

# “This Impacts Women More Than Men”: Gender, Mobility, and Medical Licensing Pathways for International Medical Graduates (IMGs) in Aotearoa New Zealand

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## Abstract

This paper explores the gendered dimensions of medical licensing for international medical graduates (IMGs) in Aotearoa New Zealand through a capabilities approach to mobility justice. Using an exploratory sequential mixed methods approach, the research draws on 24 interviews with IMGs and 9 local experts, alongside an online questionnaire of 80 IMGs, to analyse how licensing pathways, family roles and country of training shape opportunities to practise. Questionnaire data show marked gender disparities: only 38 per cent of respondents who identified as women had ever achieved medical registration in Aotearoa New Zealand, compared with 80 per cent of men. Nevertheless, most of the participants did not explicitly identify gender as a barrier, and women were disproportionately concentrated in the NZREX pathway, which has the lowest registration success rate. Applying a capabilities approach to mobility justice, this article argues that ostensibly neutral licensing criteria operate as mobility regimes that reproduce gendered and globally stratified inequalities, particularly for women with caregiving responsibilities who migrate from low- and middle-income countries. More equitable licensing processes would consider alternative pathways for those with career interruptions, greater flexibility in recent clinical experience requirements, and mechanisms to address structural biases in eligibility criteria.

**Keywords:** international medical graduates (IMGs); medical registration; Aotearoa New Zealand; gender; mobility justice; capabilities

## Introduction

International medical graduates (IMGs) are central to the sustainability of medical workforces in high-income countries, including Aotearoa New Zealand. The extent to which IMGs can contribute to meeting workforce needs depends, however, not only on local demand but also on their ability to navigate registration systems. Existing research on IMGs has largely focused on credential recognition, workplace integration and public perceptions, with less attention paid to how gender and family roles shape these processes (e.g., Al-Btoush & El-Bcheraoui, 2024; Buchanan, 2024; Healey et al., 2025; Schut, 2022). For many IMGs moving with families, career progression is negotiated alongside caregiving responsibilities, the prioritisation of partners' careers, and periods of study, insecure employment or unemployment.

The medical registration system in Aotearoa New Zealand reflects global hierarchies in the valuation of medical qualifications. Doctors trained in a select group of high-income “comparable health systems” (Medical Council of New Zealand, 2025a) are afforded relatively streamlined pathways to registration, while those from many lower- and middle-income countries face more demanding requirements, including prerequisite examinations and limited availability of mandatory supervised positions (Medical Council of New Zealand, 2025f). These differentiated pathways intersect with broader colonial legacies and assumptions about quality and competence, making it particularly difficult for some IMGs to maintain or advance their professional standing (Thomas-Maude, 2023, 2025).

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Gender and family roles add further layers of complexity that are rarely examined directly in IMG research. Studies of skilled migration show that women are more likely to migrate as “trailing spouses” (Kallane & Punnett, 2023), relocating to follow a partner’s opportunities or obligations, and to shoulder disproportionate responsibility for unpaid care (Föbker, 2019; Kallane & Punnett, 2023). These dynamics can interrupt women’s employment trajectories and limit their ability to pursue demanding re-credentialing processes, especially when licensing requires intensive preparation, recent clinical experience and geographical mobility. However, there is still limited empirical work on how such gendered responsibilities shape IMGs’ experiences of medical licensing specifically.

This article addresses that gap by examining how gender and family roles influence IMGs’ navigation of medical registration pathways in Aotearoa New Zealand, and how these dynamics relate to discourse around capabilities and mobility justice. This analysis is guided by two key questions:

- (1) How do gender and family roles influence IMGs’ pathways through the licensing system and their subsequent professional outcomes?
- (2) How do these gendered dynamics relate to broader mobility and capabilities (in)justices in medical migration?

Drawing on a mixed methods study with IMGs and local experts, the article discusses how women in this research were less likely than men to achieve registration, more likely to experience delayed or stalled careers, and more likely to report feeling unwelcome and reluctant to recommend Aotearoa New Zealand to others with similar backgrounds. Nonetheless, most of the participants did not explicitly identify gender as a barrier. To make sense of this paradox, the article adopts a *capabilities approach to mobility justice* (Thomas-Maude, 2023, 2024), conceptualising medical licensing not only as a technical gatekeeping mechanism but as part of a wider “mobility regime” (Sheller, 2018a, 2021) that shapes whose qualifications can be converted into meaningful, dignified work. This lens highlights how registration criteria that appear neutral—such as recent clinical experience, uninterrupted practice and geographical flexibility—interact with gendered divisions of labour and care to constrain some IMGs’ “substantive freedoms” (Sen, 2009), while leaving these inequities largely unrecognised in policy discourse.

The first sections of the article situate the study within literature on IMGs, gendered and nationality-based dimensions of skilled migration, and theoretical perspectives on capabilities, mobility justice and misrecognition. The article then outlines Aotearoa New Zealand’s medical licensing pathways and the mixed methods research design. The findings section examines gendered patterns in registration outcomes, family roles and perceptions of fairness and belonging. Finally, the article concludes by reflecting on the implications for mobility justice, licensing policy and future research on the intersection of gender, migration and professional regulation.

## Literature review and theoretical framework

### *International medical graduates, licensing and “brain waste”*

The experiences of IMGs in Aotearoa New Zealand sit within broader patterns of global medical migration, whereby doctors cross borders for training, work and professional advancement (Hsu, 2012; Johnson, 2005; McKimm & Wilkinson, 2015). The mobility of medical practitioners and the circulation of medical knowledge have long been integral to health systems worldwide (Connelly & Künzel, 2018; Helble, 2011). Today, IMGs are crucial to alleviating workforce shortages in many countries (Brücker et al., 2012; Chacko, 2007; Colebatch, 2005; Connell, 2009, 2010; Meyer et al., 1997), including Aotearoa New Zealand.

In Aotearoa New Zealand, up to 40 per cent of locally trained doctors who graduated in the early 2000s now live abroad (Medical Council of New Zealand, 2022a), often moving to other high-income

countries for better employment or training opportunities (Association of Salaried Medical Specialists, 2017). Despite some improvement in the retention of New Zealand medical graduates (NZMGs), the country continues to face chronic medical workforce shortages (e.g., Armah, 2022; Broughton, 2021; Ellingham, 2022; Royal New Zealand College of General Practitioners, 2020; Russell, 2021a, 2022; Shahtahmasebi, 2021; Spence, 2024; Tebbutt, 2021; Trigger, 2022). To mitigate these shortages, Aotearoa New Zealand relies heavily on migrant doctors: as of September 2025, 44 per cent of the medical workforce had trained overseas (Medical Council of New Zealand, 2025d). Nevertheless, regulatory bottlenecks and complex licensing processes prevent many IMGs from working as doctors, despite persistent demand (Bhamidipati, 2022; Fenton & Chillag, 2023; Forbes, 2022; Lillis & Roblin, 2014; Mpofu & Hocking, 2013; RNZ, 2023; Russell, 2021b; Thomas-Maude, 2022, 2023; Thomas-Maude & McLennan, 2022).

Aotearoa New Zealand is not unique in this respect. Internationally, IMG licensing processes often involve rigorous assessments, supervised practice and extensive credential verification (Al-Btoush & El-Bcheraoui, 2024; Buchanan, 2024; Healey et al., 2025; Peterson et al., 2014; Schut, 2022). While such processes are designed to safeguard professional standards of care, the complexities involved can pose significant challenges for IMGs, particularly when requirements lack transparency or impose prohibitive costs. In such cases, qualified doctors may be unable to practise at a level commensurate with their skills, a phenomenon described as “brain waste” (Pang et al., 2002) and “wastage” (Dovlo, 2005). Canadian research, for example, documents how IMGs unable to secure medical registration take up lower-skilled work, even amid doctor shortages (Bourgeault & Neiterman, 2013; Covell et al., 2016; Dauphinee, 2005; Purewal et al., 2023). These issues not only impede the career progression of individual IMGs but also diminish the capacity of healthcare systems reliant on international talent to address critical workforce gaps. Similar dynamics are evident elsewhere (McGrath et al., 2012; Musoke, 2012; Peterson et al., 2014; Russell, 2021b; Schut, 2022; Yeomans et al., 2022). In Aotearoa New Zealand, too, IMGs frequently experience brain waste as they encounter obstacles within registration pathways (Bhamidipati, 2022; Fenton & Chillag, 2023; Forbes, 2022; Mpofu & Hocking, 2013; RNZ, 2023; Russell, 2021b; Thomas-Maude, 2022, 2023, 2024, 2025; Thomas-Maude & McLennan, 2022).

Building on this documented relationship between occupational licensing pathways and the ease or difficulty of registration, this research examines how these pathways intersect with gendered dynamics in IMGs’ professional trajectories. To contextualise the findings, the next section briefly outlines the primary medical licensing pathways available to IMGs in Aotearoa New Zealand. (For more detailed discussion, see Thomas-Maude, 2023, 2024, 2025.)

### *Medical licensing pathways in Aotearoa New Zealand*

Te Kaunihera Rata o Aotearoa | The Medical Council of New Zealand (MCNZ) specifies several registration pathways for doctors trained overseas. For analytic purposes, these can be grouped into three principal categories: specialist pathways, competent/comparable pathways, and the New Zealand Registration Examination (NZREX) pathway.

#### *Specialist pathways (SP)*

Specialist pathways are available for doctors holding recognised postgraduate specialist qualifications. Under the Vocational 3 pathway, eligibility for IMGs is assessed on a case-by-case basis (Medical Council of New Zealand, 2025g), while Locum Tenens registration allows short-term licensing for specialists from selected countries (Medical Council of New Zealand, 2015). Successful applicants may transition directly into senior positions and are usually eligible for skilled migrant visas and residency (Immigration New Zealand, 2025).

### *Competent/Comparable pathways (CC)*

Non-specialist IMGs may obtain general registration via competent/comparable pathways, which do not require additional clinical examinations. Doctors trained in Australia are generally treated as equivalent to NZMGs (Medical Council of New Zealand, 2025c), while the Competent Authority pathway is designated for those who trained in the United Kingdom (UK) or Ireland and worked there for at least one year (Medical Council of New Zealand, 2025b). On the other hand, the Comparable Health System (CHS) pathway requires applicants to demonstrate recent clinical experience in a country deemed to have a ‘comparable’ health system, regardless of primary qualification. MCNZ bases this designation on indicators such as life expectancy, mortality rates, doctor-to-population ratios, similarity of registration systems, and public health expenditure per capita (Medical Council of New Zealand, 2025a). The determination of CHS countries thus relates to indicators linked to human and economic development and, notably, the accepted countries in the 2025 list are all classified as “high-income” by the World Bank (Metreau et al., 2024). Finally, a recently established pathway also allows IMGs who have gained full registration and one year of experience in Australia or the UK to obtain general registration in Aotearoa New Zealand, regardless of country of primary qualification (Medical Council of New Zealand, 2023). Overall, these pathways benefit candidates with qualifications and/or recent experience in high-income health systems, providing relatively streamlined entry and immigration options as skilled migrants (Immigration New Zealand, 2025).

