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Revised

Report from the National Nursing Organisations to Health Workforce New Zealand



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Foreword

The purpose of this document is to inform and partner with the Health Workforce New Zealand (HWNZ) board and the sector to arrive at a long-term national nursing workforce strategy to ensure nursing's contribution to health outcomes and sustainability is understood and supported. The National Nursing Organisations (NNO) group expects to accept responsibility in partnership with HWNZ for the strategy and will sponsor and be jointly accountable for the socialisation and support of the strategy.

National Nursing Organisations

The NNO group is made up of New Zealand's key nursing stakeholder organisations comprising representatives from employers, educators, professional bodies, the regulator, and the Office of the Chief Nurse (refer to Appendix 1). The group provides a national forum to discuss, consult and develop consensus positions on the direction of nursing.

Over the past three years the NNO group has made a significant contribution to progress on nursing workforce planning and development. The group through its individual member partners and collectively has led considerable development of data intelligence around new graduates, workforce planning, advanced practice development, and care capacity demand management in hospitals and other health care settings. Moving forward and building on this work, and addressing gaps identified in the report will require a comprehensive nursing workforce plan with an agreed and allocated material support.

The NNO have worked together to produce the advice and direction contained in this report for the HWNZ board. This advice has been developed in the context of the Government's commitment to providing a public health service that delivers better, sooner, more convenient care for all New Zealanders.

Within the context of developing a fit for purpose nursing workforce, and Government directions for a health system that delivers better, sooner, more convenient health care for all New Zealanders (Ministry of Health, 2011), the NNO group has developed a set of nine principles to guide the development of a long-term national strategy for nursing workforce planning. The principles have taken into account workforce development strategies previously recommended, and which are supported by the NNO group (Ministry of Health 2001; 2006a; 2011; Mental Health and Addictions Service Review 2011) and Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012–2017 (Ministry of Health 2012).

Principles

Principle 1

Nurses work in partnership with people, whānau, family and communities to meet health need; effectiveness to be measured by levels of engagement and outcomes.

Principle 2

The protection of public safety is paramount.

Principle 3

The person is treated as part of a family and community. Care will address the social, economic and environmental determinants of health especially poverty, housing and social exclusion which are significant factors.

Principle 4

Public health and population-based policies and programmes underpin health care to ensure the best possible health outcomes.

Principle 5

A long-term national strategy for nursing workforce planning is predicated on a health care system that is clinically integrated across primary, secondary and tertiary provision and is intersectoral in nature.

Principle 6

There is system-wide integration of funding with clear accountabilities which follows people rather than diagnostic groups or disease categories to enable flexible service delivery.

Principle 7

Recognition and support are to be given to the work of families and individuals in promoting health and providing care.

Principle 8

Nurses, as health professionals are responsible for their practice and supported by employers, policymakers, and regulators to be clinically and culturally competent, compassionate and working to the full scope of their practice.

Principle 9

The workforce ethnicity demographic should match the population demographic and data should be collected across the continuum of a workforce lifetime at the local and national level to guide workforce planning and decision-making.

Principle 10

Evidence for investing in staffing, skill mix, qualifications and models of care delivery is used to guide workforce development and planning, and nurse leaders are to participate in investment decisions.

Executive summary

The health system is facing significant challenges. Nursing, being a large, generalist and flexible workforce is well placed to meet the changes required but data indicates that this workforce is not growing at the pace required to meet the demand. Attention to the development of the nursing workforce is required to ensure financial and clinical sustainability of the New Zealand health system.

The nursing workforce is the largest regulated health workforce and supervises the largest unregulated workforce. Nursing attracts 15% of the funding available to health professionals for post-entry clinical training. Increased investment in line with an agreed national strategy will be necessary to address the challenges outlined and progress the recommendations in this report.

Because of the predicted increase in the demand for care, the pace and scale of the response necessary will require targeted strategic action commencing in 2014 and picking up momentum in subsequent years.

New models of care built on pathways of care and evidence-based health needs will inform the make-up of the health workforce. In turn these models will inform the knowledge, skill mix and size of the workforce required to deliver the care. Timely attention is required to build more sophisticated workforce modelling to improve workforce planning.

With an ageing nursing workforce and predictions that over 50% of the present nursing workforce will retire by 2035 (Nana et al. 2013), a clear workforce development strategy is necessary to meet the extra demand for nurses that will occur as a result of population and models of care changes.

The current vacancy-driven employment model means new graduate nurses are finding it difficult to gain employment. Moreover our reliance on Internationally Qualified Nurses may be unsustainable in the future.

Recent new graduate data revealed that Māori and Pacific nurses are slightly less likely to be employed because of vacancies in their areas of domicile than NZ European nurses. Models exist that could correct this and require a system-wide response.

The synthesis of evidence about New Zealand's nursing workforce indicates a need to build a more comprehensive database and to harness current data, research and activities to develop a strategic workforce plan to ensure a resilient and fit-for-purpose nursing workforce.

International and national research establishing the links between the nursing workforce and patient outcomes demonstrates that quality nursing care clearly contributes to significantly improved outcomes for patients. Healthy work environments, supported educational opportunities, effective nursing leadership, and enabling legislative and contractual arrangements hold the key to supporting nurses to provide quality care to patients.

