Building the evidence base for a National Nursing Workforce Strategy

Consultation and research

Report of Stage 1 – Volume 2

Accessible version, May 2024

Creative Commons licence

This publication is licensed under the Creative Commons Attribution 4.0 International Public License available from <https://creativecommons.org/licenses/by/4.0/legalcode> (‘Licence’). You must read and understand the Licence before using any material from this publication.

Restrictions

The Licence may not give you all the permissions necessary for your intended use. For example, other rights (such as publicity, privacy and moral rights) may limit how you use the material found in this publication.

The Licence does not cover, and there is no permission given for, use of any of the following material found in this publication:

* the Commonwealth Coat of Arms. (by way of information, the terms under which the Coat of Arms may be used can be found on the [Department of Prime Minister and Cabinet website](https://www.pmc.gov.au/honours-and-symbols/commonwealth-coat-arms) https://www.pmc.gov.au/honours-and-symbols/commonwealth-coat-arms)
* any logos and trademarks
* any photographs and images
* any signatures
* any material belonging to third parties. The third party elements must be included here or have a footnote reference throughout the document showing where they are.

Attribution

Without limiting your obligations under the Licence, the Department of Health and Aged Care requests that you attribute this publication in your work. Any reasonable form of words may be used provided that you:

* include a reference to this publication and where, practicable, the relevant page numbers
* make it clear that you have permission to use the material under the Creative Commons Attribution 4.0 International Public License
* make it clear whether or not you have changed the material used from this publication
* include a copyright notice in relation to the material used. In the case of no change to the material, the words “© Commonwealth of Australia (Department of Health and Aged Care) 20XX” may be used. In the case where the material has been changed or adapted, the words: “Based on Commonwealth of Australia (Department of Health and Aged Care) material” may be used
* do not suggest that the Department of Health and Aged Care endorses you or your use of the material.

Enquiries

Enquiries regarding any other use of this publication should be addressed to the Branch Manager, Communication Branch, Department of Health and Aged Care, GPO Box 9848, Canberra ACT 2601, or via e-mail to [copyright@health.gov.au](mailto:copyright@health.gov.au)

Contents

[1. Executive summary 5](#_Toc176866801)

[1.1 Introduction 5](#_Toc176866802)

[1.2 Building the evidence base 5](#_Toc176866803)

[1.3 Eight key themes 5](#_Toc176866804)

[2. Introduction 9](#_Toc176866805)

[2.1 Overview 9](#_Toc176866806)

[2.2 Building the evidence base 9](#_Toc176866807)

[3. The context 10](#_Toc176866808)

[3.1 What is the value of a nurse? 10](#_Toc176866809)

[3.1.1 Economic and social impact of a sustainable nursing workforce 10](#_Toc176866810)

[3.1.2 Economic impact of nursing 10](#_Toc176866811)

[3.1.3 Social impact of nursing 11](#_Toc176866812)

[3.2 An evidence-based approach to developing an NNWS 11](#_Toc176866813)

[3.2.1 The inputs 11](#_Toc176866814)

[3.2.2 Summary of the nursing workforce consultation 14](#_Toc176866815)

[3.2.3 Summary of environment scans and global literature 15](#_Toc176866816)

[3.2.4 The nurse of the future 17](#_Toc176866817)

[4. Eight key themes from the evidence 19](#_Toc176866818)

[4.1 Workforce planning 19](#_Toc176866819)

[4.1.1 Overview – workforce planning 19](#_Toc176866820)

[4.1.2 Global workforce planning 22](#_Toc176866821)

[4.1.3 Workforce planning and data 24](#_Toc176866822)

[4.1.4 Workforce needs and distribution 26](#_Toc176866823)

[4.1.5 Internationally qualified nurses 27](#_Toc176866824)

[4.1.6 Casualisation of the workforce 29](#_Toc176866825)

[4.2 Recruitment and retention 30](#_Toc176866826)

[4.2.1 Overview – recruitment and retention 30](#_Toc176866827)

[4.2.2 Community awareness and knowledge of nursing roles 31](#_Toc176866828)

[4.2.3 The pipeline 34](#_Toc176866829)

[4.2.4 Working conditions 37](#_Toc176866830)

[4.3 Education and lifelong learning 43](#_Toc176866831)

[4.3.1 Overview – education and lifelong learning 43](#_Toc176866832)

[4.3.2 The approach to nurse education and training 44](#_Toc176866833)

[4.3.3 Undergraduate education length and format 45](#_Toc176866834)

[4.3.4 Clinical placements 47](#_Toc176866835)

[4.3.5 Student experience 49](#_Toc176866836)

[4.3.6 Transition to practice for new graduates 51](#_Toc176866837)

[4.3.7 Models of postgraduate study, career progression and specialisation 53](#_Toc176866838)

[4.4 Models of care 56](#_Toc176866839)

[4.4.1 Overview – models of care 56](#_Toc176866840)

[4.4.2 Scope of practice 57](#_Toc176866841)

[4.4.3 Innovative nursing models of care 58](#_Toc176866842)

[4.4.4 Change management strategies to ensure successful implementation 60](#_Toc176866843)

[4.4.5 Multidisciplinary models of care 61](#_Toc176866844)

[4.4.6 Student employment models 62](#_Toc176866845)

[4.4.7 Innovative funding models for nurse‑led models of care 63](#_Toc176866846)

[4.5 Leaders of the future 64](#_Toc176866847)

[4.5.1 Overview – leaders of the future 64](#_Toc176866848)

[4.5.2 Leadership programs 66](#_Toc176866849)

[4.5.3 Leadership that promotes safe workplaces 68](#_Toc176866850)

[4.5.4 Mentoring and support for novice leaders 68](#_Toc176866851)

[4.5.5 Leadership and performance development frameworks for nurse leaders and staff 69](#_Toc176866852)

[4.6 Technology and data 71](#_Toc176866853)

[4.6.1 Overview – technology and data 71](#_Toc176866854)

[4.6.2 Digital frameworks and policies for a standardised approach 73](#_Toc176866855)

[4.6.3 Digital education and training 74](#_Toc176866856)

[4.6.4 Co-designing new technology adoption and implementation 75](#_Toc176866857)

[4.6.5 The future of AI in nursing care 75](#_Toc176866858)

[4.6.6 Nursing and genomics 76](#_Toc176866859)

[4.7 Academia 77](#_Toc176866860)

[4.7.1 Overview – academia 77](#_Toc176866861)

[4.7.2 Clinical-academic-researcher roles 77](#_Toc176866862)

[4.8 Diversity and inclusion 79](#_Toc176866863)

[4.8.1 Overview – diversity and inclusion 79](#_Toc176866864)

[4.8.2 First Nations people 80](#_Toc176866865)

[4.8.3 Cultural diversity training and education 82](#_Toc176866866)

[4.8.4 Inclusivity – LGBTIQ+ communities 83](#_Toc176866867)

[5. Summary 85](#_Toc176866868)

[6. References 88](#_Toc176866869)

# 1. Executive summary

## 1.1 Introduction

The nursing workforce is a vital component of Australia’s health and aged care systems, having a pivotal role in delivering quality care and meeting the diverse healthcare needs of all Australians. The health system, and the nursing workforce in particular, is facing unprecedented challenges from a range of factors including increasingly complex and chronic diseases, geographical disparity, changing patient and health system needs and advances in technology.

There have been concerted efforts to strengthen Australia’s nursing workforce over many decades through targeted policies, strategies and initiatives designed to ensure a robust, satisfied and well-distributed workforce. Advancements have been made, but there remains a significant projected national workforce shortfall. To address a range of issues influencing the workforce shortages and to build a sustainable future-focused nursing workforce, all health ministers agreed to the development of Australia’s first national nursing workforce strategy. The strategy will provide a strategic and transformative national roadmap to address challenges and guide future nursing policy, planning and investment.

## 1.2 Building the evidence base

In September 2023 the Australian Government Department of Health and Aged Care, Safer Care Victoria and the Victorian Department of Health (the project team) began a comprehensive consultation process to inform the development of a national nursing workforce strategy. Almost 6,000 stakeholders took part in the consultations across a series of virtual and in-person channels including webinars, workshops, video/written submissions and surveys. Participants included student nurses, nurses, administrators, policymakers, funders, unions, peak bodies, clinicians and educators, both nationally and internationally. First Nations people and community members including people with a recent experience of the health system and young people considering careers in nursing and their families were also consulted. Insights were sought from futurists, researchers and expert workforce planners.

To understand the challenges facing nursing workforces in jurisdictions similar to Australia, ongoing efforts to address those challenges and the impact of these efforts, 19 environment scans and 6 thematic literature reviews were undertaken. The scans and literature review included government publications, news articles, academic journals and reports from various stakeholder groups.

## 1.3 Eight key themes

The multiple data sources and inputs have been synthesised and reveal a range of contemporary ideas and initiatives from Australia and around the world. They are grouped under 8 key themes in this report, from which the project team can determine what could best apply to the Australian landscape (Figure 1). Table 1 summarises the key findings synthesised from the amassed data.

Figure 1: Overview of inputs into this report and identification of themes

[Note that the content of this figure has been converted to text for improved accessibility]

Inputs:

* NNWS Strategy Advisory Group and Strategy Steering Committee consultation
* Australian State and Territory Government consultation
* NNWS consultation e.g. workshops, interviews, submissions and a survey
* National survey of nurses
* Environment scans of 19 countries and peak organisations
* NNWS Project Team-led stakeholder engagement
* Literature review of selected themes
* Consumer community consultations
* First Nations yarning circles

Themes identified:

1. Workforce planning

2. Recruitment and retention

3. Education and lifelong learning

4. Models of care

5. Leaders of the future

6. Technology and data

7. Academia

* 8. Diversity and inclusion

[End of figure text]

In summary, stakeholders and the literature highlight there is a need to consider the following in developing a national nursing workforce strategy.

Table 1: Summary of themes to consider in a national nursing workforce strategy

| Theme | Summary |
| --- | --- |
| Workforce planning | * Broader policy contexts as well as the immediate regulatory and legislative context of nursing policy to be considered in developing a national strategy. * Better coordination of workforce planning, data sharing and modelling including regular analysis of workforce trends. * Better alignment of nursing workforce needs that address distribution issues, particularly in rural and remote areas. * Strategic recruitment and improved integration of internationally qualified nurses into the Australian nursing workforce. * Strategies that consider and/or address the casualisation of the workforce. |
| Recruitment and retention | * The profession to be elevated to improve community awareness and knowledge of nursing roles through nationally coordinated communication. * Support for non-traditional cohorts to become nurses (e.g. males, culturally diverse populations) and provide re-entry-to-practice initiatives. * Strategies to improve working conditions focused on supporting nurse wellbeing and providing culturally safe and diverse workplaces. * Increased flexibility in rostering or in offering support to fulfil shiftwork requirements including childcare. |
| Education and lifelong learning | * A forward-thinking contemporary approach to education and training that reflects the need to educate and train nurses of the future and the changing nursing environment and healthcare needs of Australians. * A more coordinated national approach to lifelong nurse education and training in a framework that would ensure quality and consistency across Australia. * More innovative models of education that consider undergraduate education length and format and a blended model approach. * A review of the structure of the clinical placement system to address key issues including a nationally consistent approach, financial support, a national preceptorship framework and guidance around the role of simulation. * More support for nursing students including providing financial relief, increased flexibility and ensuring a positive experience through mentoring, engaged leadership, consistent learning and supervision and a safe workplace culture. * A national framework for career progression across multiple pathways including a digital ‘careers passport’. * Promotion of the value of postgraduate qualifications and offering support to undertake them, encouraging more nurses into further study. * Reform of the annual continuing professional development scheme including national micro-credentialling or a similar approach. |
| Models of care | * Optimisation of scope of practice at all nursing levels including enrolled nurse, registered nurse and nurse practitioner to enhance skill mix. * Better alignment and articulation of roles, in particular between the enrolled nurse and registered nurse scopes of practice. * Increased focus on innovative nurse-led models of care including ways to maximise nurse-led models. * Change management strategies to ensure the successful implementation of new models of care. * More opportunities for a central role for nurses in multidisciplinary models of care. * Expansion of student employment models such as the Registered Undergraduate Student of Nursing (RUSON) model. * More innovative funding models to support nurse-led models of care. |
| Leaders of the future | * A focus on structured leadership development programs including mentorship programs and leadership training at every level of the nursing profession. * Support for leaders in creating safe workplaces including training and support to address bullying and racism, implement safe-work strategies and building and maintaining a positive workplace culture. * Mentoring and support for novice leaders to create a more coherent and prioritised approach to growing the next generation of nurse leaders. * Developing frameworks for leaders and staff with a greater focus on the skills for leaders to support them to promote positive work environments through effective development of staff. * Professionalising nurse leadership development approaches through a range of initiatives including secondments and rotations and exchange programs outside the profession. |
| Technology and data | * Building knowledge capacity and capability for nurses to construct, synthesise and use data across the continuum of nurse clinical work and managerial and leadership roles. * Supporting digital education and training for nurses including a culture of continuous learning and innovation to prepare current and future nurses for a technology-driven healthcare environment. * Co-designing initiatives with nurses that promote new technology adoption and implementation to ensure they are fit for purpose and align with clinical workflows. * Exploring nurse-led initiatives to develop digital and technological innovations such as AI and genomics to meet the changing healthcare needs of Australians in a cost‑effective way. * Expanding roles and responsibilities and related training to include genomic literacy, the ability to interpret genomic information and the integration of this knowledge into patient care. |
| Academia | * Better connectivity between the practice of nursing within health systems and the academic discipline of nursing. * Better intersections between academic and nursing workforces in a joint focus on evidence-based nurse-led models of care, research and evaluation. * Better clinical-academic-researcher career pathways from novice to expert including more joint academic-clinical roles. * Building and sustaining a contemporary nursing academic workforce that educates nurses for the future. |
| Diversity and inclusion | * A dedicated national First Nations people strategy to address barriers for the First Nations nursing workforce including enhanced career pathways and support, educational reforms and support, recruitment and retention, and research. * A focus on cultural diversity training and education in educational institutions and workplaces to develop national cultural competence and inclusive policies and practices to ensure nurses from culturally diverse backgrounds feel respected and valued. * Strategies and policies to support a more diverse nursing workforce (gender, age, disability, LGBTIQ+ communities, First Nations people and culturally diverse populations) including inclusion training, inclusive recruitment policies, support mechanisms, safe and inclusive environments and engagement and advocacy. |

# 2. Introduction

## 2.1 Overview

Australia’s nursing workforce is a vital component of the health and aged care system, having a pivotal role in delivering quality care and meeting the diverse healthcare needs of all Australians. The health system, and nursing workforce in particular, is facing unprecedented challenges from a range of factors including increasingly complex and chronic diseases, geographical disparity, changing patient and health system needs and advancements in technology. With nurses representing some 40% of the healthcare workforce nationally, these challenges have a significant impact on the sustainability of the health system, necessitating a comprehensive and strategic approach to address shortages, skills gaps and retention issues.

There have been concerted efforts to strengthen Australia’s nursing workforce over many decades through targeted policies, strategies and initiatives designed to ensure a robust, satisfied and well‑distributed nursing workforce. Advancements have been made, but there remains a significant projected national workforce shortfall. To address a range of issues influencing the workforce shortages and to build a sustainable future-focused nursing workforce, all Australian health ministers agreed to the development of Australia’s first National Nursing Workforce Strategy (NNWS). An NNWS will provide a strategic and transformative national roadmap to address challenges and guide future nursing policy, planning and investment.

## 2.2 Building the evidence base

In September 2023 the Australian Government Department of Health and Aged Care, Safer Care Victoria and the Victorian Department of Health (the project team) began a comprehensive consultation process to inform development of an NNWS. More than 5,000 stakeholders took part in the consultations across a series of virtual and in-person channels including webinars, workshops, video/written submissions and surveys. Participants included key sector stakeholders such as nurses, student nurses, administrators, policymakers, funders, unions, peak bodies, clinicians and educators, both nationally and internationally. Community members were consulted including people with a recent experience of the health system and young people considering careers in nursing and their families. Yarning circles were also undertaken with First Nations nurses and stakeholders, where many of the issues were consistent but amplified. Insights were sought from futurists, researchers and expert workforce planners. A full report of the consultation can be found at Building the evidence base for a National Nursing Workforce Strategy – Volume 1 (March 2024).

Concurrently, environment scans of academic and grey literature around nursing workforce issues were undertaken across 14 countries, including Australia, and 5 organisations. The environment scans included government publications, news articles, academic journals and reports from various stakeholder groups. The aim was to understand the challenges facing nursing workforces in jurisdictions similar to Australia, ongoing efforts to address those challenges, and the impact of these efforts. Completed in partnership with Federation University, a summary of the lessons most relevant to the Australian context can be found in the National Nursing Workforce Strategy: Summary of environment scans (March 2024).

# 3. The context

## 3.1 What is the value of a nurse?

### 3.1.1 Economic and social impact of a sustainable nursing workforce

Globally, the nursing profession emerges not merely as a cornerstone of accessible and quality patient care but also as a vital driver of overall economic and social prosperity.1 As noted by the World Health Organization, nurses are pivotal in responding to global health needs, contributing significantly to achieving universal health coverage and Sustainable Development Goals2 as well as broader economic, social and policy ambitions.3 Undoubtedly, nursing care contributes value that extends well beyond its impact on healthcare provision.4 For example, a recommendation from the World Health Organization’s High-Level Commission on Health Employment and Economic Growth5 notes that as a female-dominated profession, investment in nursing also maximises women’s economic participation and supports the achievement of the Sustainable Development Goal on gender and women’s rights.

Australia recognises the economic and social impact of nursing in a broad range of policy contexts. The recent release of the National health and climate strategy6 redoubles Australia’s commitment to achieving a resilient, high-quality, net-zero health system and notes the role of workforce, leadership and training in achieving this commitment. Other relevant plans include the Nurse practitioner workforce plan7 and Australia’s primary health care 10 year plan 2022–20328 in addition to a range of state-based plans and strategies outlined in detail in the Australian environment scans. Finally, a sustainable, well-educated, well-utilised and resilient nursing workforce can act as an enabler of the Australian Government’s commitment to the UN Agenda 2023 and Sustainable Development Goals, and also to the Commonwealth’s commitment to a broader economic and social wellbeing measurement agenda to build a healthy, secure, sustainable, cohesive and prosperous Australia.9

Quote:

* ‘We alert governments and policy makers about the risk of underestimating the economic impacts of nurses on economic systems of OECD countries.’ – Amiri and Solankallio-Vahteri (2020)4

### 3.1.2 Economic impact of nursing

The economic impact and value of nursing is reflected through various lenses including direct employment, economic growth, contribution to gross domestic product and improved healthcare outcomes. Nursing constitutes the largest occupational group in the health sector globally, accounting for approximately 59% of health professionals.10 Nursing roles contribute to the labour market not only through direct employment but also by enabling the participation of other sectors’ workforce including health services, education and research. The literature identifies that investing in a stable nursing workforce yields substantial economic benefits, arguing the economic value of nursing should not be calculated as a ‘cost’ but rather as a stimulus.4

The literature suggests that investment in a stable and sustainable nursing workforce leads to cost savings by reducing nurse turnover rates, minimising recruitment and training expenses and enhancing overall workforce productivity.11 The opposite effect can occur when nursing staff are subject to cost cutting policies, revealing a detrimental effect on health care as a whole, including poor patient outcomes and increased costs.4

Another study suggests that implementing safe nurse‑patient ratios and an appropriate skill mix correlates with improved patient outcomes (including decreased mortality rates, admission length, fewer adverse outcomes and reduced readmissions) and reduced costs.11 Examples such as these provide context to why nurses are consistently among the highest rated for ‘most trusted profession’ globally.12

Economic benefit is created not just in acute care but also primary care settings. In Australia, the planned removal of collaborative arrangements7 and increased access to Medicare rebates for nurse practitioners is designed to significantly increase access to care and allow nurses to work to their full potential. The potential economic impact of this approach is outlined in a 2018 KPMG study,13 which found that enabling patients to access Medicare rebates for care provided by nurse practitioners in primary and residential aged care improves access and can deliver substantial savings to the health system.

### 3.1.3 Social impact of nursing

Beyond economic considerations, the literature suggests a stable and representative nursing workforce significantly influences societal wellbeing, enhancing the quality of patient care and contributing to positive patient experiences. Nurses have a vital role in public health initiatives, disease prevention and community health promotion, fostering social cohesion, cultural diversity and social justice.

Evidence suggests a sustainable nurse workforce has a significant economic and social impact. Some literature highlights the roles that nurses and midwives play in supporting environmentally sustainable practices within healthcare settings. As first responders, they are crucial in adapting healthcare services to challenges posed by local and global health crises such as extreme weather, shifts in disease vectors, pollution, dietary changes and displaced populations.3,14

## 3.2 An evidence-based approach to developing an NNWS

### 3.2.1 The inputs

The following data sources and inputs were collected and analysed from October 2023 to February 2024 to inform the development of an NNWS:

* NNWS Strategy Advisory Group and Strategy Steering Committee consultation: These group members were consulted through regular meetings, but, in addition, 11 members – industry leaders, experts and key stakeholders – provided more detailed input through in-depth interviews.
* State and territory government consultation: In addition to consultation through Strategy Steering Committee meetings, state and territory governments provided input to the consultation program through 5 online or face-to-face workshops and 8 in-depth interviews. State and territory government stakeholders participated, including policy, strategy, workforce planning and recruitment officers.
* The NNWS Consultation Program also included the following inputs (Figure 2):
* **Place-based workshops:** 16 × 3-hour face-to-face workshops were conducted across the country, in capital and regional cities. Workshops were publicly advertised with an open invitation and were attended by stakeholders including service providers, state and territory governments, peak bodies, education providers, regulatory bodies and nurses from various specialties and practice settings.
* **Cohort-specific online webinars:** 23 × 90-minute online webinars were hosted for likeminded cohorts across Australia. The webinars included break-out rooms with up to 12 participants in each to allow for deep and meaningful discussion about the nursing workforce. The webinar sessions often ran in the evenings to ensure maximum engagement, with more than 400 attendees across all the sessions.
* **Cohort-specific in-depth interviews:** 99 in-depth interviews (between 45 and 60 minutes) were conducted with people from across the full range of relevant cohorts, and from industry bodies, health care and government. In addition to the cohorts listed above, these interviews included stakeholders from specific areas of interest.
* **Written submissions:** 56 written submissions were received via the Australian Government Department of Health and Aged Care Consultation Hub.
* **Vox pops:** 3 ‘vox pop’ video uploads were received via the Australian Government Department of Health and Aged Care Consultation Hub.
* **Adjacent sector and futurist in-depth interviews:** 15 interviews were also carried out to gain a perspective of what interventions and actions are being undertaken to create sustainable workforces elsewhere. The adjacent industries included emergency services (e.g. policing, paramedicine), futurists, defence, corrections and education.
* **Strategy project team-led stakeholder engagement:** In addition to consultation conducted by Where*to*, the project team facilitated 24 discussions and forums with key stakeholder groups including:
* 8 conference workshops with 550 attendees.
* 4 Chief Nursing and Midwifery Officer symposiums with 446 attendees.
* **Yarning circles:** In collaboration with National Aboriginal Community Controlled Health Organisations and CATSINaM, the project team conducted 3 yarning circles with 9 attendees in total.
* **Consumer community consultations:** The project team conducted 2 consumer community conversations with 24 attendees.
* **Panel-Recruited Nurses Survey:** A primarily quantitative survey was conducted with 1,485 practising nurses recruited from accredited market research panels.
* **Consultation Hub Survey:** A short primarily quantitative survey was published on the Australian Government Department of Health and Aged Care’s Consultation Hub and was completed by 830 stakeholders.

Figure 2: Overview of methodology

[Note that the content of this figure has been converted to text for improved accessibility]

A qualitative sample of 3,622 and quantitative of 2,373 totalling 5,995 people

* In-depth interviews:
* Strategy Advisory Group/Strategy Steering Committee – n = 11
* Adjacent industries – n = 15
* In-depth interviews
* Nursing or health-related – n = 99
* States and territories government workshops – n = 5, with n = 55 stakeholders
* States and territories government interviews – n = 8
* Face-to-face workshops – n = 16, with n = 560 attendees
* Online webinars – n = 23, with n = 405 attendees
* Panel-Recruited Nurses Survey – n = 1,485 responses
* Consultation Hub Online Survey – n = 830 responses
* Open written submissions – n = 56
* Consultation data points – 1,169,336
* Strategy project team-led workshops and symposiums – n = 24, with n = 1,547 attendees
* Community conversations – n = 2, with n = 24 attendees
* Yarning circles – n = 3, with n = 9 attendees

Environment scans and literature reviews

* Environment scans – countries – n = 14
* Australia
* Canada
* England
* Finland
* Ireland
* Israel
* Netherlands
* New Zealand
* Northern Ireland
* Norway
* Scotland
* Switzerland
* United States
* Wales
* Environment scans – organisations – n = 5
* Commonwealth Nurses and Midwives Federation (CNMF)
* International Council of Nurses (ICN)
* International Confederation of Midwives (ICM)
* International Labour Organization (ILO)
* World Health Organization (WHO)

[End of figure text]

A separate report has been published identifying the key findings from these consultations and research (Volume 1).

In addition to the consultation program, a series of environment scans and literature reviews were undertaken including:

* environment scans: 19 scans of selected countries and organisations including grey and academic literature to explore workforce strategies, policies and initiatives
* literature review: academic literature review of selected themes.

The key findings from this program of work are documented in the environment scans summary.

### 3.2.2 Summary of the nursing workforce consultation

The Volume 1 report identified a range of key factors affecting a sustainable workforce, outlined in Figure 3. These factors are presented from the perspective of 3 relevant lenses: systemic, nurse workforce and the community. This summary highlights the key areas that stakeholders perceive to be currently performing well and contributing to a sustainable workforce, those that stakeholders believe are performing less well and those they believe are not currently in place or operating in a way that would contribute effectively to creating a sustainable nursing workforce in Australia.

