RESEARCHED VIEWPOINT:

Sharon Brownie and Patrick Broman

Growing our own: The abyss of data monitoring and support for New Zealand's domestic nursing workforce pipeline

Sharon Brownie, RN, PhD, DocBusAdmin, MEdAdmin, MHealthSAdmin, *is a professor and director of health strategy and partnerships at Swinburne University of Technology, Victoria, Australia, and an adjunct professor at the Centre for Health and Social Practice, Wintec – Te Pūkenga, Hamilton, New Zealand.*

Patrick Broman, MSocSci, PhD (demography), *is the HEPPP (Higher Education Participation and Partnerships Program) evaluation manager at Swinburne University of Technology, Victoria, Australia, and a research fellow at Wintec – Te Pūkenga, Hamilton, New Zealand.*

Sharon Brownie

Patrick Broman

Nurses, the backbone of the health sector (Salmond & Macdonald, 2021), comprise more than 50 per cent of the regulated health workforce in New Zealand (New Zealand Nurses Organisation, 2018) with 74,497 current annual practising certificates (APCs) (New Zealand Nurses Organisation, 2018; New Zealand Nursing Council, 2023). It goes without saying that investment in, and support and retention of, the domestic nursing pipeline and workforce is of critical importance (Salmond & Macdonald, 2021). While internationally qualified nurses (IQNs) make a critical contribution to the New Zealand workforce, a healthy domestic nursing pipeline is key to culturally-aligned care and improved health outcomes (Derouin, 2022; Komene et al., 2023; Moore et al., 2022; Wilson, 2018). The reported strengths of domestically-qualified nurses include better communication with patients, increased patient satisfaction, and enhanced patient outcomes in several areas (Derouin, 2022; Moore et al., 2023). Given the longstanding inequities in health service access and outcomes for Māori, Pacific and regionally remote communities, Māori and Pacific nurses are particularly important (Komene et al., 2023; Wilson, 2018; Wilson et al., 2022).

New Zealand is not alone in facing challenges regarding its homegrown nursing workforce. In a recent report, *Sustain and Retain in 2022 and Beyond,* the International Council of Nurses recommends that countries each undertake immediate and ongoing assessments of the local nursing workforce, including factors such as new-graduate entries, retirements, turnover, retention and migration (both incoming and outgoing) to underpin data-informed planning for nursing workforce education, development and retention (Buchan et al., 2022). Against this backdrop, we have attempted to access data to inform a current state-assessment of New Zealand's domestic nursing workforce pipeline. While some data was easily sourced, access to a full and complete picture proved impossible.

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A 2019/2020 touch point seemed a plausible starting point in the search for data. In 2020, the World Health Organization (WHO) published its first *State of the World's Nursing* report, drawing data from 191 member states (World Health Organization, 2020a). The profile for New Zealand reported 27.25 per cent of the total nursing workforce as "foreign trained", ranking New Zealand with the highest percentage of IQNs of countries surveyed (World Health Organization, 2020b). The vulnerability of New Zealand's nursing workforce was further noted with the fact that 32 per cent of nurses were aged 55 years and over – a third of the workforce likely to retire in the next 10 years (World Health Organization, 2020b). In profiling these vulnerabilities, the WHO report did not envisage the pending pandemic and its significant impacts, nor did it consider New Zealand's specific risk factors such as the impact of the prolonged period of uncertainty and change associated with reforms of the health and vocational education sectors (Te Pūkenga, 2021; Tertiary Education Union, 2019). These factors have only exacerbated New Zealand's reliance on IQNs, who, by September 2023, are reported to comprise 40.7 per cent of the workforce (New Zealand Nursing Council, 2023). Of 4505 nurses joining the register in the September 2023 quarter alone, 3885 (86 per cent) were IQNs and 620 (14 per cent) domestically-qualified nurses (NZQN) (New Zealand Nursing Council, 2023).

Matters of health workforce supply and demand are complicated issues, with the extent and causality of drivers not easily apparent – detailed data analysis is required to better understand patterns and trends. Almost two decades ago, North and Hughes (2006) expressed frustration at the lack of data available for workforce

planning – a sentiment echoed by Health Workforce New Zealand (Ministry of Health, 2016) and the policy recommendations of Shaw and Heap (2022). Each highlighted the urgent need to connect information held within various entities as well as a need to link the unconnected "islands of expertise" (Ministry of Health, 2016; North & Hughes, 2006; Shaw & Heap, 2022).