Some facts and observations are offered to focus initial attention.

- We need to improve workforce data quality, completeness, accessibility and intelligence to improve workforce planning.
- By 2035, New Zealand will be faced with a significant shortage of nurses,
- By 2017 we will need to start increasing the number of nurses in undergraduate programmes to meet the population's need for care.
- We will need to have educational and employment plans for the three nursing scopes of practice to make the best use of the available workforce.
- We will need to work purposefully towards changing the demographics of the workforce to match those of the population.
- We need to be targeting employment of nurses in aged care, primary care and community services to meet future models of care changes.
- We need to free nurses from non-nursing work.
- We need to work with employers at pace to improve matching nursing FTE to patient requirements to enhance patient quality and safety, workforce productivity, and workforce engagement and retention.
- We need to track nurse turnover across time and economic contexts, using past trends to strengthen future predictions.
- We need to value and invest in local nursing workforce research whilst continuing to monitor and utilise relevant international research.

The NNO group has developed an ongoing and evolving direction for the nursing workforce. In order to achieve this direction, a series of key recommendations are proposed. The NNO group believes these recommendations require urgent consideration and looks forward to working in partnership with HWNZ to enable recommendations to be implemented.

Recommendations

Key recommendations are presented to inform and support workforce strategy development.

We recommend that:

1. known and anticipated health care need is the key driver for workforce strategy development
2. DHB nursing HR and PDRP data be centrally available for workforce planning purposes
3. ways are found to make aged care, primary health care and NGO data relevant to the nursing workforce centrally available for workforce planning purposes
4. TEC data about student progression be centrally available for workforce planning purposes
5. specific system solutions are developed for tracking attrition and success rates for Māori and Pacific nursing students.
6. national data is collected to inform a strategy for faculty development and retention, and attention to HWNZ funding directives
7. local educational and service providers work together to:
 - a. employ more new graduate nurses
 - b. improve employment of new graduate nurses for aged care and primary health care
 - c. improve employment of Māori and Pacific nurses to match their population demographics
8. alternative models of clinical education are developed and resourced in partnership with education, service and regulators
9. the voluntary bonding scheme (VBS), NETP funding and postgraduate nursing education funding are used strategically to incentivise shifts to services closer to patient's homes and enhance retention
10. HWNZ develops a data base that shows the numbers, course details and qualifications of nurses funded for workforce planning purposes
11. specific funding and systems solutions are developed for growing Māori and Pacific new graduate employment particularly in primary health care
12. HWNZ actively partners with the NNO in directing a sector-wide approach to Nurse Practitioner development across education, required legislative changes and employment opportunities.
13. safe staffing is promoted as an important priority in all health service workplaces.
14. a nationally consistent balanced score card approach be developed in partnership with the Ministry of Health (MOH), the Health Quality and Safety Commission (HQ&SC) and employers to ensure patient safety and care quality, staff safety and health, and service productivity data informs health service management

1. Challenges facing the health system

New Zealand faces a number of fiscal and demographic pressures predicted to intensify in the future. A significant driver in the context of care provision is the ageing of New Zealand's population. Predictions indicate that by 2035, there will be 5.26 million people living in New Zealand and a 30% increase in over 80-year-olds (Nana et al. 2013). An ageing population increases demand for health services.

Other pressures include a growing population; a youthful and growing Māori and Pacific population, an increase in the incidence and impact of chronic diseases; and persistent health inequalities. Opportunities and challenges arise in the face of new diagnostic and treatment techniques; unaffordable exponential increases in health care expenditure; and funding constraints (NHB 2010).

Coupled with burgeoning health demand, significant nursing workforce shortages are predicted to develop and intensify (Nana et al. 2013), increasing workforce shortages concurrent with unemployed new graduates, including slightly higher percentages of unemployed Māori and Pacific new graduates.

The Government's approach to health policy emphasises better services for patients, less waiting for services, and services provided closer to home (Ministry of Health 2011). The Primary Health Care Strategy (Ministry of Health 2001) requires the workforce to work in new ways (Ministry of Health 2001; 2011) taking a population-based approach to health care emphasising prevention, education, health maintenance and wellbeing, and strengthening of connections with other health agencies, social and community services, and iwi. Aligned with these priorities, primary health care is a key growth point for the nursing workforce (Tuckett et al. 2009).

The Government's strategies require health and other public services to work in new ways emphasising cultural appropriateness of services, promoting inclusive and consumer-centred approaches to service provision, and the development of new health care services and roles in the community.

New Zealand is facing increased pressure in primary health care with an ageing GP workforce and reduced access to services in some communities. HWNZ has made significant investment into growth of GP numbers in the past four years but given the predicted demand the need for best use of all primary health care professionals is critical.

Ensuring undergraduate and postgraduate prepared nurses are supported and positioned through changed Models of Care (MsOC) to work to the full breadth of their scope of practice will make best use of their considerable skills. Unleashing the potential for primary health care nurses was recommended as the policy direction for nursing in the 1998 *Ministerial Inquiry Taskforce on Nursing* and is encouraged by the NNO group. This will however, also add to the demand for nurses.