Figure 3: Summary of key factors affecting nurse recruitment and retention

[Note that the content of this figure has been converted to a table for improved accessibility]

| System lens | Nurse workforce lens | Community lens |
| --- | --- | --- |
| * Performing well | * Proud of the reputation of nurses * Interesting and varied career * Innovative practices in places across Australia * Formalising of assistant in nursing and nurse practitioner roles * Blended models of education and training (e.g. RUSON) * Empowered to perform well * Support and supervision from other nurses and health professionals * Collaboration with multidisciplinary teams * Well-equipped to do their job * More opportunities for career progression than in the past * Good job security and diversity | * Highly valued role * Quality of care in the health system |
| * Performing less well | * Sporadic use of data * Inconsistent practical application of technology in practice * Diverse workforce (CALD, LGBTIQ+) | * Burnout * Safety/pay concerns |
| Significantly affecting recruitment and retention   * Unsafe workloads * Inconsistent transition to practice * Nationally  inconsistent  training standards * Healthcare funding  mix between state and Commonwealth | * Inconsistent workplace safety * Inconsistent workplace culture and leadership * Dominance of acute care nurse persona * Limited opportunities for nurse-led innovations due to funding and scope of practice barriers * Lack of definition of expected competencies and responsibilities (role scope/skills mix) * Inconsistent quality of education and training * Inconsistent transition to practice to prepare graduates to the optimal standard * Limited pathways into nursing to maximise interest * Poor student experience * Insufficient focus on meeting needs of nursing in rural and remote communities * Lack of flexibility across the profession – leading to interest in more attractive options * Absence of standardised international nurse qualifications * Significant barriers to movement and progression (qualifications and competencies) * Extreme workload and burnout including administrative tsunami | * Knowledge of breadth of nursing options |

### 3.2.3 Summary of environment scans and global literature

To understand the challenges facing nursing workforces in jurisdictions similar to Australia, ongoing efforts to address those challenges, and the impact of these efforts, 19 environment scans and 6 thematic literature reviews were undertaken. The scans and literature reviewed included government publications, news articles, academic journals and reports from various stakeholder groups.

#### Countries

Fourteen countries (including Australia) were included in the scans – all are members of the Organisation for Economic Co-operation and Development, are parliamentary democracies and are considered economically prosperous, with populations experiencing relatively high standards of living. With the exception of the United States, all these countries have some form of universal health care. The countries included are:

* Australia
* Canada
* England
* Finland
* Ireland
* Israel
* Netherlands
* New Zealand
* Northern Ireland
* Norway
* Scotland
* Switzerland
* United States
* Wales.

#### Organisations

The scans also included the available information published by or about the work of 5 organisations. These organisations were chosen because they have interests in the nursing workforce globally and produce valuable advocacy and research work. Much of this work is relevant to the evidence base needed to inform an NNWS. The organisations included were:

* Commonwealth Nurses and Midwives Federation
* International Council of Nurses (ICN)
* International Confederation of Midwives
* International Labour Organization
* World Health Organization.

#### Thematic literature reviews

Six thematic literature reviews were undertaken as a deep dive into key areas of interest for an NNWS.

#### Findings

The findings of the environment scans and literature reviews are integrated into the National Nursing Workforce Strategy: Summary of environment scans (March 2024) report; however, broadly there were a number of key insights:

* **Nursing workforce sustainability** features strongly in the international literature, particularly in the context of an over-reliance on the immigration of health professionals, in some cases despite the host country producing a high number of graduates itself. This situation points to a misalignment between the output of educational institutions and the needs of the health system, as well as potential barriers to entry or retention within the profession.
* Governing bodies and academic institutions report that **challenging workplace conditions** contribute substantially to attrition and subsequent workforce shortages. Further, workforce demographics including an ageing workforce, gender imbalances and a lack of cultural diversity that reflects the population it serves add considerably to the workforce planning challenges of the nursing profession. They note that these demographic challenges are linked to broader issues of workplace culture including the need for a more inclusive, supportive and flexible working environment that can adapt to the diverse needs of the workforce. Importantly, the literature also acknowledges the ongoing and long-term damaging impact of the COVID-19 pandemic on nurses and health systems.14
* The literature pays particular attention to the impact of **technological advancements and digital transformation** on healthcare delivery and workforce requirements and its role in supporting the resourcing of the future nursing workforce.14 Equally, experts noted that as health systems evolve, there is a pressing need to ensure the nursing workforce is equipped with the necessary skills and training to leverage these technologies effectively, enhancing patient care while also opening new avenues for nurse professional development and specialisation.
* Finally, the environment scans highlight that **strategic planning and integration of workforce planning** with broader health system reforms is a critical challenge. Effective workforce planning requires a coordinated approach that aligns with the overall goals of health systems such as improving access to care, enhancing the quality of services and ensuring financial sustainability. This involves not only addressing immediate staffing needs but also anticipating future changes in healthcare demand and service delivery models and the potential impact of external factors such as political or economic shifts.
* All countries in the scans agree that addressing these challenges requires a **multifaceted strategy** that encompasses targeted recruitment and retention efforts, investment in education and training, support for workforce diversity and inclusion, adaptation to technological advancements and integrated workforce planning. But they also recognise the difficulties in successfully developing and implementing strategies and initiatives that deliver optimal outcomes in these key areas.

Quote:

* ‘Demand for nurses means demands on nurses … If policy makers give proper attention to the impact of their decisions on individual nurses, then retention and future supply will improve. Focus only at the system level, ignore the impact on nurses, and nurse retention will worsen.’– International Centre on Nurse Migration (2022)14

### 3.2.4 The nurse of the future

In considering relevant inputs for this report, we reflect on what the nursing workforce of the future will look like. The consultation with futurists and other stakeholders presents a workforce that will differ from the current application of nursing practice. While no‑one can accurately predict the future, most experts consulted agree that nursing practice in the future will:

* **Be guided by and use data to respond to clinical, operational and strategic issues.** While data has always been available, the ability to synthesise vast amounts of inputs and, based on these, guide nursing practice will be a key skill set in the future.
* **Enable better use of data through rapid technological advancement.** As outlined in the global environment scans, it is difficult to predict the multitude of ways digital transformation will affect the practice of nursing in the future. However, the application of artificial intelligence (AI) in prevention, diagnosis, monitoring, communication and overall healthcare delivery is expected to be profound. The role of nursing informatics, already a distinct specialty, will become more common and more integrated.
* **Build further on the trusted role they already occupy.** Although it may be possible to automate caregiving, it is not possible to automate caring. It is likely that the nursing profession will continue to hold the highly human, personalised and trusted role in a way that other health professionals cannot. Indeed, some experts forecast a lowering of trust in general practitioners (GPs) and that ‘Doctor Google’ is becoming an increasingly trusted, viable and mainstream alternative. In the consultations, stakeholders suggested that bringing data and technology use to the fore will further strengthen the roles of nurses as the keepers of knowledge and owners of the patient relationship.
* **Reflect greater scope of practice in nursing.** Many experts consider there will be a stratification of roles (e.g. assisted by AI), and nursing practice will continue to broaden. Interprofessional collaboration will also continue to increase, where nurses will act as full partners with other health professionals. Collaborative teamwork will enhance patient outcomes and system efficiency.
* **Focus on holistic care.** A holistic approach, considering physical, emotional and social aspects, will guide nursing practice. Nurses will address patients’ overall wellbeing, especially preventative, community-based care and rehabilitation (given an increase in elective surgery as the population ages). Acute care settings will diminish comparatively in importance.

These examples are certainly not exhaustive, but they provide further input for consideration to an NNWS and the development of the key themes we outline below.

# 4. Eight key themes from the evidence

The multiple data sources and inputs have been synthesised and reveal a range of contemporary ideas and initiatives from Australia and around the world for consideration and inclusion into an NNWS. They are grouped under 8 key themes in this report:

Figure 4: Overview of inputs into this report and identification of themes

[Note that the content of this figure has been converted to text for improved accessibility]

Inputs:

* NNWS Strategy Advisory Group and Strategy Steering Committee consultation
* Australian State and Territory Government consultation
* NNWS consultation e.g. workshops, interviews, submissions and a survey
* National survey of nurses
* Environment scans of 19 countries and peak organisations
* NNWS Project Team-led stakeholder engagement
* Literature review of selected themes
* Consumer community consultations
* First Nations yarning circles

Themes identified:

1. Workforce planning

2. Recruitment and retention

3. Education and lifelong learning

4. Models of care

5. Leaders of the future

6. Technology and data

7. Academia

* 8. Diversity and inclusion

[End of figure text]

All ideas generated during the consultation and sourced from international and peak organisations are included in the appendices of this report; however, we highlight in the body of the report those that appear to have the greatest level of applicability to the Australian context (Figure 4). Importantly, they are a sample of the extensive ideas and initiatives uncovered throughout the data synthesis. We note that considerations of priority, need and budget are critical inputs yet to be determined.

A summary of relevant themes for consideration precedes the analysis of the 8 key themes over the following pages.

## 4.1 Workforce planning

### 4.1.1 Overview – workforce planning

The consultation, environment scans and review of the literature highlight that integrating workforce planning with broader health system reforms is a critical challenge for Australia, as it is for most countries. The literature explains that effective workforce planning requires an evidence-based and coordinated approach that aligns with the overall goals of health systems such as improving access to care, enhancing the quality of services and ensuring financial sustainability. This involves not only addressing immediate staffing needs but also anticipating future changes in healthcare demand, service delivery models and the potential impact of external factors such as political or economic shifts.

Stakeholders identified a range of workforce issues across both the health and education systems and a need to address labour market dynamics, including issues with staff retention. They highlight the pressing need to address:

* the poor data environment with a focus on improved data sharing, modelling and planning
* issues of workforce maldistribution of roles, levels and geography including across rural and remote workforce
* workforce composition including the impacts of migration and the internationally qualified nurse (IQN) workforce
* the challenges of casualisation of the nursing workforce.

#### The policy context

The literature shows that the social and economic value of a sustainable nursing workforce also places nursing policy at the epicentre of a wide variety of policy areas across health but also across other areas including social, education, economic and employment policy domains. Related policy areas include:

* nursing and health workforce planning:
* extensive nurse workforce planning and policy development underway at the state and territory level
* broader related Commonwealth policy development and strategies including scope of practice reviews and health workforce strategies related to IQNs and other areas
* related overarching policy areas including disability, aged care, mental health, climate change and education
* specific health area strategies such as mental health and chronic disease strategies
* states and territories’ workforce strategies in health‑related areas including housing, cost of living and childcare
* digital, technology and data strategies
* First Nations strategies
* rural and remote area workforce development strategies
* health policy and climate change.

Stakeholders agree that an NNWS should consider these broader policy contexts as well as the immediate regulatory and legislative context of nursing policy (Figure 5).

Figure 5: Broader policy context for a national nursing workforce strategy

[Note that the content of this figure has been converted to a table for improved accessibility]

National nursing workforce policy context

| Policy area | Policies, strategies and plans |
| --- | --- |
| Workforce planning | Advancing health service delivery through workforce: A strategy for Queensland 2017–2026  QLD Early Career Nursing and Midwifery Retention Strategy  ACT Health Workforce Strategy 2023–2032  TAS Health Workforce 2040 – Nursing and Midwifery  WA Nursing and Midwifery Digital Health Strategy  NT Nursing and Midwifery Plan 2023–2028  Nurse Practitioner Workforce Plan  National Health Reform Agreement  TAS Health Workforce Strategy 2040  Victorian health workforce strategy  Joint Standing Committee on Migration: Migration, Pathway to Nation Building  WA Nurse Practitioner Workforce Innovation Strategy 2023–2028  10 Year National Action Plan for the Health and Wellbeing of LGBTQIA+ people (in development)  National Health and Climate Strategy  National Medical Workforce Strategy 2021–2031 |
| System review | MBS Review Advisory Committee  Kruk Review – Australia’s regulatory settings relating to overseas health practitioners  Migration Strategy  Care and Support Economy (PMC)  Intergenerational Report 2023  Unleashing the Potential of our Health Workforce – Scope of Practice Review  Strengthening Medicare Taskforce |
| Education and training | National Skills Agreement  Universities Accord  Educating the Nurse of the Future |
| Specific health areas | National Preventative Health Strategy (2021–2030)  National Roadmap for Improving the Health of People with Intellectual Disability  National Action Plan for the health of children and young people 2020–2030  Australian Cancer Plan  National Dementia Action Plan 2023–2033  National Palliative Care Strategy |
| Defence | ADF Health Strategy: Policy |
| Rural, remote, regional | National Rural and Remote Nursing Generalist Framework 2023–2027  SA Rural Health Workforce Strategy  SA Rural Nursing and Midwifery Workforce Plan 2021–26  Rural Nurse Practitioners – A framework for service and training in NSW Health  Stronger Rural Health Strategy  Ngayubah Gadan Consensus Statement – Rural and Remote Multidisciplinary Health Teams  Innovative Models of Care Program |
| Digital and tech | The National Digital Health Blueprint and Action Plan 2023–2033  National Nursing and Midwifery Digital Health Capability Framework |
| First Nations | National Agreement on Closing the Gap  National Aboriginal and Torres Strait Islander Workforce Strategic Framework and Implementation Plan  National Aboriginal and Torres Strait Islander Health Plan (2021–2031)  NSW Aboriginal Nursing and Midwifery Strategy |
| Climate change | National Climate and Health Strategy |
| Aged care | Royal Commission into Aged Care  Expansion of the National Aged Care Mandatory Quality Indicator Program (QI Program)  Draft Aged Care Act consultation |
| Mental health | SA Mental Health Nursing Workforce Strategy 2020–2030  National Mental Health and Suicide Prevention Plan  National Mental Health Workforce Strategy |
| Disability | National Disability Insurance Scheme (NDIS) Review |

### 4.1.2 Global workforce planning

Alongside the Australian context, the environment scans identified a wide range of international examples of workforce planning. Some examples are described below.

* **Scotland:** Scotland has reported an increase in the nursing and midwifery workforce by 14.5% since 2006.15 Scotland’s approach to safe staffing includes offering free university tuition and bursaries for nursing students, reflecting its commitment to addressing workforce challenges. The Health and social care national workforce strategy, published by the Scottish Government, lays out a comprehensive framework aimed at creating a sustainable and skilled workforce. This vision encompasses attractive career options where all individuals are esteemed and valued for their contributions. The strategy also outlines a substantial annual investment of more than £230 million in training costs for undergraduate nursing and midwifery programs, with a steadfast commitment to maintaining the student bursary scheme.15
* **Finland:** Finland’s approach to workforce planning, particularly in addressing workforce shortages and safe staffing levels, is notable. One such initiative is task shifting between physicians and registered nurses in response to a critical shortage of doctors. This transformation of the healthcare team has been positively evaluated by employers in helping to achieve beneficial healthcare outcomes for patients in hospitals with variable physician numbers.16
* **Ireland:** Ireland’s strategic initiatives, such as the implementation of Sláintecare, a 10-year strategy aimed at shifting care from acute to community settings, demonstrate a comprehensive approach to workforce planning. The Sláintecare reform is aimed at transforming healthcare delivery in Ireland, designed to alleviate the strain on the acute sector. It specifically tackles the anticipated rise in population and the growing prevalence of comorbidities. Given these shifts in healthcare delivery and general population dynamics, the creation of a robust workforce plan is essential to guarantee accessible services for the future.17
* **Northern Ireland:** Northern Ireland developed a long-term healthcare workforce strategy in 2018, Health and social care workforce strategy 2026: delivering for our people,18 which includes boosting locally trained and international nursing staff numbers. This strategy, coupled with the establishment of an international nurse recruitment process and improvements in data collection, showcases Northern Ireland’s commitment to addressing workforce deficits and safe staffing levels.
* **Israel:** Israel has also taken significant steps in workforce planning by creating a 5-year plan to increase the rate of nurses from 6.5 nurses to 7 per thousand people by 2027.19,20 This plan includes recruiting additional nurses into the health system, conducting intensive care training for existing nurses and enlisting nursing students for employment, demonstrating a multifaceted approach to addressing workforce deficits.
* **Canada:** Canada has made progress in workforce planning by appointing a Chief Nursing Officer to provide a pan-Canadian perspective on nursing issues and creating a national nurse database.21 These initiatives, along with the utilisation of technology for efficiency, indicate Canada’s efforts to improve workforce planning and policy.
* **England:** In England, the National Health Service (NHS) has developed several strategies including the NHS long term workforce plan.22 With the backing of £2.4 billion in government funding it is an attempt to recruit an extra 170,000 to 190,000 nurses into NHS England by 2028–29.23 The plan is grounded by the following priorities:
* Train: Increase health professional education and training to record levels and introduce new roles,24 including nursing associates, to meet changing healthcare needs.
* Retain: Greater retention of existing staff in the NHS by better supporting people throughout their careers, increasing flexibilities and improving the culture and leadership across organisations.
* Reform: Improve productivity through broader teams with flexible skills, amending education and supporting staff to take advantage of new technology that enables safe and efficient care.22

### 4.1.3 Workforce planning and data

Stakeholders identified the need for a more coordinated national approach to nurse workforce planning, noting that planning is currently hindered by the lack of a consistent approach – states and territories manage planning differently within their jurisdictions. The absence of a minimum shared dataset to underpin workforce planning and policy development compounds the problem.

Quote:

* ‘The universities, the Commonwealth and states aren’t even at the same table together about health care let alone nursing workforce … so who owns the performance of the system when it comes to nursing workforce supply, quality and sustainability?’ – Executive Director Workforce Strategy in‑depth interview

#### National workforce data

Stakeholders noted that, notwithstanding the existence of the National Health Workforce Dataset, the lack of a consistent, timely, single view and accessible dataset that enables visibility across the continuum of the nursing workforce affects the ability to effectively plan a workforce that meets the needs of the health system. The Australian College of Nursing (ACN) white paper, A national minimum dataset for nursing workforce planning and decision making,25 notes the technical difficulty involved:

Quote:

* ‘Workforce planning in health care is technically difficult with the ever increasing and evolving complexity of health care systems, models of care and patient demographics. Nursing workforce planning is complex due to the many potential variables and measures, such as patient acuity and complexity, diverse nursing activities, and staff turnover that can all compound the development and currency of a workforce dataset.’ – Australian College of Nursing

The paper notes that nurse workforce data is currently collected based on jurisdiction, service or sector and that this limitation affects the ability to use the data to plan for the appropriate skill mix, monitor the workforce pipeline and deploy the workforce effectively. Also, one of the challenges in developing and maintaining an Australian nursing dataset is the variation in nomenclature across jurisdictions. The consultation calls for a more nationally coordinated approach to nurse workforce planning and data collection and regular analysis and publication of workforce trends, including nurse distribution, skill mix, and retirement projections.

Quote:

* ‘Until now the value of a nursing workforce dataset to health services has gone largely unnoticed. In Australia, there is currently a lack of timely and accurate access to datasets relating to the nursing workforce across all levels of the health care system. In addition, there is a lack of transparency around workforce datasets employed by workforce planners on a national and international level. Nurse staffing is inherently linked to patient, nurse and health system outcomes. The availability of a national minimum dataset would benefit health services at the local, district, state and national levels and undisputedly translate into improved patient care, and enhanced outcomes for both patients and nurses.’ – Australian College of Nursing25

The Australian Nursing and Midwifery Federation (ANMF) notes limitations in the available data presented in its ANMF graduate data set – nurses and midwives, 202326 document in terms of providing a complete data picture of graduate nurse and midwife employment. This is primarily due to the ANMF’s inability to gain access to some portions of relevant data.

Quote:

* ‘The ANMF has some concerns about of the accuracy of data available and presented within the document in terms of providing a complete data set related to graduate nurse and midwife employment. This is primarily due to the ANMF’s inability to gain access to some portions of relevant data. These concerns are identified as limitations and notes throughout the document.’ – Australian Nursing and Midwifery Federation26

#### National coordination of data

Health Workforce Australia was a national agency introduced in 2009 to review the contemporary and arising challenges of the health workforce in Australia27 and historically presented reports on health workforce data.28 Despite the promise of this agency producing ongoing nurse workforce data, it was closed in 2014 after a change in government.29 The most recent publicly available report for nursing through the Nursing and Midwifery Board of Australia (NMBA) was in 2022, providing only a 3-page summary.30 In light of this, there is a clear need for a renewed approach to rigorous workforce data collection, analysis and modelling in order to meet the gap left after the closure of the Health Workforce Australia initiative which provided workforce planning projections.31

To partially remedy these concerns, the Australian Government Department of Health and Aged Care will be providing updated supply and demand modelling as part of stage 1 of an NNWS in mid–2024.

Examples of initiatives from other jurisdictions and organisations seeking to address data challenges through more integrated systems include the following:

* **Northern Ireland:** The Health and Social Care Workforce Census provides detailed statistical data on staff numbers, demographics and turnover rates, informing workforce planning and policy formulation.32
* **Ireland:** Safe staffing frameworks and service models, such as the nurse hours per patient per day model, are being implemented to ensure adequate staffing levels based on patient needs, with ongoing evaluation to monitor success.33
* **Scotland:** Workforce planning data from the NHS and initiatives to address nursing shortages and disparities across services highlight the importance of data in identifying and addressing workforce challenges.34
* **England:** In 2022 NHS England implemented the Data Saves Lives initiative, part of its transformation directorate.35 This included procuring a federated data platform. The platform will serve as a way of establishing a more interconnected and streamlined system, ultimately resulting in improved services for patients and service users. Some of the areas in which it will assist nursing and healthcare teams are:
* connecting teams and organisations that need to work together to provide patient care
* helping local teams better prioritise waiting lists, manage theatre capacity and identify staffing needs
* helping local health and care teams to understand the health of their local populations and what services might best support them
* making it easier to see where critical supplies are, determine how much is available and spot and prevent potential shortages
* helping local innovations be scaled-up and shared via the ‘marketplace’.
* **World Health Organization:** The World Health Organization outlines the National Health Workforce Accounts36 and the International Labour Organization Global Care Policy Portal37 as examples of initiatives aimed at providing comprehensive data to inform policy and planning.38,39 These systems aim to enhance the availability, quality and utilisation of data related to the health workforce of countries, thereby advancing universal health care coverage, the United Nations Sustainable Development Goals and other national and global health objectives. Australia has worked closely with the organisation to provide data for both initiatives.

### 4.1.4 Workforce needs and distribution

#### Rural and remote nursing

Stakeholders and the Australian environment scans highlighted the challenge of attracting nurses to work in Australia’s rural and remote communities.40 There are a number of strategies in place that aim to address the geographical and skills maldistribution of the nursing workforce in Australia including incentives for relocation, support for living costs and specialised programs to attract and retain nurses in rural and remote areas. However, stakeholders agree these incentives and programs provide only varying levels of success and as noted in data provided by the NMBA and published by the ANMF the issues persist (Table 2).41

Stakeholders reported specific challenges for nursing workforces in rural and remote contexts including the following:

* **Higher levels of patient acuity:** The challenges of geographical isolation, high levels of patient acuity, ageing populations and First Nations communities that experience more social disadvantage all drive higher prevalence of health risk factors, which are exacerbated due to reduced access to services.
* **Recruitment and retention of the workforce:** Workforce challenges in rural and regional contexts are mirrored more generally across the nurse workforce but are heightened in rural and regional contexts. These issues include high levels of staff shortages, high workloads, long hours, poor workplace safety and a lack of suitable accommodation in many locations. These result in poor retention rates, creating relocation barriers and an over-reliance on nursing agency staffing.

Stakeholders identified several opportunities for rural and remote workforce sustainability:

* **a dedicated rural and remote strategy:** a dedicated strategy focused on workforce issues affecting rural and remote Australia as mentioned in the National rural and remote nursing generalist framework 2023–202742
* **place-based ‘grow your own’ approaches:** workforce capacity building at the local level (‘grow your own’) including rotational workforce strategies (non‑agency), better incentives and relocation support akin to the National Rural GP program43
* **financial and funding incentives:** increased funding and financial and relocation incentives – for example:
* Health Workforce Scholarship Program44
* HELP for Rural Doctors and Nurse Practitioners45
* NSW Rural Health Workforce Incentive Scheme46
* Regional Mental Health Workforce Incentives program47
* The Tuition Support Program for Nurses (TSPN) (Ontario)48
* **retention payments:** a retention payment system for nurses working in remote areas
* **housing:** an audit of housing options to ensure quality and suitability
* **rural and remote student strategy:** support for students in rural and remote locations to study and work as well as incentives to draw potential staff from outside these areas and diminish the need for agency nursing – for example:
* the Rural Health Multidisciplinary Training Program (Submission)
* Queensland Health’s Remote Area Nursing Incentive Package (Submission).

Table 2: Nurses registered and employed in Australia by Modified Monash Model

| Modified Monash Model | Headcount | Total FTE | Average age | Average total hours |
| --- | --- | --- | --- | --- |
| 1 – Metropolitan | 271,344 | 247,033 | 42.0 | 34.6 |
| 2 – Regional | 38,627 | 33,310 | 42.9 | 34.7 |
| 3 – Large rural towns | 28,707 | 26,102 | 44.4 | 34.6 |
| 4 – Medium rural towns | 13,210 | 11,779 | 46.0 | 33.9 |
| 5 – Small rural towns | 14,126 | 12,626 | 47.5 | 34.0 |
| 6 – Remote communities | 3,990 | 4,001 | 43.5 | 38.1 |
| 7 – Very remote communities | 2,534 | 2,812 | 45.5 | 42.2 |
| Total | 372,759 | 339,883 | 42.6 | 34.6 |

### 4.1.5 Internationally qualified nurses

The environment scans and literature explain that many countries are developing and implementing strategies to secure IQNs to address workforce shortages. The literature and stakeholders highlighted the challenges in using IQNs as a primary solution to achieve a sustainable nursing workforce, with many describing an over-reliance on IQNs, which creates additional workforce issues. The NMBA 2022–23 annual summary reports that Australia has 480,070 registered nurses (RNs),49 of which 30% are migrant nurses who have moved to Australia.

