

Nurse Practitioner: Background document and literature review



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Introduction

In Aotearoa New Zealand, the introduction of nurse practitioners *mātanga tapuhi* (NPs) into the health workforce in the early 2000s was intended to improve access to healthcare and promote health equity by delivering a culturally safe model of health care that bridged biomedicine and nursing. Te Kaunihera Tapuhi o Aotearoa Nursing Council of New Zealand (the Council) is reviewing the NP scope of practice to ensure that it appropriately reflects contemporary nursing environments now and into the future to meet the health needs of local communities. In order to guide this review, it is imperative that we explore the role of the NP broadly and the development of the role, its regulation, scope of practice, education standards and registration in other countries.

This literature review explores and maps the evidence related to the scopes of practice of NPs, education standards of NPs, and the registration and accreditation process for NPs internationally by:

1. Providing a comprehensive overview of how NP scopes of practice or titles define their roles internationally.
2. Describing competency frameworks and processes of continuing competence and registration of NPs.
3. Providing a comprehensive overview of educational standards for NPs internationally.
4. Discussing the different roles of NPs internationally and how these roles impact patient care, healthcare systems, and NP professional development.
5. Providing a review of regulation processes and changes over time in countries with NPs.

The Council's regulatory role in registration

The Nursing Council of New Zealand (the Council'), under the Health Practitioners Competence Assurance Act 2003 ('the Act'), is the responsible authority that governs the practice of nurses. The principal purpose of the Act is to protect the health and safety of members of the public by providing mechanisms to ensure health practitioners are competent and fit to practise their professions. The Council sets and monitors standards in the interests of the public and the profession. The Council's primary concern is public safety.

The Council is authorised under the Act to regulate the practice of nursing. This includes setting scopes of practice and accrediting and monitoring education programmes. The



Council's strategic priority is to ensure standards and competencies are enabling, appropriate, relevant, and reflect the future of the nursing profession.

The Council can set prescribed qualifications and registration standards for nurses under the Act. Section 15 states requirements for registration which include being fit for registration in accordance with section 16; has the qualifications prescribed under section 12; and is competent to practise within the scope of practice.

Te Tiriti o Waitangi

The Council carries out its functions within the context of its commitments, responsibilities and obligations under Te Tiriti o Waitangi, and has recently updated its Te Tiriti o Waitangi policy statement [[available here](#)].

This review of the NP scope of practice recognises commitment to, and the position of, Te Tiriti o Waitangi. We acknowledge the importance of health equity and its contributing factors (including colonisation) and working to provide culturally safe care. Implementing these expectations is a way we can support nurses to deliver care which is responsive to the rights and needs of tangata whenua and does not further perpetuate existing health inequities. The Council acknowledges and values the unique role of Māori nurses in achieving Māori health equity through actively engaging with, and listening to, Māori nurses.

NP scope Aotearoa New Zealand

In Aotearoa New Zealand, NPs have advanced education, clinical training, and the demonstrated competence and legal authority to practise beyond the level of a registered nurse. NPs work autonomously and in collaborative teams with other health professionals to promote health, prevent disease, and improve access and population health outcomes for a specific patient group or community. They manage episodes of care as the lead healthcare provider in partnership with health consumers and their families/whānau. NPs combine advanced nursing knowledge and skills with diagnostic reasoning and therapeutic knowledge to provide patient-centred healthcare services, including the diagnosis and management of health consumers with common and complex health conditions. They provide a wide range of assessment and treatment interventions, ordering and interpreting diagnostic and laboratory tests, prescribing medicines within their area of competence, and admitting and discharging from hospitals and other healthcare services and settings. As clinical leaders, they work across healthcare settings and influence health service delivery and the wider profession¹.



Development of NP role in Aotearoa New Zealand

In 1998, the Aotearoa New Zealand Ministerial Taskforce on Nursing published a document recognising nurses' potential to significantly contribute to improved healthcare outcomes, specifically through the development of the NP role. The taskforce envisioned NPs serving in various settings such as community healthcare, hospitals, schools, and other care-providing services. The primary goal for NPs was to enhance healthcare access, especially for marginalised communities, including Māori². In 2001, the NCNZ responded to the taskforce's findings by identifying areas for NP practice, including chronic disease management, mental health, emergency care, perioperative care, primary care, palliative care and high-dependency care². In the same year, NCNZ trademarked the term "Nurse Practitioner"³ and established a separate scope of regulated practice for individuals holding this title.

The legislative act regulating NPs in Aotearoa New Zealand is the Health Practitioners Competence Assurance Act 2003. The primary purpose of the HPCA Act is the protection of the health and safety of the public by providing mechanisms to ensure that health practitioners are competent and fit to practise within their professions⁴. The NCNZ ensures NPs' competence and fitness to practise by requiring set standards for public safety. The first NP was registered in Aotearoa New Zealand in 2001.