It is critical that workforce strategy is driven by health care need rather than by historical profession-specific boundaries. One model to operationalise this principle would be:

- identification of key areas of differentiated health care need
- investment in building and implementing models of care that can be shown to improve clinical and financial sustainability and meet the identified needs

- well-articulated knowledge and skills framework to support care delivery with a focus on generalist practice with specialist support [based on agreed MsOC]
- develop models of funding and education policy to support workforce development (Holloway 2013)

Recommendation: That known and anticipated health care need is the key driver for workforce strategy development

The Registered Nurse (RN) workforce is well positioned to enable shifts in models of care given its size, broad scope of practice, educational preparation and low relative cost. New models of care have the potential to both reduce and increase the demand for nurses so any workforce modelling for nursing and medicine specific pipelines need to take this into account.

Contemporary models of care emphasise integration and care closer to home. However, the nursing workforce is still employed predominantly in the hospital sector. The expansion of nurses' roles to provide better access to appropriate, more cost-effective services has resulted in greater acceptance by patients of nurses as the first port of call; increased choice of provider for patients; freeing up of General Practitioners' time; and greater job satisfaction overall for general practice teams (King et al. 2011). These benefits, however, are not as widespread as they should be, and the creation of a more enabling environment for nurses to provide innovative models of care to respond to patient need, is required.

2. Challenges facing the New Zealand nursing workforce

2.1 Workforce supply data - what we know

One of the first things identified by the NNO group was the need to develop a comprehensive data picture and national oversight for accountability and monitoring of the nursing workforce. While information is collected to measure the nursing workforce via a range of mechanisms, the information is partial with data either hard to access or unavailable at a national level. A dearth of comprehensive information about the national nursing workforce (Ministry of Health 2006b) is limiting a timely and future-oriented national approach to nursing workforce planning.

Nursing Council of New Zealand (NCNZ) data is of very good quality based on a near 100% return on APCs. The data tells us about the current workforce, its age, ethnicity, area of work, area of domicile, hours of work, postgraduate education, and cross-border movement. Between 2008-2010 the Council made significant changes to data capacity, and publication of workforce data and statistics.

A recently completed nursing five-year cohort study informs about the employment patterns of new graduates and nurses new to New Zealand from 2006-2011 and provides data about movement of nurses in their first five years of registration. The study shows that one year after registration 84% of the New Zealand cohort was practising, this had dropped to 72% by five years after graduation. Sixty-nine percent of the Internationally Qualified Nurse's (IQN) cohort was practising one year after registration and this figure had dropped to 53% at five

years. The study will continue as a longitudinal study of this cohort of nurses and a further cohort study of the 2012-2013 graduates and newly registered IQNs has commenced.

In 2012 the Nursing Council commissioned BERL Economics to undertake an analysis of the nursing workforce from 2010 to 2035 based on the available workforce information and taking into account those predicted changes in New Zealand's population size and structure. By 2035 it is estimated there will be 5.26 million people living in New Zealand and an increase in demand for health care based on an ageing population and lifestyle disease.

The nursing workforce is ageing. Over 50% of our present workforce is likely to retire by 2035. Therefore the supply of nurses must replace the increasing numbers of nurses who are retiring and meet the extra demand for nurses as a result of population changes.

The current nursing workforce does not reflect the changing ethnic composition of the New Zealand population. Further strategies are required to increase the proportion of Māori and Pacific students enrolling in and completing nursing programmes.

Workforce demographics

As of 31 March 2013, there were a total of 50,060 practising nurses on the New Zealand Nursing Register: 110 Nurse Practitioners, 47,019 Registered Nurses, and 2,931 Enrolled Nurses (NCNZ 2011). This paper focuses on the registered nurse workforce as the largest group.

In 2010 approximately 46 % of the Registered Nurses workforce was aged between 40 and 54 years old with the peak numbers of nurses aged between 45 and 54 years. Eleven percent of nurses were over the age of 60. Over the next 25 years approximately 57% are predicted to retire, although this may be revised upwards. The geographical spread is about right with around 40% of RNs working in the upper North Island; 31% of RNs in the rest of the North Island; and 29% of RNs in the South Island.

A large percentage of our nurses are employed in DHB settings. As of 2010, a total of 25% of the nursing workforce comprised nurses registered in New Zealand who had completed their initial nursing education and training overseas. Approximately 45% of nurses registering to practise each year in New Zealand are internationally qualified. In 2010 the majority of IQNs obtained their initial education in the UK. However New Zealand also registered notable numbers of IQNs from the Philippines, Australia, and Zimbabwe. In 2013 the majority of IQNs came from the Philippines (531), India (335) and the United Kingdom (177) (NCNZ 2013).

Sixty-eight percent of nurses identify as New Zealand/European, 7% identify as Māori and 4% as Pacific (NCNZ 2011).

Hidden workforces and data holes

There is a wealth of information within DHBs sitting in payroll, HR and nursing development units that, if it was available at the DHB and national level, would provide a much more comprehensive data set to understand career progression, qualifications, turnover, ratio of patients to direct care providers and much more. This data is available but is not easily

retrievable. The data on workforce in all sectors outside the provider arm of DHBs, i.e. what happens in aged care, primary care, NGOs and private hospitals is still to be made transparent.