The final report of the Independent Review of Australia’s Regulatory Settings Relating to Overseas Health Practitioners, led by Robyn Kruk AO, recommended hiring more internationally qualified health practitioners in the short to medium term, noting the need for health practitioners to continue to meet Australia’s stringent safety standards.50 However, the ANMF has raised concerns that health departments are not undertaking comprehensive workforce and social impact analyses before recruiting from low-income countries like those in the Pacific.51

Ethical recruitment of IQNs as suggested by the Global strategy on human resources for health: Workforce 20301 promotes adherence to the World Health Organization’s Global Code of Practice on the International Recruitment of Health Personnel. The code of practice encourages that ‘Member States should discourage active recruitment of health personnel from developing countries facing critical shortages of health workers’ and where possible, form international agreements to safeguard optimal nurse staffing levels globally.52

The literature and stakeholders noted that the key issues related to recruiting and integrating IQNs into the Australian nursing workforce include the following:

* **Inconsistent global standards:** There are significant discrepancies in internationally recognised education standards, accreditation of programs of nursing, requirements for licensing and policies on misconduct and re-certification.53 The ANMF highlights that many migrant aged care workers hold nursing qualifications that are unrecognised in Australia.51
* **Poor pathways and recognition of IQNs:** While some health services and educational institutions have made strides in acknowledging the skills of IQNs, there is still a lack of consistency, which can lead to frustration and a sense of devaluation among IQNs, who may feel that their prior experience is not fully appreciated. In our consultations, many IQNs reported feeling unprepared and unsupported in their new roles.
* **Poor inclusion and racism:** There is a need for greater support of IQNs in their new country, with reports of racism and a lack of inclusiveness in the workplace. Prejudicial racism towards IQNs, cumbersome pre-migration processes,54 suboptimal organisational support55 and complications in adjusting to a new culture with communication barriers56 were all identified as challenges facing nurses migrating to Australia. During the consultation session with IQNs, participants discussed the need to better integrate IQNs in their first position in Australia to make the transition smoother. Similar challenges are observed in countries such as Norway.57

Although most countries, including Australia, highlight a preference for a ‘grow your own’ strategy and plan to invest domestically, many have strategies for better integrating IQNs into their workforces. The environment scans reveal a number of policies, programs and strategies that can inform more effective approaches to integrating IQNs into the Australian nursing workforce:

* **Pre-migration bridging programs:** the introduction of pre-migration bridging programs,58 organisational measures (e.g. cultural support programs, professional development opportunities and peer support programs)59 and embedding cultural safety practices into health care.60
* **Dedicated health immigration services:** launched in 2022 to take a streamlined and ethical approach to attracting and retaining international health professionals in New Zealand.61
* **Offshore recruitment support:** Canada established offshore nurse recruitment desks and offers funding to cover licensing for international nurses and living expenses.62
* **Special occupation lists:** the special occupation list (‘Green List’) for IQNs offering accelerated pathways to permanent residency in New Zealand.63
* **Online support and bilateral agreements:** Israel’s funded online ‘refresher’ course and personal support and direct bilateral agreements with source nations.64
* **UK’s Refugee Nurse Support Pilot Programme:** supports refugees who are qualified as nurses in their home country to resume their nursing careers in the NHS England.65
* **The Bologna Process:** strives for a cohesive European higher education landscape, fostering collaboration and ensuring qualifications are recognised across borders. Its primary goal is to create the European Higher Education Area, allowing students and graduates (including nursing) to move freely between countries while maintaining the recognition of their prior qualifications. The outcome of the Bologna declaration has generated a consensus among European countries on nursing policies to achieve better and higher qualification of the nursing workforce.66 It is described as the ‘quiet revolution in nursing higher education.’67

Stakeholders identified the need for Australia to consider the opportunities of strategic recruitment of IQNs to fill short- to medium-term workforce shortages while a domestic strategy is developed and implemented. They also noted the importance of improving the integration and work experience of IQNs in Australia including the following:

* **A more timely, transparent and flexible registration process:** IQNs consulted noted the need for a more expedited approach to registration. They noted the very specific and limiting nature of endorsement as a barrier to practising in Australia. Further, there is a call for clearer processes and more transparency in how Ahpra assesses qualifications and experience, with a greater recognition of prior experience. The Objective Structured Clinical Exam only being held in person in Adelaide is also a barrier.
* **Transition support:** IQNs consulted noted comprehensive support for IQNs transitioning into the Australian health system is required including workplace orientation and assistance with adapting to a new country’s lifestyle, culture and health system nuances. They noted that support should ensure IQNs feel welcome, ensuring they are not just professionally but also personally settled in their community.
* **Bridging courses and internships:** IQNs consulted suggested there is an important role for bridging courses and internships specifically designed for IQNs to adjust to the Australian health system’s standards and expectations. This could be similar to a new graduate program to provide more hands-on, practical experience and transition support.
* **Reducing visa and work limitations:** IQNs considered there is a need for relaxation on visa and work limitations to alleviate Australia’s nursing workforce shortages. Limited visa duration discourages long-term commitment from IQNs because they are uncertain about their future employment opportunities in Australia. They noted that this issue also affects their personal sense of stability and decision making regarding their professional growth in the country.
* **Migration Review and Skill Occupation List:** IQNs consulted consider the migration review and its impact on the skill occupation list, particularly for nursing and personal care work, as an area in need of improvement. Changes in migration policies could potentially address some of the limitations currently placed on IQNs, such as short-term visas, and recognise the critical skill shortages in areas like aged care.

Quotes:

* ‘Let’s celebrate diversity, and not tolerate it.’ – IQN webinar participant
* ‘I think there needs to be support for transition. Especially at your first workplace where you just came from a different country. You don’t know anyone. Not just transition at work, this also includes the whole readjustment to a new lifestyle, the whole what’s AFL?’ – IQN webinar participant
* ‘In terms of a bridging course, and maybe part of the bridging course actually leads into an internship of some sort. Similar to a new graduate program, but specifically designed for IQNs to then do a bit more of that transition support.’ ***–*** IQN webinar participant

### 4.1.6 Casualisation of the workforce

Stakeholders, environment scans and literature reviews suggested that, globally, the lack of flexibility is driving many nurses to leave traditional rostered roles and seek greater flexibility and better conditions outside formal full-time settings. Stakeholders advised that, historically, nonstandard forms of work have been undertaken by less skilled and less committed workers, but higher pay and greater flexibility is resulting in highly skilled and committed workers increasingly attracted to casual and flexible work. Stakeholders reported that nurses know they are in high demand and are taking the opportunity to seek new models of flexible work including agency shifts, part-time work and self-employment platforms such as Mable, and are increasingly building careers to suit their needs across a variety of health, aged care and disability contexts. They noted that nurses are demanding that their needs and circumstances are considered when designing rosters, rather than the more rigid traditional and fixed approach to rostering. The literature indicates that nurses are ‘voting with their feet’ and leaving for roles that offer more flexible options.

There is, however, limited data availablethat outlines the rates of casualisation of Australia’s nursing workforce. Stakeholders suggested that remedies noted earlier to address the overall limitations of nursing workforce data could also support better data on casualisation with a redefined process at the point of registration renewal. Some insight is provided by a scoping review of 35 separate articles that explored nurses working in dual practice roles (part-time, casual work or appointments additional to their full-time employment).68 The review identified that 80% of nurses in the UK were engaged with nurse ‘banks’ (agency nursing) or had a nursing role alternate to their present role. Supplementing income, dissatisfaction with their principal place of employment and flexibility with work hours were the most common factors influencing nurses’ decisions to engage in dual work practices. Decisions of the employer to engage nurses as casual employees were centred on the ability to have more flexibility when managing their staffing.68

Stakeholders agree there is a need to consider the impact of casualisation of the nursing workforce in workforce planning.

In summary, stakeholders said there is a need for:

* broader policy contexts as well as the immediate regulatory and legislative context of nursing policy to be considered in developing a national strategy
* better coordination of workforce planning, data sharing and modelling including regular analysis of workforce trends
* better alignment of nursing workforce needs that address distribution issues, particularly in rural and remote areas
* strategic recruitment and improved integration of IQNs into the Australian nursing workforce
* strategies that consider and/or address the casualisation of the workforce.

## 4.2 Recruitment and retention

### 4.2.1 Overview – recruitment and retention

Recruitment and retention of nurses is a broad theme encompassing a range of different challenges and opportunities. Stakeholders agree that attracting community members to the workforce by ‘filling the pipeline’ is critical to the future of Australia’s nursing workforce. In 2022–23 almost a quarter (23.9%) of Australia’s nurses were aged over 55 years.49 Stakeholders noted that as they head towards retirement, they will depart with significant experience and knowledge, leaving a substantial gap in Australia’s health system and making the recruitment of new entrants to the workforce increasingly important.

The consultation, environment scans and literature support the need for a radical shift in nursing value, respect and role to address the recruitment challenges and attract more people into the profession.

However, all data inputs show that retention emerges as a critical concern, overshadowing recruitment in terms of immediate priority. Stakeholders refer to the high attrition rates in the nursing profession, particularly among mid-career nurses, which they attribute to burnout, poor work-life balance and a lack of support for professional development. While there is limited data that outlines attrition rates and reasons for departure, Mannix in 2021 noted that ‘concerningly, 25-35% of Australian nurses have reported intentions to leave the profession. This is larger than the 18% average workforce turnover rate in Australia’.69 Other 2021 data from McKinsey and Company also notes that one fifth of Australia’s RNs say they intend to leave their current role in the next 12 months. Of these, 41% said they were planning to move countries or leave direct-care roles entirely.70

Stakeholders explained that the departure of experienced nurses not only depletes the workforce of valuable expertise but places an undue burden on remaining staff, exacerbating the cycle of burnout and attrition. To counter this, there is a strong call for implementing comprehensive retention strategies that focus on creating supportive and safe work environments, ensuring job satisfaction through meaningful work (and professional growth opportunities as outlined in section 4.3) and offering competitive remuneration.

The wellbeing of nursing professionals is under strain due to high workloads, stress and burnout.71 Stakeholders reported that the effective implementation of policies addressing retention faces considerable challenges, necessitating clear guidance, support for role differentiation and ongoing evaluation of interventions to mitigate workforce shortages effectively. However, increasingly, research suggests a more drastic approach is required, specifically in the area of positive workplace culture and safety.14,72,73

Research has highlighted that some initiatives increase retention slightly, but there is no evidence of these resulting in major shifts, which is what is needed.

Stakeholders identified a clear opportunity for an NNWS to include a national recruitment and retention effort to achieve the following:

* **Elevate the profession** and improve community awareness and knowledge of nursing roles. This includes addressing outdated community views and stereotypes of nurses and nursing roles.
* **Expand the pipeline** and appeal to a broader range of community members including those from non‑traditional cohorts who may not have considered nursing before such as men, people from lower socioeconomic backgrounds or disadvantaged backgrounds, people from different cultural backgrounds and people without a healthcare background. This also includes specific strategies to re-engage non-practising nurses to re-enter the workforce.
* Improve working conditions including:
* ensuring safe staffing levels
* reducing burnout and increasing workload management initiatives
* addressing violence, bullying and racism
* introducing more flexible working and rostering arrangements, in particular to support working parents.

### 4.2.2 Community awareness and knowledge of nursing roles

#### Elevating the profession – the societal value of nursing

The environment scans and literature reviews highlight a series of comprehensive studies that show that Australians hold nurses in high esteem, acknowledging their commitment to providing compassionate, patient-centred care. Stakeholders echoed this sentiment, with many referencing the public’s appreciation and widespread respect for nurses, who they agree that the Australian community regards as integral to the health system’s success.

A number of comprehensive research programs highlight this regard for the nursing profession. The 2023 Ethics Index report from the Governance Institute of Australia reveals that nurses are rated as the fourth most ethical profession in Australia, ranking higher than GPs and second only to pharmacists within the health sector.74 This public esteem is mirrored in the perception of nursing as a values-based career, where the intrinsic rewards of patient care and the ability to make a meaningful difference in people’s lives are highly valued. Nurses are seen as the glue of the health system, providing continuity of care, fostering nurse-patient relationships and leading care in various settings from acute hospitals to community‑based care.75,76

Stakeholders described a high community interest in nursing careers but suggested some community views are outdated, indicating stereotypes of nurses do not always reflect nurses’ own professional identity.

Stakeholders explained that the recruitment pipeline in Australia is currently negatively impacted by 3 main factors:

* **Stereotypes and misconceptions:** Community perceptions of nurses as mere assistants to doctors persists, with media representations and dramatisations often reinforcing these narrow views.
* **Domination of acute care:** Public perception of nurses focuses on the traditional acute care setting, with little regard to, or awareness of, the breadth of nursing careers. This was heard particularly from nurses.
* **A tarnished reputation:** Nurses believe the profession’s reputation has been tarnished post COVID-19 and that the community perceives nurses to be stressed, burnt out, overworked and underpaid.

Quote:

* The introduction of the Nursing Now initiative was designed to help bridge the gap between true role descriptions of nurses and general population assumptions. The campaign highlighted the many different facets of nursing. However, due to COVID-19, it did not gain momentum, with energy focused more on supporting nurses through the pandemic.– Nursing Now Campaign76

Further, research77 suggests the competencies the public attributes to nursing professionals do not match those described in the professional profile of nurses, meaning **society underestimates the role a nurse has in a health system**. Stakeholder feedback and research indicates this may be due to gender stereotyping (with nursing being a predominantly female nursing workforce) and from part-time roles, which are perceived to devalue the role and the contribution nurses make to policy, innovation and health outcomes.

Stakeholders reported that a lack of knowledge and a partial vision of nursing undervalues essential aspects of the profession such as nurses’ capacity for research and leadership, health policy planning, health legislation and health management. They suggested that this constrains the development of the profession and the creation of a professional identity and, most importantly, negatively influences attitudes towards nursing and the potential for it to offer an interesting and rewarding career path.

Quote:

* The Here for Life campaign in the UK and Ireland showcases the diverse roles and significant impact of nurses and midwives, aiming to increase awareness and appreciation for the profession. It is described as a social movement for nurses and midwives to show what they do. – Here for Life Campaign78

The research suggests that while Australians consider nurses to be one of the most trusted professions, there is the opportunity to elevate the professional competencies of nurses.77

Further, these conflicting narratives are acknowledged by stakeholders, noting that nurses enjoy a high level of respect and trust from the Australian community while also feeling undervalued by government and management. The consultation suggested there is an increasing awareness of the importance of nursing by governments, particularly in recognising the opportunity for nurses to support a shift in health care towards more innovative models of patient-centred care in the community.

Quotes:

* ‘What’s good about nursing in Australia? The value that the profession contributes to the community is beginning to be actively recognised by government. We are in a rare window of opportunity for reform and influence, with particular focus and imperative on other than acute hospital practice contexts.’ – Stakeholder in-depth interview
* ‘Nurses are essential and valued members of the healthcare team who can provide valuable insights and contributions to service redesign and innovative models of care. There needs to be a move away from the traditional medical model and rethink the best approach to delivering holistic care.’ **Stakeholder in-depth interview**

The environment scans show that most countries and global peak bodies have invested sporadically in communications over decades to promote the value of the nursing profession as part of their recruitment strategies. As outlined below, stakeholders identified an opportunity for an NNWS to address some of the misperceptions and outdated views of nursing. This includes elevating the nursing profession both within the health sector and the Australian community more broadly.

#### A national approach to communications

All data sources identified an opportunity for a national approach to communications to:

* elevate the profession and improve community awareness and knowledge of nursing roles
* promote the breadth of nursing roles and increase overall aspiration
* enhance the image of aged care nursing to position it as an attractive career choice
* continue to develop nursing’s professional identity and communicate a shared vision for the future the profession.

The environment scans reveal a possible lack of effective recruitment strategies across all countries investigated, as highlighted by the scarcity of literature focusing exclusively on recruitment initiatives and information that might indicate their effectiveness in meeting their recruitment objectives.

As noted, countries appear to be having greater success in targeting IQNs rather than attracting new nurses into the field. Stakeholders identified an opportunity to focus on the breadth, depth and variety of nursing careers, to change the narrative and to target students at earlier ages, specifically using social media.

Recruitment campaigns or communication seeking to raise the profile of nursing as a desirable profession identified through the scans include the following:

* **NHS England’s Healthcare Support Worker Programme**: This program focused on recruiting people from non-healthcare backgrounds and providing accelerated certification and career pathways. It successfully recruited a significant number of healthcare support workers.79
* **NHS England’s ‘We are the NHS’ campaign**: This campaign used multimedia channels to promote nursing as a fulfilling career, featuring testimonials from patients and nurses.80
* **NHS Scotland’s overseas recruitment drive**: Supported by significant funding, this initiative focused on recruiting staff, including nurses, from overseas to meet healthcare service demands.81 It exceeded recruitment targets by attracting 800 new staff.82
* **The** **Australian Primary Health Care Nurses Association campaign** ‘The Anatomy of a **Primary Health Care Nurse’**: This campaign sought to challenge people’s perception of what a primary health care nurse is, and what they do.83
* **Nurse Hamish**: In this campaign, an Australian nurse shares his experiences in studying and becoming a nurse – the realities, highs and lows – and presents a ‘new face’ of nursing.
* New Zealand’s **‘The Real Nurses’:** This is an attraction campaign aimed at increasing the number of people choosing nursing by showcasing the diversity and rewards of a nursing career. It seeks to encourage more men and young Māori and Pacific Islander people to consider a career in nursing.84

As noted, the environment scans found very few publicly available evaluation reports to indicate outcomes achieved by these campaigns.

Stakeholders identified the opportunity for an NNWS to look for new communication channels to reach a broader audience. They suggested leveraging traditional and social media platforms to reach broader audiences. They also noted that influencers, educators, career advisors and parents are also important target audiences. Communication should help to raise awareness of the competencies and realities of nursing to help attract people who are well informed about the profession’s demands.

### 4.2.3 The pipeline

#### Non-traditional cohorts

The consultation, environment scans and literature review all acknowledged the need to appeal to and support a broader population of people who could join the nursing workforce to address workforce shortages. Many countries have sought to better understand the pipeline of prospective nurses, but there appears to be less effort invested in diversifying recruitment efforts to appeal to non-traditional cohorts.

Quote:

* The UK’s ‘We are the NHS’ recruitment campaign created a surge in young male nursing applicants. The number of men applying to study nursing rose by 50% over a decade (9% in the first year) and initiated a steady change in attitudes towards nursing. – We are the NHS Campaign89

Stakeholders identified an opportunity for an NNWS to target people who may not see themselves becoming a nurse yet would be suitable – including men, people from lower socioeconomic or disadvantaged cohorts, people from different cultural backgrounds and people without healthcare experience. The State of the world’s nursing 2020 report10 emphasises the need for a radical change in how the nursing workforce is educated, deployed, managed and supported. While it highlights the nursing workforce’s predominance of females, it suggests policy options that could also support increasing male participation such as implementing the Decent Work Agenda and developing nursing regulation to support gender diversity.10 Similarly, governing bodies and academic institutions reported that workforce demographics should reflect the diversity of the population it serves, particularly in terms of cultural diversity.

Initiatives implemented in various countries that support a more diverse approach to filling the pipeline include the following:

* **In the UK, NHS Professionals (an NHS staff bank)** signed up to the Care Leaver Covenant to offer apprenticeship and internship roles to young people leaving care. The organisation mentors young people to help them to start, build and sustain a career at NHS Professionals.85
* **The ACN has introduced the Men in Nursing Working Group and the Men in Nursing Guiding Principles (Australia scan).** It has also produced theMen in nursinge-book, which presents a collection of the stories of 28 males who outline their experiences as nurses. The e-book was part of a campaign to recruit more men into the nursing profession, addressing the stigma around nursing being a female-only profession and understanding the issues male nurses face.86
* **The American Association of Men in Nursing** was established to shape the practice, education, research and leadership for men in nursing and to advance men’s health (United States scan).87
* **A partnership between the University of Wollongong and the Order of the Eastern Star Wollongong** Chapter 59 is contributing $200,000 towards scholarships for nursing. The initiative focuses on helping students from low socioeconomic backgrounds to achieve their goal of entering the nursing profession.88
* **The UK’s ‘We are the NHS’** recruitment campaign received a record-breaking number of applications from male school leavers to be nurses (UK expert interview).89
* **In New Zealand, the Nursing Pipeline Programme** was established in late 2019 to progress improvements to the nursing pipeline. The program involved a partnership with the Ministry of Health, the Office of the Chief Nurse, New Zealand Nurses Organisation, New Zealand Nursing Council, education providers, aged residential care and nursing leaders from across the sector. The aim was to reach a shared understanding of the nursing pipeline and to work with the Tertiary Education Commission and education providers to ensure the supply and demographics of nurses match the demand and the needs of the populations nursing serves.91

Quote:

* ‘Just as females have broadened the gender diversity horizon in medicine, it is as crucial for more men to step into nursing. Solving this gender imbalance can improve patient care and potentially accelerate the profession’s development. Increasing the number of men in nursing can ensure a larger talent pool for healthcare institutions to pull from.’ – Nurse Journal website9

#### Re-entry to practice

The environment scans, consultation and literature highlight the opportunity to encourage non-practising nurses to return to the nursing workforce through a number of initiatives including incentives and processes to ensure a smooth transition after a hiatus. Stakeholders highlighted the role of structured refresher or re-entry programs in expanding the pipeline into nursing. This includes programs that offer comprehensive clinical refreshment courses and upskilling opportunities and that cover essential nursing skills, recent advancements in health care and practical clinical placements. Stakeholders explained that programs should offer:

* flexible and online learning options for theoretical components to accommodate people with caregiving responsibilities or those who are working in other sectors
* financial support to cover living expenses and tuition fees to alleviate financial barriers to re-entry.

Examples of refresher or re-entry programs include the following:

* **Canada** offers a Return to RN Practice certificate92 that provides educational access to non-practising nurses and supports their re-entry into professional practice. Canada also offers micro-credentialling programs93 to allow returning nurses to update specific skills or knowledge areas without committing to full-time study.
* **In Victoria**, the Refresher Pathway for Nurses and Midwives94 awards scholarships to approximately 225 people, enabling them to return to practice in public health services. This initiative covers essential costs, including living expenses during clinical placements, addressing a significant barrier to nursing studies.
* **Western Australia’s** Return to Nursing and Midwifery Program95 establishes pathways for nurses and midwives seeking to return to practice, offering financial support to alleviate cost-of-living pressures.
* **New South Wales** offers re-entry to nursing scholarships96 valued at up to $10,000 for nurses or midwives looking to re-enter practice, requiring a commitment to work in the New South Wales public health system for 2 years after completing a re-entry pathway.
* **In the UK,** non-practising nurses can access an online training program on the e-learning for healthcare platform97 to help gain confidence before returning to the workplace.
* **In New Zealand**, the Te Whatu Ora Return to Nursing Workforce Support Fund98 has been introduced to assist non-practising nurses to rejoin the workforce, especially in aged care.

Stakeholders also identified the need for:

* **Purpose-built and targeted campaigns** to raise awareness of the pathways available for non‑practising nurses to return to the workforce. Stakeholders noted that messages should highlight the support available, the critical role of nurses in health care and the opportunities for career advancement and professional development upon re‑entry.
* **Mentorship and support systems:** This includes, as piloted in Scotland, retired midwives mentoring and supporting non-practising nurses returning to the workforce, offering guidance, emotional support and professional advice.183
* **Recognition of prior experience and skills:** This includes programs that use competency assessment tools to recognise the prior experience and skills of returning nurses and potentially reduce the duration of refresher courses for those who demonstrate current competencies.
* **Streamlined registration processes:** This includes simplifying and expediting the registration process for returning nurses, as seen in the initiatives for internationally educated nurses in Canada and other IQNs, as well as fast-tracking applications and offering guidance through the registration process.
* **Financial incentives and support:** This includes scholarships, grants or stipends for returning nurses, similar to the bursaries offered to nursing students in Scotland and the financial support offered during clinical placement such as the ACT’s Placement Support Grants of $1,000,99 easing the financial burden for returning nurses.
* **Collaboration with healthcare employers:** This includes engagement with healthcare employers to support returning nurses to ensure they are welcomed into supportive and inclusive work environments. This could include creating designated positions for returning nurses with appropriate orientation and gradual integration into the workforce.
* **Re-entry to practice support:** More support is required to assist the re-entry of non-practising nurses, including re-entry programs such as support for qualified staff with limited recent acute hospital experience to take up acute care roles.

Quote:

* ‘Nursing must celebrate its contribution to Australian society to educate the public on the full scope and capability of nurses and encourage people to explore the possibilities offered by a career in nursing. A national promotion strategy is required to shift the image of nursing, attracting school leavers to university and the nursing profession.’ – Submission

### 4.2.4 Working conditions

Research shows that creating a positive workplace environment is crucial for retaining nurses. Increasingly evident in the next generation of nurses, employees have little tolerance for unsatisfactory working conditions.100,101 The mobility inherent in the nursing profession leads to frequent job changes and, in some cases, exits from the field, as their valuable skills are sought after in other sectors.102

The literature indicates that many countries see nurses leave nursing after experiencing less than satisfactory workplace culture or working conditions. The health and wellbeing of the nursing workforce is a concern, particularly post COVID, with most countries and global peak organisations acknowledging that the stress of the pandemic has exacerbated existing workforce shortages and strain. The environment scans suggest that workplaces are not fully equipped to address these issues, with many workforce planning strategies aiming to improve working conditions. However, there is a lack of evaluation data that demonstrates effectiveness.