### *The NZREX pathway and the PGY1 bottleneck*

IMGs who do not qualify for specialist or competent/comparable pathways must pursue the NZREX pathway. This involves passing the NZREX clinical examination, securing a supervised Postgraduate Year 1 (PGY1) House Officer position, and then completing two years of supervised practice (Medical Council of New Zealand, 2025f). However, PGY1 roles are limited and prioritised for domestic graduates, meaning that many IMGs who pass the NZREX are often unable to obtain the necessary positions. Furthermore, candidates on this pathway typically lack the immigration advantages associated with other routes, and some lose eligibility when their NZREX pass expires before they secure a post (Thomas-Maude, 2023). Limited examination offerings combined with the PGY1 bottleneck can thus lead to “downward occupational mobility” (Salami & Nelson, 2014, p. 153), with IMGs who can meet Aotearoa New Zealand’s requisite standards instead moving into non-medical or lower-skilled roles despite ongoing doctor shortages (Bhamidipati, 2022; Fenton & Chillag, 2023; Forbes, 2022; RNZ, 2023; Russell, 2021b; Thomas-Maude, 2022, 2023; Thomas-Maude & McLennan, 2022).

### *Gendered dimensions and global hierarchies in skilled medical migration*

Despite substantial scholarship on IMG experiences, the gendered dimensions of licensing and professional mobility have often been underexamined. Much of the literature treats IMGs as a gender-neutral category or reports gender only descriptively rather than treating it as a central analytic focus (e.g., Al-Btoush & El-Bcheraoui, 2024; Buchanan, 2024; Healey et al., 2025). In contrast, a wider body of work on skilled migration highlights gender as a key factor shaping migrants’ opportunities, risks and responsibilities. Decisions about where to move, whose career to prioritise, and how to organise childcare and elder care are shaped by gendered norms and expectations (Buchanan, 2024; Flanagan & Lumley-Sapanski, 2025; Grimes et al., 2017; Kofman & Raghuram, 2006). Women are more likely to migrate as trailing spouses (Kallane & Punnett, 2023), to interrupt their employment trajectories to accommodate partners’ opportunities, and to shoulder disproportionate responsibility for unpaid care (Föbker, 2019; Grimes et al., 2017; Iredale, 2005; Kubiciel-Lodzińska & Maj, 2021). Selection mechanisms for employment and skilled migration visas that reward continuous work histories and high earnings can therefore indirectly disadvantage women, whose careers are more likely to be interrupted by caregiving (Kofman & Raghuram,

2006). Even when women are the primary migrants, their professional plans may be subordinated to wider family needs in contexts where licensing or re-credentialling demands intensive study, financial investment and geographic flexibility (e.g., Odedra, 2023).

Moreover, registration processes are also embedded in colonial histories that shape who is imagined as a “desirable” migrant (Simon-Kumar, 2015, p. 1174), whose training is readily trusted, and whose competence is continually scrutinised. Work on decolonising medical education and regulation highlights how Global North norms are embedded in accreditation standards and curricula, often marginalising knowledge and practices from the Global South and reinforcing nationality-based hierarchies in assessments of quality (Rashid et al., 2023; Wong et al., 2021). Female IMGs can experience compounded disadvantage due to the intersection of their gender, nationality and/or ethnicity (Kubiciel-Lodzińska & Maj, 2021; Odedra, 2023). In Australia, for example, IMGs from non-Competent Authority Pathway (non-CAP) countries (generally equivalent to non-CHS countries in Aotearoa New Zealand) report significantly higher rates of discrimination than IMGs from high-income CAP countries. IMGs in Australia must engage with a tiered system similar to that in Aotearoa New Zealand, where registration options are first based on country of qualification rather than individual skills (Healey et al., 2025). These processes are associated with experiences of exploitation, powerlessness and mental health impacts among IMGs from non-CAP countries, with female IMGs describing specific discriminatory practices such as being openly criticised for insufficient effort or being asked to consult their husbands before discussing clinical hours (Healey et al., 2025). Global North-Global South hierarchies in the recognition of medical qualifications are thus also gendered and globally stratified, with women from lower- and middle-income countries more likely to face multiple layers of disadvantage.

Overall, while recent work has begun to explore intersections between gender and nationality among IMGs (e.g., Al-Btoush & El-Bcheraoui, 2024; Buchanan, 2024; Healey et al., 2025), these studies tend to focus on discrimination and inequitable treatment in the workplace. Less attention is paid to how male and female IMGs themselves interpret the role of gender in their licensing experiences, or how they navigate tensions between family responsibilities, financial pressures and the pursuit of professional recognition. This article places gender and family at the centre of analysis, rather than treating these as background variables.

### *Capabilities, mobilities and justice*

To unpack this phenomenon, this article draws on a capabilities approach to mobility justice, developed in previous work (Thomas-Maude, 2023, 2024). A capabilities approach, building on the work of Amartya Sen and Martha Nussbaum, shifts attention from resources or outcomes alone to the “substantive freedoms” (Sen, 2009) people have to “be” and “do” certain things they have reason to value (Nussbaum, 2011). Capabilities are shaped by *conversion factors* that affect how people can translate resources, such as qualifications, income or social networks, into valued *functionings*, such as practising as a doctor, living with family, or maintaining health (Crocker & Robeyns, 2009; Naz, 2020; Robeyns, 2017).

In the context of IMGs, a *capabilities approach* highlights how having a medical degree and extensive clinical experience does not automatically translate into the capability to practise medicine after migration (Thomas-Maude, 2023). Licensing processes, examination structures, visa regimes and employment opportunities all mediate the extent to which overseas qualifications can be converted into professional functionings. Family responsibilities, gender norms and the distribution of domestic labour further shape whether IMGs can realistically take up the opportunities that licensing pathways ostensibly offer. As such, the focus here is not simply whether individuals succeed or fail in securing registration, but on the structured conditions that expand or constrain their real opportunities to do so.

A *mobility justice approach* complements this perspective by foregrounding power relations in the organisation of movement and stasis. Mobility justice theorists argue that inequalities are reproduced not only through who can move, but also through how mobility is governed, who bears the costs of movement and immobility, and how infrastructures and institutions embed hierarchies of value (Cook & Butz, 2018; Harada, 2023; Sheller, 2018a, 2018b). Mobility is understood as multi-scalar (Sheller, 2018a, 2018b), and systems that appear neutral at the level of policy (such as global labour agreements or occupational licensing regulations) can produce differentiated effects when they interact with local histories and embodied social roles.

Furthermore, this theoretical lens emphasises the concepts of *recognition* and *respect*. Lack of recognition and respect, manifesting as insults, degradation and devaluation of individuals and groups, generates injustice not only by harming and constraining people and their opportunities, but also because these behaviours negatively impact the formation of a positive sense of self (Honneth, 2004). In this way, an individual's self-worth, dignity and integrity depend, at least in part, on the approval or recognition of others (Schlossberg, 2007). Fraser (1998) characterises misrecognition as a "status injury", inseparable from social relations and status hierarchies, and associated with processes such as cultural domination, stereotyping or being rendered invisible through non-recognition.

Bringing capabilities and mobility justice together enables the conceptualisation of medical licensing pathways as part of broader "mobility regimes" (Sheller, 2018a, 2021) that distribute capabilities unevenly and confer or withhold recognition. Rather than treating occupational licensing systems as purely technical processes of assessing competence, this approach asks: Whose professional mobility and capabilities are facilitated, on what terms, and at what cost? Who is recognised as a legitimate doctor, and whose expertise is questioned or devalued? How do licensing policies interact with global inequalities between states, and with gendered divisions of labour within households?

Importantly, adopting a capabilities approach to mobility justice does not imply that IMGs have an absolute or automatic 'right' to practise medicine in any country. Theorisations of mobility justice and capabilities are not intended as prescriptive theories of justice (Pereira et al., 2017; Sheller, 2018a), instead allowing for pluralist and contextualist understandings (Thomas-Maude, 2024). This perspective therefore acknowledges that states and professional bodies have obligations to protect patients and ensure quality of care, while also recognising that occupational licensing processes can themselves become sources of injustice when they systematically restrict particular groups' capabilities in ways that are not transparently related to competence or public safety.

## Methodology

This article draws on a broader project exploring IMGs' pathways to registration in Aotearoa New Zealand, using a three-phase exploratory sequential mixed methods design (Creswell, 2015). This design is particularly suited for in-depth exploration with some individuals, while aiming to extend findings to a larger population. By conducting the qualitative component first, key themes and findings were used to inform the quantitative instrument in the second phase, which is particularly useful in a context in which there is limited other research (Teddlie & Tashakkori, 2009). Ethics approval for Phases 1 and 2 was obtained from the Massey University Human Ethics Committee (applications SOA 22/19 and OM1 23/03). All the participants gave informed consent, and strict confidentiality protocols were followed throughout.

### *Phase 1*

The research aimed to understand how licensing pathways affect IMGs' opportunities and experiences, beginning with semi-structured interviews conducted between August 2022 and May 2023. The participants comprised 24 IMGs and nine local experts, representing diverse licensing pathways, regions of qualification,

gender and time spent in Aotearoa New Zealand. Recruitment used maximal variation and snowball sampling via professional networks and IMG social media groups, with the goal of speaking to IMGs at different licensing stages and in different pathways, including those facing persistent barriers or who had left medical practice. Local experts were selected for their roles in medical education, employment, workforce planning and policy, to contextualise the IMG accounts. As there is limited prior research in this context, Creswell's (2015) recommendation of recruiting around 20 to 30 participants was followed.

Most of the interviews were conducted in person (22 in person and 11 virtually). The interview schedules were informed by a capabilities and mobility justice framework and covered licensing journeys, challenges and enablers, support systems, and the impacts of licensing on professional, personal and family life. The interviews ranged between 20 minutes and two hours, tending to take around an hour on average. All the interviews were audio-recorded, transcribed and thematically analysed using a combination of both inductive coding and deductive codes derived from the literature on capabilities, mobility justice and skilled migration. The development of the theoretical framework was intertwined with this process, following an "inductive interpretative approach" (Creswell & Plano Clark, 2018, p. 43), wherein new theoretical insights were iteratively modified as data were analysed (see Thomas-Maude, 2024).

In this article, the IMG participants are identified by participant number, licensing pathway and self-described gender (e.g., IMG 1, NZREX-F). Licensing pathways are abbreviated as SP (specialist pathways), CC (competent/comparable pathways), and NZREX (NZREX pathway). The local experts are referred to by participant number, role and self-identified gender (e.g., Expert 1, M). Table 1 summarises the IMG participants' licensing pathways and registration status, while Table 2 provides an overview of local experts' roles and expertise.

## *Phase 2*

Phase 2 involved an online questionnaire targeting both practising and non-practising IMGs, which was developed based on the key themes explored in Phase 1. For example, participants' accounts of feeling unwelcome or undervalued in Aotearoa New Zealand were framed as questions about whether they felt welcome and able to use their skills as medical professionals. After piloting the instrument with two IMGs who were not involved as research participants, the questionnaire was refined and distributed via professional networks, IMG associations and social media between March and May 2023. This process generated 90 responses, of which 80 were retained after data cleaning.