The potential exists to maximise the development of the unregulated health workforce and this group could be considered as a potential recruitment pool for the regulated workforce. Data about this workforce is likewise inaccessible.

Recommendation: That DHB nursing HR and PDRP data relevant to that workforce be centrally available for workforce planning purposes

Recommendation: That ways are found to make aged care, primary care and NGO data relevant to nursing workforce centrally available for workforce planning purposes

2.2 Nursing workforce projections

The ageing and increased life expectancy of our population, coupled with predictions showing the ageing of the nursing workforce has led to concerns about the ability of the future size, skill and attribute of the nursing workforce to meet the increased demand for health care. An economic modelling exercise has developed four possible scenarios to indicate how decisions made now are likely to impact on the nursing workforce by 2035 (Nana et al. 2013). A business-as-usual scenario is used as a benchmark measure and indicates that, assuming the number of NZ and internationally qualified nurses remains constant, the number of places available at New Zealand schools of nursing remains constant; and the rate that nurses enter and leave the profession continues at the same level, the nursing supply will remain adequate until 2020, but will result in a shortage of 15,000 nurses by 2035.

Strategies to address projected supply shortage

The option of increasing the proportion of IQNs in the New Zealand workforce to 33% was also examined by BERL. This option assumes that New Zealand will be able to continue to attract an increased number of internationally qualified nurses from 2020 to 2035 when there is a worldwide demand for nurses. New Zealand already relies on attracting a significant number of nurses from overseas to supplement New Zealand-trained nurses but this supply is not guaranteed into the future. An increasing reliance on overseas nurses is likely to create a nursing workforce that does not reflect the ethnic diversity of our population. Growing our own through the undergraduate pipeline is increasingly seen as a more viable option.

The challenges of growing the undergraduate pipeline

Growing the supply of nurses educated in New Zealand-based nursing programmes necessarily requires an increase in enrolments in nursing programmes; and improving the retention of students once they are enrolled in nursing undergraduate programmes. This is especially important for Māori and Pacific students, and aligns with the current Tertiary Education Strategy.

Recommendation: That TEC data about student progression be centrally available for workforce planning purposes.

Māori and Pacific nurses: the undergraduate pipeline

There are challenges associated with recruiting and retaining Māori and Pacific students into nursing programmes (Pacific Perspectives 2012; Jamieson 2012; Wilson, McKinney & Rapata-Hanning 2011). However, the low proportion of Māori and Pacific nursing students means the nursing workforce is unlikely in the near future to reflect New Zealand's ethnic demographic (Nana et al. 2013). The reasons Māori and Pacific nursing students withdraw from nursing education programmes include financial hardship (Pacific Perspectives 2012; Wilson, McKinney & Rapata-Hanning 2011); family commitments and challenges associated with travel to clinical placements when placements are outside the student's area of domicile (Pacific Perspectives 2012).

Enrolment in culturally specific Māori and Pacific undergraduate programmes has proven a successful strategy in retaining students and growing this workforce. Currently there are two Pacific nursing programmes (Whitireia and MIT) and one Māori nursing programme (Whitireia) available. The programmes offer a choice for Māori and Pacific students to engage with a culturally responsive pedagogical approach that enhances retention and engages with communities to support success. However, we lack specific data about attrition rates for Māori and Pacific students compared with other groups of students.

Recommendation: That specific system solutions are developed for tracking attrition and success rates for Māori and Pacific nursing students.

Clinical learning experiences

Evidence tells us that we need to increase student numbers starting 2015, however, this growth may be limited where there are constraints on the number of clinical placements. This is predicted to result in nurse shortages without a supply-side intervention by 2015 (Nana et al. 2013). Alternative models of providing clinical placements, such as Dedicated Education Units (Fourie & McClelland 2011) or the use of simulation (Norman 2012) have demonstrated positive outcomes and could be explored. Increased investment in nursing education and investigating a range of clinical learning numbers could increase nurse graduate numbers (Nana et al. 2013).

Recommendation: We need to develop and resource alternative models of clinical education in partnership with education, service and regulators.

Faculty pipeline

A significant challenge in growing the pipeline for delivery of new undergraduate nurses is the ageing of the Nursing Faculty. We have little nationally collected data about the demography of neither this group nor a nationally focussed strategy on workforce development in this area. In addition the preference of directing HWNZ funding to clinical papers is severing the pipeline for faculty development through research masters and PhDs.

Recommendation: We need national data to inform a strategy for faculty development and retention and attention to HWNZ funding directives

2.3 Graduate nurse employment

Strengthening the recruitment of graduate nurses is one way to manage the supply-side pressures. **An NNO vision is for 100% graduate employment by 2018 at the latest.** The fiscal and skill mix impacts of a protected pool of new graduate nursing positions have been modelled and this is a strategy for strengthening the recruitment of new graduate RNs by 2018.

Modelling shows that new graduate RNs represent an opportunity to begin to replace the retiring nurses with a younger nursing workforce, contain expenditure by increasing the percentage of RNs on lower salary scales and reduce supply-side pressures on the workforce. Modelling also shows that strengthening recruitment of new graduates over the next three to five years can be achieved within existing District Health Board (DHB) budgets and full-time equivalent (FTE) staffing levels and may actually reduce costs.