Examples:

* One example of a successful wellbeing program in Australia is ‘Imagine’. This uses a variety of wellness techniques incorporated into work hours. Staff are given time out of their day to participate in short wellness sessions or attend paid wellness workshop days. It aims to increase wellness in the short term with guided meditation and exercise, as well as long term by teaching selfcare and resilience. – Agency for Clinical Innovation106
* Almeida et al. (2020)110 and Wilson et al. (2021)111 emphasise the importance of prioritising staff wellbeing in healthcare organisations. The Almeida study noted that nursing staff benefited most from the wellbeing initiative with an increase in job satisfaction reported among the participants.

Stakeholders agree there are a number of factors that influence the experience of a nurse in a workplace and that challenging working conditions significantly contribute to retention rates. In the consultation, they noted that workplaces that have unsafe staffing levels and inflexible rostering arrangements, where nurses experience burnout, violence, bullying, racism and poor leadership, have higher attrition rates. Stakeholders identified a range of specific strategies to address the many aspects that affect working conditions in Australia. These are discussed in more detail in each relevant section.

However, stakeholders noted that there are a range of overarching programs that have been designed and implemented globally to create more positive workplaces, improve workplace conditions and support nurse health and wellbeing. These programs include the following:

* **Magnet Hospital Program:** Managed by the American Nurses’ Credentialing Centre, the program accredits hospitals that meet criteria focused on strong leadership, an inclusive management style, autonomy for nurses, positive nurse-physician relationships, good resources, quality career development/training and good prospects for promotion. A Magnet hospital is one where nursing delivers excellent patient outcomes, where nurses have a high level of job satisfaction, and where there is a low staff nurse turnover rate and appropriate grievance resolution.103 There are 391 Magnet hospitals worldwide including 6 in Australia:
* Sir Charles Gardiner Hospital, Nedlands, Western Australia
* St Vincent’s Private Hospital, Sydney, New South Wales
* Princess Alexandra Hospital, Brisbane, Queensland
* Gold Coast University Hospital, Gold Coast, Queensland
* Robina Hospital, Gold Coast, Queensland
* Varsity Lakes Day Hospital, Gold Coast, Queensland.
* **A positive practice environment:** In 2007 the ICN coined the term ‘Positive Practice Environment’, referring to workplaces that foster excellence, safety and wellbeing for nurses and other health professionals. While there does not appear to be a formally accredited system behind becoming a Positive Practice Environment, the concept has gathered momentum and is used in the vernacular to refer to workplaces that focus on improving safety and wellbeing for nurses.104

Stakeholders identified an opportunity for an NNWS to address barriers to creating safe, inspiring workplaces by focusing on workload management, supporting nurse mental health and wellbeing, providing culturally safe and diverse workplaces and providing more flexible and supportive rostering arrangements.

Stakeholders noted that implementing these solutions requires strong leadership in nursing to promote a positive culture and create a healthy environment that clearly values its nursing workforce. The importance of leadership is discussed in section 4.5.

#### Workload management, burnout and mental health

The environment scan, literature review and consultation highlight the critical issues of burnout and poor mental health, which are significantly affecting retention of the nursing workforce. The wellbeing of nurses is not only essential for their personal health and job satisfaction but also crucial for maintaining a high standard of patient care and the overall functioning of the health system. Hassmiller and Wakefield72emphasise that nurse wellbeing is significantly influenced by external factors such as organisational structure, policies, leadership and day‑to-day work conditions. The physical health of nurses is said to be poorer than that of the general population, particularly in nutrition, sleep, substance abuse and physical activity.105

Mental health issues, including stress, burnout and depression, are prevalent among nurses, especially those working in high-stress environments such as intensive care units.71 These challenges not only diminish job satisfaction but also contribute to increased absenteeism and higher turnover rates.106,107

As outlined, the mental health of nurses has been severely impacted by the workload and strain caused by the COVID-19 pandemic, with many countries and global peak organisations reporting increased levels of concern about mental health in comparison with pre-COVID levels. For example, a poll conducted by SEIU Healthcare and CUPE’s Ontario Council of Hospital Unions revealed that 59% of registered practical nurses in Ottawa, Kingston, Cornwall and eastern Ontario were not coping well, with 53% describing their mental health as poor.108,109

Many countries have developed and implemented plans to improve the health and wellbeing of nurses, but there is limited data demonstrating their effectiveness. Instead, the studies related to nurse satisfaction, health and wellbeing continue to show a high level of dissatisfaction, and the attrition indicates they’re not achieving the desired outcomes.110,111

Examples include:

* **Health and wellbeing framework:** The NHS has adopted an evolutionary health and wellbeing framework to retain nurses in the UK.112
* **Supporting employee wellbeing during pandemics:** New Zealand research on effective workplace strategies during the COVID-19 pandemic identifies key resources that support employee wellbeing including job security, effective communications and flexibility.113
* **Mental health support services:** The Nursing and Midwifery Health Program in Victoria is an independent and confidential service for nurses, midwives and students of nursing and midwifery experiencing issues related to their mental health, substance use, family violence or any issue impacting on their health and wellbeing.114
* **Dedicated telephone support service:** Australia has invested $25.2 million in the National Nurse Midwife Health Service, a dedicated phone support service hotline designed and led by nurses and midwives to provide free and confidential case‑managed support.115

Stakeholders noted that addressing workload issues will be most effective in improving the mental health and wellbeing of Australia’s nurses. They identified minimum requirements as stipulated in enterprise bargaining agreements in terms of taking breaks, shift hours and nurse–patient ratios.

Quote:

* ‘Government and nurse employers [need to] stop relying on the good will of nurses (missed breaks, extra hours) and resource/fund appropriately.’ – ACT CNMO Symposium

However, stakeholders also recognised the opportunity for more:

* open dialogue about mental health and wellbeing in the workplace to foster a supportive work environment
* mentorship and support from leaders in the workplace
* peer-to-peer support – for example, buddy programs
* access to mental health support services
* access to rest facilities
* role changes, particularly to take time out from higher stress environments such as intensive care units.

#### Workplace culture – violence, racism and bullying

The consultation, literature and environment scans show that violence, structural racism, cultural biases, discrimination and bullying persist in nursing. The prevalence of violence and harassment in nursing is a significant concern for many countries and, despite having policies in place, incidents of assault are often under-reported due to fear of retaliation and inadequate reporting systems.116,117 The research shows that nurses experience verbal and physical abuse from patients, family members and even colleagues,116 and stakeholders noted that the consequences of this are profound, leading to physical injuries, psychological trauma, decreased job satisfaction and resignations.

There are several initiatives reported in the literature to deal with workplace violence. These include the zero-tolerance approach, which evidence suggests is not entirely effective, investment in staff training around de-escalation and use of personal security alarm systems.118,119 There has also been the use of trained security personnel to limit the opportunities for violence and to hold perpetrators to account.116

The literature review shows that nurses from minority backgrounds encounter prejudice and unfair treatment in both the workplace environment and educational institutions. Research suggests that systemic racism is embedded within medical education, funding systems, health policies and clinical practices, ultimately resulting in disparities in health outcomes.120 This challenge is exacerbated by the lack of diversity among nursing staff.

Strategies designed to focus on workplace culture to prevent or address violence, racism and bullying include the following:

* **The ACT** has implemented a workplace culture framework in the public health system that focuses on building organisational trust, leadership skills, workplace civility, psychological safety and team effectiveness.121 Other states have also developed wellbeing frameworks for nurses to alleviate workplace pressures and support mental wellbeing (e.g. Queensland and New South Wales).
* **The South Eastern Sydney Local Health District** Nursing & midwifery strategy for transforming person-centred cultures 2024–2029122 emphasises the importance of person-centred care and outlines priority areas for action, including developing person-centred cultures that create a supportive practice environment.
* **The World Health Organization and International Labour Organization123** recommend developing clear, enforceable policies against bullying and racism in healthcare settings and, as suggested by the International Council of Nurses and the International Confederation of Midwives, mandatory training programs for all healthcare workers. They argue programs should be ongoing, focus on cultural competence, sensitivity and anti-racism, and include practical strategies for creating inclusive work environments.
* **Canada** suggests establishing a workplace violence reduction plan124 alongside a national awareness campaign to address workforce violence. Strategies include creating a culture that supports mental health days, peer support, wellness programs, and increases nurse resilience.
* **The Registered Nurses’ Association of Ontario** has published guidelines aimed at preventing violence, harassment and bullying against healthcare workers.125 These guidelines emphasise the importance of creating a healthy work environment as a foundational element for optimal clinical performance and staff wellbeing. The association’s approach seeks a systemic strategy that includes organisational change, education/training and supportive policies and procedures.
* **The Victorian Government’s** Our pathway to change: eliminating bullying and harassment in health care126 document outlines a comprehensive strategy aimed at addressing these issues in healthcare settings. It emphasises creating a culture and environment that supports both patient and staff safety, recognising the critical role of a positive workplace culture in delivering high-quality health care. The strategy addresses the significant problem of bullying and harassment in the health sector, acknowledging its economic and psychological costs including stress, ill health, lost productivity and the impact on patient care.
* **The NHS** National Retention Programme (2020) includes resources such as a guide for line managers to improve staff retention and a nursing and midwifery retention self-assessment tool.127
* **Canada’s** Nursing retention toolkit: Improving the working lives of nurses is a resource created ‘by nurses, for nurses’, drawing on the expertise of the nursing community, evidence-based practice and current lived experiences of frontline nurses.128
* **The NHS** has introduced resources that include practical examples and tools to help nursing and midwifery professionals discuss, explore and challenge racism safely and effectively through the Combatting racial discrimination against minority ethnic nurses,midwives and nursing associates guidance document.129
* **The Cognitive Institute and The Royal Melbourne Hospital** partnered to pioneer a system of anonymously reporting bullying and workplace harassment. The system aims to slowly break down the damaging effects of bullying.130

#### Flexible working and rostering

The environment scans showed that many countries report challenges of retaining nurses within an inflexible rostering system. Rostering and shift patterns are an important factor for wellness and job satisfaction among nurses,131,132 and there is limited research that identifies the least disruptive shift pattern. Stakeholders noted that, for health services, rostering is a complex balance of managing nursing skill mix, ward acuity, bed spaces and nurses’ preferences.

The Canadian Union of Public Employees highlighted the issue of 24-hour shifts at North Bay Regional Health Centre, arguing that such practices are unsustainable and counterproductive, exacerbating the staffing crisis.133 Some countries are exploring different rostering options, including the NHS, which has trialled a self-rostering initiative,134 highlighting some benefits for nurses and challenges for health services. Barrett and Holme131found that using a self-roster software increased the fairness of rostering, morale and retention in clinical nurses, and took administration burden away from managers.

Other examples included the following:

* **Australia – ANMF and Safer Care Victoria:** The Nursing and Midwifery Rostering Projectdemonstrates the use of technology-driven solutions, such as the implementation of e-rostering systems, and how they can significantly enhance flexibility in rostering. It allows nurses and midwives to input their availability and preferences, thus improving work-life balance and reducing absenteeism.135
* **NHS flexible working:** Flexible rostering is encouraged in the NHS long term workforceplan. This approach showcases the opportunity to increase nurse autonomy using flexible rostering as a way to work as a team rather than individuals and to promote the role of leadership in enabling a flexible work culture.22
* **Scotland’s reduced working week:** Scotland is reducing the working week to 36 hours without the loss of earnings within an agreed timescale.136
* **Dynamic rostering where shifts are ‘priced’ rather than static schedules:** These are variable work schedules designed to accommodate fluctuations in work demand that can occur due to factors such as consumer demand, changing environments and employee needs (futurist interview).

In addition, the research shows that as a predominantly female workforce, there is a critical need for the future of nursing in Australia to consider the impact that inflexible rostering and shiftwork has, particularly given the current societal pressure on women to be the primary carer for their family.137

Research also suggests that many nurses are leaving jobs because of insufficient and expensive childcare options.138 Childcare centres operate within fixed hours in Australia, making it difficult for nurses to use these services to support their work schedule. Some Australian and international health services are recognising the opportunity to support staff and are setting up in-house childcare centres. For example, health services in New South Wales are building onsite childcare services at Westmead, Bankstown-Lidcombe, Shellharbour and Shoalhaven hospitals. The services will offer extended hours to support shiftwork of health professionals (e.g. up to 11:15 pm).139

Stakeholders advised that government-subsidised nanny services remain financially unattainable for nurses with average incomes, particularly for single parents. Consequently, nurses often depend on support from friends and family or face the difficult decision of leaving the workforce. Currently in Australia, it is unknown how many nurses leave the workplace after having children due to the lack of support to return to shift work, but stakeholders clearly identified childcare as a major issue for nurses due to a lack of flexibility in rostering and shiftwork.

Stakeholders raised a number of ideas that speak to the heart of a desire for increased flexibility including:

* better rostering for shift workers, including the ability to know rosters well in advance; for example, fire and rescue services roster staff on for 4 days and 2 nights, publishing well ahead of time so the workforce can plan in advance (ACT and Cairns workshops)
* setting realistic expectations of the role, with no out‑of-hours emails or contact (Tasmania workshop)
* setting as a basic ground rule the permission to say no to additional responsibilities before the onset of burnout (Tasmania workshop).

In summary, stakeholders said there is a need for:

* the profession to be elevated to improve community awareness and knowledge of nursing roles through nationally coordinated communication
* support for non-traditional cohorts to become nurses (e.g. males, people from CALD communities) and to provide re-entry-to-practice initiatives
* strategies to improve working conditions focused on supporting nurse wellbeing and providing culturally safe and diverse workplaces
* increased flexibility in rostering or in offering support to fulfil shiftwork requirements including childcare.

## 4.3 Education and lifelong learning

### 4.3.1 Overview – education and lifelong learning

The consultation, environment scans and literature all reiterate the value placed on lifelong education and learning in nursing, including the opportunity to ensure the educational preparedness of nurses who are equipped to excel over a long-term career in a rapidly evolving health system. Both the consultation and literature review noted some positive aspects of the way in which nurses are currently trained in Australia. However, there remain a number of challenges and opportunities for improving education and training to address the current and projected nursing workforce shortages in Australia.

Quote:

* ‘There is much that is excellent about nursing education. Nevertheless, there are processes, practices, and procedures that could work better.’ – Schwartz (2019)142

The consultation identified a need for a more coordinated national approach to education and training in a framework that would ensure quality and consistency across Australia. Such a framework could facilitate skill and knowledge acquisition, support specialisation and include provisions for continuous professional development at every level. Equally, many participants perceive it would provide clearer career progression pathways and empower nurses to reach their career goals.

The environment scans show a global expectation of quality education and training in nursing, with the literature demonstrating that each country and organisation recognises the rightful professionalisation of nursing and the need for a highly qualified and well-trained nursing workforce. The literature also highlights the strong correlation between career satisfaction and career progression, and the importance and availability of clear career pathways.140,141

The consultation also clearly articulated the need for more accessible and affordable nursing education that is inclusive of a more diverse cross-section of the community, including First Nations people.

Stakeholders noted a range of opportunities to address education and lifelong learning challenges affecting the nursing workforce in Australia. These included the following:

* **A nationally consistent postgraduate education, career progression and specialisation framework:** Stakeholders suggested that a nationally consistent framework would increase the appeal of postgraduate education, establish greater articulation of the pathways to progress and diminished barriers to movement across specialisations, with better articulation of development options.
* **Undergraduate education length and format:** The length and format of tertiary courses are related but distinct concepts. There are global examples of differing lengths of qualifications and, while length is debated, so too is format including blended models. Examples of accelerated models include the UK’s apprenticeship model and America’s accelerated one-year qualification.
* **A review of clinical placements:** While stakeholders recognise the value of clinical placements, they also highlight that they are a particular pain-point of the student experience, particularly in relation to the need for financial support.
* **Enhancing the student experience:** The literature highlights a range of factors that can affect the student experience. Considerations such as better flexibility, more effective mentorship and support have been identified as important issues by students.
* **Transition to practice support for new graduates:** While there are examples of transition-to-practice programs for graduating nurses, stakeholders agree there is an opportunity for a formalised nationally consistent approach.

Quote:

* ‘Flexible study pathways primarily fall under the realm of education but will require collaboration from regulators, professional bodies, and healthcare service providers to enable adaptable educational programs and clinical placements.’ – Submission

Stakeholders expressed the need for a forward-thinking approach in Australian nursing education, highlighting the necessity of not just keeping pace but setting a world-leading standard for the preparation of nurses to meet the dynamic demands of Australian healthcare consumers.

### 4.3.2 The approach to nurse education and training

Stakeholders suggested that the array of options in nursing education and training can lead to inconsistencies in the skill sets and abilities of nursing graduates. They noted that this variability cannot only affect the quality of consumer care but also hinder the mobility of the nursing workforce across different regions and sectors.

Recommendation:

* ‘**Recommendation 5:** To improve the quality of nursing education across the country, ANMAC should make accreditation and monitoring reports public. It should point out areas of poor practice and disseminate information about effective teaching techniques and initiatives. In a commitment to transparency, ANMAC should create a publicly accessible database, containing comparative information about all accredited nursing courses.’ – Schwartz (2019)142

Note: The Australian Medical Council publishes accreditation reports for medical programs in Australia.

In Australia, Bachelor of Nursing programs vary significantly across institutions, with each program offering a unique curriculum and approach. Unlike education for enrolled nurses (ENs), there is no standardised set of competencies or skills mandated for these programs.142 Although higher education provider programs undergo accreditation via the Australian Nursing and Midwifery Accreditation Council (ANMAC), the emphasis is primarily on evaluating teaching methods and learning outcomes, rather than prescribing specific and consistent content.143In addition to a more standardised curriculum, Schwartz142 argues for greater transparency of accreditation information, including publicly accessible reporting.

While some stakeholders suggested that standardisation might limit the ability to adapt nursing practice to changing societal needs in the future and compromise person-centred care, the Schwartz report142 recommends a more standardised approach to promote consistency in nursing education and to provide a more defined standard for evaluating competencies and skills.

Further support for standardisation is provided in recommendations from the World Health Organization.144 Literature also suggests the Bologna Process, introduced in 2007 (described in section 4.1.5), has strengthened and harmonised the higher education system in participating countries across Europe, increasing mobility and collaborative research efforts.145 Further, recent examples from Norway,146 and the UK’s updated standards framework 2023,147 point to a focus on greater standardisation of nursing education in other countries.

Many stakeholders believe a national framework would provide clearer career progression pathways and empower nurses to reach their career ambitions. They noted that an NNWS could consider the need for uniform accreditation of qualifications and registration of nurses to facilitate greater workforce utilisation and mobility and address healthcare disparities.

### 4.3.3 Undergraduate education length and format

The environment scans, literature and stakeholders highlighted debate about both the optimal duration of undergraduate qualifications, as well as the structure and format of course content to ensure nurses are adequately prepared for safe and effective practice. Recent research on the preparedness of Australian nursing graduates to begin practising148 has initiated discussions on the feasibility of nurse graduates achieving all the requisite capabilities required to function effectively in increasingly complex, dynamic and diverse healthcare settings in a 3-year program.149 There is literature to support this, including Saitoh et al.,150 who report that the shorter the course, the less nursing identity a student attains. The literature suggests this needs to be balanced against the unintended consequences of higher fees and the longer time taken to complete the qualification acting as a barrier for undergraduates.

#### Extending the length of degrees

There are examples of differing lengths of qualifications in other jurisdictions, with Denmark, Finland and Estonia having 3.5-year programs while Spain, Portugal, Greece, Cyprus, Bulgaria and Ireland have adopted a 4-year bachelor’s degree.151

Quote:

* ‘As RNs take on increasing responsibility for complex care, it is likely that three years of higher education will be insufficient to prepare the nurse of the future. Working with NMBA, ANMAC, the Commonwealth education department, and other stakeholders, HEPs should explore ways to extend nursing education, including the option of nesting an associate degree in a four-year bachelor’s degree.’ – Schwartz (2019)142

ACN members advocate introducing a 4-year undergraduate nursing degree program, with the fourth year serving as an internship year in a mainstream health service. Similar to the structure followed in medicine and pharmacy, the primary goal is to enhance nurses’ readiness for their initial year in the workforce.

However, as highlighted by Christiansen et al.,149simply increasing the program length may yield minimal benefits unless accompanied by a corresponding rise in practice hours. Stakeholders noted that adequate exposure to clinical practice is crucial for professional learning, and there is the opportunity for a discussion on how best to balance the duration and structure of nursing courses including an increased focus on learning outcomes.142

* **Specialised streams:** Stakeholders noted that consideration could also be given to extending the duration of undergraduate programs to incorporate specialised streams, catering to areas of high demand and future growth in the healthcare sector, such as gerontology, mental health and digital health. They suggested that ENs could also be given an opportunity of extension to specialise in areas like aged care, mental health, or community nursing.
* **Better articulation of EN to RN courses:** Some of the literature also argues for an extension to the duration of nursing education by way of better articulation of EN to RN programs. The Schwartz report142 suggests that all nursing students could begin their studies with an endorsed EN diploma, progressing to obtain a Bachelor of Nursing degree, which would result in an extra 6 to 12 months to achieve the Bachelor of Nursing degree. Exit points could be accommodated for students who do not complete the full degree to become ENs.
* **Extended duration programs:** Curtin University152 provides a 3-year and 6-month-long Bachelor of Science Nursing course, suggesting that higher education providers can extend it if desired. However, this extension would affect both HEPs and students financially and delay students’ entry into the workforce.

#### Accelerated models of education

The literature shows that alternatives being explored by other jurisdictions in response to workforce shortages focus on shorter programs, online delivery and innovative blended models. One example is the **UK Apprenticeship Model**. The Blended Learning program (Apprenticeship Model) was developed to address national workforce shortages by using online, remote-access study for a range of healthcare disciplines and provide the opportunity to remain in salaried employment while studying. Blended Learning Nursing degrees are now offered by a number of universities in England.153 The government also intends to increase degree apprenticeship places to nearly 28,000 in 2028–29, meaning 20% of registered nurses will qualify through this pathway compared with 9% currently.22

At Cambridge University Hospitals154 the nursing apprenticeship pathway yielded impressive results:

* **vacancy rate** – reduced to 5.4% for adult nurses
* **agency spend** – agency spending for adult nurses in the financial year 2019–20 was £0
* **pay enhancements** – pay enhancements for adult nurses decreased by 80%
* **turnover** – the turnover rate for adult nurses stood at 9%.

Other colleges and universities have also reported success in implementing this model, emphasising equity and access while building on established work‑based learning approaches.

* **US accelerated one-year qualification:** The newly introduced accelerated Bachelor of Nursing Sciences is a one-year program for students who already have a bachelor’s degree in another area. Given particular prerequisites,155 an undergraduate can transition into nursing with just the one year extension instead of the usual Bachelor of Nursing Science 4-year degree.
* **Accelerated programs for previous degree holders:** In Australia, similar fast track programs have become available at the University of Tasmania, with a minimum 2-year undergraduate program.156
* **Formalised EN to RN articulation:** Sydney’s University of Technology’s Bachelor of Nursing (Accelerated) course offers qualified ENs to transition to an RN through a shortened 2-year degree course.157

#### Increased emphasis on blended learning

Stakeholders suggested that including a greater emphasis on blended learning could be achieved through a variety of models and formats. They noted that such an approach could offer greater flexibility, accessibility and personalisation of learning experiences, catering to the diverse needs of students, in addition to better preparing undergraduates for a wide variety of roles within the health system.

* **The RUSON model** (Registered Undergraduate Student of Nursing) is a pilot program that employs second and third-year students to undertake general nursing activities under the delegation and supervision of RNs in Victoria. Student nurses who have completed at least one year of their degree are employed and supervised by RNs in a specific role supporting patient care while remaining supernumerary to ward staffing levels.158 Similar models exist in other states, such as Western Australia and Queensland (where undergraduate nurses and midwives are hired by the government as ‘fundamental care assistants’).159 An evaluation of the RUSON model by McGillion et al.160 demonstrated positive outcomes, showing RUSONs improved acuity management allowed RNs more time with patients and contributed to risk prevention.160 In another study, nursing staff consistently reported significant potential in the RUSON role and the model proved to be a cost-effective workforce supplementation strategy for rural health services.161

The literature review and some stakeholders do not support blended models, referring to potential quality and equity concerns when undergraduates act as a paid workforce.A submission to the consultation addresses the need for a more supportive system that should not come at a cost to the education of nurses:

Quote:

* ‘Work-based or apprenticeship models have the potential for an intrinsic conflict of interest that places student learning at risk in favour of service delivery. Approaches such as the RUSON model may be useful, as a fundamental aspect of the model is that clinical placement is kept entirely separate from any paid experience. Financial support, provided at a federal government level, that enables students to undertake placements would be welcomed.’ – Submission

Further, some stakeholders raised concerns about the concept of an apprenticeship scheme, which they believe diminishes the hard-fought professionalisation of the nursing sector.

Overall, however, stakeholders believe there is a significant opportunity for an NNWS to consider a form of blended model approach to nursing training and education in Australia.

### 4.3.4 Clinical placements

While many stakeholders agree that the clinical placement approach to training is effective in providing hands-on learning, they also identified a need to address the significant financial burden facing Australian students, and to implement a nationally consistent model that offers more flexibility in meeting placement requirements and a more positive experience on clinical placement.

#### Addressing ‘placement poverty’

Stakeholders and the literature confirm the significant potential for student debt as a direct result of the demands of clinical placement, which some refer to as ‘placement poverty’.162

Quote:

* ‘I had a very difficult situation having to travel far to my placement, so I had loads of financial burdens of attending the placement whilst also not being paid. It makes no sense whatsoever.’ – Nursing student consultation interview

The requirement for full-time (unpaid) work during placement for extended periods rules out the ability to either complete placements on a part-time basis or undertake other forms of part-time work.163 The resulting ‘placement poverty’ is perceived to be a significant barrier to completing tertiary nursing studies,142 and stakeholders acknowledge it has a negative impact on the student experience.