In 2002, the NCNZ implemented the registration process for the NP scope of practice. To become a registered NP in Aotearoa New Zealand, a registered nurse (RN) must have a minimum of four years of experience in a specific practice area and have completed a clinical master's degree, which includes an approved NCNZ prescribing practicum. Additionally, they must demonstrate the attainment of the required advanced practice competencies. The clinical master's degree programme entails a prescribed pathway of NCNZ-approved papers in pathophysiology, pharmacology, advanced clinical assessment, diagnostic reasoning, and prescribing practice. Upon completing an individual practice portfolio and a panel/verbal assessment, the applicant is registered as an NP¹.

In 2014, an amendment to the Medicines Act granted NPs the status of authorised prescribers. This encompassed the ability to prescribe controlled drugs and special authority medications, and issue standing orders for other healthcare professionals.

Subsequently, in 2015, several changes also occurred, including the introduction of the Health Practitioners Competence Act Amendment Bill and the Health Practitioners (Replacement of Statutory References to Medical Practitioners) Bill. Once passed, these legislative amendments revised the wording from 'medical practitioner' to 'health practitioner' or included the designation of nurse practitioner alongside medical practitioner⁴. These changes have enabled NPs to carry out functions previously

restricted to medical practitioners such as certification of death and cremation, and signing sick leave certificates.

In 2017, after an extensive consultation process, NCNZ revised the key NP competencies and education programme standards to reflect and recognise the diverse contexts in which NPs may practice and to encourage their growth and proficiency across different healthcare environments. These changes included: the removal of the restriction on NPs practising in a specific area of practice, instead enabling NPs, as advanced practitioners, to self-regulate and practice within their areas of competence and experience; revision of the education programmes for NPs to establish a consistent educational and clinical learning standard; and the expansion of the scope of clinical knowledge for NPs to include developing advanced skills in multiple settings ⁵.

Despite these early changes, the initial growth of the NP workforce was slow, with only 150 NPs registered in the first 13 years to 2015. In 2016, a government-funded pilot programme, the Nurse Practitioner Training Programme (NPTP), focusing on the final practicum year, was initiated at two universities in Aotearoa New Zealand. The purpose of this pilot programme was to reduce some of the barriers to NP education and therefore increase the number of NPs in Aotearoa New Zealand. In order to be accepted to this programme, candidates were required to have completed all pre-requisite papers and either have only the final 60-credit practicum to complete their Master of Nursing (MN) or already have their Master of Nursing. They were required to have their employer's agreement to support the clinical practicum of a minimum of 500 clinical hours under the supervision of an authorised prescriber within their workplace and a period of 80 hours of clinical supervision in an alternative clinical area. The NP candidate's employers were also required to commit to employing them as an NP once registered in the NP scope. This process significantly increased the number of NPs in training and employment in Aotearoa New Zealand. The government funding for NPTP grew to include six universities and funding for 121 candidates in 2024. However, there are identified limitations of this funding: firstly, it does not fund all potential NP candidates, and secondly, it does not cover all aspects of education, clinical supervision and mentorship ⁶. In 2024, the government commissioned an evaluation of the NPTP programme and identified a number of barriers that still exist in NP development ⁶.

Much progress has been made to streamline the development of the NP role and the education to registration process, however, this has also resulted in a change in the profile of current NP candidates compared to 20 years ago. The early NP workforce predominantly had extensive clinical experience, whereas more recently, there is a trend for NP candidates to have less experience in clinical practice. This can create new challenges in the education and preparation of NPs, including a lack of full understanding of the NP scope of practice, and challenges to completing the practicum



programme and achieving competency in the one-year period of the current NPTP practicum ⁶.

Nurse practitioner registration in Aotearoa New Zealand

To achieve registration, NPs have to be experienced nurses with a clinical master's degree in nursing and have demonstrated the required advanced practice nursing competencies. The following are the minimum criteria that must be met by all applicants applying for NP registration:

- Hold a current registration with the Nursing Council of New Zealand in the registered nurse scope of practice
- Have a minimum of four years of experience in an area of practice
- Have completed an approved clinical master's degree programme for the nurse practitioner scope of practice.
- The programme must include relevant theory and a minimum of 300 hours of clinical learning, and/or the completion of an equivalent overseas clinically focused master's degree qualification which meets the requirements specified above
- Pass an assessment against the nurse practitioner competencies by a Council-approved panel ¹.

Since consultation in 2017, the NCNZ registration process has developed and become more streamlined with NPTP students stating they are more supported to develop their portfolios within the NPTP year and the panel process being reduced from a full-day panel assessment to a half-day assessment ⁷. Despite this, the panel process has recently been criticised in the 2024 Malatest evaluation with only 25% of survey participants describing the panel process as very good and 38% as fair or poor ⁶. As the NPTP already includes a similar assessment within the programme, some survey respondents queried whether the panel assessment was required for NPTP trainees, particularly based on feedback of inconsistencies between panel members ⁶.

Current NP workforce in Aotearoa New Zealand

The number of NPs has almost doubled since March 2019. As of June 2025, there were 910 NPs with an annual practising certificate. Of the NPs that are on the register as of June 2025, 91 (10%) identified as Māori and 16 (2%) identified with one or more Pacific ethnicities.