Recruitment of new graduate nurses had previously been reactive i.e. based on employers' requirements at time of graduation. The use of the recruitment tool ACE (Advanced Choice of Employment) as a strategy commenced in 2011 to improve the information about this group in order to inform workforce planning.

Nurses want to be employed in the region where they trained; and employers want nurses who trained locally. This is an opportunity on which to capitalise.

Recommendation: That local educational and service providers work together to employ more nurses.

Asking students about speciality preference helps better match graduates. This is particularly valuable data in harder-to-staff areas. The whole system needs to work together to improve the image/conditions/incentives to effect change. Purposeful work is required to ensure the new graduates who want to go into primary and aged care get there; if not in the first year then soon afterwards. The Nursing Council's cohort study shows that nurses move quite quickly from surgical and medical areas to other areas possibly even outside of the hospital.

Recommendation: Strategic use of the voluntary bonding scheme (VBS), NETP funding and postgraduate nursing education funding to incentivise shifts to services closer to a patient's home and enhance retention.

The data also tells us that some tertiary providers are very good at growing students with a stronger focus in primary health care, mental health and aged care (areas of key priority). This is an opportunity for local educational and service providers to make sense of the reasons behind the data, learn from those who are doing well and work more purposefully toward strategies to increase student interest in a more comprehensive range of specialty options.

Recommendation: That local educational and service providers work together to improve the employment of more nurses for aged care and primary care.

Māori and Pacific graduate nurse employment

The need for a culturally competent health workforce that matches the demographic of the population is heightened; because the health profile for Māori and Pacific populations indicate high levels of mental disorder (Baxter 2008), high rates of chronic diseases and a high probability of risk factors linked to poor health, coupled with a low uptake of preventive health services and a high level of avoidable hospital admissions (Pacific Perspectives 2012). To establish how well the ethnicity of the nursing workforce matches the ethnicity of the population, comparisons have been developed which indicate that both the Māori and Pacific nursing workforce demographics are not reflective of the populations they serve.

HWNZ is seeking a workforce that better reflects the demography of the population being cared for. Some DHBs are making more of the opportunity for their workforce to better reflect the demography of their population by employing Māori and/or Pacific graduates in higher proportions than the proportion of Māori and Pacific graduates identifying them as their preferred employer.

The fundamental issue with the Māori nursing workforce is supply. While the absolute numbers of Māori nurses (all scopes) has increased by 423 over the two year period (n=2856 in 2011 and 3279 in March 2013) - the percentage of the total nursing workforce remains at 7%. The biggest increases to the Māori nursing workforce came from new graduates in 2011 and 2012. Strategies for increasing Māori nurse employment are in place in some DHBs but more work needs to be done to develop a consistent national approach including reviewing the current Māori faculty resources.

Recommendation: That specific systems solutions are developed for growing Māori and Pacific new graduate employment particularly in primary care.

Nurses want to work with their own people to improve health outcomes and we need to support this aspiration. Some places with high Māori and Pacific populations have been very successful in growing Māori and Pacific nurses to match the demographic, but if the availability of employment is limiting uptake then we need to encourage local educational and service providers to strategise more purposefully.

Recommendation: That local educational and service providers work together to improve employment of Māori and Pacific nurses to match their population demographic.

Internationally Qualified Nurse employment

Careful consideration of the risk and benefits of internationally qualified nurses (IQNs) as a resource for managing supply pressures is required. Immigration of IQNs has been New Zealand's solution to replacing the sustained emigration outflow and domestic shortages of RNs for the last 20 years. Consequently in 2011 25 percent of the RN workforce was internationally qualified. New Zealand has one of the highest proportions of migrant RNs among OECD countries. Our dependence on IQNs to replace outflows in the face of escalating global competition for IQNs may become a challenge as the global economic situation improves.

Four groups of RNs are on Immigration New Zealand's Long-Term Skill Shortage List: aged care (36% IQN), critical care/emergency (31% IQN), medical (31% IQN) and perioperative (28% IQN). Developing a planned framework for progressively growing capacity and capability of New Zealand RNs in specialties listed on the Long-Term Skill Shortage List using a combination of voluntary bonding and postgraduate nursing funding will reduce the risk associated with New Zealand's high level of reliance on IQNs.

2.4 Effective use of the nursing workforce

Synopsis of the regulated nursing workforce scopes

Nursing has three scopes of practice and as such is well positioned with adaptive capacity to allow for unanticipated changes in the details of forecasted future need.

In 2010 a new scope of practice for enrolled nurses was put in place and a new education programme was implemented to prepare them for their role. The Ministry of Health and national nursing organisations are committed to supporting enrolled nurses to work to the full extent of their scope of practice.

When the skill mix in the health care team includes enrolled nurses working with registered nurses, health care assistants, or other clinicians, we expect to see safe, high-quality nursing care, and improved workforce productivity. Current employment practices, models of care, and variable local policies can result in barriers to ENs contributing to their potential. It is important that nurse leaders and others develop models of care, orientation programmes, and policies and guidelines to make the most of enrolled nurses' skills and knowledge.