The Australian Universities Accord final report recommends:

‘To reduce the financial hardship and placement poverty caused by mandatory unpaid placements, the Australian Government (should) work with tertiary education providers, state and territory governments, industry, business and unions to introduce financial support for unpaid work placements.’162

Stakeholders agree there is an opportunity for an NNWS to consider how to address the need for students to be able to access financial support during clinical placement.

#### A nationally coordinated approach to clinical placements

Stakeholders, environment scans and literature suggested that a national clinical supervision model would prioritise education and support leadership in clinical placements. The literature shows that clinical placement requirements are inconsistent globally and, according to Jayasekara et al.,164 clinical practice models of integration are under-researched. The preceptorship model is commonly used in various clinical environments165, but limited studies have evaluated the efficacy of these programs.

Stakeholders noted several opportunities to improve the approach to clinical placement including the following:

* **Improved skill development:** Clinical supervision for mental health nurses - A framework for Victoria166 is a useful example of why clinical supervision is helpful for nurses seeking to develop their skills. A standardised structure is important to make sure nursing students are exposed to clinical environments and experiences to ensure learning and development.
* **Greater diversification and flexibility in placements:** The format and structure of clinical placements could be diversified to include a broader range of settings such as primary care, community health, mental health and aged care. This would also assist the current tension of a lack of availability of clinical placements in acute settings.
* **Raising the minimum placement hours:** Stakeholders have suggested increased clinical placement hours may contribute to a more competent and confident nursing workforce and address the disparity between the requisites for RN students’ placement hours in Australia compared with international standards (as also outlined in the Schwartz report).142 However, it is also noted that the mere accumulation of placement hours does not inherently equate to enhanced educational outcomes and may place pressure on the number of placements available. The efficacy of such placements is contingent on the quality of the healthcare setting and the calibre of supervision.10,149   
  Minimum RN mandated placement hours by country:
* Australia – 800+
* New Zealand – 1,100
* UK – 2,300
* Germany – 2,500
* Netherlands – 2,300
* India – 580
* Philippines – 800+
* **Reviewing the preceptorship model:** Preceptors in clinical placement could benefit from a more uniform and structured approach and greater professionalisation of the role, as in the NHS’s National preceptorship framework for nursing.165 The model encompasses elements such as classroom instruction, the achievement of competencies specific to the role, online assistance, clinical oversight and mentoring:

Quote:

* ‘There’s a new gold standard preceptorship … now in place. A preceptorship framework that allows students to mirror their preceptors … which works really well.’ – NHS expert in-depth interview

Stakeholders suggested considering a national preceptorship framework to ensure programs include a core set of standards that constitute a minimum requirement for preceptorship programs and are enthusiastic endorsers of a revised and more consistent approach.

#### The growing role of simulation

The literature suggests that simulation has emerged as a valuable pedagogical tool in nursing education, offering students immersive learning experiences in a controlled environment. Research highlights the effectiveness of simulation in enhancing clinical skills, critical thinking and confidence among nursing students.167,168 While debate surrounds the extent to which simulation training should replace clinical experience169, and challenges persist in achieving realism in certain areas of nursing simulation, there are signs these challenges can be overcome.170

Stakeholders agree that simulation cannot replace the experiential learning that students gain during placements, but research indicates positive outcomes for its integration as a fundamental component of nursing education.167,170 The consultation, environment scans and literature identified the following examples that could be considered in a national approach to simulation in undergraduate education:

* **UK simulated clinical placement:** In 2021 the UK government announced grants to universities to invest in new simulated training facilities and technologies for nursing and other health students.171 The Nursing and Midwifery Council also announced permanent changes to allow up to 600 hours of simulated practice learning within the 2,300 practice learning hours students must complete.172
* **Akershus University Hospital:** A collaboration between Lovisenberg Diaconal University College and the Akershus University Hospital in Norway developed virtual simulation training projects to adapt digital platforms for simulation training.173
* **The National League for Nursing’s Jeffries Simulation Theory:** Developed in the United States, the Jeffries Simulation Theory guides the design and implementation of simulation-based learning in nursing education, focusing on key elements such as educational practices, simulation design and learner outcomes.174
* **Australian examples of simulation training:** Simulation training is currently implemented in a number of hospitals across Australia. La Trobe University has recently expanded its simulation-based learning with the aim of facilitating increased student enrolment to meet workforce demands.175

Stakeholders highlight the opportunity to consider the growing role of simulation in education and invest in this area to better support learning.

### 4.3.5 Student experience

In addition to addressing issues with clinical placements, stakeholders highlighted the need to consider broader aspects of the nurse student experience to ensure a more positive learning journey. These include more financial supports, more supportive mentoring through engaged leadership, consistent learning and supervision quality, and safe workplaces (free from bullying). There is no available data on the demographic profile of nursing students in Australia and why they may leave, with the most comprehensive view of nurse graduates, the ANMF Graduate Data Set – Nurses and Midwives (2023)26, not providing this information. As outlined above, addressing the financial burden of clinical placements in particular is noted by stakeholders as an important opportunity for change; however, other aspects of the experience require attention to minimise attrition.

#### Financial support

The environment scans and literature highlight that many students globally face financial pressure while they are studying and prior to being able to earn a full‑time income. The environment scans highlight a range of initiatives in the United States, England and Scotland that recognise and attempt to address financial burden for nursing students including the following:

* **New York State Support:** The state of New York provides direct financial support for educating health professionals, provided that they work in New York for a specified period after obtaining their credentials.176
* **UK Cost of Living Grants:** After removing student bursaries in England led to a decline in applications for pre-registration nurse education, the UK government responded by introducing a cost-of-living grant in 2019.177,178
* **NHS Learning Support Fund:** This fund was introduced in England in 2020 to provide additional funding for healthcare students including training grants, parental support, specialist subject payment for targeted programs, help with the costs associated with clinical placements and a hardship fund.179
* **NHS Scotland Nursing and Midwifery Student Bursary and other programs:** Scotland offers bursaries and allowances to alleviate the cost-of-living burden as well as a program enabling nursing and midwifery students to ‘earn as they learn.’180
* **Australian state and territory initiatives:** While Australia’s nursing students have access to a level of national financial support through Youth Allowance and Austudy, the Australian environment scans show a range of initiatives in different states and territories have also been enacted to alleviate the financial burden on students. These include subsidised studies (Victoria), undergraduate scholarships (Northern Territory), yearly stipends (ACT) and graduate sign-on bonuses (Victoria). Stakeholders raised concerns about the current fragmented and state-based nature of student financial incentives, perceiving them to drive short-term movement to some states over others instead of comprehensive and coordinated nationwide solutions beyond Youth Allowance or Austudy.

#### Improved mentorship and supervision quality

Stakeholders suggested that a national approach to formal mentorship and buddy programs could be considered in an NNWS to provide support and positive reinforcement to student nurses on placements through graduation and beyond. Examples of mentorship programs include the following:

* **Rural mentorship programs:** In Canada, rural mentorship programs aim to support healthcare providers in rural settings, addressing challenges such as isolation and limited resources.181
* **National Nurse Residency Program, Canada:** This includes competency-based workshops and mentorship to support newly graduated nurses, ease the transition from classroom to workplace and improve retention.182
* **Retired Nurse Mentor Program:** Scotland leverages the experience of retired nurses and midwives as mentors.183
* **Four-stage Assimilation Model:** Israel has developed a 4-stage assimilation model focusing on supports for student nurses and creating career pathways.19
* **RN2Blend at the UMC Utrecht, Netherlands:** While not strictly a mentorship program, the 4-year research program investigates and monitors differentiated and function-oriented employment of nurses in hospitals, which means that the nurses’ tasks are rearranged in new and/or revised positions. Individual qualities are therefore better recognised and deployed in roles and more ‘tailored’ to individuals.184 RN2Blend began in 2019 supported by the Ministry of Health, Welfare and Sport. The research program is a collaboration across a consortium of the Dutch Association of Hospitals and the Dutch Federation of University Medical Centers, with researchers from Radboudumc, UMC Utrecht, Erasmus University Rotterdam, Fontys Hogescholen and the Spaarne Gasthuis.
* **The Reducing Pre-registration Attrition and Improving Retention** initiative in the UK has developed resources for health education institutions that can be used to replicate best practice and effective interventions. The initiative includes the blueprints for a buddy scheme for students and a toolkit that explains what interventions should be in place to best support students and newly qualified nurses.185

#### Bullying and racism support programs for students

The environment scans, literature and stakeholders reported that some students in Australia experience bullying and racism in both their educational institution and clinical placement workplace, noting that this may contribute to attrition. While there is limited data to gain an accurate understanding of how widespread incidents may be, there are opportunities to consider how to best support students in the workplace in an NNWS. This could include:

* implementing policies and practices that promote cultural safety, inclusivity and equity
* providing targeted support for international and First Nations students
* fostering an environment where all students feel valued, respected and empowered to achieve their full potential.

There are examples of relevant programs to address aspects such as:

* University of Wollongong Clinical Placement Support: The provision of confidential advisors, clinical educators and placement coordinators who support students with workplace bullying or harassment concerns. This is not specific to the University of Wollongong – many universities claim to have a clinical placement support system in place for their students.186
* Professional bodies and nursing unions: In many countries, Australia included, nursing unions offer guidance and support for members (and student members) experiencing difficulties during their studies (e.g. the ANMF Member Assistance program).187
* Dedicated nursing employment assistance programs: These include the Nurse & Midwife Support Hotline, which is also available to students and new graduates.188

Recommendation:

* ‘**Recommendation 10:** To ensure that all nurses are adequately prepared, ANMAC and the NMBA should increase the minimum number of placement hours required for the Bachelor of Nursing degree to 1,000 hours. ANMAC/NMBA should also increase the minimum number of placement hours required for EN diplomas and graduate-entry master’s degree programs proportionately.’ – Schwartz (2019)142

### 4.3.6 Transition to practice for new graduates

Stakeholders, environment scans and the literature indicate that new graduates often experience challenges during the transition from student to practising nurse, including feelings of uncertainty, stress and role ambiguity.189 Research shows that new graduates can feel that a lack of workplace support, together with heavy workload, creates unsafe practices190 and that they have insufficient professional skills including the ability to effectively communicate with patients and relatives.191 As discussed earlier, research also highlights the importance of providing nurses with a supportive transition period, typically lasting a year, as they transition into their roles.192

In Australia, a formal transition year known as a ‘grad year’ is available to RNs and, in some states, ENs, but there are more graduating nurses than positions and the programs are unregulated and inconsistent.193 A graduate nurse program is often a 1- to 2-year contract, and some hospitals do not automatically offer ongoing employment for those who complete their graduate year. There are some programs that prioritise First Nations graduates in the selection process to support efforts to increase the First Nations nursing workforce.

Of note, the consultation Panel survey indicated that 42% of nurses surveyed (Volume 1) did not do a transition to practice program and half of those who did not, either did not know there was one, or were unsuccessful in obtaining a place. A further 12% of those who did not do a transition program felt it was of no benefit to them.

Stakeholders suggested that an NNWS could consider:

* **A nationally coordinated transition to practice program** to provide a nationally consistent approach to transition programs, including formalising some of the existing programs through the ACN or the Australian Primary Health Care Nurses Association or implementing a similar program to America’s Nurse Residency program.194,195 The Schwartz report142 also recommended a national web-based transition-to-practice program in 2019.
* APNA’s Transition to Practice Program provides an education framework and support for newly graduated nurses or nurses who need support in the primary health care setting.196
* **More opportunities for clinical experience for newly qualified nurses to provide more hands-on before specialising:** Stakeholders noted that this could ensure newly qualified nurses learn a wide range of competencies while also finding a preferred specialty area. This could prevent nursing graduates from choosing a specialisation too early in their career and without a clear understanding of their preferences. As noted in a submission:

Quote:

* ‘All new graduate staff have access to pathways leading to their preferred speciality area. The new graduate year for nurses provides limited opportunity for gaining clinical experience with only 2 clinical rotations. If neither of these are paediatric orientated, it is more challenging to transition as a second-year nurse from adult to paediatric care. The graduate year could be extended to a true transition to practice with a three-to-four-year plan of varied experience and opportunities to gain some extended practice skills.’ – Submission

Recommendation:

* ‘**Recommendation 13:** NMBA and ANMAC should establish a national web-based TTP. The TTP should be flexible enough to be tailored to the individual needs and circumstances of different workplaces. Completing this TTP should be a requirement for all nurses in their first year.’ – Schwartz (2019)142

Quote:

* NHS England introduced passports in 2019 to facilitate smoother, quicker staff movement across hospitals without the need for lengthy inductions. As part of the NHS long term workforce plan, electronic passports verify staff credentials, training and performance records, allowing health professionals to easily transition between positions or organisations within the NHS, promoting flexibility and efficiency in staffing. – NHS England204

Global examples include the following:

* **Accredited nurse residency programs (United States):**195 These programs are designed to bridge the gap between educational preparation and the realities of working in the healthcare environment. The programs offer on-the-job training and other supports to recently graduated, newly hired nurses, resulting in smoother onboarding and socialisation for nurses.
* **The Practice Transition Accreditation Program (United States):**197 This is a program by the American Nurses Credentialing Center. It sets the global standard for residency or fellowship programs that transition registered nurses and advanced practice registered nurses into new practice settings. The Center accredits a range of transition to practice programs.

### 4.3.7 Models of postgraduate study, career progression and specialisation

Stakeholders view career progression as a significant opportunity to attract and retain nurses. They agree that nursing offers many pathways and supports to facilitate career progression, but they noted that some challenges also contribute to workforce strain and shortages.

Stakeholders reported that while education and training can often focus on undergraduates, a commitment to lifelong learning must also address models of postgraduate study, including how ongoing education and specialisation contributes to the career progression of nurses. The literature suggests nurses who have well-defined career trajectories have higher levels of satisfaction and job security198,199 but also identified that postgraduate education in nursing is a developing area.

#### Career progression pathways

Stakeholders agree there is an opportunity for a **national framework for career progression across multiple pathways**. Even though there are a range of scholarships and other supports available for postgraduate study,200 there is currently no prescribed pathway for nurse career progression in Australia.201,202 Global literature and stakeholders strongly support a nationally consistent education and training framework so nurses know what to do to progress, including across different settings.

Stakeholders noted the benefits of a nationally consistent education and training framework that clearly articulates career progression pathways as including:

* whole-of-career planning support and career coaching (Vic CNMO Conference NNWS consultation)
* better profiling of specialisation career pathways
* transparency of opportunities for career progression
* nationally consistent roles, competencies and career pathways across the sector – primary health/acute/subacute care, the NDIS and aged care
* better collaboration between the university and health sectors to develop research and clinical practice progression pathways
* better career progression support for those from diverse backgrounds including the First Nations’ nursing workforce.

Stakeholders suggested that an NNWS could consider providing focused support for this audience through financial support for credentialling, protected hours to upskill and dedicated career progression funding for nurses in rural and remote locations. This could include better support for career progression into senior clinical roles. Stakeholders suggested there are fewer opportunities to progress into more senior or highly skilled clinical roles as compared with non-clinical roles. They noted that there is an opportunity for better pathways into more highly qualified skilled roles.

Support for transition between specialties is a particular benefit of a nationally consistent career progression pathway, with a number of examples including the following:

* **Netherlands:** The CZO Flex Level project is designed using ‘entrustable professional activities’ to allow easy transition between specialties. This program provides a flexible, competency-based model for career development and nursing competence.203
* **Career passports:** A digital CV or career profile that is easily shared with employers and training providers can enable nurses to plan their career trajectory effectively. Examples include:
* a proposed national nursing career passport (Submission)
* the NHS Skills Passport, introduced in 2019204
* the Canadian Nurse Registration Database (Nrsys in Canada) (2023).21

#### Attracting more nurses to postgraduate education

Research suggests that patients are less likely to experience adverse outcomes when nurses have higher levels of education,205 clearly making the case for attracting more nurses to postgraduate education. Stakeholders noted, however, that financial support for postgraduate studies (graduate certificates, diplomas and higher degrees including master’s and PhD qualifications) is a consistent barrier to the take-up of postgraduate study, along with the challenge of balancing course requirements with clinical roles.206

Stakeholders suggested that an NNWS could consider greater promotion of the value of postgraduate qualifications including graduate certificates, diplomas, master’s and PhDs through:

* **Incentives to encourage further study:** Enhancing the range of incentives that enable nurses to specifically invest in gaining a higher qualification and become eligible for more senior or different roles. These range from financial incentives such as grants and scholarships, to being part of a recognised program of professional development and increased pay and recognition of seniority after completion.
* **Specialised training and professional development opportunities:** These allow nurses to further their expertise in specific areas of interest such as aged care, mental health or emergency nursing.

International efforts to educate more nurses to master’s and PhD level include examples in England (the Clinical Academic Careers Framework promotes PhD training and encourages research),207 parts of Europe (the Bologna Process identifies a 3-level pathway of a bachelor’s, master’s then PhD)145 and the United States (a bachelor’s to PhD program).208 Stakeholders noted cost as a barrier to engagement with postgraduate study, with countries such as Scotland and Australia offering financial incentives to encourage nurses into postgraduate study.

Examples of increased investment include the following:

* **Australia:** Various state and territory strategies focus on increasing access to postgraduate nursing education, with a range of scholarships available.200
* **Scotland:** The NHS Education for Scotland was commissioned to allocate funding to support education for an extra 500 advanced nurse practitioners.209
* **Northern Ireland:** Investment in the post-registration nursing master’s program is designed to attract new nurses into the program to develop leadership skills and support workforce retention.210

#### Continuing professional development

While formal postgraduate studies contribute to the hours required, stakeholders suggested that many nurses rely on workplace training or engaging in journal reading to meet their continuing professional development (CPD) requirements. While some time off work for CPD is built into enterprise bargaining agreements, stakeholders noted that some CPD comes with additional course fees, adding financial strain. In Australia, some hospitals and health services have taken the responsibility for providing ongoing education, believing they offer greater control of content and overall higher quality because they can often support the training in familiar onsite or face‑to-face environments. Research appears to support this, demonstrating CPD is more effective when it is interactive.211

The literature shows that some professional bodies and unions, such as the ACN, also offer CPD courses for a fee. Some of the courses offered resemble the micro-credentialling approaches offered in Canada;212 however, the literature suggests that if a nurse in Australia acquires a new skill outside their workplace, there is a high possibility that they might be prohibited from applying that skill intheir workplace. The literature also indicates that they would be required to demonstrate their competency through an assessment before being permitted to apply the newly acquired skill.

Stakeholders identified an opportunity to reform the annual CPD scheme. Nursing registration in Australia mandates 20 hours of CPD annually, but stakeholders agree there is an opportunity to review this. The NSW Productivity Commission is taking steps to review and reform mandatory CPD schemes, ensuring offerings are targeted, efficient and effective. Stakeholders noted that an NNWS could consider micro-credentials or similar aspects of CPD for national implementation.

In summary, stakeholders said there is a need for:

* a forward-thinking contemporary approach to education and training that reflects the need to educate and train nurses of the future and the changing nursing environment and healthcare needs of Australians
* a more coordinated national approach to lifelong nurse education and training in a framework that would ensure quality and consistency across Australia
* more innovative models of education that consider undergraduate education length and format and a blended model approach
* a review of the structure of the clinical placement system to address key issues including a nationally consistent approach, financial support, a national preceptorship framework and guidance around the role of simulation
* more support for nursing students including providing financial relief, increased flexibility and ensuring positive experience through mentoring, engaged leadership, consistent learning and supervision quality and a safe workplace culture
* a national framework for career progression across multiple pathways including a digital ‘careers passport’
* promotion of the value of postgraduate qualifications and support to undertake them, to encourage more nurses into further study
* Reform of the annual Continuing Professional Development (CPD) scheme including a national micro‑credentials or similar approach.

## 4.4 Models of care

### 4.4.1 Overview ­– models of care

Stakeholders raised the topic of ‘scope of practice’ as a significant concern across all nursing roles, calling for a more defined and expanded scope of practice that aligns with their qualifications, skills and the evolving needs of healthcare delivery.

Quote:

* ‘I think that’s something we really need to highlight, the EN scope is not utilised. They are taught so much; the assessments are so robust … people don’t even understand what the EN’s scope is or what they can do. It’s just extraordinary. I think that they’re a very underutilised and marginalised and to some degree, in my experience, discriminated against workforce. And I’m speaking as an RN.’ – Nurse unit manager in-depth interview

Stakeholders highlighted the importance and clear benefits of allowing nurses to use their full skills and competencies, noting that working to an optimal scope of practice enhances job satisfaction and also ensures more efficient and effective patient care. Research identifies that nurses are happier when they can work to their full scope of practice and have the option to continue to expand it.10,213 It is also clear that maximising nurses’ enacted scope of practice is a key integrated strategy for enhancing organisational performance, patient care and nurses’ satisfaction and wellbeing.10

Quotes:

* In Swiss primary care, particularly in chronic care management, advanced practice nurses (APNs) and medical practice assistants (MPAs) have significant roles. APNs care for older, multimorbid patients with complex needs, while MPAs counsel younger patients with chronic diseases. This model addresses the global epidemic of chronic diseases and the increasing healthcare burden they pose. – Carron et al. (2023)217
* ‘Restrictive and unresponsive scope of practice regulation is stifling innovation, inhibiting workforce reform and adversely impacting healthcare access and quality.’ – Leslie et al. (2023)216

The Unleashing the Potential of our Health Workforce – Scope of Practice Review: issues paper 1214identifies a range of issues and themes to help optimise scope of practice in the primary health setting, but much of the rationale for the review applies equally to scope of practice constraints with the broader nursing workforce.

Stakeholders, the environment scans and literature identified a need for more focus on opportunities to deploy resources in a manner that is ‘smarter not harder’, incepting innovative nurse-led models of care, better aligning tasks for ENs and RNs in particular, and ensuring nurses are at the centre of multidisciplinary teams. Stakeholders highlighted that a stratification of roles (e.g. assisted by AI) and nursing practice will continue to broaden. They noted that interprofessional collaboration will also continue to increase, where nurses will act as full partners with other health professionals.215

Stakeholders agree that changing models of care underscores considerable innovation in the system itself, including funding implications, and can have considerable impact on the sustainability of the nursing workforce. They suggested there are opportunities for an NNWS to consider ways to achieve the following:

* **Better alignment and articulation between the EN and RN scope of practice:** There is an opportunity to create better skills utilisation through a national competency–based EN and RN pathway. Robust examples include the Swiss primary care model217 and the New Zealand expanded scope of practice.218 Further opportunities for reform are noted in the environment scans.
* **Increased focus on innovative nursing models of care:** Stakeholders highlighted the importance of nurse-led models of care, particularly in primary care settings. Global innovations in nursing models of care point to a range of opportunities for consideration.
* **Change management strategies to ensure successful implementation of new models of care:** While change management approaches are well-worn strategies in many sectors, stakeholders noted there are not many examples of effective change management strategies that transition to nurse-led models of care.
* **More opportunities for a central role in multidisciplinary models of care:** The literature suggests that models of care in allied health that incorporate nurses have higher rates of successful outcomes and offer a range of examples of multidisciplinary models with nurses at the centre. The Innovative Models of Care Program219 and the HealthOne NSW service model220 are both examples of the successful implementation of outcomes from a multidisciplinary approach. Both models are covered in more detail when discussing multidisciplinary models of care.
* **Innovative funding models for nurse employment and models of care:** A range of different funding models from Australia and globally could be explored to identify innovative funding mechanisms to support the expansion of nurse-led models of care.
* **Exploring innovative student employment models:** A number of student models of employment both from Australia (RUSON) and globally (as discussed earlier) offer potential solutions to both fast-tracking a nursing workforce and alleviating issues of financial strain during clinical placement and improving transition to practice for new graduates.

### 4.4.2 Scope of practice

Schwartz142 notes that while the titles of EN, RN and NP (nurse practitioner) are legally safeguarded, meaning only those who fulfill specific criteria can use these designations, the actual tasks and responsibilities of these nursing roles are not as distinctly demarcated.

The literature explains that while all registered health professionals are bound by their scope of practice, the actual scope of an individual’s practice is influenced by:

* the context in which they practice
* consumers’ health needs
* their level of competence, education, qualifications and experience
* the service provider’s policy, quality and risk management framework and organisational culture.221

Stakeholders noted that the work of ENs, RNs and NPs can intersect, with ENs and RNs sometimes performing similar functions and RNs taking on roles that closely resemble those of NPs. This overlap in roles can cause confusion, dilute the distinct professional identity of each type of nurse, and potentially cause professional tension. By optimising the scope of practice for all nurses across EN, RN, AIN and NP roles, the nursing profession can be at the centre of a shift towards more accessible, patient-centred and responsive health care.

Stakeholders agree there is an opportunity for a discussion about scope of practice across all nursing roles.