Responsibility for, and information related to, the nursing pipeline and employed workforce is held by a multitude of entities, including the Ministries of Health and Education; the Tertiary Education Commission (TEC); New Zealand Qualifications Authority (NZQA); Te Whatu Ora; the Department of Immigration within the Ministry of Business, Innovation and Employment; and the New Zealand Nursing Council, to name a few (Ministry of Health, 2016). Information is fragmented and often inconsistent, and while some information is gleaned via parliamentary questions and official information requests (OIAs), the overall picture remains incomplete.[1] Analysis of data that can be collected paints a disturbing picture of a lack of unified governance, of uncoordinated data monitoring and of insufficient support for the preparation of a domestic nursing workforce:

• **Lack of coordination of nursing education and workforce data:** Previously reported problems (Ministry of Health, 2016; North & Hughes, 2006) of inaccessible and inconsistent nursing and workforce data remain unaddressed. Health Workforce New Zealand has attempted to improve data about the nursing and overall health workforce (Ministry of Health, 2016), drawing from multiple sources including regulatory bodies (the Nursing Council), the Ministry of Health, district health boards, private sector employers, and official data-sets. However, its 2016 report concluded that because various organisations released data using different methodologies, at different times of the year, there are significant limitations in the ability to obtain a cohesive view of patterns and trends (Ministry of Health, 2016).

Almost a decade later, the issue of data fragmentation persists. For example, the training funder (the TEC) does not hold specific data about nursing enrolments and is unable to determine whether student intakes have declined or increased (Tinetti, 2023b). Inquiries regarding which providers are funded to provide postgraduate papers linked to the nurse entry to practice (NETP) programme were refused as too time intensive to collate (Verrall, 2023). Similarly, questions to Te Pūkenga about the turnover of nurse educators since the introduction of the Reform of Vocational Education (RoVE) revealed that this data was reportedly fragmented across the different payroll systems and therefore too difficult to collate (Tinetti, 2023e).

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• **RoVE impacts and challenges within the Te Pūkenga network:** New Zealand's vocational education sector is grappling with major challenges, including financial deficits, funding shortfalls and the impact of prolonged change associated with the establishment and pending disestablishment of a national provider – Te Pūkenga (Rankin, 2023). The Te Pūkenga network graduates approximately 70 per cent of New Zealand's domestic nurses. Of concern, the RoVE changes seem to have adversely impacted sector performance, affecting programme development and students and faculty alike. Nursing education is currently provided across 13 Te Pūkenga entities, each with a unique curriculum and accreditation process (NZ Nursing Council, 2023). It makes sense to unify aspects of these processes; however, a careful change process would be required to achieve success. A unified Te Pūkenga curriculum was submitted for accreditation in mid-2023 but later withdrawn (Kenny, 2023). NZQA reported inadequate consultation with relevant stakeholders and gaps in the submitted curricula content, structure, governance and delivery arrangements (Tinetti, 2023f). A large-scale loss of nursing leaders from the sector – the retention rate for heads of nursing across Te Pūkenga schools of nursing from January 1, 2019, to July 5, 2023, was 38 per cent (Tinetti, 2023a, 2023c) – is of concern, and is perhaps unsurprising given that the Tertiary Education Union described proposed changes as *"rushed and disrespectful"* (NZ National Party, 2023b; Tertiary Education Union, 2023). Data obtained under the Official Information Act show at least 69 nursing educators having left roles at Te Pūkenga in 2023 alone, with nine from an overall head count of 25 (36 per cent) having departed Waikato Institute of Technology (Te Pūkenga, 2023). In the meantime, delays persist in the intended unification, with a rescheduled accreditation date of November 2023 now scheduled for Quarter 1, 2024, but subject to potential further change aligned with new government direction for Te Pūkenga (NZ National Party, 2023a).

Concerning trends are also seen in nursing student attrition and completion rates across all three years of Te Pūkenga bachelor of nursing programmes. Data released by Te Pūkenga via OIA (Te Pūkenga, 2023) shows first-year attrition rates from 2022 enrolments as high as one third at some institutions (Unitec and WelTec-Whitireia) and above 20 percent (one in five students) at Eastern Institute of Technology, Manukau Institute of Technology, NorthTec and Waikato Institute of Technology (Te Pūkenga, 2023). That attrition continues into the third and final year of the degree (up to 15 per cent attrition from final-year studies at some providers) is particularly worrying. Urgent research is required into why nursing students are abandoning study throughout the programme, including those close to completion. Additionally,

[1] For example, private providers are not subject to Official Information Act requirements and the Nursing Council, while a regulatory authority, appears to be exempt.

there is an urgent need to identify effective mitigation strategies to reverse these trends.