The initial competencies for registered nurse practice are generalist in their nature in that they cover an extensive range of aspects of nursing practice. As nurses develop in their careers they often focus on a particular aspect or area, or they may remain involved in a broad range of nursing care activities (e.g. primary care). Within this generalist area they may develop advanced practice expertise and offer extended service thus functioning as a nurse specialist in the generalist area i.e. a specialist generalist. The elements that make them specialist are in the level of service they provide rather than the area of service they practice.

The NNO glossary (2011) provides useful definitions and the description of general nursing practice reflects an understanding of generalist nursing practice. Generalist practice is defined and encompasses a comprehensive spectrum of activities. It is directed towards a diversity of people with different health needs, it takes place in a wide range of healthcare settings, and it is reflective of a broad range of knowledge and skills. Generalist practice may occur at any point on the continuum from beginning to advanced practice.

Nursing practice in a specialty area focuses on a particular area of nursing practice. It is directed towards a defined population or a defined area of activity and is reflective of increased depth of knowledge and relevant skills. Specialty practice may also occur at any point on the continuum from beginning to advanced practice. Conversely a specialist nurse provides an advanced level of practice either in a focussed area of practice (a specialty) or a generalist area of practice, i.e. the specialist generalist.

Utilising expert knowledge and skill occurs through expanding and extending practice and advanced practice roles.

Role expansion

Expanding the boundaries of nursing practice occurs as a professional strategy in response to a changing health care need with nurses supported and being qualified to assume an increased range of autonomy, accountability and responsibility. In 2011 NNO provided the following definition along with an algorithm from the Nursing Council to guide employers and clinicians on their responsibilities when health professionals expand or extend their practice to meet patient care needs.

Expanded practice	Expanding the boundaries of nursing practice occurs as a professional strategy in response to a changing health care need with increased range of autonomy, accountability and responsibility. There is a formal pathway to role expansion that entails further education and credentialing e.g. First Surgical Assist Nursing
Extended practice	The addition of a particular skill or area of practice responsibility usually in response to increased demand or consumer needs.

National Nursing Organisation Glossary (2011)

2.5 Advanced practice roles

Where relevant educational and employment opportunity is available nursing has demonstrated considerable willingness to step up and increase its service to meet consumer need. Where evidence has been collected (see for example the HWNZ evaluation of the NP role in aged care) we know that advanced practice nursing roles can make a considerable difference to health experience for consumers and to cost efficiencies.

The differences and contributions of Clinical Nurse Specialist (CNS) and NP

The NP role was originally constructed as being in line with a broad population focus such as child health or aged care but the absence of a clear policy platform or sector-wide shared strategic direction saw an initial proliferation of rather narrowly defined roles. Recent trends and focused action by nursing show this to be broadening into more generalist scopes across large population groups such as primary and aged care. The strength of the NP role is its boundary spanning function following population groups across primary secondary and tertiary care. In addition NPs are comparatively inexpensive to produce (less than 25% of the cost of GP preparation) and their scope of practice allows them to provide vital services in areas which are becoming increasingly underserved e.g. aged care and primary health care. Recent research (Pirrett 2013) has demonstrated the accuracy of NPs' diagnostic ability and thus confirmed their ability to deliver front line services safely.

The need for a more streamlined approach to NP development and employment has been agreed by the NNO group and a proposal for a demonstration of an alternative NP pathway was presented to the HWNZ board in March 2014.

Recommendation: That HWNZ actively partner with the NNO in directing a sector wide approach to NP development across education, required legislative changes and employment opportunities.

The CNS role is well established in the DHB provider arm but the qualifications and role descriptions are particular to employers. No national data is collected about CNSs so the exact number is unknown.

Understanding the difference in advanced practice roles

	Nurse Practitioner	Nurse Specialist
Scope of practice	<ul style="list-style-type: none"> • A separate scope of practice from RNs. • Title protection, formal authorisation. 	<ul style="list-style-type: none"> • Registered nurses – advanced practice and extended within the RN scope. • No title protection.
Contribution to health service	<ul style="list-style-type: none"> • Able to practice both independently and in collaboration with other health care professionals to promote health; prevent disease and to diagnose, assess and manage people's health needs. • Working across traditional service boundaries especially primary and secondary care. • They provide a wide range of assessment and treatment interventions, including differential diagnoses, ordering, conducting and interpreting diagnostic and laboratory tests, and administering therapies for the management of potential or actual health needs. • Allows even greater expansion and supports appropriate recognition and remuneration for the level of responsibility. • Leadership role in nursing service delivery. 	<ul style="list-style-type: none"> • Expert nurses who work within a specific area of practice incorporating advanced knowledge and skills, and who provide mentoring to other members of the health care team. • Designated prescriber status for this group, following suitable educational preparation, is currently under consideration.
Education	<ul style="list-style-type: none"> • Completed clinical master's degree. 	<ul style="list-style-type: none"> • Often have additional postgraduate qualifications to support their practice.
Practice Settings	<ul style="list-style-type: none"> • Delivering expanded services in areas where there are workforce challenges, e.g. rural primary care, aged care. • Able to practise autonomously in increasing areas of General Practitioner absence. 	<ul style="list-style-type: none"> • Offer an extended range of services focussed on a specific area of nursing practice usually defined by population (e.g. older adult), setting (e.g. emergency care), disease(e.g. diabetes), type of care (e.g. mental health) or problem (e.g. pain)

HWNZ funds postgraduate study for both NPs and CNSs. The data concerning numbers, course details and end qualifications of nurses is collected at the DHB level but is unavailable centrally making workforce planning difficult. Earlier this year we repeated an NP scoping exercise across the districts which tells us where the NPs are practising and the employers' intentions of growing and employing more of them.