Table 1: Nurses with current annual practising certificate, by quarter



	Sep-24	Dec-24	Mar-25	Jun-25
Registered nurse	80,313	82,419	82,106	80,719
Enrolled nurse	2,473	2,471	2,459	2,446
Nurse practitioner	805	859	897	910
Total	83,591	85,749	85,462	84,075

In 2024-25, the nurse practitioner workforce gender balance reflected the nursing workforce, with 10% being male. The profile was also older than the nursing workforce, with 54% aged 50 years or older compared to 29% of the entire nursing workforce. This reflects a more experienced cohort of nurses. The majority (70%) of these nurses have been practising for over 15 years.

Table 2: Years in practice of the nurse practitioner workforce²²

Years of practice	Number	Percentage
1-5 years	4	0.4%
6-10 years	70	7.8%
11-15 years	141	15.7%
16-25 years	247	27.5%
26+ years	385	42.9%
Not stated	50	5.6%
Total	897	100.0%

Table 3: Number of years practising in nurse practitioner scope

This table presents the number of years in practice since gaining NP scope, for each NP who held an APC on 31 March 2024.				
	10 years or fewer	11-15 years	Over 15 years	Total
Female nurse practitioners	633	52	26	711
Male nurse practitioners	68	4	3	75
All nurse practitioners	702	56	29	787

Due to the small number of nurses who reported 'another gender', for privacy purposes, they are shown only in the 'All nurse practitioners' row.

Employment settings

As of 31 March 2025, 46% of nurse practitioners reported working in primary care or community services, and 44% reported working in HNZ (Te Whatu Ora) employment settings. A smaller number of nurse practitioners mātanga tapuhi report working in aged residential care (5%), Māori service providers (3%), and self-employed (5%). Around a quarter of nurse practitioners (26%) practise in multiple employment settings.

Table 4: Employment settings reported by NPs

Employment setting	Number	Percentage
Educational institution	65	7.2%
Government agency (e.g. Ministry of Health, ACC, Corrections, Defence)	19	2.1%
Health NZ Te Whatu Ora - clinical (community)	103	11.5%
Health NZ Te Whatu Ora - clinical (hospital)	285	31.8%
Health NZ Te Whatu Ora - non-clinical/other	4	0.4%
Maori health service provider	23	2.6%
Nursing agency	1	0.1%
Other private provider	4	0.4%
Pacific health service provider	1	0.1%
Primary health care	407	45.4%
Private hospital (i.e. non-Health NZ Te Whatu Ora)	25	2.8%
Rest home/residential care	43	4.8%
Rural	29	3.2%
Self employed	46	5.1%
Other setting	58	6.5%
Overseas	4	0.4%
<i>Not Stated</i>	10	1.1%
Total nurse practitioners	897	100%

NB: nurses can report up to two employment settings - the number above represents the number of individuals reporting each setting - a nurse who reported two settings would be counted once for each setting. (The sum total of the 'number' column will therefore be greater than the total of 897 nurses).

The percentage column reflects the percentage of the total 897 NPs that reported each setting.

Region of practice

At 31 March 2025, there were 897 NPs holding an active annual practising certificate (APC).

Table 5: Regions of practice reported by NPs

Region of practice	Number	Percentage
Auckland	222	24.7%
Bay of Plenty	76	8.5%

Canterbury	86	9.6%
Hawkes Bay	40	4.5%
Manawatu-Whanganui	77	8.6%
Nelson - Marlborough	31	3.5%
Northland	38	4.2%
Otago	55	6.1%
Southland	22	2.5%
Tairāwhiti	11	1.2%
Taranaki	22	2.5%
Waikato	70	7.8%
Wellington	90	10.0%
West Coast	10	1.1%
New Zealand wide	6	0.7%
Overseas	12	1.3%
<i>Not stated</i>	29	3.2%
Total	897	100.0%

The NP role internationally

The NP role has been established since the mid-60s in both the United States (US) and Canada, initially in response to shortages of general practitioners (GPs) in rural and remote areas. The United Kingdom (UK) started to use NPs/advanced practice nurses in the early 1980s, and other countries such as the Netherlands in the late 1990s. Ireland and Finland adopted the NP model in the early 2000s, as did Australia and Aotearoa New Zealand⁸. In its State of the World's Nursing Report 2020, WHO identified that 78 countries around the world had advanced practice nurses (APNs), of which clinical nurse specialists (CNS) and NPs were the most common⁸.

The definition and scope of APN/NPs vary between and sometimes within countries. The International Council of Nurses (ICN) defines the advanced nurse practitioner role as *"a registered nurse who, through additional education and certification, attained the expert knowledge base, decision-making skills and clinical competencies for expanded nursing practice"*^{8,9}. NPs can act beyond the scope of registered nurses to diagnose, prescribe and develop care plans for patients^{8,10}.