The questionnaire comprised 42 items, which collected background information (such as training region, licensing pathway, current registration status) and used 33 Likert-scale questions to capture experiences and perceptions of medical registration, including questions on fairness, belonging and the perceived role of gender. Two open-ended questions also allowed the respondents to elaborate on their experiences. The respondents were grouped into the three pathway categories (SP, CC and NZREX) and data were analysed descriptively, focusing on relationships between licensing pathway, training region, gender and reported experiences. Figure 1 shows the demographics of the questionnaire respondents based on United Nations (2019) subregion classifications and their stated gender.

The population size of IMGs residing in Aotearoa New Zealand but not currently registered to practise is unknown. For this reason, an accurate estimate of how many would constitute a representative sample could not be produced and probability sampling was not feasible for this research. Therefore, inferential statistics were not used due to the non-probability sampling approach.

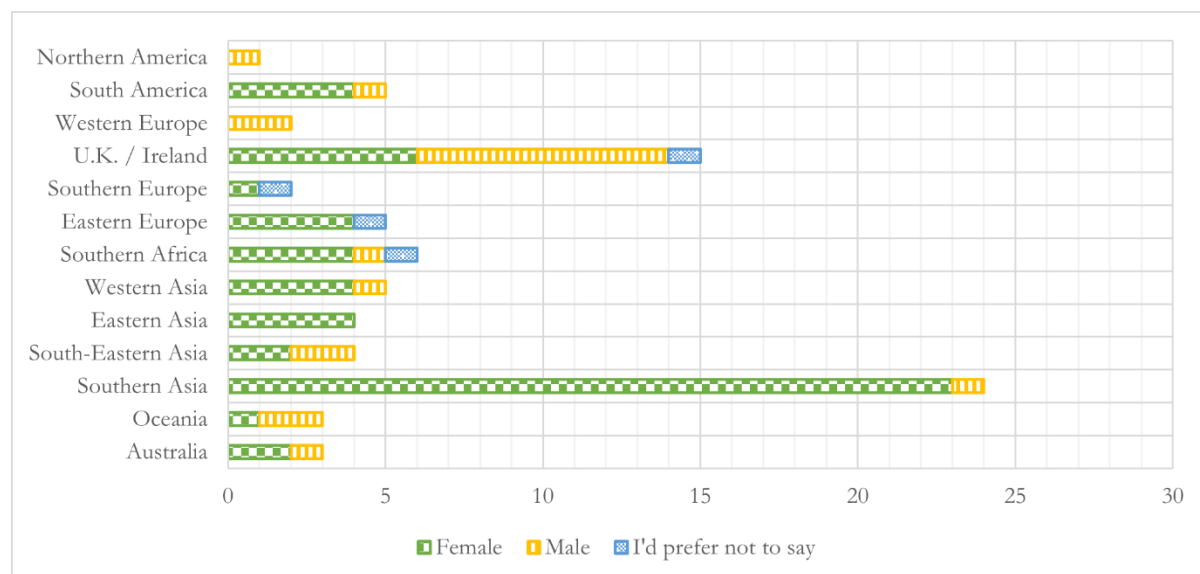
Table 1. Phase 1 IMG research participants and their registration status at time of interview

IMG #	Training Region	Gender	Licensing Pathway	Licensing Stage
1	Southern Asia	Female	NZREX	Not attempted
2	Southern Europe	Female	Competent/Comparable	Provisionally registered
3	Southern Europe	Male	Competent/Comparable	Preparing for English-language assessment
4	Southern Asia	Male	NZREX	Fully registered
5	North America	Female	Specialist	Provisionally registered
6	Eastern Asia	Male	NZREX	Waiting for PGY1
7	Southern Asia	Female	NZREX	No longer attempting
8	Southern Asia	Male	NZREX	Waiting to take NZREX
9	Eastern Asia	Male	NZREX	Waiting for PGY1
10	Oceania	Male	NZREX	Provisionally registered
11	Eastern Europe	Male	NZREX	Waiting to take NZREX
12	South America	Female	NZREX	Waiting for PGY1
13	Southern Asia	Female	NZREX	Preparing for medical knowledge examinations
14	UK/Ireland	Female	Specialist	Fully registered
15	Southern Asia	Female	NZREX	Fully registered
16	Eastern Europe	Female	NZREX	Fully registered
17	Western Asia	Male	NZREX	Fully registered
18	North Africa	Male	NZREX	Fully registered
19	Western Asia	Female	NZREX	Waiting for PGY1
20	Southern Asia	Female	NZREX	Waiting for PGY1
21	South America	Male	NZREX	Waiting for PGY1
22	UK/Ireland	Female	Competent/Comparable	Fully registered
23	Southern Asia	Female	NZREX	Registered and working in CHS country
24	Southern Africa	Female	NZREX	Waiting to take NZREX

Table 2. Phase 1 local expert participants and their roles

Expert #	Gender	Role	Further Details
1	Male	Employer	NZMG and employer at a public hospital
2	Male	Political commentator	Political expert and advocate for change in IMG licensing processes
3	Male	Researcher	NZMG with research interests relating to vocational licensing pathways in Australia and Aotearoa New Zealand
4	Male	Recruitment agent	Senior employee at a medical staffing company
5	Female	Local government representative	Advocate for change in IMG licensing processes that negatively impact ethnic minorities
6	Male	Educator	NZMG involved in medical education, as well as health workforce policy initiatives
7	Male	Policy adviser	Adviser on health-related policy in Aotearoa New Zealand
8	Male	Employer	Registered IMG and hospital employer seeking to support increased employment opportunities for NZREX candidates
9	Male	Policy adviser	Adviser on health-related policy in Aotearoa New Zealand

Figure 1. Questionnaire respondents by global subregion of primary medical qualification and gender (N = 79)



### Phase 3

In Phase 3, qualitative and quantitative findings were integrated and situated within publicly available workforce and policy data, including MCNZ statistics and Official Information Act responses. Integration occurred at two points: the interview themes informed questionnaire development, and the data sets were combined using the evolving theoretical framework to illustrate how licensing pathways shape IMGs' professional and personal capabilities.

## Findings: Licensing pathways, gender and professional outcomes

### *Family roles, caregiving and interrupted careers*

While the questionnaire did not directly ask about parenthood or caring responsibilities, the interview narratives suggested a patterned association between being a woman, carrying primary responsibility for children, and experiencing delays on the NZREX pathway. The interviewees reflected extensively on the importance of family and home life in their medical licensing and professional journeys in Aotearoa New Zealand. For some, family featured in their narratives through obligations to parents (IMG 15, NZREX-F) or spouses (IMG 4, NZREX-M; IMG 7, NZREX-F; IMG 13, NZREX-F) who had provided financial support for migration and licensing. Others focused on how their children shaped both their motivations for remaining in Aotearoa New Zealand and their sense that an interrupted medical career had been worthwhile (IMG 1, NZREX-F; IMG 7, NZREX-F; IMG 20, NZREX-F; IMG 22, CC-F).

As noted above, women made up 58 per cent of the IMG interview sample. Among the 19 IMGs who had attempted the NZREX pathway, however, a considerable share of those experiencing prolonged licensing difficulties were women who had taken extended time out of practice to raise children. At least six NZREX interviewees (IMG 1, 7, 19, 20, 23 and 24) explicitly described stepping back from paid work for periods of childrearing, and three of these women (IMG 7, 19 and 20) characterised themselves as primary caregivers for young children while also trying to prepare for examinations or maintain other employment. IMG 7 (NZREX-F), for example, recounted her first attempt at the NZREX clinical examination shortly after giving birth:

“I wanted to sit the exam and I tried to prepare. But it was a bit rushed because I had just come back from [my home country] and then I was pregnant. I had my daughter and of course I couldn't study as much. But my family was so keen on me doing the exam that I sat it anyway,

when my daughter was three months old, and I definitely didn't work as hard as I should have to make it. ... It was so hard... I felt like a burden on my husband for taking his money for my exam, for childcare, and yet I still can't work." (IMG 7, NZREX-F)

Rather than attributing her difficulties to the challenges of these circumstances, IMG 7 internalised responsibility, describing herself as not having worked hard enough, even though she was caring for a newborn at the same time. IMG 20 (NZREX-F) similarly described attempting to juggle employment, childcare and NZREX preparation, during the COVID-19 pandemic:

"With men it is different, like they don't have to wait for having a family or anything. For men, it's like: 'Let me become a doctor first, and then let me have a family.' Maybe that is a cultural thing as well... it's so hard for women. Even if the process was not hard, by nature because of the age we are in, we are starting families—this impacts women more than men because of gender expectations, and we can't get maternity leave because we're not in the system." (IMG 20, NZREX-F)

IMG 19 (NZREX-F) conveyed a similar sentiment, explaining that: "As a mum, I have more responsibility and have to look after my kids as a priority—I can work only after meeting their needs." These individual stories are echoed by local experts' observations. An employer responsible for hiring first-year House Officers (PGY1) described what he saw among NZREX candidates:

"That's where I think the unfairness comes in, is women... the countries that people come from often have hierarchical systems where women must, you know, be responsible for the children. So it's the women NZREX doctors who take a long time to get into medicine. ... Female doctors, because they've been out of practice a long time, can have quite significant skill, competency and knowledge gaps." (Expert 8, M)

He went on to note that many NZREX candidates are in Aotearoa New Zealand because of a partner's opportunity—they are trailing spouses (Kallane & Punnett, 2023)—and that families rarely have the financial capacity for both partners to pursue NZREX simultaneously. While none of the male NZREX interviewees described themselves as primary caregivers, one male doctor described his own family's approach to this dilemma:

"Many NZREX candidates are in New Zealand because of their partner, and this often affects women. In our case, I supported my wife to complete her NZREX, but it could have been the other way around. There's no way we both could have done it at the same time while raising our family—PGY1 doesn't give you enough money to sustain a whole family. So I was working full time and didn't have time to prepare for the NZREX." (IMG 8, NZREX-M)

In this arrangement, his wife's licensing was prioritised, while his own progression was deferred indefinitely, in favour of taking up alternative employment that positioned him as the breadwinner for his family. The quote underscores how the low pay and high demands of PGY1 positions, together with the cost of examinations and childcare, shape which family member can feasibly pursue registration.