Recommendation: That HWNZ develop a data-base that shows the numbers, course details and qualifications of all nurses it funds and makes this available for workforce planning purposes

3. Nursing retention

Recruitment is futile if we fail to retain nurses. Retention is dependent upon multiple factors such as employment context, nursing leadership and workload management (North et al. 2013).

3.1 Impact of employment context on intention to stay in nursing

Retention of nurses is challenging in times of economic buoyancy as nurses move to alternative opportunities or return to single-income households. Evidence shows some nurses choose when they can, to reduce their hours or leave the profession altogether due to an increasingly stressful clinical environment, which results from the effects of shift work, workloads (Huntington et al. 2011) and negative workplace experiences combined with a failure by organisations to address the situation (Bentley et al. 2009; Huntington et al. 2011; Ventura-Madangeng & Wilson 2009).

Turnover rates for younger nurses relate to a range of factors linked to a lack of support in the transition from student to competent nurse (Beecroft, Dorey & Wenten 2008; Clendon & Walker 2012; Jamieson 2012; Nursing Council of New Zealand 2013) contributing to their intention to leave the profession. Older nurses experience a decreasing tolerance for shift work (Clendon & Walker 2013; Health Workforce New Zealand 2012) and higher pain scores (Clendon & Walker, 2013; Health Workforce New Zealand 2012).

3.2 Impact of nursing hours on quality of care and nurse retention

Compelling evidence demonstrates that quality nursing care is a crucial component of the modern health care environment, because it has a direct effect on patient and consumer health outcomes (Aiken 1981; Aiken, Clark & Sloane 2000; Aiken et al. 2001; Aiken et al. 2002; Blegen & Vaughn 1998; Buerhaus & Needleman 2001; Buerhaus et al. 2002).

New Zealand-based evidence is aligned with international findings, which established that there were significant increases in negative patient outcomes potentially sensitive to nursing when nursing hours decreased (McCloskey & Diers 2005; Carryer et al. 2011).

3.3 Link between organisational structure, nursing leadership and positive culture

District Health Boards have a variety of leadership structures for nursing, most commonly with a matrix model. During the 1990s there was a widespread move to generic management models and currently there is a reported degree of return to this focus. (Hughes PhD thesis (2013) and in press). Generic management models interrupt a professional practice model of nursing leadership which is known to support the greatest patient safety and nurse retention. Such models particularly risk confusion around accountabilities with DHB Directors of Nursing having full accountability for the delivery of

nursing services and patient outcomes, yet diminished control over the budget and other critical decisions, which underpin the quality of nursing service delivery (Hughes & Carryer 2011 and Hughes 2013).

A professional practice model ensures that nurses report to nurses and nurse leaders oversee professional development, discipline and decisions about position appointments and the appropriate deployment of nursing staff. In primary care a professional practice model is often completely absent and there is no designated organisational responsibility for nursing by a Director of Nursing (or similar). With the advent of contract alliancing and service redesign the role of a nurse leader is critical and yet the role is not always in place.

Recent reports from the UK describe inexcusable neglect and harm to patients caused by serious failings on the part of a provider Trust Board including failure of nursing care (Keogh 2013; Mid Staffordshire NHS Foundation Trust 2013). The lessons from the UK experiences are relevant to nursing workforce development in New Zealand. Learnings indicate the need for strong nursing leadership, for close monitoring of outcomes of care, and to ensure appropriate staffing levels and skill mix are maintained in all contexts (NZNO 2013). Improving work environments for nurses is recommended in the literature as a relatively low-cost mechanism to produce safer and higher quality hospital care and higher patient satisfaction (Aiken et al. 2012).

3.4 Link between educational support and nurse retention

An example of a successful model is the Ministry of Health (through the Pacific Provider Development Framework (Serau)) funding of the ANIVA Whitireia Postgraduate Certificate in Specialty Care, Pacific Health. The ANIVA programme contributes to the Ministry's overall strategy to increase the Pacific health and disability workforce by ensuring the health sector has the right Pacific people with the right skills in the right places. A key focus of the programme is development and support for career advancement for Pacific nurses to positions of greater governance, clinical and management responsibility.

This programme provides development opportunities for up to 30 Pacific nurse leaders per cohort. The fellowship supports leadership and workforce development through a programme of study and research-based practice in health care delivery, with a focus on Pacific health. The outcomes of the programme in terms of development of nursing leadership and progression onto further study are positive.

3.5 Link between nurse staffing and nurse retention

Nurses want reassurance that when they come to work they can be confident that the system will deliver the appropriate number and skill mix of staff to meet patient care needs. In 2006 following a Ministerial Committee of Inquiry, the Safe Staffing Health Workplace (SSHW) Unit was established and over four years of demonstration in New Zealand hospitals the Care Capacity Demand Management (CCDM) tools were developed. The work represents an ongoing partnership between the DHBs and the NZNO which, after six years, has grown to include all the health unions and all the health professions with the exception of medicine. There is work currently underway by the NZNO to clarify concepts such as care rationing and essential care delivery as part of this approach.