The growth of the NP workforce differs significantly between countries. In the US and Canada, where the role of NP was established nearly 60 years ago, NPs are now generally well accepted and integrated into healthcare teams, and the number of NPs has more than doubled in both countries over the past decade. In 2022, NPs

represented over 8% of all registered nurses in the US and about 3% in Canada. Australia, Ireland, Netherlands and Aotearoa New Zealand, which established the NP role two decades ago, have also accelerated the growth of the NP workforce over the period 2015-2022, although these NPs still only represent a relatively small proportion of all nurses^{8;11}. NPs in Aotearoa New Zealand now represent approximately 1% of the nursing workforce.

Evidence of outcomes related to NP practice

There is strong international evidence of the value of the NP role through multiple studies and systematic reviews which evidence the positive impact on clinical and service-related outcomes: patient satisfaction, waiting times, management of chronic diseases, and cost-effectiveness in all care settings and population groups¹². Studies demonstrate that NPs in primary healthcare have equivalent or better patient outcomes than other providers and are potentially cost-saving¹³. International research has also found that NP roles are a positive way to retain and recruit nurses and develop advanced nursing roles¹⁴. More specifically, in Aotearoa New Zealand research, NPs bring a nursing paradigm to their advanced role, which includes understanding of the socio-economic cultural context of the lives of whānau and extending access to health care to a wide range of patients. Aotearoa New Zealand NPs also bridge gaps in service delivery and meet the health needs of their local populations, improving access and reducing inequalities in health^{15;16}.

Defined area of practice, scopes and titles

Scope

The scope of practice of APN/NPs is generally broader in some countries such as Australia, Canada, Estonia, Iceland, Norway, the UK, Aotearoa New Zealand, and the US, with independent practice permitted. In other countries such as Austria, the Netherlands and Poland, the scope of practice is more restricted, with some functions only permitted under the supervision of a doctor^{8;10}.

The scopes of practice of NPs in some countries also vary across jurisdictions, for example, in most of Canada's provinces and territories, while NPs have full authority to order and interpret diagnostic tests, these clinical activities are restricted in others¹⁷.

The ability to independently prescribe medications and diagnostic tests is common across countries, with only a few countries requiring supervision or collaborative



arrangements to prescribe, whereas the ability to authorise medical treatments or refer patients to other clinicians is limited in numerous countries and has not evolved over time⁸. In Australia, although NPs can provide independent practice, the individual scope is determined by the individual NP, their employer and legislation, so varies significantly^{18;19}. In Finland, even though the NP role is recognised, there are no national regulations or titles, and the NP roles vary in titles, job, scope and workplace. In Finland, the authority to prescribe medicines is based on achieving a written assignment given by the physician in charge at the nurse's place of employment²⁰.

NP roles and area of practice

There is heterogeneity in the breadth of practice of NPs across countries, with some having defined areas of practice or streams and others being more general across conditions. In many countries, there is an established scope to manage patients with chronic conditions. Fewer countries provide nurses with the ability to manage a wider range of patients regardless of their condition²¹.

The US and Canada have specific "streams" of practice. For Canada, these are: family within a primary healthcare focus, adult with or without specialisation, paediatric with or without a clinical area of specialisation, neonatal, anaesthesia, and mental health¹⁷. In the US, the streams are: psychiatric-mental health, women's health, family, adult-gerontology acute care, adult-gerontology primary care, and paediatric²².

In the US, practice and licensure laws regulate the degree to which the NP can practice. The American Association of Nurse Practitioners defines three types of practice authority for NPs: Full: permits NPs to evaluate patients, diagnose conditions, order and interpret diagnostic tests, and initiate and manage treatments (including prescribing medications). Reduced: can require collaborative agreement with another health provider for NPs to provide patient care or can limit one or more elements of NP practice, and Restricted: requires career-long supervision, delegation or team management by another health provider for NPs to provide care in at least one element of NP practice. In the US, NPs are educated broadly and must also pass a final exam before registration, and then can complete a fellowship post-registration for a specific area of practice (AOP)²³.

The Netherlands stipulates streams of general and mental health, whereas other countries in our review do not define specific streams or areas of practice²⁴.

In Australia, due to the individual scope being determined by the individual NP, their employer and legislation, there are many variations of practice, even for those who are educated and practising in the same specialty area. Australia also now has more than

50 different NP specialties^{18;19}. Challenges regarding these differences led to the development of metaspecialties (groups of specialties or subspecialties), which provide a framework for the development of NP students and their clinical scopes of practice²⁵.

PHC NP roles

The NP role was originally developed to help address access to primary healthcare⁸. Internationally, there has been recognition of the role of NPs in primary healthcare in strengthening and improving access and outcomes, particularly for underserved communities and those with more complex needs^{8;26-28}. Despite this, many countries such as Australia, have only a small proportion of NPs working in PHC^{8;29}. The US, Canada and the Netherlands offer primary care NP specialisations and there is evidence to support fellowship programs post-registration²⁹. In the US, the need for accreditation programmes including residencies and fellowships has been more prominent in primary care^{30;31} and may help to address the research finding of the difficulty in the transition to NP practice and role preparation²².