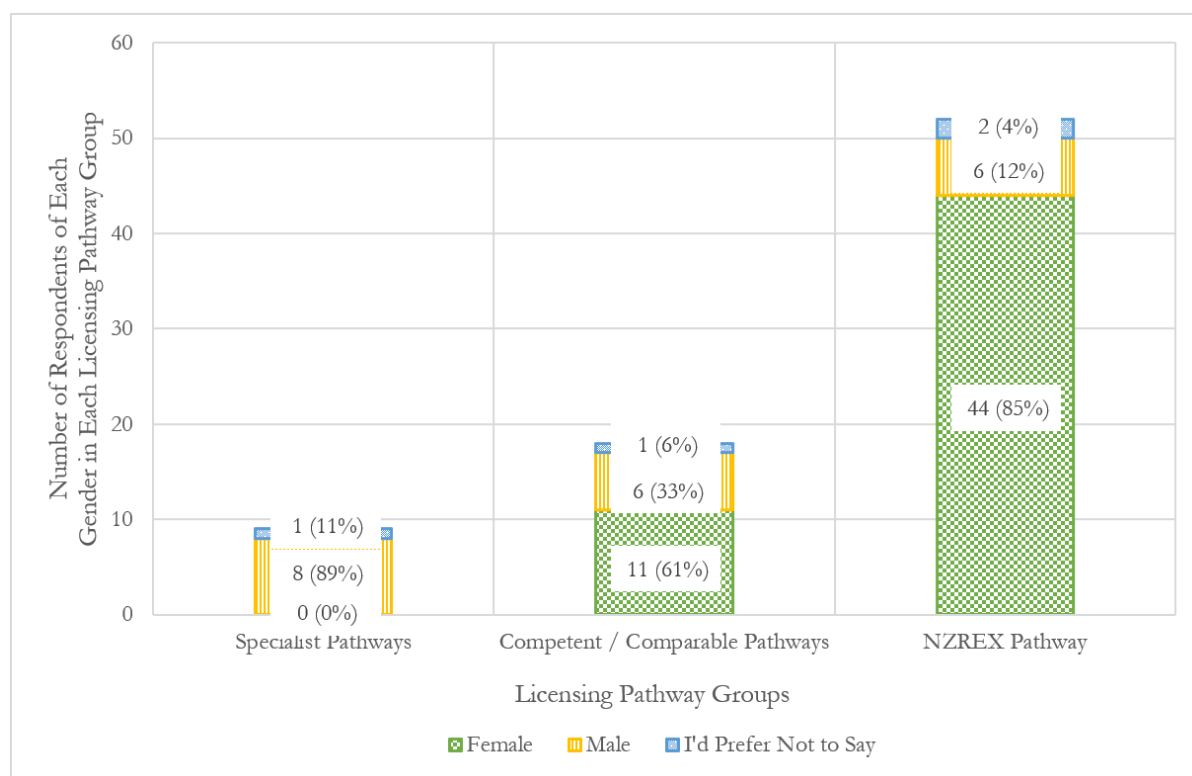
These examples highlight how gendered divisions of labour and care act as powerful conversion factors (Robeyns, 2017) within the NZREX pathway. The pathway's structure assumes that candidates can devote sustained time and resources to examination preparation and then accept low-paid, geographically inflexible PGY1 roles. For IMGs who are primary caregivers or who carry major responsibility for children's day-to-day care, those expectations are difficult to meet. The women in this study were more likely than the men to experience career interruptions due to pregnancy, early childcare, and periods of economic dependence on partners or extended family. For several, these interruptions translated into long gaps in practice, erosion of clinical confidence, and ultimately stalled or abandoned licensing trajectories. These

narratives underscore how the combination of registration pathway design and gendered family roles can systematically reduce women’s substantive freedoms to pursue registration, even when policies appear gender-neutral on paper.

### *Gendered registration outcomes across licensing pathways*

Across both Phases 1 and 2 of the study, women outnumbered men in the sample but were less likely to have converted their medical qualifications into registration. Among the interviewees, women made up just over half of the IMG participants (58 per cent), while in the questionnaire this pattern was even more pronounced: 69 per cent of respondents ( $n = 55$ ) identified as female, 25 per cent ( $n = 20$ ) as male, and 6 per cent ( $n = 5$ ) preferred not to specify their gender. (Participants also had the option to self-describe their gender, though none chose to do so.) This over-representation of women may partly reflect the research recruitment methods through social media and professional networks. However, this trend also mirrors a broader pattern in the data: women were more likely to be situated in the NZREX pathway, while men were more likely to appear in specialist or competent/comparable pathways. Notably, as illustrated in Figure 2, 85 per cent of NZREX respondents were female ( $n = 44$ ), while none of the nine recognised specialist respondents identified as female. Among the competent/comparable pathway participants, 61 per cent were female ( $n = 11$ ) and 33 per cent were male ( $n = 6$ ).

Figure 2. Relationship between questionnaire respondents’ indicated gender and licensing pathway eligibility ( $N = 79$ )



When registration is examined by gender, these disparities become particularly striking (see Figure 3). Of the 55 questionnaire respondents who identified as female, only 21 (38 per cent) had ever achieved provisional or full registration in Aotearoa New Zealand, while 34 (62 per cent) had not. For comparison, 16 of the 20 male respondents (80 per cent) had achieved registration and 4 (20 per cent) had not. In other words, women in this sample were more than twice as likely as men to be unregistered at the time of taking the questionnaire, despite having comparable levels of medical training and, in many cases, many years of clinical experience overseas.

At the same time, registration outcomes differed sharply by licensing pathway (see Figure 4). In the questionnaire, all the respondents in the specialist and competent/comparable pathway groups had at some point achieved provisional or full registration as medical doctors in Aotearoa New Zealand, whereas only one quarter of the NZREX pathway respondents had done so. Among the IMG interviewees, a similar pattern emerged: most of the doctors who registered via specialist or competent/comparable pathways were practising as doctors at the time of interview, while a substantial proportion of those who were attempting the NZREX pathway remained unregistered.

These pathway-specific bottlenecks align with earlier studies (e.g., Lillis & Roblin, 2014; Mpofu & Hocking, 2013), news articles (e.g., Bhamidipati, 2022; Forbes, 2022; RNZ, 2023; Russell, 2021b), and workforce data (e.g., Medical Council of New Zealand, 2020, 2022b, 2025e), pointing to ongoing concerns around the bottlenecks and viability of the NZREX pathway. Registration pathways therefore provide an important context for interpreting the gendered disparities described above, as these figures suggest that women’s concentration in the NZREX pathway—which has the lowest registration success rate—is one key factor behind gendered differences in licensing outcomes in this study.

Figure 3. Questionnaire responses to: “Have you ever achieved provisional or full registration to work as a medical doctor in New Zealand?”, by respondents’ indicated gender (N = 79)

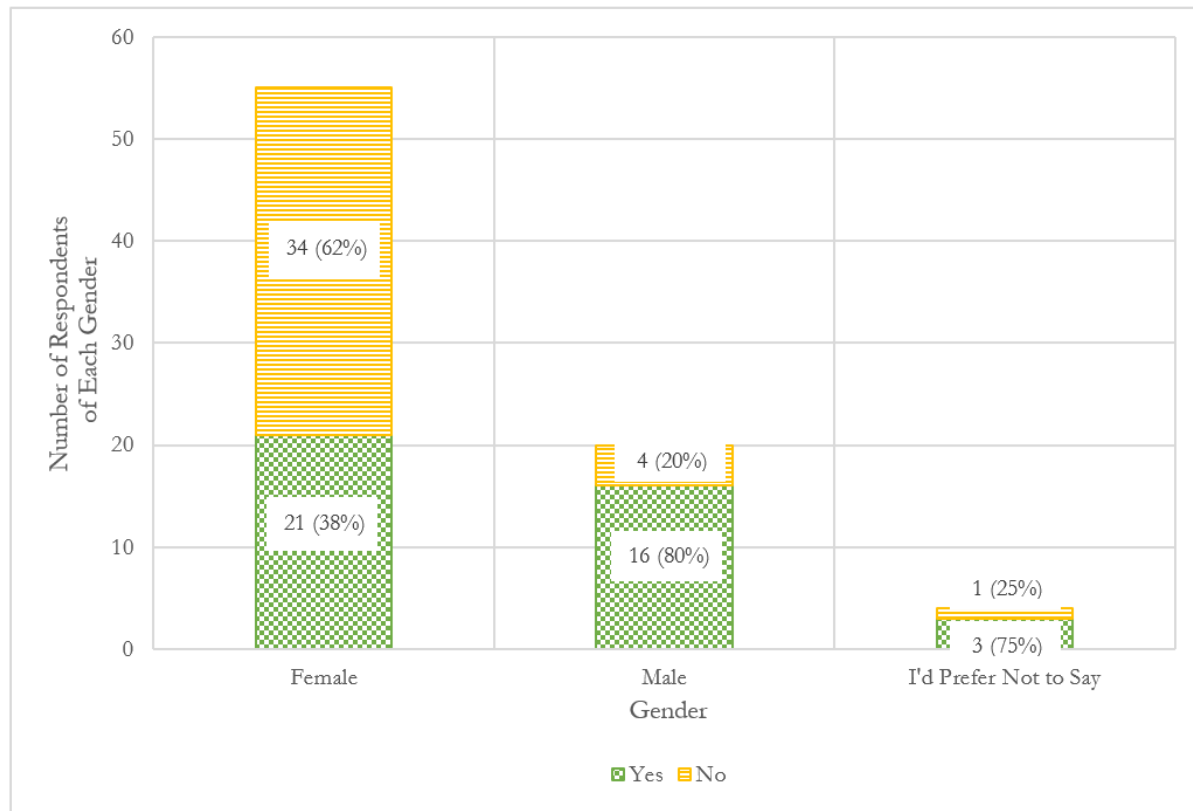
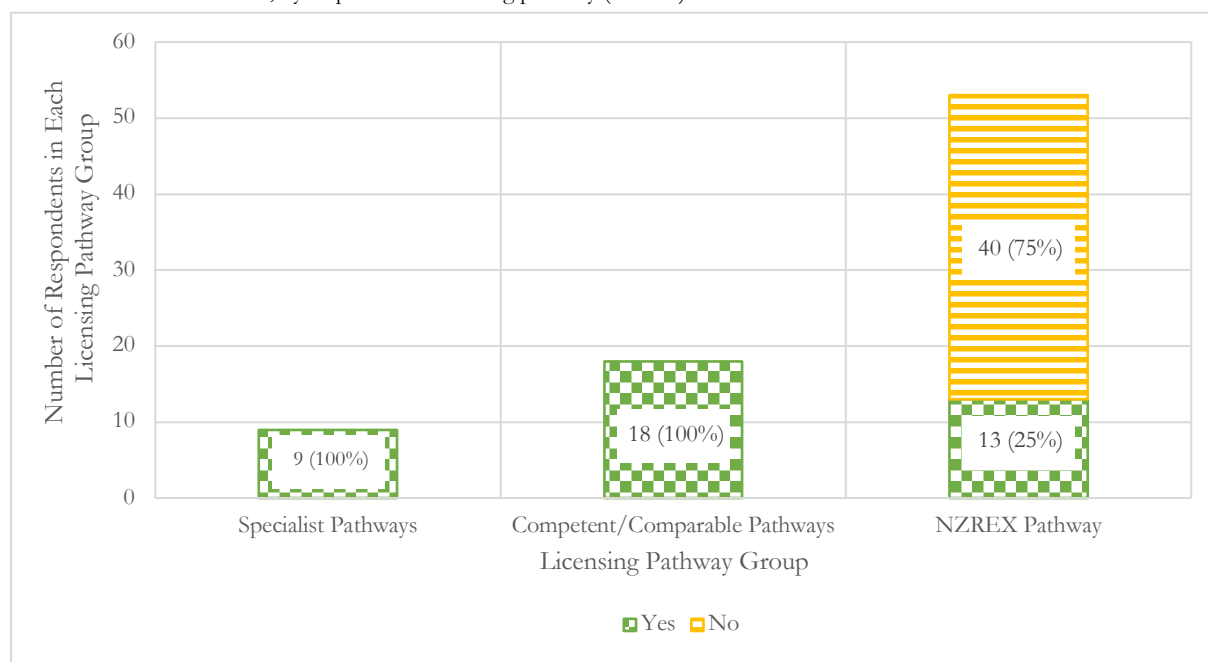


Figure 4. Questionnaire responses to: “Have you ever achieved provisional or full registration to work as a medical doctor in New Zealand?”, by respondents’ licensing pathway (N = 80)



As discussed further below, more than half of the female questionnaire respondents disagreed or strongly disagreed with the statement that their gender had played a role in their medical licensing experiences. This apparent contradiction—between clear gendered disparities in registration and limited recognition of gender as a barrier—suggests that many of the mechanisms through which gender shapes IMG licensing outcomes operate indirectly, through the interaction of registration processes, life stage and family responsibilities.