Recommendation:

- That safe staffing is promoted as an important priority in all health service workplaces
- That a nationally consistent balanced score card approach be developed in partnership with the Ministry of Health (MOH), the Health Quality and Safety Commission (HQ&SC), the Accident Compensation Corporation (ACC) and employers to ensure patient safety and care quality, staff safety and health, and service productivity data informs health service management

3.6 Removal of barriers to improve retention

Nurses tell us they are frustrated by models of care (in particular but not restricted to) in primary health care that don't make the best use of their knowledge and skills and the rules, contract and legislation that create and maintain barriers (Clendon,2013). Currently a number of strategies are in the process aimed at making the best use of the range and scopes of the workforce (removing legislative, contractual and attitudinal barriers).

- The Medicines Amendment Bill made Nurse Practitioners authorised prescribers thus they now have the full suite of permissions available to doctors, midwives and dentists. However, the associated right to write standing orders is not yet in place for NPs.
- The Nursing Council is currently working on progressing suitably qualified nurses to become designated prescribers. In preparation for this the Ministry of Health and Pharmac are working on the policy and implementation planning to ensure we pave the way.
- The omnibus Health Practitioners (Statutory References to Medical Practitioners) Bill will change the statutory reference to medical practitioners in seven pieces of legislation and replace it with wording to enable suitably qualified health practitioners to undertake statutory functions that are currently limited by law to medical practitioners.
- The availability of the General Medical Subsidy (GMS) for all suitably qualified health practitioners not just GPs.

Change management is required to reduce practice and attitudinal barriers to nurse utilisation by demonstrating ways in which alternative models of care in primary health support private business as well as population health by making the best use of nurses. We need to incentivise business owners and partner with them to invest in building and implementing models of care that can be shown to improve clinical and financial sustainability. It is critical that funding streams in primary care such as capitation are clearly acknowledged as purchase of a service regardless of who provides that service.

Conclusion

Investment in the development of the nursing workforce needs to mirror the goals and aspirations of the profession and for the way it develops to meet the health needs of New Zealanders. Piecemeal initiatives to address parts of the system have not been integrated. Outdated management models and insufficient allocation of funding for nursing workforce development allow a potential erosion of quality and safe patient care.

There is an opportunity right now to build on the knowledge and data we have detailed in this paper. The NNO group proposes to work in partnership with Health Workforce New Zealand to develop and support evidence-based strategies for a sustainable and flexible nursing workforce for the future.

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Appendix 1: Membership of National Nursing Organisations (NNOs)

Name	Organisation
Dr Jenny Carryer (Chair)	College of Nurses (Aotearoa)
Carolyn Reed	Nursing Council of New Zealand
Denise Kivell	Nurse Executives of New Zealand
Dr Daryle Deering	New Zealand College of Mental Health Nurses
Dr Jane O'Malley	Chief Nurse, Ministry of Health
Dr Kathy Holloway	Nursing Education in the Tertiary Sector (Aotearoa NZ)
Helen Pocknall	District Health Boards Directors of Nursing
Jean Batt	Te Kaunihera Neehi Māori o Aotearoa - National Council of Māori Nurses
Judy Kilpatrick	Council of Deans and Midwifery (NZ)
Memo Musa	New Zealand Nurses Organisation

Appendix 2: Summary of nursing workforce data and information collected

Title	Date / information collected	Responsible organisation
<i>The New Zealand Nursing Workforce: A profile of Nurse Practitioners, Registered Nurses and Enrolled Nurses</i>	Following data collected biennially: <ul style="list-style-type: none"> • total numbers in each workforce • qualifications • clinical specialties • age, gender, ethnicity • geographic distribution • characteristics of IQNs. 	Nursing Council of New Zealand
<i>The Future Nursing Workforce Supply Projections 2010 - 2035</i>	Economic modeling and projections using a range of scenarios to predict future workforce requirements.	Nursing Council of New Zealand
Health Workforce Information Programme (HWIP)	<ul style="list-style-type: none"> • Registered nursing FTEs in DHBs • Number of new FTE Registered Nurses employed in DHB by DHB for each quarter. • FTE nurses who have left a paid position. • FTE nurses by clinical specialty. 	Ministry of Health
Advanced Choice of Employment (ACE)	A system for new graduate nurses to identify and rank four DHBs they would like to work in and three preferred specialty areas. Data is collected on: <ul style="list-style-type: none"> • numbers of new graduate nurses who were employed through the ACE system. • data on how new graduate nurses were placed according to their preferred DHB / clinical specialty. 	Ministry of Health (Health Workforce New Zealand)
<i>National Nursing Student Survey</i>	Data and information regarding the student nursing population: <ul style="list-style-type: none"> • demographics (age, sex, ethnicity) • programme being completed and year of study • school of Nursing • mode of study (part-time or full-time) • student fees and anticipated debt • plans after study • childcare issues and responsibilities • views of nursing. 	New Zealand Nurses Organisation
<i>National Graduate Destination Survey</i>	Employment destination of graduates from approved schools of nursing	Nursing Education in the Tertiary Sector (NETS)