International NP titles

Title protection is reported in Australia, Botswana, Canada, France, Hungary, Israel, Jamaica, the Netherlands, Aotearoa New Zealand, Portugal, the Republic of Ireland, Singapore and the US³²⁻³⁴.

The education and title of NP in the UK has evolved over time with the intention to standardise both the title and scope of practice³⁵. As a result of the ongoing lack of regulation and title protection, the title of nurse practitioner is used in the UK in many other advanced nursing positions. The Royal College of Nurses published guidance for NPs suggesting that those working at an advanced level of practice, having achieved the educational and practice competencies, use the title advanced nurse practitioner to identify the “advanced” nature of the role, however, this has not helped to distinguish the role of NPs in the UK³⁶.

In Finland, even though the NP role is recognised there are no national regulations or titles, and NP roles vary in titles, job, scope and workplace. The authority to prescribe medicines is based on achieving a written assignment given by the physician in charge at the centre where the nurse is employed²⁰. NP education also varies considerably with only a recent move to NPs requiring master’s education, which does not always include clinical practice²⁰.

Registration and regulation

The regulatory frameworks for NPs in Aotearoa New Zealand, Australia, and Ireland are similar ³⁷⁻⁴². Despite variations in healthcare systems and service delivery models in these three countries, NPs have demonstrated similar mastery in competencies to the individual regulatory boards ^{5; 43; 44}.

In Aotearoa New Zealand, to become an NP, you must register with the Nursing Council of New Zealand. Applicants must complete four years of experience in the area of practice they intend to work in as an NP, obtain a master's degree through a Nursing Council-accredited programme, submit a competency-based portfolio, and demonstrate mastery of six NP competencies in a portfolio and panel (verbal) assessment through NCNZ. Annual practising certificates are required to demonstrate safety to practise and NPs are required to recertify every three years ⁵.

In Australia, the nurse practitioner role has a regulated scope of practice requiring endorsement by the Nursing and Midwifery Board of Australia (NMBA), which is built on the foundation of the registered nurse scope of practice ⁴⁵. The NMBA requires NPs to demonstrate competencies in advanced clinical skills, diagnostic reasoning, therapeutic management, and leadership. In Australia, advanced practitioners are eligible to apply for credentialing after successful completion of the MSc in Nursing (Advanced Practice) and submission of a portfolio that demonstrates meeting the credentialing knowledge area criteria through ongoing education and clinical practice. The regulatory/accreditation body must approve the portfolio in order for credentialing to be granted. However, in Australia, NP scope of practice is determined by the individual NP, their employer and legislation ¹⁸.

In Ireland, the Nursing and Midwifery Board of Ireland (NMBI) offers two pathways leading to registration. Pathway one is the most common and preferred option and requires students to complete an accredited master's degree-level curriculum. Pathway two requires submission of a self-assessment portfolio outlining competency in the six domains of advanced nurse practice, in addition to evidence of a master's degree qualification ⁴³. The NMBI sets the standards for NPs, emphasising advanced clinical practice across six competency domains including providing evidence-based care, and collaborative healthcare delivery whilst practising at a higher level of capability (36).

In the UK, the Royal College of Nursing (RCN) has outlined the minimum standards for advanced nurse practitioners, which include a master's-level education in one of several core clinical or research areas through to being able to independently prescribe medication ⁴⁶. In the UK, there is noted to be inconsistent application of recommended standards for graduates of NP programmes ⁴⁷.



Different countries have different requirements for registration or NP endorsement. Some require certification, which can be reliant on a level of recognition based on curriculum. Canada, Israel and the US require passage of a certification exam in order to practise³² while other countries, like Aotearoa New Zealand, require a competency-based certification. Competency-based certification also differs; some countries have an exam-based competency assessment whereas others have a portfolio-based competency assessment. The literature recommends competency-based assessment as the best measure of competency credentialling⁴⁸. Australia has a capability-based approach, where the NP's individual speciality shapes their clinical practice⁴⁹. More recently, it has been suggested that implementing standardised education streams aligned with national health priorities (including primary health) and replacing the significant advanced practice experience hours with competency-based assessments would be preferable²⁹.

Recertification

There is a paucity of literature regarding different jurisdictions' requirements to recertify or show ongoing competence as an NP. The only four countries that the literature details recertification requirements are the US, Ireland, the Netherlands and Aotearoa New Zealand. In the US, recent changes were made to the recertification requirements that are consistent with continued competency. These changes include maintaining a minimum of 1,000 advanced practice hours as an NP in the role of clinician, educator, administrator and/or researcher plus obtaining 100 contact hours of qualified professional development credits; and allowing completion of the renewal criteria after the certification end date for individuals who have allowed their certification to expire. The key changes made were changing the wording from clinical *practice* to clinical *competence* and *specialty* to *population*⁵⁰. Clinical practice hours were renamed competence hours to better reflect the expanded set of activities included in the broader view of practice such as administrative, direct patient care, teaching or research activities, or a combination of these. The requirement for recertification in the US is now: professional development/continuing education credits, plus a minimum of 1,000 advanced practice hours as an NP in the role(s) of clinician, educator, administrator and/or researcher during the five-year certification cycle, or (2) by retaking the national certification examination.