### *Perceptions of gender, fairness and belonging*

In addition to the disconnect between the apparent gender-neutrality of medical registration processes and the participants’ lived experiences, the questionnaire data reveal a further paradox between how IMGs perceive the role of gender and the gendered patterning of their licensing outcomes. Only two questionnaire respondents (one identifying as female and one as male; 3 per cent of those who answered the question) agreed or somewhat agreed that gender had played a role in their licensing. In contrast, 61 per cent of women and 35 per cent of men disagreed or strongly disagreed that gender had influenced their experiences (see Figure 5).

These responses suggest that most IMGs did not regard gender as a salient factor in their registration journeys. Nevertheless, there were gendered patterns evident in broader measures of professional recognition and belonging in this research, such as the respondents’ sense of being professionally welcome (see Figure 6). Among the women who answered this question, 73 per cent somewhat disagreed, disagreed or strongly disagreed that they felt welcome as medical professionals in Aotearoa New Zealand, compared with 30 per cent of men, and only 2 per cent of women strongly agreed that they felt welcome, compared with 15 per cent of men.

Figure 5. Proportion of questionnaire respondents of each gender according to their responses to: “My gender has played a role in my medical licensing experiences in New Zealand.” (N = 66)<sup>1</sup>

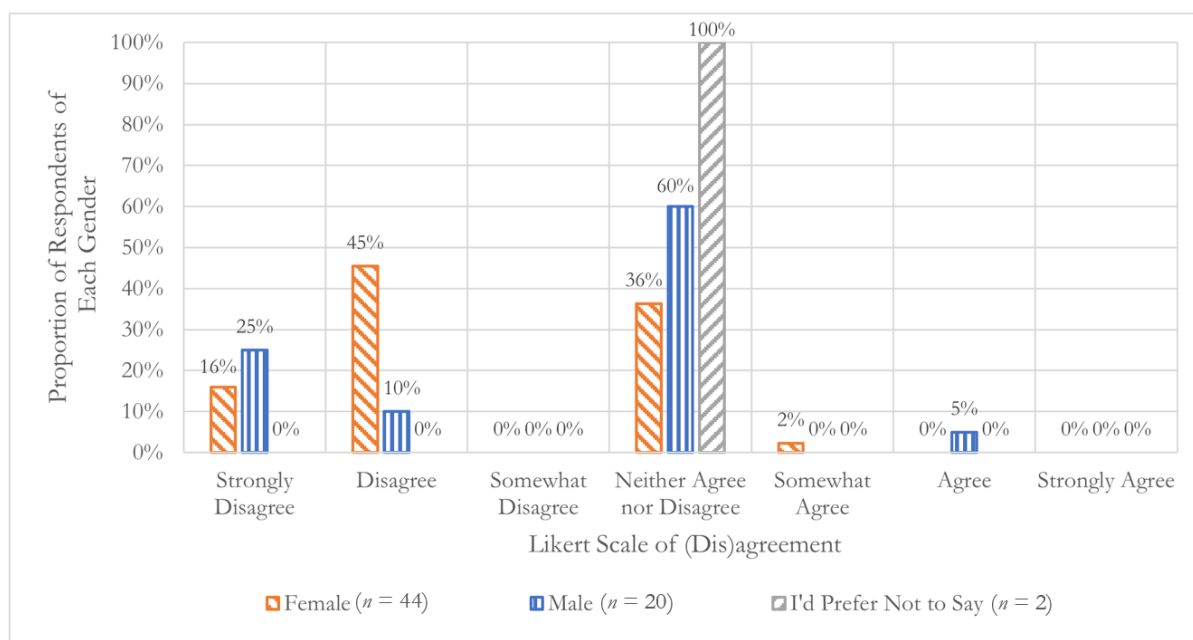
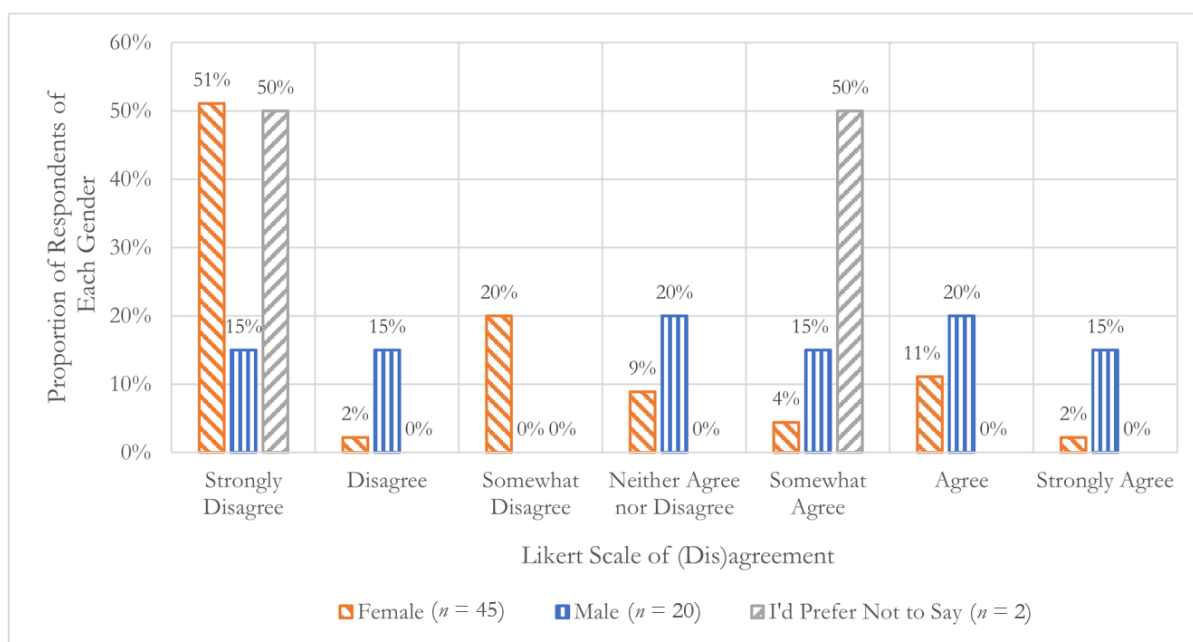


Figure 6. Proportion of questionnaire respondents of each gender according to their responses to: “As a medical professional, I feel welcome in New Zealand.” (N = 67)



<sup>1</sup> Charts relating to the Likert scale matrices in the questionnaire have been presented as percentages of the total subgroup, rather than whole numbers. This is because of the vast differences in the total size of the specialist (n = 9), Competent/Comparable (n = 18), and NZREX (n = 53) pathway subgroups. Three respondents among the specialists are equivalent to 33% of the total subgroup, as opposed to just 6% of NZREX. It was therefore considered more useful to capture these trends with percentages in the charts.

A similar pattern emerged when respondents were asked whether they would recommend Aotearoa New Zealand to IMGs with a similar background. Nearly two thirds of women (64 per cent) strongly disagreed, compared with 30 per cent of men, while 45 per cent of men somewhat agreed, agreed or strongly agreed, compared with just 16 per cent of women (see Figure 7).

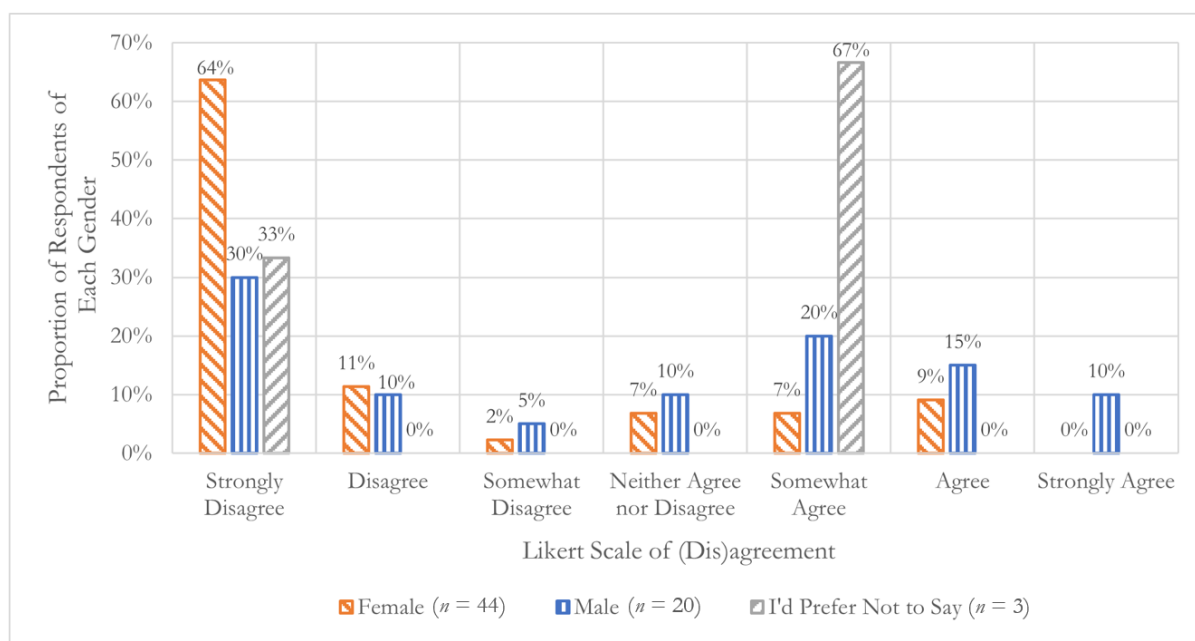
These findings indicate that even if gender is rarely named as a direct cause, women in this study were more likely than men to feel unwelcome, to view their licensing experiences negatively, and to hesitate to recommend Aotearoa New Zealand to others like them.

Qualitative accounts help to explain how the participants navigated these tensions between not naming gender as a problem and nonetheless describing their situations as unfair or exclusionary. Local experts were often more willing than IMGs to frame the issue explicitly in gendered terms. Expert 3 (M) described how regulatory mechanisms contribute to gender inequities in medical workforce outcomes: despite women constituting more than half of Australian and New Zealand medical graduates by 1991, they comprised only around a third of registered specialists almost two decades later, with women of Colour—including Indigenous Māori and Pacific Peoples women—facing additional disadvantages. While this may be coincidental, it may also help to explain why none of the questionnaire respondents identifying as recognised specialists also identified as female. Expert 5 (F) reiterated this concern, emphasising the need for more concerted efforts to (re)integrate women into the workforce, particularly after childbirth.