#### Better alignment between EN and RN scopes of practice

Stakeholders spoke of ongoing confusion in workplaces regarding scope of practice, particularly in relation to the roles undertaken by ENs and the scope delineation between EN and RN roles as the EN scope has expanded. This confusion is partly attributed to the presence of different types of ENs in various workplace settings. The overlap of roles and poor communication is compounded by EN delegation to assistant roles. This can add to the confusion and, at worst, lead to episodes of missed care. Stakeholders noted that the issue is not with the definition of the EN scope of practice as such but with individual and workplace interpretations of the scope, highlighting that the regulatory framework and practice structures are misaligned.222

Stakeholders noted that this misalignment extends to the RN delineation, where local health services and hospitals sometimes choose to define the scope of practice of their nursing workforce to ensure a clear local standard. Given the complex nature of competence and differing settings, RNs can sometimes end up working below their scope of practice.60 Variations in scope are sometimes even seen across departments in singular workplaces, causing confusion and fear of working beyond their scope.223

Stakeholders noted opportunities to align scopes of practice through changing models of care including better definition of EN-RN pathways and skill mix. A more defined and better articulated scope of practice that matches qualifications and responds to the changing and future healthcare delivery needs, particularly at the EN and RN levels, would be beneficial, especially in specific settings like acute and primary settings, rural and remote areas, and aged care.142

Recommendation:

* ‘**Recommendation 6:** NMBA practice standards should specify the core knowledge, skills, and procedural competence newly registered ENs and RNs require to function in any workplace setting.’ – Schwartz (2019)142

Although Australian ENs can work across all settings, New Zealand will soon allow ENs to specialise in areas like aged care, mental health or community nursing. A new scope of practice is being introduced in New Zealand that will enable ENs to work in more health settings as part of a team with RNs. The New Zealand Nursing Council has developed a new and more flexible EN scope of practice that will enable greater autonomy for the roles.60,224

### 4.4.3 Innovative nursing models of care

The literature reveals examples of nurse-led practice in many settings, including in primary health care. However, as noted in Unleashing the Potential of our Health Workforce – Scope of Practice Review: issues paper 1214there is no widespread, nationally consistent acknowledgment of nurse-led practice, nor is there secure funding or underpinning policy levers to support nurse-led models of care.

The literature underscores the positive outcomes associated with nurse-led care, including improved patient satisfaction, enhanced quality of life and better clinical results.214 These models not only facilitate a more efficient use of healthcare resources but also foster a deeper understanding of health issues among patients, streamlining their access to other health professionals.

Stakeholders identified an opportunity to focus on nurse-led care policy and practice in community settings by expanding nurse-led models including NPs across primary health, aged care and virtual care settings to deliver the full range of services. This approach could include models of designated RN prescribing (Submission). The introduction of NPs into Norwegian primary health care reflects efforts to enhance clinical competence among RNs and to improve the management of older patients with chronic conditions. This initiative underscores the challenges and opportunities in defining and organising the NP role within existing healthcare models, highlighting the importance of clear role definitions and interprofessional collaboration.225

There are many examples globally and across Australia of innovative nurse-led models of care including the following:

* **Patient-centred home care:** The Buurtzorg model in the Netherlands emphasises patient-centred home care delivered by self-governing teams of nurses, resulting in high patient and nurse satisfaction and potential cost savings.226
* **Transitional care model:** The American transitional care model, which is spearheaded by advanced practice nurses, emphasises in-home care for the elderly with chronic conditions, aiming to reduce hospital readmissions and improve health outcomes through comprehensive care coordination.227
* **The Edge Runners Initiative:** The American Academy of Nursing’s Edge Runners initiative acknowledges nurse-developed models of care that effectively reduce costs, enhance healthcare quality, promote health equity and increase consumer satisfaction.
* **Evaluated nurse-led models in aged care:** An American study reviewed multiple care models aimed at providing nursing care to older adults.228 The models offered diverse approaches to addressing the complex needs of the older population, ranging from community-based interventions to specialised hospital units. These and other inventive nursing and interprofessional initiatives like the UK’s A-EQUIP model229 showcased enhanced patient outcomes, reduced costs and elevated quality and safety standards for older adults.
* The Advocating and Educating for Quality Improvement Program (A-EQUIP) is a UK clinical model that focuses on restorative supervision for nurses. These nurses have undergone professional nurse advocate training and are equipped to actively listen to and understand the challenges faced by their colleagues and teams. – NHS England229
* **The Queen’s Nursing Institute (QNI) UK Pilot:** The QNI supports community nurses to lead innovative projects aimed at improving the health and wellbeing of communities, particularly those that are vulnerable or have complex needs. The QNI exemplifies how nurse-led initiatives can fill critical gaps in healthcare provision.230
* **Victorian Schools Nursing Program:** This is an Australian example of an innovative model of nursing care designed to meet the healthcare needs of children, adolescents and their families in schools.231
* **Expanded and formalised nurse practitioner roles:** Norway, Switzerland and Israel all have examples where NPs are more fully integrated into the health system, especially in areas like out-of-hours primary care, chronic disease management and care for older adults. This includes legislative support to expand their scope of practice and study reimbursement mechanisms.19,215,225
* **Canada’s Nurse Practitioner-Led Clinics:** These clinics offer comprehensive and accessible health care, particularly for underserved populations. These clinics highlight the role of NPs in leading a collaborative approach to family health care, focusing on prevention, chronic disease management and health promotion.232
* **Integration of nurse practitioners in Australia:** Initiatives in Western Australia and New South Wales highlight the successful integration of NPs into primary care and rural settings, improving access to health care and addressing workforce shortages. The Nurse Practitioner and Team-Based Care Pilot in Western Australia233 and theRural Nurse Practitioners Framework in NSW234 exemplify efforts to use NPs to their full scope of practice, enhancing healthcare delivery in under-serviced areas.
* **Technology-enabled care services:** England’s action learning program for general practice nurses promotes the integration of digital health technologies and care services in nursing practice to enhance patient care and improve clinical outcomes.235
* **AACN Synergy Model for Patient Care**: This 20-year-old approach from the United States embodies a fundamental shift in thinking about nursing skills and how to assess them through certification. The core concept of the model is that ‘the needs or characteristics of patients and families influence and drive the characteristics or competencies of nurses’.236
* **Virtual health care models:** The Australian cancer plan 2023–2033 underscores the pivotal role of digital health in revolutionising nurse-led service delivery. It emphasises the contribution of technology and digitally enabled services to the operation and delivery of healthcare services (Cancer Australia).237
* **Virtual nursing hubs:** The concept of virtual nursing hubs to support nurses who may be injured, less physically able or nearing retirement, yet still capable of providing virtual care, is exemplified by a regional New South Wales provider, McLean Care,238 offering a solution to workforce issues preventing on-site nursing availability.
* **Nurse-led healthy lifestyle clinics in New Zealand:** This program specifically targets Māori communities, Pacific Islander people and people living in high-deprivation areas. The initiative was identified because it demonstrated the effectiveness of nurse-led clinics. The clinics achieved significant success, with one nurse participant highlighting that patients receive health care tailored to their preferences and needs, which is a positive impact on patient empowerment.239
* **Queensland’s telehealth strategy:** This strategy demonstrates the potential of digital health to complement traditional care models, offering an effective solution to geographical and logistical barriers to care.240
* **Cancer telehealth services:** A study commissioned by Cancer Australia on telehealth services in cancer care revealed a patient preference for video consultations due to their ability to facilitate visual communication and enhance the quality of care. The study advocates for a hybrid approach to cancer care delivery, combining in-person, video and telephone modalities.241

### 4.4.4 Change management strategies to ensure successful implementation

Stakeholders agree that a central part of any change program is the change management process itself. In our consultation, stakeholders noted the need for a successful change management program to embed innovative nurse-led models of care that includes strategic planning, communication, training and staff support to ensure nursing professionals can adapt to and embrace changes aimed at improving patient care and operational efficiency. When introducing a novel innovation or care model, the literature and stakeholders emphasise the need for meticulously planning the implementation process, particularly in effectively managing the repercussions of change among staff and broader members of healthcare teams.242   
However, there are limited examples of comprehensive or effective change management programs in global healthcare settings:

* **Flexible working within the NHS in the UK:** The NHS’s focus on flexible working aims to attract and retain nursing staff by accommodating their diverse needs. Case studies demonstrate the successful implementation of flexible working practices such as the use of an e-roster system to support team-based flexible working. This approach improved work-life balance and reduced staff turnover, showcasing the significance of adapting work environments to support the nursing workforce.243
* **The implementation plan for the enhanced nurse/midwife contract:** This program in Ireland aims to transform the role of nurses and midwives, focusing on community services and patient safety. Pilot sites for testing the community virtual ward concept prove the feasibility and benefits of shifting care from hospital to community settings. This approach emphasises the need for a robust ICT system for monitoring and reporting, highlighting the importance of technology in supporting new care models.244
* **Queensland Stay On Your Feet – Community Good Practice Model:** This program is a Queensland Health initiative that aims to equip those working with older adults with convenient access to up-to-date evidence-based resources related to falls prevention and strategies for healthy active ageing. The model is guided by Kotter’s 8 steps of a change model framework to support the change by:
* establishing a sense of urgency
* creating the guiding coalition
* developing a change vision
* communicating the vision for buy-in
* empowering broad-based action
* generating short-term wins
* never letting up
* incorporating changes into the culture.245

### 4.4.5 Multidisciplinary models of care

Stakeholders and the literature note that as healthcare teams expand and diversify, nurses have the opportunity to become full partners with other health professionals and collaborate with diverse partners such as allied health professionals and community health workers – both in roles that nurses have traditionally occupied and also in new spaces where nurses have been less present.

Stakeholders reiterate that nurses are natural ‘boundary spanners’, using care coordination and transition management to connect patients across healthcare and community settings. They also make connections across departments, professions, organisations, sectors and geographical areas to develop new care strategies and population health models.

The following examples from various countries demonstrate the diverse approaches to implementing multidisciplinary team models of care including nurses. Each model addresses specific healthcare challenges and leverages the unique skills and contributions of nurses and other health professionals to improve patient outcomes, enhance care delivery and support the wellbeing of the nursing workforce:

* **HealthOne NSW Multidisciplinary Team Care:**220 This service modelhighlights collaborative care provision, involving general practitioners alongside community health and other health professionals. An evaluation demonstrated positive outcomes compared with non-collaborative alternatives.
* **Innovative Models of Care:** In Australia, this Commonwealth program trials and evaluates multidisciplinary primary care models in rural and remote areas. By fostering innovation and adaptation to local contexts, this program seeks to improve access to quality health care in underserved regions.219
* **Advanced practice nurses and medical practice assistants in Switzerland:** The study in Swiss primary care highlights the integration of advanced practice nurses (APNs) and medical practice assistants (MPAs) into primary care teams, particularly for chronic care management. This approach demonstrates the potential of multidisciplinary teams to meet evolving healthcare needs.215
* **A district nursing framework in Northern Ireland:**246 The Northern Ireland framework aims to deliver a world-class district nursing service and is available 24/7, regardless of a patient’s location. Emphasising person-centred care, integration, efficiency and effectiveness are essential to developing an expert district nursing team. The study calls for the integration of district nursing with general practice and the adoption of new technologies to enhance the efficiency and effectiveness of nursing care.

### 4.4.6 Student employment models

Student employment models were identified in the consultation, environment scans and literature as another potential solution to workforce shortages*.* Under these models, employment could assist student nurses to develop their clinical skills over an extended period and without the added pressures of financial strain.

Research suggests that student employment models can be effective in enhancing patient care and experience, enhancing student learning, as well as enhancing the experience of RNs and offering an important ‘third space’ for learning.247 RUSONs and RNs surveyed in one study perceive that the knowledge and enhanced confidence acquired through the RUSON role would lead to improved work readiness for the graduate year.248

There are numerous examples of student employment models globally:

* **American and Canadian intern and extern models:** Various models of paid student employment in clinical roles have been established over the years in the United States and Canada, including intern (residency) and extern (short-term ‘shadowing’ placements) programs, as well as cooperative partnerships. These programs show increased recruitment to the corresponding graduate positions and increased confidence in practice.249–251
* **Registered roles – RUSON:** Evaluation of the RUSON model demonstrates promising outcomes, including reduced workload pressure and increased job satisfaction among RNs, as well as enhancements in patient care quality and the confidence levels of RUSONs in delivering nursing care, teamwork and communication.247
* **Registered roles – Ungraduated Student in Nursing:** This model from Queensland252 shares many similarities in scope and requirements. The model was formed to build a pipeline of RNs in the paediatric speciality and, due to its success, has expanded into other fields.
* **Unregistered roles – assistants in nursing and personal care workers:** There are a variety of unregistered student models including AINs, personal care workers and health assistants in nursing. The ANMF has advocated for regulating this workforce, emphasising the need for consistent educational preparation and national registration standards for healthcare support roles. The ANMF recommends that, ‘To protect the public, assistants in nursing (whatever their job title) should have mandated education, English language, and probity requirements, which are accredited, assessed, and enforced by a robust quality-assurance regime.’253
* **HLT33115 AIN qualification:** Acknowledging the need for practical insights and addressing workforce demands, TAFE NSW offers a program allowing undergraduate nursing students to attain the HLT33115 Assistant in Nursing qualification while studying for their bachelor’s degree. This innovative approach incorporates recognition of prior learning, a self-directed education package and objective structured clinical examinations, and could act as a potential template for other nursing faculties. Fifteen units of competency must be achieved to earn the award. This program enables student nurses to work as AINs within the acute care environment and provides employment in a health facility and opportunities for students to immerse themselves in the clinical environment while continuing their studies.254

Although paid work in health care has shown to improve transition into nursing roles for students, currently the registered pathway remains the primary method for achieving optimal workload and patient outcomes. Despite this, Lindsay et al.253 note the intersection of skills and knowledge required for these positions and suggest more research is needed to explore the positive connections between undergraduate university education and learning acquired through paid employment in clinical settings.

Stakeholders identified an opportunity for an NNWS to consider ways to expand student employment models to assist with relieving the financial strain and improve transition to practice.

### 4.4.7 Innovative funding models for nurse‑led models of care

Aside from scope of practice considerations, the other key enabler of more nurse-led models of care is the use of innovative funding approaches, with stakeholders identifying an opportunity to consider more innovative funding options to support nurse-led models of care.

There have been some reported initiatives in the global literature on how funding models can have an impact on nursing practice and patient outcomes. The Canadian government, for example, has introduced a variety of funding models aimed at promoting interdisciplinary teams where several health professionals (including nurses) have shared responsibilities in managing patient care.255

There are a number of other examples of funding models and strategies that could be considered for enhancing nurse-led models of care:

* **IMOC:** As outlined above, the Commonwealth program funds organisations to trial new multidisciplinary primary care models in rural and remote communities. Examples include GP-led multidisciplinary teams, shared GP models and allied health services. Round 5 funding applications are currently being considered.219
* **APNA’s Building Nurse Capacity Program (Australia):** Specifically for nurses, this program offers grant funding and comprehensive support to develop nurse-delivered, team-based care models – for example, nurse clinics in general practices such as diabetes clinics.256
* **University research block grants:** Universities in Australia receive funding from the Australian Government to undertake research through a dual funding system. Competitive research grants and research block grants are awarded to universities to support specific research projects.257
* **National Health and Medical Research Council, Australian Research Council Grants:** There are many examples of grants in Australia, but the Australian Catholic University Nursing Research Institute focuses on nurse-led model implementation research in partnership with clinical, policy and academic partners.258,259
* **Targeted workforce plan funding – NHS long term workforce plan:** Supported by £2.4 billion in government funding up to 2028–29, the plan aims to recruit an extra 170,000 to 190,000 nurses into the NHS in England. It focuses on an integrated workforce plan covering training, retaining and reforming the workforce, with an emphasis on increasing health professional education and training.22
* **Government co-funded social enterprise models:** The Buurtzorg approach from the Netherlands is a community-focused social enterprise model that has been acknowledged by policymakers as a means of enabling people with care needs to live independently with less formal support. Potential cost savings of up to 40% have been calculated for delivering care outside traditional hospital settings.226,260
* **Value-Based Health Care through nursing leadership:** This model complements traditional health funding models with new outcomes-based funding approaches.261 A number of European countries and the United States have successfully implemented similar funding models, and Australia is now trialling them in various settings (Submission).
* **Place-based funding:** Place-based funding aligns with the Commonwealth’s place-based strategies designed to build whole-of-government capability to work in partnership with communities, explore innovative funding models and enable better coordination of investment priorities, including in health.262

Stakeholders said there is a need for:

* optimising scope of practice at all nursing levels including EN, RN and NP to enhance skill mix
* better aligning and articulating roles, in particular between EN and RN scopes of practice
* increased focus on innovative nurse-led models of care including ways to maximise nurse-led models
* change management strategies to ensure successful implementation of new models of care
* more opportunities for a central role in multidisciplinary models of care
* expanding student employment models such as the RUSON model
* more innovative funding models to support nurse-led models of care.

## 4.5 Leaders of the future

### 4.5.1 Overview – leaders of the future

Stakeholders highlight the need for a strong focus on developing both nurse management and leadership skills and noted that nurse leadership will have an important role in driving the change that is required to build a more sustainable nursing workforce across Australia.

Quote:

* ‘Strong leadership within the nursing workforce is vital to ensure a high-quality, sustainable, and effective healthcare system. This is achieved by enhancing the skills and capabilities of senior nurse team leaders, including Nursing Unit Managers (NUMs). Surprisingly, only 33% of NUMs have completed studies beyond an undergraduate degree.’ – Submission

The literature explains that many countries and global peaks identify strong and supportive leadership, specifically transformational leadership, as a key element in ensuring nurses’ wellbeing.263 As outlined above, wellbeing and job satisfaction and therefore retention are also inextricably linked to supportive leadership. Stakeholders agree there is a critical need to create safe and supportive workplaces to improve retention rates, and this relies heavily on inspiring and aspirational leadership at all levels of the nursing profession. Also referred to above is the importance of the opportunity for career progression in nursing. An awareness of a career pathway via leadership development is considered essential to retaining nurses in the workforce.

The literature explains that transformational leadership is a proven approach to drive and oversee change in health care.242,264,265 By fostering accountability, ownership and autonomy, leaders can inspire teams to embrace shifts in practice. Notably, transformational leadership not only motivates teams but also improves healthcare, shaping positive structural cultures and encouraging positive patient outcomes.264 Key qualities of transformational leaders include transparent communication, visible presence within the organisation and modelling expected behaviours. They align staff around common goals, inspiring and empowering them to enact change effectively.265

Stakeholders and the literature highlight the need for additional support and training to bolster leadership capability and capacity across Australia’s health system. The nurse unit manager role was repeatedly called out as a major pressure point in the leadership pathway, with many nurse unit managers ‘doing the role because no one else would’ and enduring overwhelming workloads and limited leadership support, training or development opportunities.

Stakeholders also noted the critical issue of senior staff departures resulting in inexperienced nurses assuming management roles early in careers, leaving new leaders feeling unprepared and overwhelmed. Stakeholders suggested that nurses may feel that the lack of opportunity to develop leadership skills is exacerbating challenges within teams and potentially leading to increased burnout rates and contributing to the cycle of attrition.

Stakeholders and the literature identified best practice leadership as promoting the importance of establishing environments where nurse unit managers in particular can dedicate time to their staff and understand their individual needs and aspirations while nurturing their development.

Quote:

* ‘They say, either I’ve been around the longest, no one else wanted to do it or I’m doing it because someone else was interested, and none of us wanted them to get it, so I went for it. In many cases they don’t want to be a NUM. No one wants to. They just want to do what they are passionate about, which is being a nurse. They don’t want the bureaucracy, the politics, that comes with it ... it’s not that they don’t necessarily want to be a leader. It’s that they don’t want to be a leader within the existing system.’ – Nurse unit manager in-depth interview

Stakeholders highlighted the importance of developing nurse operational and strategic leadership capacity across all levels and the need to provide widespread nationally consistent acknowledgment of the value of investing in nurse leadership by securing funding and policy.

Stakeholders suggested that key opportunities for an NNWS to improve the profession’s leadership capabilities include the following:

* **A focus on leadership development programs at every level of the nursing profession:** There is a lack of structured leadership programs at each level of nursing for nurses aspiring to leadership roles – as mentioned, particularly for nurse unit managers.
* **Support for leaders in creating safe workplaces:** The issues of workplace bullying, harassment, racism and violence require strong leadership skills to promote a positive environment of change. As noted, there are a range of strategies and frameworks that provide guidance on how to create a safe workplace, but there is a critical need to train and support leaders to implement these strategies and build and maintain a positive workplace culture.
* **Mentoring and support for novice leaders:** Inconsistent mentoring and support for emerging nurse leaders is highlighted as an issue for early career nurses, but there are examples of good practices both from Australia and internationally.
* **Performance development frameworks for leaders and staff:** There is a need for greater focus on the skills development and performance frameworks for leaders to ensure successful leadership, but there is also a need to support leaders to promote positive work environments through effective performance development of staff.

### 4.5.2 Leadership programs

Stakeholders noted nursing offers the opportunity to grow and develop into different roles but also to progress in seniority into roles such as clinical nurse specialist, clinical nurse consultant, nurse educator and director of nursing. They agree that nurses who are willing to relocate or work in a different organisation or setting have access to a wider range of career progression opportunities. However, the literature and stakeholders confirm that transitioning into leadership or management roles often lacks formal or informal education requirements for nurses. Management skills are typically learned on the job, leading to gaps in leadership abilities in local settings.266

Quote:

* Less than half (41%) of nurses say they feel supported to access opportunities for career progression. – Vol 1 Consultation report

The literature suggests that nurses seeking further formal education for management roles often pursue options such as a Master of Healthcare Leadership or the ACN’s nurse unit manager course.267

While those in management roles in a health service reported having clarity on the pathways for nurses, feedback from nurses indicated they may not be as certain and want more information about the pathways. Nurses explained they want a clear national roadmap so they know what qualifications or training they need to complete in order to advance in the profession, particularly into leadership roles.

Stakeholders agree there is a need for leadership development opportunities that are accessible to all nurses, regardless of their geographical location or the sector they work in. They noted that the absence of leadership development opportunities at all levels of nursing (including funded opportunities) that are accessible to all nurses often results in talented individuals being overlooked or not adequately prepared for leadership positions, which can have a detrimental impact on the quality of patient care and the overall efficiency of the health system.

Nurse leadership development practices from around the world demonstrate the positive impact of structured leadership programs, high-level leadership forums and innovative models like the A-EQUIP model from the UK outlined above.229 Consultation noted an opportunity for an NNWS to promote a more structured approach to leadership development in the nursing profession, particularly for nurse unit managers, including mentorship programs, leadership training and clear career progression pathways.

Quote:

* The ACN Institute of Leadership, offers leadership development opportunities for nurses at all career stages, aiming to empower nurses to enhance their leadership skills, advance their careers, and contribute to health system improvement. – ACN Institute of Leadership271

Stakeholders believe an opportunity exists to influence a more structured approach to leadership development within the nursing profession, including mentorship programs and leadership training to maximise access to career progression pathways.

Examples of leadership initiatives and programs in Australia and globally include the following:

* **Westpac Future Leaders Scholarship:** This program offers scholars $120,000 to complete a program of study and international experience of their choosing, with the remaining funds being allocated to 2 residential leadership training courses and items determined by the applicant’s self‑developed budget.268
* **NHS Leadership Academy:** The Leadership Academy offers a range of programs designed to enhance leadership skills and support career development for nurses and other health professionals.269
* The NHS long term workforce plan emphasises the critical role of leadership in healthcare outcomes. This includes the introduction of an ‘NHS Leadership Code’ to guide leadership behaviours and practices. – NHS England22
* **HSC collective leadership strategy (Northern Ireland):** Launched in October 2017, the strategy sets out the framework for creating a leadership culture based on the principles of quality, continuous improvement, compassionate care and support.18
* **The Nightingale Challenge Global Leadership Development Programme (ICN):** The Nightingale Challenge seeks to raise the profile of nurses through leadership development opportunities internationally, particularly among early career nurses. To date, more than 20,000 nurses and midwives across employers have engaged in the challenge.270
* **ACN Institute of Leadership:** The ACN in Australia provides a range of tools and resources to support leadership development of nurses in Australia.271 The ACN also offers nurse unit manager leadership courses to develop nurses aspiring to nursing unit management roles with practical skills required to influence and manage self, others, resources and operations.
* **Business school leadership programs (United States):** The Wharton Nursing Leaders Program, for example, is designed for nursing leaders who want to enhance their effectiveness and advocate for patients. It covers essential financial skills, strategic issues, critical analytical skills and resource management.272
* **The Johns Hopkins Nursing Leadership Academy:** The hospital offers a 3-day intensive program to explore evidence-based practices with management experts and experienced Johns Hopkins nursing leaders.273
* **World Health Organization initiatives:** The World Health Organization has been instrumental in fostering nurse leadership globally with initiatives including the creation of the Global Forum for Government Chief Nursing and Midwifery Officers and the production of a manual to support nurse leadership roles and responsibilities.274
* **ICN initiatives:** The Global Nursing Leadership Institute program, adapted for online delivery during the COVID-19 pandemic, focuses on developing senior nurse leaders’ capacity to influence policy at the national, regional and global levels. This program emphasises regionalising leadership development while maintaining cross-regional connections.275
* **Queens Nursing Institute Scotland Leadership Programme (Scotland):** This program ‘supports, develops and inspires Scotland’s community nurses and midwives to become agents for health improvement and catalysts for social change.276
* **Programs focused on nurse unit managers:** There is an opportunity to support nurse leadership development at all levels and in all health settings to promote the need for funding and policy for nurse leadership214 and enhance the skills and capabilities of senior nurse team leaders. This specifically includes nurse unit managers through mentoring and professional development opportunities to develop their leadership skills. Stakeholders suggested a range of initiatives including:
* leadership secondments and rotations
* leadership exchange programs outside the profession
* leadership opportunities for nurses within multidisciplinary health teams in acute settings.

### 4.5.3 Leadership that promotes safe workplaces

The literature, environment scans and stakeholders highlighted the issues of workplace bullying, harassment, racism and violence in the health system and noted the need for strong leadership skills to promote a positive environment of change.

Quote:

* ‘Preventing workplace bullying is important to reduce clinical nurses’ burnout and turnover. The role of nursing leadership is crucial to develop interventions that reduce workplace bullying and successfully create a professional, nurturing, and supportive work culture’. – Kim et al277

As outlined above, there are a range of strategies and frameworks that provide guidance on what constitutes and how to create a safe workplace; however, stakeholders agree there is a critical need in Australia to train and support leaders to implement these strategies and build and maintain a positive workplace culture. Most of the examples of the leadership programs and initiatives outlined above also include specific training to empower leaders to create more positive workplaces and prevent and manage bullying and poor workplace culture.