Re-validation for NPs in Ireland takes place every five years post-registration, however, the requirements for this have not been published by NMBI (35). In the Netherlands, advanced practice nurses are also required to re-validate every five years by completing more than 200 hours of 'expertise promotion', including a minimum of 100 hours of continuing education and training, and 40 hours of peer-reviewed activities⁵¹.

In Aotearoa New Zealand, NPs are required every three years to provide evidence that they have maintained continuing competence, when they apply for their practising certificate. This evidence includes a competence assessment that demonstrates their competence as a nurse practitioner completed by an authorised prescriber; a minimum of 40 hours of professional development activities per year over the past three years; and a minimum of 40 days of practice as a nurse practitioner per year over the past three years, confirmed by their employer ¹.

Competency-based assessment

In 2020, the ICN published the Guidelines on Advanced Nursing Practice to help progress the role of advanced nursing practitioner practice globally. The guidelines give an overview of NP practice and articulate that NP practice is an extension of individual basic nursing practice education. The guidelines draw on the assumptions that in most countries an NP is a registered nurse (RN) who has advanced clinical training beyond their initial professional RN preparation; the NP competencies also build on the RN competencies to expand upon the knowledge, skill and abilities; that NPs practice in coordination or collaboration with healthcare professionals and other individuals; and are clinically educated and require a master's degree ⁵². The majority of NP competencies internationally include direct comprehensive care, education, support systems, research, publication and leadership, although wide variation still exists surrounding the details of these ⁵³.

Education

Currently, there are no global educational standards for NPs despite the International Council of Nurses' recommendation in 2002 for master's level education as the minimum requirement ⁵⁴. Standardisation of NP education programmes has long been debated as an approach to promote the NP profession, allow recognition of NPs across countries and enhance the credibility of the NP workforce ^{55; 56}. Internationally, most countries now require a MN minimum requirement, with the US intending to move to all NPs graduating with a Doctorate of Nursing Practice 2025 ⁵⁶.

Entry criteria to NP training

Internationally, there are inconsistencies between countries regarding the requirements for admission into their NP training programme, and also inconsistencies in different

programmes within the same country²⁴. The majority of countries require the applicant to already have a bachelor degree in nursing and nursing registration and a minimum number of practice hours as a nurse^{10; 29}. The exception is Finland which instead requires a minimum number of hours as a registered health professional (three years of nursing practice or practice in a related field, for example, physiotherapy or midwifery)^{20; 56}. International literature has identified the unique challenge in identifying those NP candidates who are ready, both academically and with advanced clinical experience and competence, as other health professional programmes such as medicine, dentistry, pharmacy etc are not reliant on clinical competence developed through clinical practice prior to enrolment⁵⁷.

The US requires the applicant to have a nursing registration upon entry but does not stipulate a minimum number of practice hours. Aotearoa New Zealand, Australia and Ireland are the only countries identified within our review that have a requirement of a minimum number of practice hours (or equivalent) in a speciality area. With Ireland stating a minimum of three years recent post-registration clinical experience in nursing or midwifery (within the last five years) and an equivalent of 'one year' full-time experience in the specific area of clinical practice that the nurse will be prescribing and practising in. Australia also requires three years of equivalent full-time experience in the last five years⁵⁶.

There is no consistency in other entry requirements across countries, with some requiring letters of support, statement of interest, professional activity evidence, employer support, established mentor relationships, and interviews prior to admission. Finland and some programmes in the US have an entrance exam requirement prior to admission into the NP programme²⁴.

Canada and the US stipulate a minimum GPA average prior to entry (cumulative grade point average of B in an undergraduate degree programme), while Norway requires a C average (60 %) in some programmes. Other programmes do not stipulate in the literature if they have a consistent GPA requirement²⁴.

In the US, the removal of pre-entry clinical experience requirements has increased the number of courses accepting candidates directly from undergraduate nursing programmes. Some US courses also offer direct-entry that allows non-nurses to concurrently obtain their registered nurse and NP licensure⁵⁸. Direct entry programmes typically cover the prerequisite nursing knowledge and skills and the advanced coursework necessary for obtaining a master's degree in nursing. Upon completion, graduates become eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN) and apply for licensure as a registered nurse. Post-completion direct entry graduates can then apply for Doctor of Nursing Practice (DNP) programmes if they have completed the pre-requisite courses (usually statistics,



research, and health assessment). Most of the DNP programmes include an additional required number of clinical hours within the programme (generally more than a third higher). There have also been concerns raised about the lack of clinical experience of these nurses entering programmes, although evidence of these nurses' competency post-registration is conflicted^{58; 59}.