Furthermore, certain licensing requirements create structural disadvantages for women, particularly those with caregiving responsibilities. While the two registered specialists interviewed in Phase 1 who identified as female did not attribute their challenges to gender (IMG 5, SP-W; IMG 14, SP-W), neither had children at the time of the interview. Conversely, for IMG 2, following the CHS licensing pathway proved disadvantageous to women due to the requirement for a minimum number of hours worked in a Comparable Health System country:

“Only for being a woman, you have more difficulties. For example, if she has a baby then that reduces her 4000 hours. Even when you apply for your visa, they ask you if you are pregnant, and who is going to pay for the baby or the pregnancy? So if you are pregnant, you can’t work here?” (IMG 2, CC-F)

Figure 7. Proportion of questionnaire respondents of each gender according to their responses to: “I would recommend that other doctors, with a similar background to me, migrate to New Zealand.” (N = 67)



Expert 8 (M) also noted that IMGs recruited on specialist or competent/comparable general pathways are often in their early thirties, coinciding with family-building years and creating potential disadvantages for women. Similarly, Expert 2 (M) highlighted the importance of workforce planning that takes into account the increasing number of women entering the medical workforce and the need to accommodate maternity leave and other temporary absences.

The questionnaire data thus show that women are both less likely to achieve registration and less likely to feel welcome or to recommend migration to others with similar backgrounds, while the qualitative accounts reveal how these differences are experienced in terms of unfair treatment and being seen as less-valued doctors. The relatively low proportion of respondents who explicitly attribute their experiences to gender helps to explain why such disadvantages may remain largely invisible in policy discourse, even as they are acutely felt in the lives and careers of IMGs.

## **Discussion: Invisibility as misrecognition**

The findings highlight a striking disconnect between the participants' perceptions and the patterned outcomes revealed in the data. Most IMGs in this study did not explicitly identify gender as a barrier in their licensing experiences. Similar patterns are evident elsewhere: IMGs frequently report inequitable treatment and discrimination, but these are rarely framed in explicitly gendered terms (Al-Btoush & El-Bcheraoui, 2024; Buchanan, 2024; Healey et al., 2025). At the same time, women in this study, especially those on the NZREX pathway, were significantly less likely than men to have achieved registration, were more likely to experience delays and barriers to professional recognition, and more likely to feel unwelcome as medical professionals in Aotearoa New Zealand. This resonates with wider evidence that skilled migrant women face disadvantages in employment, progression and recognition compared with male and locally born counterparts, even where formal processes appear gender-neutral (Flanagan & Lumley-Sapanski, 2025; Föbker, 2019; Iredale, 2005; Kofman & Raghuram, 2006; Odedra, 2023). As Expert 8 (M) noted, licensing processes may not be intentionally gendered, but they are not designed with caregiving and interrupted careers in mind, creating an unintentional yet persistent disadvantage for many migrant women doctors.

From a capabilities and mobility justice perspective, this disjuncture is not simply a matter of individual 'success' or 'failure', but of structured differences in the substantive freedoms that IMGs have to convert their qualifications into recognised practice. Formal licensing criteria in Aotearoa New Zealand are presented as neutral mechanisms for assessing competence, yet the pathways they create distribute capabilities unevenly. Specialist and competent/comparable pathways fast-track doctors whose training and recent experience align with a narrow set of high-income 'comparable' health systems, thereby reproducing colonial norms in accreditation and regulation (Thomas-Maude, 2025). In contrast, NZREX candidates—many of whom in this study are women from the Global South—must navigate demanding examinations, prolonged uncertainty and a structural bottleneck at the PGY1 stage, echoing international patterns of constrained careers for IMGs from low- and middle-income countries (e.g., Al-Btoush & El-Bcheraoui, 2024; Musoke, 2012; Schut, 2022). Furthermore, requirements for continuous, recent clinical experience and uninterrupted practice function as conversion factors that are easier to meet for those with stable, linear careers and fewer domestic responsibilities.

A capabilities approach to mobility justice offers further clarity on how these arrangements come to appear normal. Infrastructures and institutions are often built around a "default mobility subject" whose needs and capacities are taken for granted, while the constraints faced by others are rendered invisible (Sheller, 2018a, p. 77). Gendered analyses of skilled migration suggest that this default worker is imagined as mobile, unencumbered and continuously employed, with time and geographical flexibility unconstrained by care responsibilities (Flanagan & Lumley-Sapanski, 2025; Kofman & Raghuram, 2006). In the case of

Aotearoa New Zealand's medical registration system, the default subject appears to be a continuously practising doctor from a high-income, predominantly Western health system—statistically more likely to be a White man without extended caregiving interruptions. For such a subject, registration pathways, expectations of recent experience, and the structure of PGY1 employment are broadly compatible: they can move between 'comparable' systems, they do not need to experience the PGY1 bottleneck on the NZREX pathway, and they can work full time without extended absences of leave.

For many of the IMGs in this research, particularly the women on the NZREX pathway, their lives do not fit this template. Many arrive in Aotearoa New Zealand via family migration, care for young children or other dependants, and may spend years outside clinical practice while settling their families or working in other jobs. When such realities conflict with licensing criteria that favour uninterrupted, globally mobile careers, women's capabilities to re-enter medicine are systematically reduced. However, as the findings show, the participants frequently interpreted these constraints through the language of family decisions, cultural expectations or personal shortcomings ("I didn't work hard enough"), rather than as consequences of systemic design.

This is where misrecognition becomes central. For Fraser (1998), *misrecognition* is not only about overt disrespect but also about being rendered invisible or seen as less worthy of full participation. In this study, women's diminished chances of registration are doubly misrecognised. First, the gendered dynamics of caregiving and family roles that shape their trajectories are treated as private matters rather than structural conditions that occupational mobility regimes should anticipate. And second, because policies are written in ostensibly neutral terms, referring to recent clinical experience or examination performance, the uneven distribution of risk and opportunity remains largely unacknowledged in public discourse on workforce planning. The result is a status injury (Fraser, 1998) in which women IMGs are more likely to find themselves positioned as less employable.

As such, viewing these findings through a capabilities approach to mobility justice highlights that gendered inequities in medical licensing are not anomalies within an otherwise fair system; rather, they are by-products of how mobility regimes are designed and whose lives they are built around. The core argument in this article is not that women IMGs should have an unconditional right to practise medicine anywhere, but that their accounts point to licensing arrangements that systematically erode their capabilities and sense of belonging in ways that are not clearly related to competence as medical doctors or patient safety. Recognising these patterns as injustices of misrecognition, rather than as individual misfortunes, is a necessary step towards rethinking registration policies that better accommodate caregiving, migration histories and non-linear careers, and towards making visible the gendered foundations of seemingly neutral licensing policies.

## Conclusion

This article has explored how medical licensing in Aotearoa New Zealand reproduces and entrenches gendered and globally stratified inequalities through registration pathways that may appear neutral on paper. While not the primary focus of this analysis, hierarchies between Global North and Global South health systems are built into the mobility regimes governing these licensing pathways via the designation of 'comparable' countries and the privileging of particular forms of training and experience (see Thomas-Maude, 2025). These hierarchies intersect with gendered divisions of labour and care, with the result that women, particularly those on the NZREX pathway, carry a disproportionate share of the risks and costs of disrupted professional mobility. From a capabilities approach to mobility justice perspective, this constitutes a form of injustice by misrecognition: those whose capabilities are most constrained by current arrangements are also those least visible as subjects of concern in policy reform.

Specifically, bringing capabilities to the forefront of mobility justice theorisations is useful in understanding the disconnect between holding a medical qualification and having a real opportunity to practise. Licensing policies, examination structures and PGY1 bottlenecks operate as conversion factors that sharply curtail some IMGs' substantive freedoms, especially when combined with caregiving and migration-related interruptions. The participants' experiences and accounts of the "human element" (e.g., IMG 14, SP-F) being overlooked in decision-making suggest that current policies ignore the structural disadvantages that shape IMGs' professional capabilities in this environment. Seen through a mobility justice lens, registration pathways are not merely gatekeeping mechanisms for maintaining professional standards but are part of a wider regime that facilitates the mobility of some doctors while normalising the delays or downward mobility of others. The Aotearoa New Zealand case thus speaks to broader questions about how health systems worldwide value, govern and recognise migrant expertise.

Several limitations of this study should be acknowledged. First, both the interview and questionnaire phases relied on non-probability sampling, using social media, professional networks and snowballing. In the absence of a comprehensive register of IMGs in Aotearoa New Zealand—specifically those who are unregistered or have left the profession—the wider population is unknown, and the findings cannot be treated as statistically representative. Instead, the goal is analytical generalisability, identifying patterns that are likely to be relevant to understanding this phenomenon in Aotearoa New Zealand, and across similar contexts, while recognising that the precise distribution of experiences may differ. Second, the samples are skewed towards women and NZREX candidates. This may reflect lived realities (for example, high numbers of women in NZREX cohorts or greater engagement by those facing barriers), but it also means women on specialist or competent/comparable pathways are likely under-represented. Third, the study focuses on IMGs and does not examine New Zealand-trained doctors, including Māori and Pacific Peoples NZMGs, who may encounter similar inequalities. Comparative work between NZMGs and IMGs, or across different IMG cohorts, would help distinguish pathway-specific issues from wider patterns in the profession. Recently, two new initiatives aimed at integrating IMGs into Aotearoa New Zealand—a bridging programme and the opportunity for supervised PGY1 work in general practice—have been piloted since this study was conducted (Te Whatu Ora | Health New Zealand, 2025). Ongoing research on how these pilots and possible future expansions may affect IMG licensing experiences is essential.

Despite these limitations, the patterns identified here are consistent across both phases of data collection and echo international research on the gendered dynamics of skilled migration. Conceptually, the research contributes to sociological debates on skilled migration and professional regulation in three ways. First, the article foregrounds gender and family as central to understanding IMG licensing, rather than treating them as peripheral or purely individual choices. Second, the discussion highlights how these occupational licensing pathways function as mobility regimes that convert global and domestic binaries—between North and South, men and women, 'comparable' and 'non-comparable' systems—into differentiated capabilities to practise. Finally, a capabilities-based account of mobility justice and (mis)recognition is applied, highlighting how the most constrained IMGs are also those whose difficulties are least visible in policies that are framed as neutral and meritocratic. If medical licensing is understood not only as a technical process but also as a key site where mobility, recognition and justice are negotiated, then questions of who is enabled—and who is quietly prevented—from practising medicine in Aotearoa New Zealand become central to any serious conversation about health workforce sustainability and equity.

