) argues that design and innovative knowledge is perceived as more or less legitimate depending on *where* it originates, this could be further elaborated on by noting that even the same ‘knowledge’ can be seen as either acceptable or unacceptable depending on *who* knows it, *where* it was

acquired, and associated processes of movement. In other words, the mobility regimes in place in this context create differential combined capabilities for IMGs from different backgrounds.

The perceived legitimacy of medical knowledge and experience in this context may also relate to vestiges of historical mobility regimes. A former British colony, Aotearoa New Zealand was officially established with the signing of the Treaty of Waitangi between the British Crown and Indigenous Māori leaders in 1840 (Groot and Van Ommen 2017). The country's colonial history has repercussions in every sphere of social and political life, and the Indigenous Māori population continue to experience inequitable health outcomes, including significant disparities in measures such as life expectancy and mortality from preventable illnesses (Waitangi Tribunal 2019). Cultural 'competency' or 'safety' is one tool for tackling such inequities, by addressing determinants of health related to institutionalised discrimination, particularly in a postcolonial setting (Curtis et al. 2019). A recent national survey highlighted the challenges IMGs from all backgrounds experience with cultural adaptation to Aotearoa New Zealand, and an associated lack of support and training (Mannes, Thornley, and Wilkinson 2023).

Nevertheless, for doctors arriving via the AUS, CA, or CHS pathways, demonstration of cultural safety skills is *not* a condition for receiving provisional registration (MCNZ 2023a). Doctors trained in low- and middle-income countries, however, take the NZREX examination before they can become registered, where they must demonstrate adequate context-specific communication skills, including culturally safe interactions with Māori (MCNZ 2023f). Although doctors from Global North countries usually undergo varying degrees of post-registration cultural training (Mannes, Thornley, and Wilkinson 2023), this is neither regulated nor a requisite for medical licensing. Such an 'arbitrary exclusion' is reminiscent of a (post)colonial mentality where people from the 'West' are seen as automatically equipped to address the contextual concerns of a foreign country (McEwan 2019). This suggests that medical licensing pathways for IMGs may not be adequately tailored to the needs and safety of the Indigenous people of Aotearoa New Zealand. Medical licensing thus represents an opportunity to further integrate Indigenous perspectives on the desired capabilities of medical professionals.

Finally, postcolonial legacies may also impact migration and migrant experiences in Aotearoa New Zealand. Groot and Van Ommen (2017) note an 'Othering' process that often occurs for non-European migrants to Aotearoa New Zealand, which is something Spoonley (2017) has traced to colonial legislation that sought to exclude certain types of immigrants. Migrants from non-European backgrounds, particularly from Asia and the Pacific, often face poor income and labour market outcomes due to lack of local networks, union support, and/or labour market knowledge, but also because of barriers that are put in place to restrict the acceptance of their qualifications or skillsets (Spoonley 2017). One of the few studies exploring this phenomenon in the healthcare sector in Aotearoa New Zealand refers to these distinctions as an 'occupational apartheid', describing the negative professional, emotional, and social consequences of a mobility regime that marginalises some migrant groups (Mpfung and Hocking 2013). In explaining their policy choices for IMGs, MCNZ emphasises the importance of medical regulation that protects the public as their first priority (e.g. MCNZ 2023c). However, the bottlenecks created by the NZREX pathway disproportionately affect IMGs from Global South countries, compared to those from the Global North, who

are statistically more likely to be of European descent. It is therefore important to critically examine these policies to explore how the regimes of medical registration in Aotearoa New Zealand may reflect historical legacies and dominant discourses about the differences between medical competencies in the Global North and Global South. To this end, further research in this area is required.

Concluding thoughts

Mobility justice and capabilities approaches encourage scholars to embrace the pluralism and discomfort of multiple perspectives and angles on complex issues. International medical migration is intertwined with global dynamics of development, (post)colonialism, and Global North hegemony at both the ‘individual’ and ‘collective’ level. What presents a form of mobility injustice for an individual may be seen as a strategy for mitigating mobility injustices among a wider population, such as the potentially harmful effects of ‘brain drain’. And yet, restrictions to the mobilities and capabilities of some individuals based on ‘arbitrary’ factors, such as their place of origin, may also represent forms of injustice. Policies that attempt to address ‘brain drain’ and ‘brain waste’ thus need to acknowledge the way that historical and institutional barriers lead to suboptimal outcomes both for countries and individuals.

This paper relates to the complexities of mobility (in)justice and the impacts of individual capabilities by highlighting some potential inequities in IMG registration in Aotearoa New Zealand. IMGs follow different licensing pathways and there is an explicit link between these pathways and the health and human development indicators of the country they trained in. The result is that doctors who trained in the Global South tend to experience significantly greater barriers to licensing, by following the NZREX pathway, and this may relate to former colonial policies and dominant discourses favouring individuals, knowledge, and experiences from the Global North. Greater understanding of the competing flows, motivations, and restrictions that influence the movement of medical practitioners, expertise, and information is therefore necessary in seeking more equitable outcomes, both for overseas-trained doctors from a more inclusive range of backgrounds and for people in need of medical care in Aotearoa New Zealand.

Notes

1. Doctors who migrate to another country after graduating from medical school are often referred to as ‘International Medical Graduates’ or ‘IMGs’ (MCNZ 2022, 5). Please note that this does not exclusively refer to recent graduates, who do not have any overseas or local clinical experience – ‘IMG’ refers to any doctor who obtained their primary medical qualification overseas, independent of their clinical experience.
2. This is also referred to as the ‘capability approach’ (e.g. Robeyns 2017).
3. This example focuses on the *non-specialist* licensing pathways for overseas-trained doctors (IMGs), as these are clearly defined by MCNZ. There are no definitive registration requirements for doctors specialised in a particular field of medicine beyond their baseline medical qualifications (*specialists*), as these are decided on a case-by-case basis. However, it is unlikely that IMGs whose foundational, non-specialised medical qualifications are not eligible for the AUS, CA, or CHS pathways would have their specialist qualifications from that same country recognised in Aotearoa New Zealand. This was seen in a recent case of a

U.K.-trained specialist, whose original medical degree was from Hungary, being unable to work in his specialty field (Walker 2023).

4. Official information requests from all of the public hospitals in Aotearoa New Zealand where PGY1 positions are available revealed that 553 PGY1 positions were available in total in 2020 (Anjaria 2022; Ash 2022; Brown 2022; Dougan 2022; Fleming 2022; Green 2022; La Salle 2022; Low 2022; McCarthy, 2022; McKinnon 2022; O’Shea 2022; Saville-Wood 2022; Schiebli 2022; Sheffield 2022; Shepherd 2022; Sherborne 2022; Smitheram 2022; Watson 2022). By comparison, 561 doctors graduated from New Zealand medical schools in 2019 (Medical Deans Australia and New Zealand 2021) and were thus eligible for these positions.
5. Each MCNZ update replaces the previous one and so the status updates prior to May 2023 are no longer publicly available online.

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