Although the move to all US NPs graduating with a Doctor of Nursing Practice by 2025 has been encouraged, there is noted caution in the literature on this approach as evidence to date suggests that Doctor of Nursing Practice NPs are likely to move directly into leadership, policy or management instead of direct care roles, impacting NP workforce availability and planning²⁹.

Curriculum content

Curricular content is fairly consistent within most countries; however, there is variation, possibly due to the differences in scope and practice of NPs across countries. In Canada, the US, the Netherlands, Australia and Aotearoa New Zealand, there is a larger focus on advancing the clinical knowledge and skills of the NP. In contrast, Finland and Norway place more emphasis on research, leadership, and implementation science. Research is a requirement in Finland, Norway (which requires a thesis) and Aotearoa New Zealand.

Internationally, there is consistency across countries for courses on professional practice and at least one course on pharmacology, pathophysiology, advanced health assessment or diagnostics and therapeutic management within the master's programmes. The US doctoral programmes include more content than all other programmes including additional courses on clinical knowledge and skills, as well as specialised content not included in other curricula, for example, genetics and health informatics⁵⁶.

Clinical hours

A comparative analysis of international university programmes identified an inverse relationship between the number of clinical hours required for admission and the number of clinical hours embedded in NP programmes⁵⁶. In countries that have a minimum number of required clinical hours within the NP programme, the total number ranged from a minimum of 300 hours in Australia to 2,000 hours in the Netherlands. Across regulated countries, the average is 500 hours⁵⁶. The construct of the clinical hours across the practicum also varies across countries with some, such as Canada and the US, having an intense period in the clinical setting over the last three



months of the practicum, while others were predominantly more evenly spread across the practicum or two-year MN. Of note, the Netherlands, which has the largest number of clinical hours required, are able to facilitate this due to the allocation of government funds as a salary-stipend for NP students to practise full-time as an NP candidate across the entire practicum. In contrast, Finland's programme does not require a minimum number of clinical hours within the practicum⁵⁶. In Ireland, where the NP programme runs over two years, as well as training components within the programme, candidates are required to complete 96 hours pertaining to prescribing and 500 hours of advanced practice clinical mentorship⁴².

The setting of clinical hours placement also varies within countries. In Canada and the US, clinical placements are generally outside the NP candidate's workplace and candidates are required to experience a broad range of practice and settings. Programmes in Australia, Aotearoa New Zealand, the Netherlands, and some programmes in Norway require candidates to complete clinical hours within their workplace. In Finland, clinical placements generally occur in one practice setting, with one preceptor. It should be noted that in Canada and the US, they have moved from an individual clinical setting focus to a broader, population-based focus with more than one preceptor and a broad range of clinical settings and exposure⁵⁶. Currently in Aotearoa New Zealand, NP candidates are required to complete the practicum in their defined area of practice and workplace and complete 80 hours of clinical practicum in a secondary area of practice.

In the US, the clinical practice hours required by the Doctor of Nursing Practice for direct entry candidates is 981 hours compared to master's candidates with an average of 693 hours⁵⁸.

Teaching methods, delivery and assessment

There is consistency of teaching methods across countries with each reporting a wide range including face-to-face teaching, clinical and laboratory simulations, Objective Structured Clinical Examinations (OSCE), online learning (including teacher/mentor and candidate meetings), independent learning, group work, clinical placements, and oral VIVA exams⁵⁶.

Programme delivery varied within and across countries with the majority of programmes requiring students to attend all courses on-site or by a hybrid approach of both online and on-site teaching⁵⁶.

Grading methods and policies seem to vary across countries with a large proportion of assessment points such as OSCEs, skills labs, clinical placements and practicums as pass/fail. Internationally, a grade of 70% was considered the minimum to pass a course if required⁵⁶. Currently, in Aotearoa New Zealand, there is inconsistency in the pass



grade of practicum courses, with some universities requiring a 65% pass grade and others 50%.

Need for academic mentoring

Findings from a longitudinal intervention study, undertaken in Australia by Leggat et al. (2015), indicate that a structured mentoring programme, based on principles of action learning, was successful in assisting advanced practice nurses to enhance their clinical leadership skills in preparation for formal endorsement as a nurse practitioner. The 2024 Malatest evaluation also found that academic mentoring and support were key to success in the NP training programme, and were required after registration to support the novice NP ⁶.

Cultural considerations in education and practice

The 2018 Malatest evaluation identified that there was a lack of education and inclusion regarding teaching cultural models of care in NP programmes ⁷. In a more recent study of Māori NPs' perspectives on patient safety, it was stated that Māori NPs should be supported to implement kawa whakaruruhau as a key component of clinical care and that appropriate evaluation tools and metrics that accurately capture the full scope of Māori NP practice and its value to patients and communities are required ⁶⁰.

Barriers to NPs in Aotearoa New Zealand

Education

The 2024 Nurse Practitioner Training Programme evaluation, commissioned by the Ministry of Health, highlighted numerous barriers to the education of nurse practitioners in Aotearoa New Zealand. This report revealed the disproportionately low number of Māori and Pacific NP candidates applying for entry to this programme and highlighted the need to identify these nurses who want to advance, earlier in their postgraduate journey. This evaluation also identified that a barrier to NP growth was inequitable funding models for postgraduate education and the final NP practicum ⁶.