## References

- Al-Btoush, A., & El-Bcheraoui, C. (2024). Challenges affecting migrant healthcare workers while adjusting to new healthcare environments: A scoping review. *Human Resources for Health*, 22(1), Article 56. <https://doi.org/https://doi.org/10.1186/s12960-024-00941-w>

- Armah, M. (2022, July 30). *Migrant doctors struggling to find work despite healthcare staff shortages*. Stuff. <https://www.stuff.co.nz/national/health/129382212/migrant-doctors-struggling-to-find-work-despite-healthcare-staff-shortages>
- Association of Salaried Medical Specialists (ASMS) | Toi Mata Hauora. (2017). *International medical migration: How can New Zealand compete as specialist shortages intensify?* [https://asms.org.nz/wp-content/uploads/2022/05/IMG-Research-Brief\\_167359.5.pdf](https://asms.org.nz/wp-content/uploads/2022/05/IMG-Research-Brief_167359.5.pdf)
- Bhamidipati, S. (2022, August 15). *Migrant doctors worry about prospects as officials look overseas to fill workforce gaps*. RNZ. <https://www.rnz.co.nz/news/national/472858/migrant-doctors-worry-about-prospects-as-officials-look-overseas-to-fill-workforce-gaps>
- Bourgeault, I. L., & Neiterman, E. (2013). Integrating international medical graduates: The Canadian approach to the brain waste problem. In T. Triadafilopoulos (Ed.), *Wanted and welcome? Immigrants and minorities, politics and policy* (pp. 199–217). Springer. [https://doi.org/10.1007/978-1-4614-0082-0\\_10](https://doi.org/10.1007/978-1-4614-0082-0_10)
- Broughton, C. (2021, March 11). *Doctor shortage forcing GP clinics to turn away new patients*. Stuff. <https://www.stuff.co.nz/national/health/124477572/doctor-shortage-forcing-gp-clinics-to-turn-away-new-patients>
- Brücker, H., Bertoli, S., Facchini, G., Mayda, A. M., & Peri, G. (2012). Part I: Understanding highly skilled migration in developed countries: Conclusions. In T. Boeri, H. Brücker, F. Docquier, & H. Rapoport (Eds.), *Brain drain and brain gain: The global competition to attract high-skilled migrants*. <https://doi.org/10.1093/acprof:oso/9780199654826.001.0001>
- Buchanan, S. (2024). *The lived experiences of international medical graduates who encounter financial and language barriers while seeking employment in the United States: A phenomenological study* [Doctoral thesis, Liberty University]. Digital Commons. <https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=7228&context=doctoral>
- Chacko, E. (2007). From brain drain to brain gain: Reverse migration to Bangalore and Hyderabad, India's globalizing high tech cities. *GeoJournal*, 68(2), 131–140. <https://doi.org/10.1007/s10708-007-9078-8>
- Colebatch, T. (2005, October 27). *Bitter pill: Brain gain 'robs' others*. The Age (Melbourne), 8.
- Connell, J. (2009). *The global health care chain: From the Pacific to the world*. Routledge.
- Connell, J. (2010). *Migration and the globalisation of health care: The health worker exodus?* Edward Elgar.
- Connelly, E., & Künzel, S. (2018). *New approaches to disease, disability and medicine in medieval Europe*. Archaeopress.
- Cook, N., & Butz, D. (Eds.). (2018). *Mobilities, mobility justice and social justice*. Routledge. <https://doi.org/10.4324/9780815377047>
- Covell, C. L., Neiterman, E., & Bourgeault, I. L. (2016). Scoping review about the professional integration of internationally educated health professionals. *Human Resources for Health*, 14, Article 38. <https://doi.org/10.1186/s12960-016-0135-6>
- Creswell, J. W. (2015). *A concise introduction to mixed methods research*. SAGE.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE.
- Crocker, D. A., & Robeyns, I. (2009). Capability and agency. In C. W. Morris (Ed.), *Amartya Sen* (pp. 60–90). Cambridge University Press. <https://doi.org/10.1017/cbo9780511800511.005>
- Dauphinee, W. D. (2005). Physician migration to and from Canada: The challenge of finding the ethical and political balance between the individual's right to mobility and recruitment to underserved communities. *The Journal of Continuing Education in the Health Professions*, 25(1), 22–29. <https://doi.org/10.1002/chp.5>
- Dovlo, D. (2005). Wastage in the health workforce: Some perspectives from African countries. *Human Resources for Health*, 3, Article 6. <https://doi.org/10.1186/1478-4491-3-6>
- Ellingham, J. (2022, February 16). *Patient left in emergency department for whole day before being moved to ward*. RNZ. <https://www.rnz.co.nz/news/national/461673/patient-left-in-emergency-department-for-whole-day-before-being-moved-to-ward>
- Fenton, E., & Chillag, K. (2023). We want to help: Ethical challenges of medical migration and brain waste during a pandemic. *Journal of Medical Ethics*, 49(9), 607–610. <https://doi.org/10.1136/medethics-2022-108311>
- Flanagan, C., & Lumley-Sapanski, A. (2025). Engendering cumulative disadvantage: Explaining the experiences and outcomes of skilled migrant women. *Geoforum*, 163, Article 104310. <https://doi.org/10.1016/j.geoforum.2025.104310>

- Föbker, S. (2019). “This is not a career move” – Accompanying partners’ labour market participation after migration. *Comparative Migration Studies*, 7, Article 6. <https://doi.org/10.1186/s40878-018-0104-4>
- Forbes, S. (2022, October 25). *Junior doctor denied Medical Council registration in NZ calls for change*. Stuff. <https://www.stuff.co.nz/national/politics/local-democracy-reporting/300720651/junior-doctor-denied-medical-council-registration-in-nz-calls-for-change>
- Fraser, N. (1998). *Social justice in the age of identity politics: Redistribution, recognition, and participation* (WZB Discussion Paper, Issue FS I 98-108). Wissenschaftszentrum Berlin für Sozialforschung (WZB). <https://hdl.handle.net/10419/44061>
- Grimes, A., Ormsby, J., & Preston, K. (2017). *Migration and gender: Who gains and in which ways?* (Motu Working Papers, Issue 17-08). [https://motu-www.motu.org.nz/wpapers/17\\_08.pdf](https://motu-www.motu.org.nz/wpapers/17_08.pdf)
- Harada, T. (2023). Mobility justice and sustainable futures. *Australian Geographer*, 54(4), 425–431. <https://doi.org/10.1080/00049182.2023.2271615>
- Healey, S. J. R., Fakes, K., Malau-Aduli, B., Leigh, L., & Nair, B. R. (2025). Exploring experiences of work-related inequitable treatment among international medical graduates (IMGs): A sequential explanatory mixed methods study. *PLoS One*, 20(2), Article e0319230. <https://doi.org/10.1371/journal.pone.0319230>
- Helble, M. (2011). The movement of patients across borders: Challenges and opportunities for public health. *Bulletin of the World Health Organization*, 89(1), 68–72. <https://doi.org/10.2471/BLT.10.076612>
- Honneth, A. (2004). Recognition and justice. *Acta Sociologica*, 47(4), 351–364. <https://doi.org/10.1177/0001699304048668>
- Hsu, E. (2012). Mobility and connectedness: Chinese medical doctors in Kenya. In H. Dilger, A. Kane, & S. A. Langwick (Eds.), *Medicine, mobility, and power in global Africa: Transnational health and healing* (pp. 295–315). Indiana University Press.
- Immigration New Zealand. (2025). *Green List roles*. <https://www.immigration.govt.nz/new-zealand-visas/preparing-a-visa-application/working-in-nz/qualifications-for-work/green-list-occupations>
- Iredale, R. (2005). Gender, immigration policies and accreditation: Valuing the skills of professional women migrants. *Geoforum*, 36(2), 155–166. <https://doi.org/10.1016/j.geoforum.2004.04.002>
- Johnson, J. (2005). Stopping Africa’s medical brain drain: The rich countries of the north must stop looting doctors and nurses from developing countries. *BMJ: British Medical Journal*, 331(7507), 2–3. <https://doi.org/10.1136/bmj.331.7507.2>
- Kallane, Y., & Punnett, B. J. (2023). The trailing spouse: An evolving global phenomenon. In Y. Kallane, J. Mutter, & H. Collins (Eds.), *Research handbook of global families* (pp. 7–124). Edward Elgar. <https://doi.org/10.4337/9781788112871.00012>
- Kofman, E., & Raghuram, P. (2006). Gender and global labour migrations: Incorporating skilled workers. *Antipode*, 38(2), 282–303. <https://doi.org/10.1111/j.1467-8330.2006.00580.x>
- Kubiciel-Lodzińska, S., & Maj, J. (2021). High-skilled vs. low-skilled migrant women: The use of competencies and knowledge—Theoretical and political implications: An example of the elderly care sector in Poland. *Journal of International Migration and Integration*, 22(4), 1551–1571. <https://doi.org/10.1007/s12134-021-00813-5>
- Lillis, S., & Roblin, H. (2014). Progress of successful New Zealand Registration Examination (NZREX Clinical) candidates during their first year of supervised clinical practice in New Zealand. *New Zealand Medical Journal*, 127(1399), 36–42. PMID: 25145304
- McGrath, P., Henderson, S., Holewa, H. A., Henderson, D., & Tamargo, J. (2012). International medical graduates’ reflections on facilitators and barriers to undertaking the Australian Medical Council examination. *Australian Health Review*, 36(3), 296–300. <https://doi.org/10.1071/AH11082>
- McKimm, J., & Wilkinson, T. (2015). “Doctors on the move”: Exploring professionalism in the light of cultural transitions. *Medical Teacher*, 37(9), 837–843. <https://doi.org/10.3109/0142159X.2015.1044953>
- Medical Council of New Zealand. (2015). *List of approved qualifications for locum tenens specialist appointments – February 2015*. <https://www.mcnz.org.nz/assets/Policies/1f8183e705/List-of-approved-qualifications-for-locum-tenens-specialist-appointments.pdf>
- Medical Council of New Zealand. (2020). *NZREX clinical: Pass rates and subsequent provisional general registration – April*. <https://www.mcnz.org.nz/assets/NZREX/47a6129c68/NZREX-Clinical-Pass-Rates-and-Subsequent-Registration.pdf>