• Lack of support for students in graduate-entry nursing programmes: Graduate-entry nursing programmes provide a two-year accelerated-entry pathway for students who hold a degree in another discipline. They are relatively new in Australia and New Zealand, developed in response to the workforce demand for more domestically-trained nurses (Macdiarmid et al., 2021). Students undertake a two-year master's in nursing practice, leading to initial licensure as a registered nurse. However, because these programmes are at postgraduate level, students cannot access student allowances (StudyLink, 2023). Further, they are not eligible for social security benefits because of their full-time student status. Students with dependent children, working 20 hours per week on top of full-time study, are eligible for Working with Families tax credits (Inland Revenue, 2023), but these are removed if the weekly work total drops below 20 hours, as is common during clinical placement weeks. Graduate-entry nurses enter the workforce on the same pay and conditions as those coming via an undergraduate pathway and yet they cannot access support during study. The irony is that undertaking a three-year undergraduate nursing degree would qualify them for a student allowance. Choosing an expedited two-year graduate-entry pathway excludes them from this benefit.

• Disparity of outcomes for Māori and Pacific nursing students: Māori and Pacific nurses play a pivotal role in the New Zealand health-care system. Their cultural competence and understanding of the unique health needs of their communities make them invaluable assets in providing culturally responsive care (Komene et al., 2023; Wilson et al., 2022). Here, too, data is fragmented and siloed, although evidence provided via OIA by Te Pūkenga (Te Pūkenga, 2023) shows that 2022 attrition rates[2] for Māori bachelor of nursing students, averaged across the 13 providers in the network, were 24.4 per cent from first year, 21.0 per cent from second year, and 13.9 per cent from third year. For Pacific students, averaged attrition rates were 33.4 per cent from first year, 34.8 per cent from second year, and 13.5 per cent from third year (Te Pūkenga, 2023). These rates are considerably higher than those for all learners. A continued failure to address this issue will ensure continued under-representation of Māori and Pacific nurses and hinder efforts towards a more inclusive and equitable health-care system.

• The unrecognised value of nurse educators: Nurse education programmes have traditionally grappled with wage disparities between practice and education and between the university and vocational education sectors, with the latter being more poorly remunerated (Ministry of Health, 2016). In July 2023, Te Whatu Ora proudly announced a 6.5 per cent pay equity adjustment for eligible nurses (Te Whatu Ora, 2023). While good news for nurses in practice, the adjustment illustrates typically siloed action in this area, further increasing the pay gap between practice and education and challenging education providers. A parliamentary question to the Minister of Education revealed that the minister had not received advice from Te Pūkenga on pay parity for nurse educators but that it would be considered as part of the network's broader pay parity work in due course (Tinetti, 2023d). Meanwhile, the retention, since 2019, of heads of nursing across the network is 38 per cent at best (Tinetti, 2023b), with further departures since the June 2023 parliamentary question. Nurse educator turnover rates are equally poor, with at least 69 having departed in 2023 (Te Pūkenga, 2023).

In short, the lack of available data points to a mismatched and systemically fragmented system for this critical group within New Zealand's health system – a system devoid of a single point of governance, funding, data and performance monitoring, or accountability. Our rapidly increasing reliance on IQNs points to a national nursing workforce crisis. New Zealand relies on an internationally-qualified workforce and there is no doubt that these nurses should be valued, welcomed, and appropriately supported. However, the transition for many is difficult as they enter a fragmented and uncoordinated system no more capable of looking after them than it is of looking after its own. Better system coordination is needed for all nurses. A key question is – at what point will New Zealand policy-makers appropriately coordinate data, note trends, and improve support for the growth, retention, and ongoing development of NZQNs – including support for both educators and learners within the system?

Ultimately, the picture we paint here points to fundamental shortcomings in New Zealand's labour market and workforce policies. What is the national position with respect to coordinated governance, funding, monitoring and support for the domestic nursing workforce at this time of critical workforce shortage? Do core aspects of current policy adequately support the contributions that the university and vocational education sector must make to ensure a sustainable nursing workforce? Or will the national reality of financial stress and demand for fiscal austerity continue to challenge an under-resourced tertiary education sector and further strain the domestic nursing pipeline? The current approach, effectively "poaching" people with employable skills from other nations has rightly been described as a "free rider" labour market policy (Rankin, 2023). Whole-of-government coordination towards fixing New Zealand's domestic nursing pipeline is urgently needed.

[2] Attrition rates are defined as the percentage of learners with no qualification completion or future year enrolment recorded (ie these numbers are for 2022 BN students in the given year of their degree who neither completed nor enrolled in the degree in 2023). Ethnicities are as indicated by learners at the time of enrolment. Here, percentage attrition rates for each institution are summed and averaged across the number of Te Pūkenga bachelor of nursing providers providing data (ie those with four or more learners in each year and ethnic group).

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