There also exists inequitable access to funding, particularly for those who are based in primary healthcare, aged care, NGOs, Māori and Pacific organisations, and in rural settings where there are additional barriers to advancing to NP ^{61; 62}.



Currently in Aotearoa New Zealand, the NP practicum runs over one academic year, with other papers within the MN scaffolding into the practicum. Aotearoa New Zealand academics describe the difficulty in expecting a nurse can start “a one-year practicum and just expect that an NP will appear at the end of the year”¹⁶. Similarly, the pipeline to NP development has been identified in Aotearoa New Zealand evaluations as a barrier, particularly for Māori and Pacific nurses^{6;7} as has the need to support novice NPs, particularly in the first year of practice¹⁶. The 2024 evaluation of the NPTP recommended a two-year NP programme⁶. The need for a transition to practice programme has also been identified in international literature⁶³, with the recognition that the extent of the NP role is often not recognised until the first year in practice⁶⁴.

The 2024 NPTP evaluation report also highlighted feedback from stakeholders regarding education components for all NP candidates, regardless of area of practice and specialty, commenting on the primary focus being a broad rather than specialty focus that is based on Western models of care and values⁶.

Structural

The lack of a national strategy or national NP workforce development plan has been highlighted as a barrier to NP workforce development since 2018⁷. This has also resulted in NP positions predominantly evolving based on individuals and role development, rather than national or regional population or service needs^{61;65}. Despite two decades of NP practice in Aotearoa New Zealand, there remains a lack of understanding of the NP role, scope, and education. This lack of awareness and acceptance of the NP role remain barriers to realising the potential of NPs in Aotearoa New Zealand’s health workforce^{61; 65-67}.

Workplace

National and international literature identifies the need for continued support in the transition to practice, particularly in the first year of practice as a novice NP^{16; 68; 69}. This first year of practice is identified by both educators, academics, NPs, and other stakeholders as essential to supporting and retaining the NP workforce⁶. Aotearoa New Zealand studies have also identified that during education and post-registration there is inconsistent support for ongoing clinical support and professional development^{6; 61}.



Regulation requirements

The current requirement of four years of practice in the AOP the candidate plans to work in, can also be a barrier to those entering the NP programme ⁶. In the past, nurses reported taking two to three years to complete their portfolio after completing their educational requirements ⁷⁰. Other challenges for NP development include the panel assessment process, which does not align with other countries ^{6;7} and may be considered an arduous process, particularly for those who are rural and more isolated from NP support ⁶¹. The streamlining of the NP programmes, particularly the NPTP development of the NP portfolio, has reduced the time it takes before a nurse can come before a panel for assessment.

There is also a lack of guidance on registered NPs changing AOP post-registration, and how they should determine the adequate experience and preparation to move between AOP safely. Currently, in Aotearoa New Zealand, recertification occurs every three years and NPs are required to demonstrate competence, professional development requirements, and evidence of clinical practice. However, as the NP workforce has grown, many NPs have moved into other roles beyond clinical including research, academia and policy, and are restricted by current recertification requirements.

Currently, only NPs registered in the US and Canada are deemed as having equivalent qualifications as Aotearoa New Zealand NPs. NPs registered in Canada and the US are required to register first as an RN in Aotearoa New Zealand and then gain experience and mentorship in Aotearoa New Zealand to enable them to submit a portfolio of evidence to the Nursing Council, and undertake a panel assessment against Aotearoa New Zealand NP competencies prior to registration¹.

Australian NPs' qualifications and experience are currently recognised as equivalent to Aotearoa New Zealand NP practice through the Trans-Tasman Mutual Recognition Agreement. NPs registered outside of Australia, the US and Canada are required to have their qualifications assessed by an Aotearoa New Zealand NP education provider. This assessment can be time-consuming for academic staff and there are a limited number of providers who will offer this service.

Summary of inconsistencies between Aotearoa New Zealand and other leading countries

- Many countries have a two-year NP practicum whereas Aotearoa New Zealand has a final-year practicum.



- Currently the NCNZ requirement is 300 minimum supervised clinical hours – this doesn't align to other countries
- Area or practice speciality requirement – fairly inconsistent across countries, and longer time is required in NZ of area of practice experience
- Recertification – three years in Aotearoa New Zealand versus five years (US) while most countries have none specified
- Panel assessment- no other country has this as a registration requirement
- Some countries require specific primary healthcare (PHC) accreditation or post-registration certification/accreditation (although this sits outside the role of the regulator).

Recommendations for Aotearoa New Zealand to align to international evidence:

- Removal of panel assessment prior to registration
- Increasing minimum clinical hours of final practicum to align to international standards and current NPTP requirement (500 hours minimum)
- Potential for reduction of time in specified area of practice pre-registration.
- Review IQN registration – Australia (no requirements), the US and Canada (with portfolio and panel recommendation). Review Ireland.



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