- Medical Council of New Zealand. (2022a). *The New Zealand medical workforce in 2022*. <https://www.mcnz.org.nz/assets/Publications/Workforce-Survey/64f90670c8/Workforce-Survey-Report-2022.pdf>
- Medical Council of New Zealand. (2022b). *NZREX clinical: Pass rates and subsequent provisional general registration - January*. <https://www.mcnz.org.nz/assets/NZREX/47a6129c68/NZREX-Clinical-Pass-Rates-and-Subsequent-Registration.pdf>
- Medical Council of New Zealand. (2023). *Medical Council news: March 2023*. <https://mailchi.mp/29ab5ae7e783/medical-council-news-july-15119944>
- Medical Council of New Zealand. (2025a). *Comparable health system criteria*. <https://www.mcnz.org.nz/registration/getting-registered/registration-policy/comparable-health-system-criteria/>
- Medical Council of New Zealand. (2025b). *Competent authority criteria*. <https://www.mcnz.org.nz/registration/getting-registered/registration-policy/competent-authority-criteria/>
- Medical Council of New Zealand. (2025c). *New Zealand and Australian graduates (internship completed)*. <https://www.mcnz.org.nz/registration/getting-registered/registration-pathways/general-scope/new-zealand-and-australian-graduates-internship-completed/>
- Medical Council of New Zealand. (2025d). *Our data – Registered doctors – Snapshot*. <https://www.mcnz.org.nz/about-us/our-data/registered-doctors/>
- Medical Council of New Zealand. (2025e). *Our data: NZREX*. <https://www.mcnz.org.nz/about-us/our-data/nzrex-overview/>
- Medical Council of New Zealand. (2025f). *Registration exam (NZREX)*. <https://www.mcnz.org.nz/registration/getting-registered/registration-exam-nzrex/>
- Medical Council of New Zealand. (2025g). *VOC3 Vocational (specialist) registration*. <https://www.mcnz.org.nz/registration/getting-registered/registration-pathways/pathways-to-registration-in-a-vocational-scope/voc3-vocational-specialist-registration/>
- Metreau, E., Young, K. E., & Eapen, S. G. (2024). *World Bank country classifications by income level for 2024–2025*. World Bank Blogs. <https://blogs.worldbank.org/en/opendata/world-bank-country-classifications-by-income-level-for-2024-2025>
- Meyer, J.-B., Charum, J., Bernal, D., Gaillard, J., Granés, J., Leon, J., Montenegro, A., Morales, A., Murcia, C., Narvaez-Berthelemot, N., Stella Parrado, L., & Schlemmer, B. (1997). Turning brain drain into brain gain: The Colombian experience of the diaspora option. *Science, Technology and Society*, 2(2), 285–315. <https://doi.org/10.1177/097172189700200205>
- Mpofu, C., & Hocking, C. (2013). “Not made here”: Occupational deprivation of non-English speaking background immigrant health professionals in New Zealand. *Journal of Occupational Science*, 20(2), 131–145. <https://doi.org/10.1080/14427591.2012.729500>
- Musoke, S. B. (2012). *Foreign doctors and the road to a Swedish medical license: Experienced barriers of doctors from non-EU countries* [Bachelor’s thesis, Södertörn University]. DIVA. <https://www.diva-portal.org/smash/get/diva2:541360/FULLTEXT01.pdf>
- Naz, F. (2020). Understanding human well-being: How could Sen’s capability approach contribute? *Forum for Social Economics*, 49(3), 316–331. <https://doi.org/10.1080/07360932.2016.1222947>
- Nussbaum, M. C. (2011). *Creating capabilities: The human development approach*. Belknap Press.
- Odedra, N. (2023). *Skilled migrant women: Evolving or devolving careers: A study exploring the unfolding career experiences of skilled migrant women* [Doctoral thesis, Massey University]. MRO. <https://mro.massey.ac.nz/handle/10179/69285>
- Pang, T., Lansang, M. A., & Haines, A. (2002). Brain drain and health professionals. *BMJ: British Medical Journal*, 324(7336), 499–500. <https://doi.org/10.1136/bmj.324.7336.499>
- Pereira, R. H. M., Schwanen, T., & Banister, D. (2017). Distributive justice and equity in transportation. *Transport Reviews*, 37(2), 170–191. <https://doi.org/10.1080/01441647.2016.1257660>
- Peterson, B., Pandya, S., & Leblang, D. (2014). Doctors with borders: Occupational licensing as an implicit barrier to high skill migration. *Public Choice*, 160(1/2), 45–63. <https://doi.org/10.1007/s11127-014-0152-8>
- Purewal, S., Encalada Grez, E., & Ardiles Gamboa, P. (2023). *The myth of Canada: The exclusion of internationally trained physicians*. [https://radiussfu.com/wp-content/uploads/2023/02/The-Myth-Of-Canada\\_DIGITAL.pdf](https://radiussfu.com/wp-content/uploads/2023/02/The-Myth-Of-Canada_DIGITAL.pdf)

- Rashid, M. A., Ali, S. M., & Dharanipragada, K. (2023). Decolonising medical education regulation: A global view. *BMJ: Global Health*, 8(6), Article e011622. <https://doi.org/10.1136/bmjgh-2022-011622>
- RNZ. (2023, September 1). *Calls to fix registration pathways for overseas doctors*. Newshub. <https://www.newshub.co.nz/home/new-zealand/2023/09/calls-to-fix-registration-pathways-for-overseas-doctors.html>
- Royal New Zealand College of General Practitioners (RNZCGP). (2020). *New Zealand's general practitioners are a workforce in crisis*. [https://www.rnzcgp.org.nz/GPPulse/RNZCGP/News/College\\_news/2020/New-Zealands-GPs-are%20a-workforce-in-crisis.aspx](https://www.rnzcgp.org.nz/GPPulse/RNZCGP/News/College_news/2020/New-Zealands-GPs-are%20a-workforce-in-crisis.aspx)
- Robeyns, I. (2017). *Wellbeing, freedom and social justice the capability approach re-examined*. Open Book.
- Russell, E. (2021a, May 5). *Auckland hospitals overloaded: Patients waiting in corridors as demand skyrockets*. NZ Herald. <https://www.nzherald.co.nz/nz/auckland-hospitals-overloaded-patients-waiting-in-corridors-as-demand-skyrockets/NIU26VB3XCSZFHHGASKSXOXP2A/>
- Russell, E. (2021b, October 6). *Covid 19 Delta outbreak: Immigrant doctors denied work at 'understaffed' hospitals*. NZ Herald. <https://www.nzherald.co.nz/nz/covid-19-delta-outbreak-immigrant-doctors-denied-work-at-understaffed-hospitals/OKRC764YCBPNOUSOPRUIJ7FOVM/>
- Russell, E. (2022, January 24). *Covid-19 Omicron outbreak: Doctors' union urges Govt to declare health workforce emergency*. NZ Herald. <https://www.nzherald.co.nz/nz/covid-19-omicron-outbreak-doctors-union-urges-govt-to-declare-health-workforce-emergency/PHQXV6K2H4BS5F6LYUHEDKHD2Q/>
- Salami, B., & Nelson, S. (2014). The downward occupational mobility of internationally educated nurses to domestic workers. *Nursing Inquiry*, 21(2), 153–161. <https://doi.org/10.1111/nin.12029>
- Schlosberg, D. (2007). Distribution and beyond: Conceptions of justice in contemporary theory and practice. In *Defining environmental justice: Theories, movements, and nature* (pp. 11–40). Oxford University Press.
- Schut, R. A. (2022). Disaggregating inequalities in the career outcomes of international medical graduates in the United States. *Sociology of Health & Illness*, 44(3), 535–565. <https://doi.org/10.1111/1467-9566.13433>
- Sen, A. (2009). *The idea of justice*. Belknap Press.
- Shahtahmasebi, Z. (2021, August 4). *'We are drowning': GP workforce survey*. NZ Doctor. <https://www.nzdoctor.co.nz/article/we-are-drowning-gp-workforce-survey>
- Sheller, M. (2018a). *Mobility justice: The politics of movement in an age of extremes*. Verso.
- Sheller, M. (2018b). Theorising mobility justice. *Tempo Social*, 30(2), 17–34. <https://doi.org/10.11606/0103-2070.ts.2018.142763>
- Sheller, M. (2021). *Advanced introduction to mobilities*. Edward Elgar.
- Simon-Kumar, R. (2015). Neoliberalism and the new race politics of migration policy: Changing profiles of the desirable migrant in New Zealand. *Journal of Ethnic and Migration Studies*, 41(7), 1172–1191. <https://doi.org/10.1080/1369183x.2014.936838>
- Spence, A. (2024, January 20). *Grandad died after waiting 30 hours in ED. His family fought for months for answers*. NZ Herald. <https://www.nzherald.co.nz/nz/jim-wetere-died-after-waiting-30-hours-in-waikato-ed-his-family-fought-for-six-months-for-answers/MQIV2PR3DVBBHPRLX5RIEIV5M/>
- Te Whatu Ora | Health New Zealand. (2025). *Overseas doctors*. <https://www.tewhatauora.govt.nz/for-health-professionals/health-workforce-development/overseas-doctors>
- Tebbutt, L. (2021, July 6). *Bay of Plenty GP's 'limping through the crisis' of doctor shortage*. NZ Herald. <https://www.nzherald.co.nz/bay-of-plenty-times/news/bay-of-plenty-gps-limping-through-the-crisis-of-doctor-shortage/X3YJT2BQSPGCV2XKKZTIZDVC3Q/>
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. SAGE.
- Thomas-Maude, J. (2022, December 22). *NZ's medical licensing system is still a major hurdle for desperately needed foreign-trained doctors*. The Conversation. <https://theconversation.com/nzs-medical-licensing-system-is-still-a-major-hurdle-for-desperately-needed-foreign-trained-doctors-196724>
- Thomas-Maude, J. (2023). Mobility justice, capabilities, and medical migration: Medical licensing pathways for overseas-trained doctors in Aotearoa New Zealand. *Australian Geographer*, 54(4), 479–497. <https://doi.org/10.1080/00049182.2023.2245620>

- Thomas-Maude, J. (2024). *“Broken” pathways: Understanding the licensing experiences of overseas-trained medical doctors in Aotearoa New Zealand* [Doctoral thesis, Massey University]. MRO.  
<https://mro.massey.ac.nz/handle/10179/71468>
- Thomas-Maude, J. (2025). Medical licensing for international medical graduates in Aotearoa New Zealand since 1849: Overview and timeline. *New Zealand Medical Journal*, 138(1615), 34–52.  
<https://doi.org/10.26635/6965.6652>
- Thomas-Maude, J., & McLennan, S. (2022, February 4). *Critically understaffed and with Omicron looming, why isn't NZ employing more of its foreign-trained doctors?* The Conversation.  
<https://theconversation.com/critically-understaffed-and-with-omicron-looming-why-isnt-nz-employing-more-of-its-foreign-trained-doctors-175914>
- Trigger, S. (2022, March 24). *GP shortage: Rural medical centre says ‘impossible’ to recruit in NZ, immigration process must be seamless*. NZ Herald. <https://www.nzherald.co.nz/nz/gp-shortage-rural-medical-centre-says-impossible-to-recruit-in-nz-immigration-process-must-be-seamless/2QB37AJLJP5AEBHUX5UASG3ZS4/#:~:text=Amid%20a%20pandemic%20and%20a,of%20General%20Practitioners%20that%20painted>
- United Nations. (2019). *Annex II: Classification of SDG regions and income groups*.  
[https://population.un.org/ProfilesOfAgeing2019/Docs/Annex%202%20-%20Classification%20of%20countries%20by%20region\\_updated%20for%20WPP%202019.pdf](https://population.un.org/ProfilesOfAgeing2019/Docs/Annex%202%20-%20Classification%20of%20countries%20by%20region_updated%20for%20WPP%202019.pdf)
- Wong, S. H. M., Gishen, F., & Lokugamage, A. U. (2021). ‘Decolonising the medical curriculum’: Humanising medicine through epistemic pluralism, cultural safety and critical consciousness. *London Review of Education*, 19(1). <https://doi.org/10.14324/lre.19.1.16>
- Yeomans, N. D., Chowdhury, A., & Roberts, A. (2022). International medical graduates (IMGs) in cul-de-sacs: “Lost in the labyrinth” revisited? *Medical Journal of Australia*, 216(11), 553–555.  
<https://doi.org/10.5694/mja2.51516>