Stakeholders identified an opportunity for an NNWS to focus on leadership in the area of promoting, enabling and supporting positive practice environments by elevating its importance in frameworks, strategies and initiatives.

### 4.5.4 Mentoring and support for novice leaders

Stakeholders believe that limited access to mentorship, poor support for novice nurse transition and limited early career leadership development opportunities are factors in poor retention rates for nurses, particularly in rural and remote settings. They noted that the integration of mentorship programs, and early career leadership development, is therefore crucial in ensuring nurse students, researchers and novice leaders are well equipped to transition into leadership roles.

Stakeholders agree that establishing national and local mentorship programs is an essential component in facilitating this change. The literature supports an approach to mentoring novice leaders that underscores the role of mentorship in nurturing a positive culture and where emerging leaders are supported through protected time for mentorship, and leadership training. For example, research indicates that leadership must be fostered as early as the undergraduate and student nursing levels.278

There are several programs for early career leadership, development and mentoring:

* **ACN Emerging Nurse Leader Program:** This program is designed for nurses seeking to advance their careers and become effective nurse leaders. Key features include access to mentoring with high-profile nurse leaders, personalised career coaching and a range of professional development opportunities including workshops and networking events. Program outcomes include increased self-awareness of leadership qualities, improved confidence and a better understanding of contemporary healthcare environments.279
* **Emerging Nurse Leader Institute:** This American program combines discussion, reflective practice, experiential learning and self-assessment. Taught by expert faculty, participants develop leadership competencies to improve their effectiveness as a leader.280
* **Student leadership development – Monash University Ancora Imparo Vice Chancellor Leadership Program:**281 Australian universities offer student leadership development programs. Although opportunities such as student representative positions and leadership programs are available to student nurses, strategies to support the availability and accessibility of these programs should be considered, particularly as the learning load for nurses is extensive.282
* **The Emeritus Registered Nurse/Midwife position pilot created by Canberra Health Services:** This pilot program is similarly focused on halting the drain of knowledge from senior nurses retirement by facilitating the transfer of invaluable expertise and providing essential support to newly qualified nurses, bridging the gap between generations within the nursing profession.283
* **The Nightingale Challenge (ICN):** As noted above the Nightingale Challenge seeks to raise the profile of nurses through leadership development opportunities internationally, particularly among early career nurses.284

Stakeholders agree there is an opportunity to create a more coherent and prioritised approach to growing the next generation of nurse leaders through mentoring and support.

### 4.5.5 Leadership and performance development frameworks for nurse leaders and staff

The literature notes that central to the leadership journey is the development of management skills including performance development, critical thinking, leadership and the ability to navigate complex healthcare environments. It notes that these skills are not only essential for individual career progression but also for the overall quality and sustainability of health services.

Quote:

* ‘Nursing leadership behaviors play a crucial role in shaping nursing performance, thereby achieving the organizational goals of ensuring the delivery of quality care and achieving better patient outcomes. Considering the nursing leadership theories, transformational and transactional leadership styles and their impact on nurses’ satisfaction, burnout, and resilience have received lot of attention.’ – Alsadaan et al.285

Stakeholders suggested 2 key opportunities for an NNWS to consider in its focus on leadership and performance development:

* **Development to support leaders in their leadership role.** More structured leadership skills and structured performance development is increasingly important as nurses aspire to more impactful leadership including influencing policy, achieving greater representation in health administration and governance boards, driving roles of clinical exceptionalism (e.g. NP)286 and championing innovative nurse-led models of care.287
* **Development of management skills** to support staff in meeting their performance development opportunities. Stakeholders and the literature reference the need for leaders within the nursing workforce to support staff through performance, development and management systems and processes.

Within these 2 areas of opportunity, the environment scans and literature identified a range of nurse leadership skills and performance frameworks, strategies and programs – many of those mentioned above also consider the role of leadership development and/or the skills required for staff development, but additional programs specifically addressing both or one of these areas include the following:

* **Nurse leadership competencies:** Researchers based in the Netherlands identified 150 competencies across 4 key leadership domains: clinical, professional, health systems and health policy leadership.288
* **ACN Nurse Director Leadership Program:** This program has been developed for nurses with more than 6 years of professional experience who have held leadership roles in health or aged care systems.289
* **Australian health leadership framework:** The Australian health leadership framework, known as Health LEADS Australia, while developed in 2013, remains relevant and continues to be used.290 Developed by Health Workforce Australia, this framework focuses on the capabilities required for leaders across various health domains. It draws inspiration from existing international work and aims to address contemporary Australian health challenges. Health LEADS Australia encompasses 5 key areas of focus, represented by the acronym L-E-A-D-S:
* Leads self: self-awareness, resilience and personal growth
* Engages others: building effective relationships and collaboration
* Achieves outcomes: delivering results and improving health indicators
* Drives innovation: encouraging creative solutions and adaptability
* Shapes systems: influencing the broader health system.

More than 700 people and organisations contributed to its development, and it has been approved as a nationally agreed health leadership framework.

* **NSW Health** **Leadership strategy 2022–2025**: There are a number of examples of state- and territory-based nursing leadership strategies including NSWHealth’s Nursing and Midwifery Leadership Pathways Leadership Strategy 2022–2025.291 The strategy states its goal as supporting and developing ‘fit for purpose’ nursing and midwifery leaders to grow a compassionate, safe, high-quality care, person-centred workforce. It also includes a conceptual framework for nursing and midwifery leadership development based on the NSW HealthLeadership and management framework– a framework for excellence in care, results and change (Figure 9).292

Figure 9: NSW Health leadership and management framework

[Note that the content of this figure has been converted to text for improved accessibility]

The framework has 6 components:

1. Achieving outcomes
2. Developing and leading self
3. Engaging people and building relationships
4. Partnering and collaborating across boundaries
5. Transforming the system
6. Managing for now and the future.

[End of figure text]

Stakeholders acknowledged that there are a number of skills development and performance frameworks that are currently being used to structure nurse leadership skills development. These focus on self-leadership, collaboration and partnership and could be considered in developing an NNWS to promote a national approach to leadership.

Stakeholders said there is a need for:

* a focus on structured leadership development programs including mentorship programs and leadership training at every level of the nursing profession
* support for leaders in creating safe workplaces including training and support to address bullying and racism, implement strategies and build and maintain a positive workplace culture
* mentoring and support for novice leaders to create a more coherent and prioritised approach to growing the next generation of nurse leaders
* development frameworks for leaders and staff, with a greater focus on the skills for leaders to support them to promote positive work environments through effective development of staff
* professionalisation of nurse leadership development approaches through a range of initiatives including secondments and rotations and exchange programs outside the profession.

## 4.6 Technology and data

### 4.6.1 Overview – technology and data

The literature, environment scans and stakeholders acknowledge that the rapid evolution of healthcare technology, including the advent of genomics, is reshaping the landscape of nursing practice, education and workforce development. There is widespread agreement that this transformation necessitates a forward-thinking approach to ensure the Australian nursing workforce is not only prepared to meet the current healthcare demands but is also equipped to navigate the complexities of future healthcare innovations.

Stakeholders see a significant opportunity for an NNWS to leverage emerging technologies and data to enable a more sustainable nursing workforce. They noted that, in many ways, emerging technology and innovation stand at the forefront of the transformation that is required to address current and projected nursing workforce shortages. They agree that there is a critical need to integrate digital health technologies that not only work to assist in workload management, enhance the efficiency of care delivery and relieve some administrative burdens but to also improve patient care and health outcomes. However, stakeholders also agree the impact on tasks is likely to be so considerable that, as with evolving models of care, it is likely there will be changes to current job descriptions and new roles developed.

The literature, environment scans and stakeholders explained that digital health technologies, including telehealth, electronic medical records and AI, are rapidly changing the way nurses deliver care, but they also noted there is need for a greater investment to truly leverage these innovations in Australia. In particular, they agree the successful integration of these technologies and the development of new ones into nursing practice requires a significant investment in education and training to ensure nurses are digitally literate and capable of optimising their use effectively. The development of a national digital health capability framework, as suggested by the Australasian Institute of Digital Health, is a critical step towards building a digitally capable nursing workforce and could work in collaboration with an NNWS.293

Quote:

* Humber River Hospital, Toronto, Ontario is home to North America’s first fully digital hospital. The hospital’s integration of technology into patient care is extensive, including automated medication administration, automated vehicles for supply transport and patient- and staff-locating devices for care flow optimisation. – Humber River Hospital293

Opportunities for technology and data in nursing identified in the literature and environment scans include the following:

* **Integration of AI and machine learning:** The adoption of AI and machine learning in health care, as seen in Israel and Finland, offers significant opportunities for predictive analytics in patient care, diagnostic accuracy and treatment planning. Stakeholders identified an opportunity to focus on integrating AI tools into the nursing role for diagnostic support, patient monitoring and administrative tasks to improve care delivery and reduce workload.
* Finland’s national program focuses on implementing AI and robotics to address the challenges posed by an ageing population and the shortage of health professionals. This initiative underscores the potential of technology to fill gaps in health care, improve efficiency and enhance the quality of care. – Damm (2020)294
* Oslo’s innovative approach to elderly care through technology, including the ‘RoomMate’ system and GPS trackers, further exemplifies the successful integration of technology to enhance care and safety for the elderly, thereby reducing reliance on human caregivers. – Buces (2022)295
* **Telehealth and remote monitoring expansion:** The success of telehealth platforms in Ireland296 and the use of remote monitoring technologies in Norway297 highlight the potential for nursing to extend beyond traditional settings. Stakeholders identified an opportunity to expand telehealth services and remote patient monitoring in Australia to increase access to care, especially in rural and remote areas, and beyond traditional settings, particularly for the elderly.
* America’s Digital Nursing program has demonstrated the potential to significantly reduce the time nurses spend on indirect patient care activities. In a pilot at AHN Allegheny General Hospital, bedside nurses regained more than 80 minutes daily for direct patient care tasks. Patients benefit from more prompt discharge instructions and the opportunity to engage more thoroughly with their care through digital platforms. The program also ensures follow-up appointments are scheduled before discharge, reducing patient and family stress. By enabling remote work for digital nurses and reducing administrative burdens, the program aims to improve work-life balance for nurses and address workforce shortages. – Bruce (2023)301
* **Digital health records and data management:** The implementation of digital health records and efficient data management systems, as discussed in the context of Norway’s Health Platform298 and Israel’s digital health landscape, can significantly enhance patient care coordination and information accessibility for nurses. Stakeholders identified an opportunity to prioritise the integration of electronic medical record systems and the development of interoperable digital health platforms in Australia to help relieve the administrative burden of nurses.
* Ireland’s Health Innovation Hub Ireland initiative showcases collaboration between the health service and enterprise, leading to the development of innovative health-tech solutions such as remote patient monitoring systems and digital health platforms. – Health Innovation Hub Ireland305
* **Robotics and automation in nursing tasks:** The deployment of robotics in healthcare settings, as evidenced by the blood drawing robot in the Netherlands299 and the nurse-assisting robot in Finland,300 presents opportunities for automating routine tasks and alleviating the physical demands on nurses. Initiatives that promote the adoption of robotics, including for medication delivery, patient transport and other logistical support within healthcare facilities, are designed to increase nursing productivity and efficiency.301
* **Advancements in 3D printing for personalised care:** 3D printing technology offers the potential for creating personalised medical devices, implants and tools for surgical preparation, directly impacting patient outcomes and surgical efficiency. As the technology becomes more accessible and cost‑effective, nurses can have a crucial role in the customisation and application of 3D-printed solutions, ensuring they meet individual patient needs. This opportunity is highlighted in the Horizon scan of medical technologies by Gonzales-Moral et al., which notes the current limitations and future potential of 3D printing in health care.302
* **Development of nurse informaticians:** The increasing integration of digital technologies in health care necessitates the development of nurse informaticians who can lead the adoption and effective use of these technologies. As outlined in the ANMF Digital Capability Framework303 and the Digital roadmap for nursing and midwifery,304 investing in the education and training of nurse informaticians will support the digital transformation of health care, ensuring digital health solutions are user-friendly, secure and effectively integrated into nursing practice.
* **Balancing technology with person-centred care:** While advancing technology integration, stakeholders suggested that an NNWS emphasises the irreplaceable value of human interaction, empathy and the holistic aspects of nursing care and ensures technology serves as a tool to enhance, not replace, the fundamental elements of nursing care and patient relationships.305

The following section highlights the opportunities of a number of key areas of interest in technology and innovation.

### 4.6.2 Digital frameworks and policies for a standardised approach

The literature and stakeholders outlined the need for successful integration of technology in nursing to have supportive and comprehensive frameworks and policies to guide the use of AI and other advancements in technology (in particular genomics). They noted that this will ensure a nationally consistent approach and address technical, ethical and legal considerations including patient privacy, data security and the reliability of AI applications.

The literature and stakeholders highlighted the need for an NNWS to focus attention on adopting digital tools and technologies through consistent integration and interoperability of technology across healthcare settings. Existing frameworks or policies that promote a commitment to technology and use of data in nursing include:

* a range of strategies and resources published on the Digital Health Workforce Hub and by the Australasian Institute for Digital Health306
* frameworks and guidelines produced by the Australian Digital Health Agency307
* guidance issued in the National nursing and midwifery digital health capability framework.308

### 4.6.3 Digital education and training

Stakeholders agree that the transition to a digitally enabled profession requires a concerted effort in upskilling the nursing workforce, ensuring they are competent in navigating these new tools while maintaining the essence of nursing care. They suggested there is an opportunity for an NNWS to promote the need for consistent and constant training to equip nurses across Australia with the necessary knowledge and skills to effectively incorporate AI technologies in their practice.

Further, stakeholders identified opportunities for an NNWS to support education and training to prepare current and future nurses for a technology-driven healthcare environment through the following:

* **Continuous education and training in digital competencies:** Initiatives by the Nursing and Midwifery Board of Ireland and the emphasis on AI training in Israel highlight strategies that focus on equipping nurses with the necessary skills to effectively use digital tools and technologies. This aligns with the findings from the Horizon scan of medical technologies302 and the ANMF Policy on digital health,309 emphasising the need for nurses to be proficient in digital technologies. This work includes references to the integration of digital health literacy and informatics into nursing curricula to equip graduates with the necessary skills to effectively use digital tools, analyse data and apply genomics, bioinformatics and other digital health technologies, contributing to the development of innovative care models. It also notes this approach will ensure new graduates are prepared to integrate technology and data into patient care and navigate the associated ethical complexities.
* **Culture of continuous learning and innovation:** Stakeholders noted that the future of nursing in the context of technological advancement requires a culture of continuous learning, adaptability and innovation. They agree that creating a supportive environment that values experimentation, feedback and collaboration across disciplines can accelerate the adoption of new technologies and foster a workforce that is resilient and responsive to the changing healthcare landscape (Digital health consultation).

Stakeholders noted a number of opportunities for an NNWS:

* **Continuous professional development programs in digital health** that are readily available, supporting nurses throughout their careers in adapting to technological advancements as seen in countries like Israel, Ireland and New Zealand.
* **Leadership and management competencies** that support the implementation of technology including investing in leadership development programs to empower nursing leaders to champion technology adoption and integration across healthcare settings. For example, the Finnish Nurses Association has updated its e-health strategy to increase the role of nurses in developing and running digital services.310
* **Support systems for technology adoption and utilisation such as establishing support networks** and helpdesks for nurses would help address technical challenges and optimise the use of healthcare technologies. Peer-to-peer learning and mentorship programs can also focus on best practice.
* **Action learning programs as designed in the UK to upskill general practice nurses** to become digital champions may facilitate the adoption of technology-enabled care services in clinical practice. This initiative aligns with NHS England’s Ten-point plan for general practice nursing and aims to enhance patient engagement, improve clinical outcomes and increase the efficiency of healthcare delivery.311

### 4.6.4 Co-designing new technology adoption and implementation

Stakeholders identified as a significant opportunity for an NNWS the engagement of nurses to support the journey of change in the co-design of new technology and data collection processes. They noted that the rapid adoption of digital health technologies offers an invaluable opportunity for nursing to impact the direction of healthcare delivery and ensure clinical workflow and patient needs are prioritised. Stakeholders agree that nurses, being at the forefront of patient care, have unique insights that are essential to developing technologies that are not only innovative but also practical and user-friendly. Technologies such as home monitoring systems, telehealth services and wearable devices have the potential to revolutionise patient care, making it more accessible and personalised. Stakeholders noted that it is crucial that these technologies are developed in close collaboration with nurses to ensure:

* they meet the real needs of patients
* they do not detract from the essence of person-centred care
* they are fit for purpose and align with clinical workflows.

Stakeholders agree that engaging nurses in the development process not only enhances the usability and effectiveness of digital tools but also empowers the nursing workforce to drive innovation in healthcare delivery.

Further, as outlined, stakeholders explained that the successful integration of AI and other technology in nursing depends on collaboration among stakeholders, including other health professionals, developers, policymakers and the public. They noted the complexity of genomics and digital health necessitates close collaboration between nurses, genetic counsellors, physicians, bioinformaticians and other health professionals.

### 4.6.5 The future of AI in nursing care

As outlined, stakeholders are generally aware the role of nurses is poised for transformation with the integration of AI anticipated to revolutionise patient care and healthcare delivery. Some stakeholders working in digitally advanced roles or fields understand that predictive analytics, for instance, could significantly improve clinical decision making, enabling nurses to anticipate patient deterioration and intervene proactively. In response they identified the need for the exploration of not just co-design but nurse-led initiatives to develop digital and technological innovations such as AI and genomics to meet the changing healthcare needs of the population in a cost‑effective way.

Israel, the Netherlands, Norway and Finland are actively exploring and implementing AI solutions to address various challenges within their health systems.300,312,313 These challenges include data overload, personnel shortages, rising healthcare costs and the need for personalised treatment. This work shows that adopting AI technologies such as diagnostic aids, remote monitoring tools and administrative automation is seen as a promising solution to enhance the effectiveness and efficiency of health systems.

Opportunities for Australia’s nursing workforce include the following:

* AI’s role in diagnostics and patient care: AI technologies such as image analysis tools and remote monitoring solutions to improve diagnostic accuracy could speed up treatment decision making and enable proactive patient care. Israel and Finland are leading in the development and application of such technologies. These technologies can enhance diagnostic precision and speed, leading to earlier disease detection. AI can analyse extensive datasets, encompassing medical images, patient records and genetic data to identify subtle patterns and indicators that human practitioners may overlook.314
* Automation of administrative tasks: The use of AI to automate routine nursing and administrative tasks is a common theme in many countries. It not only reduces the workload of nurses and other health professionals but also allows them to focus more on direct patient care, which can also lead to changes in job tasks and roles. Examples include the AI chatbot implemented in the Netherlands312 and generative AI tools for administrative tasks in Israel.313
* Pilot programs and evaluate outcomes: Before nationwide rollout, the environment scans and literature indicate there is an opportunity to pilot programs that allow concentrated efforts that can be controlled and evaluated to assess effectiveness, patient satisfaction and areas for improvement of AI applications in health care.315
* **Collaborative innovation and research:** Encouraging collaboration between healthcare providers, technology companies and academic institutions, as demonstrated by the partnerships in Israel and Finland, can drive innovation in nursing care. National strategies should foster an ecosystem that supports research, development and the implementation of innovative solutions in nursing.300,313

### 4.6.6 Nursing and genomics

The literature, environment scans and some stakeholders identified the opportunity of integrating genomics into nursing practice to enhance patient care through personalised medicine. Genomics, the study of an individual’s genes and their interaction with each other and the environment, has the potential to revolutionise health care by enabling more precise diagnoses, targeted treatments and the prediction of disease susceptibility.316

Quote:

* The integration of genomics and digital health data, as seen in Israel’s Mosaic Project, offers significant opportunities for personalised medicine. Nurses will have a crucial role in managing and interpreting this data to tailor care to individual patients’ genetic profiles, improving outcomes and patient satisfaction. – Israel Innovation Authority317

The literature and some stakeholders more familiar with genomics advised, however, that the integration of genomics into nursing practice is not without its challenges. They noted that the rapidly evolving nature of genomic science requires a commitment to continuous education and professional development to stay abreast of new discoveries and their clinical applications. Furthermore, they explained that the ethical considerations surrounding genetic testing such as privacy, consent and the potential for genetic discrimination necessitate a deep understanding of the ethical, legal and social implications of genomics.

For the nursing workforce, stakeholders noted this means an expansion of roles and responsibilities and related training to include genomic literacy, the ability to interpret genomic information and the integration of this knowledge into patient care. Nurses will need to be adept at discussing genomic testing with patients, understanding the implications of test results and collaborating with a multidisciplinary team to develop personalised care plans.317

Stakeholders said there is a need for:

* developing knowledge capacity and capability for nurses to construct, synthesise and use data across the continuum of nurse clinical work as well as managerial and leadership roles
* supporting digital education and training for nurses including a culture of continuous learning and innovation to prepare current and future nurses for a technology-driven healthcare environment
* co-designing initiatives with nurses that promote new technology adoption and implementation to ensure they are fit for purpose and align with clinical workflows
* exploring nurse-led initiatives to develop digital and technological innovations such as AI and genomics to meet the changing healthcare needs of the population in a cost-effective way
* expanding roles and responsibilities and related training to include genomic literacy, the ability to interpret genomic information and the integration of this knowledge into patient care.

## 4.7 Academia

### 4.7.1 Overview – academia

Stakeholders agree that nurse academics, heads of university research centres, student researchers and clinical educators occupy a critical role as the keepers of knowledge for future nurses, to grow and advance the discipline of nursing through research and evaluation and educating the nurses of the future.

Stakeholders agree there are opportunities to enable better connectivity between the practice of nursing within health systems and the academic discipline of nursing – as a joint ‘engine room’ to enhance nurse professional identity, drive clinical practice excellence and empower more influence on health policy.

Stakeholders suggested that an NNWS could consider facilitating better intersections between the academic and the nursing workforces in a joint focus on evidence‑based, nurse-led models of care and evaluation. They noted a need for a stronger research base, particularly given the lack of evaluated workforce initiatives both in Australia and globally.

### 4.7.2 Clinical-academic-researcher roles

Quote:

* The Schwartz report also advocates for recognising the pivotal role of academics. The proposal suggests establishing more joint appointments between higher education providers and health services to encourage junior academics in the education of undergraduate students. This approach aims to enhance recruitment rates to higher education providers and enable experienced clinicians to maintain their level of practice and remuneration. – Schwartz (2019)142

Stakeholders, environment scans and the literature show that implementing nurse-led innovations would not happen without nurse-led research. However, they noted that barriers persist for nurses seeking entry into research, despite the demonstrated success of nurse‑led research and innovations.318 Stakeholders suggested there is an opportunity for an NNWS to consider the following:

* **More joint academic-clinical roles:** New roles could span health systems and educational institutions and enable the development of a rich nurse-led culture of innovation.
* **Better clinical-academic-researcher career pathways:** A career pathway for industry/practice nurses to build research capability could embed research in enterprise agreements, providing PhD scholarships and establishing dedicated nurse-led research centres.319 This could result in:
* more opportunities for nurses to undertake research while practising – this would include dedicated time and opportunities for more workplace related research
* more joint academic-clinical roles – as noted in the consultation, this is currently a significant challenge due to practice requirements for registration
* increased funding for nursing research, including dedicated streams for nurse-led research and more clinical trials involving nurses.
* more clinical-academic career pathways for nurses to build research skills and capacity such as in medicine
* a shared national nursing research agendabetween the university sector and health systems.

Some examples of the initiatives that an NNWS could consider are outlined below:

* **Australasian Nursing and Midwifery Clinical Trials Network:** In 2020 the Australasian Nursing and Midwifery Clinical Trials Network was founded to help bridge the gap between nursing and high-level research. The network has the objective of enhancing research capability in nursing and midwifery, fostering collaborative endeavours, pooling resources and knowledge, promoting trials led by nurses and midwives to strengthen evidence in the domain and securing competitive research funding.320
* **Blend of clinical nurse specialist and NP functions – Netherlands:** In the Netherlands, the blend of clinical nurse specialist and NP functions creates a unique joint academic and clinical role. These professionals are not only involved in direct patient care but also in system-level improvements, which requires a strong foundation in both clinical practice and academic research to effectively implement evidence‑based changes.321
* **Clinical nurse specialist roles in Canada:** The ICN guidelines on advanced practice nursing report322 highlights the role of clinical nurse specialists in Canada, where they are deeply involved in providing specialised care and leading quality improvement initiatives within healthcare settings. This role is inherently both academic and clinical, as clinical nurse specialists are often involved in applying research findings to improve patient outcomes and mentor nursing staff.

Stakeholders said there is a need for:

* better connectivity between the practice of nursing within health systems and the academic discipline of nursing
* better intersections between the academic and the nursing workforces in a joint focus on evidence‑based, nurse-led models of care, research and evaluation
* better clinical-academic-researcher career pathways from novice to expert including more joint academic-clinical roles
* building and sustaining a contemporary nursing academic workforce that educates nurses for the future.

## 4.8 Diversity and inclusion

### 4.8.1 Overview – diversity and inclusion

The environment scans, literature review and stakeholders recognise the importance of diversity within the nursing workforce – that every country has a responsibility to ensure a nursing workforce that represents the diversity of the community that it serves. This includes people from different cultural backgrounds, First Nations people and members of the LGBTIQ+ community. Stakeholders and the literature reported an increasing focus in health services on inclusivity and developing and implementing strategies and initiatives that recognise the opportunities and challenges of not only supporting a culturally diverse and inclusive workforce but one that operates with cultural sensitivity and knowledge when caring for patients. While recruitment and retention of a diverse workforce is important, stakeholders agree there is a growing awareness and emphasis on education and training to ensure a workforce that is culturally competent to deliver benefits for both workforce members and patients.

Quotes:

* ‘The need for diversity in nursing has been well articulated by many leading national organizations to address culturally competent, patient-centred care and reduce health inequities. Diversifying the healthcare workforce has the potential to improve healthcare delivery from a business and patient outcome standpoint.’ – Rovito et al.323
* ‘In some settings, certain race, ethnic or other vulnerable groups may be under-represented in nursing education. This may have negative impacts on the cultural fit between nurses and the communities they serve. Although there is an increasing focus across the nursing profession on ensuring that education and training incorporate cultural competencies, greater efforts are needed to increase the selection and recruitment of students from under-represented populations.’ – World Health Organization10

As outlined above, stakeholders noted that this is particularly important given the mobility of IQNs. Research shows that one nurse out of every 8 practises in a country other than the one where they were born or trained.10 The literature shows that most countries including Australia recognise that IQNs are an invaluable part of a health service and contribute significantly to creating a more diverse workforce. However, there is also acknowledgement of the need for ethical recruitment and the risks of an over-reliance on IQNs versus domestic recruitment.

Issues such as racism and a lack of cultural safety as outlined above significantly affect recruitment and retention rates and have the potential to tarnish the reputation of nursing as a career of choice. Stakeholders suggested a number of opportunities for an NNWS to influence a more inclusive and diverse nursing workforce. These included:

* **A dedicated First Nations people strategy.** Stakeholders explain that a national approach to the recruitment and retention of First Nations people could include localised strategies to support people who want to study and work where they live in regional or remote communities. Stakeholders also noted the need to recruit and support First Nations nurses in metropolitan locations. This is in line with the proposed strategies and initiatives required to address workforce shortages in rural and remote areas of Australia. Stakeholders suggested that strategies should focus on a package of initiatives across education, entry pathways and leadership.
* **The development of national cultural competence and inclusive policies** and practices to ensure nurses from diverse cultural backgrounds feel respected and valued, and patients receive culturally sensitive care.
* **Greater emphasis on promoting inclusivity, diversity and a supportive work environment** including LGBTIQ+ to ensure all nursing staff and patients, regardless of their sexual orientation or gender identity, feel valued and supported in Australia’s health system.

### 4.8.2 First Nations people

The literature review and environment scans identified Australia, Canada, New Zealand and some states in America as having invested in strategies and initiatives seeking to address a lack of First Nations nurses in their nursing workforce. They recognise the importance of having a workforce that is representative of the broader community but also one that understands the cultural sensitivities required for patient care based on similar cultural backgrounds.

Research explains that First Nations people face unique health disparities and cultural considerations that necessitate a tailored approach to nursing and healthcare provision. The under-representation of First Nations people in the nursing workforce is believed to exacerbate these disparities, placing greater importance on recruitment strategies to increase the number of First Nations people in the nursing workforce. In Australia, the nursing workforce comprises 1.5% of nurses who identify as Aboriginal and/or Torres Strait Islander, noting that as per the 2021 Census First Nations people represent 3.8% of the Australia population.324,325

As outlined above, the future of nursing in Australia, particularly within the context of serving regional, rural and remote communities, including First Nations populations, presents both significant challenges and opportunities. The consultation in particular illuminated the critical need for a comprehensive, innovative and culturally sensitive approach to nursing workforce development that is capable of addressing the unique healthcare needs of these communities.

Examples of strategies that have sought to influence change towards a workforce that is more inclusive of First Nations people include the following:

* **‘gettin em n keepin em n growin em’ (GENKE II) report by CATSINaM**underscores the need for education reform in nursing and midwifery, advocating for partnership agreements, a national monitoring framework and enhanced support systems for Aboriginal and Torres Strait Islander nursing and midwifery students. 326
* **The CATSINaM** **Strategic plan 2023–2028**outlines the priorities for the Congress in leading the nursing and midwifery workforce to improve the health outcomes for Aboriginal and/or Torres Strait Islander people.327
* **TheNational Aboriginal and Torres Strait Islander health workforce strategic framework and implementation plan 2021–2031**outlines a decade-long strategy for improving health outcomes and achieving health equity through workforce development.328
* **The Queensland Government’s** **Aboriginal and Torres Strait Islander health workforce strategic framework 2016–2026** guides and supports the development of Aboriginal and Torres Strait Islander health workforce planning within Queensland Health.329
* **Victoria’s** **Aboriginal workforce strategy 2021–2026**, developed by the Department of Health and the Department of Families, Fairness, and Housing, outlines a framework to become an employer of choice for Aboriginal people by creating a ‘culturally safe employee experience, where individuals are valued for their cultural knowledge and lived experience’.330
* **NSW Health’s** **Good Health – Great Jobs: Aboriginal workforce strategic framework 2016–2020** outlines comprehensive approaches to increasing the participation of Aboriginal and Torres Strait Islander people in the health workforce.331 In New South Wales, initiatives such as ‘training on Country’ programs are proposed to increase First Nations’ staffing across all organisational levels. These programs are designed to improve cultural knowledge and safety, reduce systemic racism and support career pathways for Aboriginal and Torres Strait Islander people. Also, the New South Wales Regional health strategic plan 2022–2032332 introduces financial incentives, such as subsidies for rural clinical placements and Aboriginal nurse cadetships, to attract and retain nursing professionals by alleviating cost-of-living pressures.

These frameworks emphasise cultural competency, strategic partnerships and targeted recruitment and retention strategies, setting clear targets for First Nations employment and leadership positions in the health sector. The policies, strategies and initiatives identified across the documents demonstrate a concerted effort to support the nursing workforce in Australia, with a particular focus on improving outcomes for First Nations people. While progress has been made in areas such as cultural competency training and increasing First Nations people representation in the workforce, ongoing challenges remain.

#### Specific initiatives aimed at increasing the number of First Nations people in the nursing workforce

The literature identifies initiatives aimed at increasing First Nations people in the nursing workforce in other countries:

* **The Government of Canada and the Professional Institute of the Public Service of Canada** agreement aims to triple the existing recruitment and retention allowances for Indigenous Services Canada nurses working in 50 remote and isolated locations.333
* **The Earn As You Learn (EAYL) model in New Zealand** focuses on supporting unregulated health workers (kaimahi) to become ENs through culturally grounded education and training. This initiative highlights the importance of accessible and culturally relevant educational pathways for increasing the number of First Nations nurses in primary health care.334

Consultation with First Nations stakeholders identified multiple opportunities for an NNWS:

* Enhanced career pathways and support
* Establish graduate nurse programs specifically tailored to prepare nurses for work in remote Aboriginal communities, incorporating hospital rotations and remote placements.
* Require educational providers to offer dedicated pathways for First Nations students, including affirmative action strategies to support the enrolment and retention of Aboriginal and Torres Strait Islander students in nursing programs.
* Develop targeted nursing and midwifery transition-to-practice programs to support the workforce entry of First Nations graduates.
* Educational reforms and support services
* Increase First Nations participation on accreditation committees and ensure nursing and midwifery education programs include comprehensive content on cultural safety, as well as First Nations peoples’ history, culture and health.
* Implement financial and academic support measures to facilitate First Nations students’ enrolment and completion of nursing and midwifery courses.
* Strategic recruitment and retention initiatives
* Develop a skills-based Aboriginal health worker training program to create clear career pathways in community health settings.
* Address broader social determinants of health, such as education, poverty and housing, to improve the recruitment base and support for Aboriginal participation in the health professions.
* National strategy and research coordination
* Formulate a national Aboriginal and Torres Strait Islander nursing education strategy, setting explicit targets for course enrolment and completion rates among First Nations students.
* Coordinate a research strategy focused on the effective recruitment, retention and replacement of the Aboriginal and Torres Strait Islander nursing and midwifery workforce.
* Expand Aboriginal leadership and participation at all levels of the health system, using programs such as cadetships and scholarships to foster professional development.
* First Nations nurse-led models of care
* Nurse-led models that focus on First Nations people via the Aboriginal Community Controlled Health Services model of care and other programs such as the Indigenous Australians’ Health Programme, which funds Aboriginal Community Controlled Health Services and other health initiatives.335

### 4.8.3 Cultural diversity training and education

Stakeholders identified the recruitment of a more culturally diverse workforce as an opportunity for the future of Australia’s nursing workforce, but the environment scan, literature review and stakeholders emphasised the importance of cultural diversity training and education in addressing workplace cultural issues.

To foster a more inclusive environment, stakeholders believe education institutions and workplaces must provide cultural competence training for all healthcare staff to promote understanding and appreciation of different cultural practices, beliefs and attitudes towards health and health care. They must also ensure fair recruitment practices, equitable career progression opportunities and address any form of discrimination or bias in the workplace.

The literature review underscores the necessity of incorporating First Nations and multicultural knowledge and perspectives into nursing curricula, as well as providing ongoing cultural competency training for all healthcare staff. This will help ensure nurses are equipped to provide culturally appropriate care and to navigate the unique health needs and cultural contexts of First Nations and other culturally diverse communities.

Examples of cultural training programs identified throughout the data sources include:

* **the Canadian Indigenous Nurses Association’s** cultural competency training for all nursing staff to ensure culturally safe care for First Nations patients336
* **the Sami Nursing Education Program in Norway,** a collaboration between Sámi allaskuvla (Sami University College) and UiT The Arctic University of Norway, aiming to educate nurses to become culturally competent and provide care that respects the Sami language, culture and traditions337
* **NSW Health’s** **Respecting the difference** policydirective, which mandates comprehensive training for all health staff, aiming to embed culturally safe practices within the health system338
* **Northern Territory Health’s** **Aboriginal cultural security framework 2016–2026**, which is designed to guide and strengthen implementation of culturally secure services for Aboriginal and Torres Strait Islander people in the Northern Territory339
* **Adaptation of the Minority ABC-model**in Norway, was introduced in aged care to improve competence among municipal care staff with a systematic focus on interaction between majority and minority healthcare staff, to foster a more inclusive and culturally competent healthcare workforce340
* **Integration of foreign-born nurses** in Finnish social and healthcare organisations, as discussed by Calenda et al.,341 which provides insights into the challenges and strategies for integrating foreign-born nurses into the workforce, emphasising the need for enhanced language support, orientation programs and multicultural training.

Stakeholders explained there are opportunities for an NNWS to lead the development of national cultural competence and inclusive policies and practices to ensure nurses from culturally diverse backgrounds feel respected and valued.

### 4.8.4 Inclusivity – LGBTIQ+ communities

The environment scans, literature and stakeholders highlighted the importance of an inclusive workplace that supports all community members including LGBTIQ+ people within the nursing workforce. By promoting inclusivity, diversity and a supportive work environment, stakeholders agree health services can ensure all nursing staff, regardless of their sexual orientation or gender identity, feel valued, supported and empowered to provide high-quality care. Stakeholders and literature also highlight the importance of LGBTIQ+ community members feeling supported when they access health care to ensure optimal healthcare outcomes. Examples of programs that promote inclusivity and support for LGBTIQ+ nursing staff include the following:

* **Northern Territory:** **The NT health inclusion strategy (2019–2022)** aims to promote the health and wellbeing of people with diverse sexualities and gender identities. This strategy includes creating safe and inclusive service environments, establishing connected care pathways and fostering a diverse workforce.342 For the nursing workforce, this translates into inclusive training and education, diverse recruitment and support and the creation of welcoming healthcare environments that visibly support LGBTIQ+ staff and patients.
* **NHS England:** The NHS Equality, diversity and inclusion improvement plan emphasises the need for targeted action to overcome inequalities, discrimination and marginalisation experienced by various groups, including those with diverse sexual orientations and gender identities. High‑impact actions such as inclusive recruitment, talent management and eliminating workplace bullying and harassment directly contribute to a more supportive environment for LGBTIQ+ nursing staff.343
* **ACN:** Nursing leadership in diversity and inclusion: guiding principlesunderscores the need for diversity and inclusion in nursing. It outlines principles and recommendations for implementing comprehensive diversity and inclusion training, promoting leadership opportunities for underrepresented groups and establishing support and ally groups.344
* **Canadian Federation of Nurses Unions:** The federation’s Equity and inclusion toolkit,along with the ‘Cards Against Inequity’ discussion tool serve as a comprehensive resource for promoting awareness, education and action towards a more equitable and inclusive society and nursing profession. This initiative recognises the specific challenges faced by equity-seeking groups, including LGBTIQ+ people, and provides practical tools and resources to combat discrimination and bias.345
* **International Labour Organization:** While not specific to the nursing workforce, the organisation’s emphasis on promoting safe and healthy working environments, ensuring equality and non‑discrimination and supporting collective bargaining and association, provides a framework that can be adapted to support LGBTIQ+ nurses.346

Stakeholders suggested the opportunities for an NNWS to improve inclusivity are:

* Inclusion training: Training programs for all nursing staff on LGBTIQ+ awareness, including language use, appropriate behaviour and unconscious bias.
* Inclusive recruitment policies: Recruitment policies that actively seek to diversify the nursing workforce, including targeted outreach to LGBTIQ+ people.
* Support mechanisms: Support mechanisms for nurses who identify as LGBTIQ+ such as mentorship programs, career development opportunities and mental health resources.
* Safe and inclusive environments: Healthcare environments to be welcoming and inclusive for patients and staff with diverse sexualities and gender identities, including visible signs of inclusivity and the creation of safe spaces.
* Engagement and advocacy: Encouraging nurses to engage with LGBTIQ+ communities and advocate for inclusivity and diversity within the health system and the broader community.

Stakeholders said there is a need for:

* a dedicated national First Nations people strategy to address barriers for the First Nations nursing workforce including enhanced career pathways and support, educational reforms and support, recruitment and retention, and research
* a focus on cultural diversity training and education in education institutions and workplaces to develop cultural competence and inclusive policies and practices, ensuring nurses from culturally diverse backgrounds feel respected and valued
* strategies and policies to support a more diverse nursing workforce (gender, age, disability, LGBTIQ+, First Nations people and cultural diversity) including inclusion training, inclusive recruitment policies, support mechanisms, safe and inclusive environments and engagement and advocacy.

# 5. Summary

This report brings together a large collection of data from Australia and around the world to present a comprehensive catalogue of initiatives, programs and ideas that could be considered in building a resilient and sustainable nursing workforce of the future.

It reflects the voices of many – more than 5,000 stakeholders took part in the consultations including student nurses, nurses, administrators, policymakers, funders, unions, peak bodies, clinicians and educators, both nationally and internationally. First Nations people and community members including people with a recent experience of the health system and young people considering careers in nursing and their families were also consulted. Insights were sought from futurists, researchers and expert workforce planners.

It also includes a contemporary collection of initiatives undertaken in other countries, offering great insight into investments being made in other jurisdictions to address nursing workforce shortages and workforce planning for the future.

In summary, stakeholders and the literature highlight there is a need to consider the following in developing an NNWS (Table 3).

Table 3: Summary of themes to consider in a national nursing workforce strategy

| **Theme** | **Summary** |
| --- | --- |
| Workforce planning | * Broader policy contexts as well as the immediate regulatory and legislative context of nursing policy to be considered in developing a national strategy. * Better coordination of workforce planning, data sharing and modelling including regular analysis of workforce trends. * Better alignment of nursing workforce needs that address distribution issues, particularly in rural and remote areas. * Strategic recruitment and improved integration of IQNs into the Australian nursing workforce. * Strategies that consider and/or address the casualisation of the workforce. |
| Recruitment and retention | * The profession to be elevated to improve community awareness and knowledge of nursing roles through nationally coordinated communication. * Support for non-traditional cohorts to become nurses (e.g. males, culturally diverse populations) and provide re-entry-to-practice initiatives. * Strategies to improve working conditions focused on supporting nurse wellbeing and providing culturally safe and diverse workplaces. * Increased flexibility in rostering or in offering support to fulfil shiftwork requirements including childcare. |
| Education and lifelong learning | * A forward-thinking contemporary approach to education and training that reflects the need to educate and train nurses of the future and the changing nursing environment and healthcare needs of Australians. * A more coordinated national approach to lifelong nurse education and training in a framework that would ensure quality and consistency across Australia. * More innovative models of education that consider undergraduate education length and format and a blended model approach. * A review of the structure of the clinical placement system to address key issues including a nationally consistent approach, financial support, a national preceptorship framework and guidance around the role of simulation. * More support for nursing students including providing financial relief, increased flexibility and ensuring a positive experience through mentoring, engaged leadership, consistent learning and supervision and a safe workplace culture. * A national framework for career progression across multiple pathways including a digital ‘careers passport’. * Promotion of the value of postgraduate qualifications and offering support to undertake them, encouraging more nurses into further study. * Reform of the annual continuing professional development scheme including national micro-credentialling or a similar approach. |
| Models of care | * Optimisation of scope of practice at all nursing levels including enrolled nurse, registered nurse and nurse practitioner to enhance skill mix. * Better alignment and articulation of roles, in particular between the enrolled nurse and registered nurse scopes of practice. * Increased focus on innovative nurse-led models of care including ways to maximise nurse-led models. * Change management strategies to ensure the successful implementation of new models of care. * More opportunities for a central role for nurses in multidisciplinary models of care. * Expansion of student employment models such as the Registered Undergraduate Student of Nursing (RUSON) model. * More innovative funding models to support nurse-led models of care. |
| Leaders of the future | * A focus on structured leadership development programs including mentorship programs and leadership training at every level of the nursing profession. * Support for leaders in creating safe workplaces including training and support to address bullying and racism, implement safe-work strategies and building and maintaining a positive workplace culture. * Mentoring and support for novice leaders to create a more coherent and prioritised approach to growing the next generation of nurse leaders. * Developing frameworks for leaders and staff with a greater focus on the skills for leaders to support them to promote positive work environments through effective development of staff. * Professionalising nurse leadership development approaches through a range of initiatives including secondments and rotations and exchange programs outside the profession. |
| Technology and data | * Building knowledge capacity and capability for nurses to construct, synthesise and use data across the continuum of nurse clinical work and managerial and leadership roles. * Supporting digital education and training for nurses including a culture of continuous learning and innovation to prepare current and future nurses for a technology-driven healthcare environment. * Co-designing initiatives with nurses that promote new technology adoption and implementation to ensure they are fit for purpose and align with clinical workflows. * Exploring nurse-led initiatives to develop digital and technological innovations such as AI and genomics to meet the changing healthcare needs of Australians in a cost‑effective way. * Expanding roles and responsibilities and related training to include genomic literacy, the ability to interpret genomic information and the integration of this knowledge into patient care. |
| Academia | * Better connectivity between the practice of nursing within health systems and the academic discipline of nursing. * Better intersections between academic and nursing workforces in a joint focus on evidence-based nurse-led models of care, research and evaluation. * Better clinical-academic-researcher career pathways from novice to expert including more joint academic-clinical roles. * Building and sustaining a contemporary nursing academic workforce that educates nurses for the future. |
| Diversity and inclusion | * A dedicated national First Nations people strategy to address barriers for the First Nations nursing workforce including enhanced career pathways and support, educational reforms and support, recruitment and retention, and research. * A focus on cultural diversity training and education in educational institutions and workplaces to develop national cultural competence and inclusive policies and practices to ensure nurses from culturally diverse backgrounds feel respected and valued. * Strategies and policies to support a more diverse nursing workforce (gender, age, disability, LGBTIQ+ communities, First Nations people and culturally diverse populations) including inclusion training, inclusive recruitment policies, support mechanisms, safe and inclusive environments and engagement and advocacy. |

# 6. References

1. World Health Organization. (2020). Global strategy on human resources for health: Workforce 2030. https://www.who.int/publications/i/item/9789241511131

2. Porta, C. M., Disch, J., & Grumdahl, N. (2019). Nursing disruption for achieving Sustainable Development Goals by 2030. Nursing Administration Quarterly, 43(4). https://doi.org/10.1097/NAQ.0000000000000363

3. Rosa, W. E., Catton, H., Davidson, P. M., Hannaway, C. J., Iro, E., Klopper, H. C., Madigan, E. A., McConville, F. E., Stilwell, B., & Kurth, A. E. (2021). Nurses and midwives as global partners to achieve the Sustainable Development Goals in the Anthropocene. Journal of Nursing Scholarship, 53(5), 552–560. https://doi.org/10.1111/jnu.12672

4. Amiri, A., & Solankallio-Vahteri, T. (2020). Analyzing economic feasibility for investing in nursing care: Evidence from panel data analysis in 35 OECD countries. International Journal of Nursing Sciences, 7(1), 13–20. https://doi.org/10.1016/j.ijnss.2019.06.009

5. World Health Organisation. (2016). Working for health and growth: Investing in the health workforce – Report of the High-Level Commission on Health Employment and Economic Growth. https://iris.who.int/bitstream/handle/10665/250047/9789241511308-eng.pdf?sequence=1

6. Australian Government Department of Health and Aged Care. (2023). National health and climate strategy – Final thematic stakeholder engagement report. Australian Government. https://www.health.gov.au/sites/default/files/2023-12/national-health-and-climate-strategy-final-thematic-stakeholder-engagement-report\_0.pdf

7. Australian Government Department of Health and Aged Care. (2023). Nurse practitioner workforce plan. Australian Government. https://www.health.gov.au/sites/default/files/2023-05/nurse-practitioner-workforce-plan.pdf

8. Australian Government Department of Health and Aged Care. (2022). Australia’s primary health care 10 year plan 2022–2032. https://www.health.gov.au/resources/publications/australias-primary-health-care-10-year-plan-2022-2032?language=en

9. Commonwealth of Australia. (2023). Measuring what matters – Australia’s first wellbeing framework. https://treasury.gov.au/sites/default/files/2023-07/measuring-what-matters-statement020230721\_0.pdf

10. World Health Organization. (2020). State of the world’s nursing 2020: Investing in education, jobs and leadership. https://www.who.int/publications-detail-redirect/9789240003279

11. Weninger Henderson, M. (2020). The economic case for meeting employees’ needs. Journal of Nursing Management, 28(1), 17–23. https://doi.org/10.1111/jonm.12897

12. Anders, R. L. (2021). Engaging nurses in health policy in the era of COVID-19. Nursing Forum, 56(1), 89–94. https://doi.org/10.1111/nuf.12514

13. KPMG & Department of Health and Aged Care. (2018). Cost–benefit analysis of nurse practitioner models of care. https://www.health.gov.au/sites/default/files/documents/2021/03/cost-benefit-analysis-of-nurse-practitioner-models-of-care.pdf

14. Buchan, J., Catton, H., & Shaffer, F. (2022). Sustain and retain in 2022 and beyond. Int. Counc. Nurses, 71, 1–71.

15. Scottish Government. (2022). National workforce strategy for health and social care in Scotland. https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2022/03/national-workforce-strategy-health-social-care/documents/national-workforce-strategy-health-social-care-scotland/national-workforce-strategy-health-social-care-scotland/govscot%3Adocument/national-workforce-strategy-health-social-care-scotland.pdf

16. Ensio, A., Lammintakanen, J., Härkönen, M., & Kinnunen, J. (2019). Finland. In A. M. Rafferty, R. Busse, B. Zander-Jentsch, W. Sermeus, & L. Bruyneel (Eds.), Strengthening health systems through nursing: Evidence from 14 European countries. European Observatory on Health Systems and Policies. http://www.ncbi.nlm.nih.gov/books/NBK545713/

17. Government of Ireland. (2021). Sláintecare implementation strategy and action plan 2021–2023. https://www.gov.ie/pdf/?file=https://assets.gov.ie/134746/9b3b6ae9-2d64-4f87-8748-cda27d3193f3.pdf#page=null

18. Department of Health Northern Ireland. (2018). Health and social care workforce strategy 2026. https://www.health-ni.gov.uk/publications/health-and-social-care-workforce-strategy-2026

19. Israel Ministry of Health. (n.d.). Growing the nurse workforce. Retrieved April 22, 2024, from https://www1.health.gov.il/en/nursing/influence/resources-for-directors/staff-increase/

20. Savitsky, B., Shvartsur, R., Findling, Y., Ereli, A., & Hendel, T. (2023). Components of professional satisfaction among novice nurses. Israel Journal of Health Policy Research, 12(1), 35. https://doi.org/10.1186/s13584-023-00584-7

21. Health Canada. (2023). Government of Canada announces support to improve health workforce planning for nurses, at the International Council of Nurses Congress. https://www.canada.ca/en/health-canada/news/2023/07/government-of-canada-announces-support-to-improve-health-workforce-planning-for-nurses-at-the-international-council-of-nurses-congress.html

22. NHS England. (2023). NHS long term workforce plan. https://www.england.nhs.uk/wp-content/uploads/2023/06/nhs-long-term-workforce-plan-v1.2.pdf

23. Garratt, K. (2024). The NHS workforce in England – Research briefing. House of Commons Library. https://researchbriefings.files.parliament.uk/documents/CBP-9731/CBP-9731.pdf

24. NHS England. (2023). Additional roles: A quick reference summary. https://www.england.nhs.uk/long-read/additional-roles-a-quick-reference-summary/

25. Australian College of Nursing. (2021). A national minimum dataset for nursing workforce planning and decision making. https://www.acn.edu.au/advocacy-policy/white-paper-a-national-minimum-dataset-for-nursing-workforce-planning-and-decision-making

26. Australian Nursing & Midwifery Federation. (2023). ANMF graduate data set – Nurses and midwives. https://www.anmf.org.au/media/szhhe4cb/anmf\_graduate\_data\_set\_july\_2023.pdf

27. Crettenden, I. F., McCarty, M. V., Fenech, B. J., Heywood, T., Taitz, M. C., & Tudman, S. (2014). How evidence-based workforce planning in Australia is informing policy development in the retention and distribution of the health workforce. Human Resources for Health, 12(1), 7. https://doi.org/10.1186/1478-4491-12-7

28. McCarty, M. V., & Fenech, B. J. (2013). Towards best practice in national health workforce planning. Medical Journal of Australia, 199(S5). https://doi.org/10.5694/mja12.10309

29. Buchan, J., Twigg, D., Dussault, G., Duffield, C., & Stone, P. W. (2015). Policies to sustain the nursing workforce: An international perspective. International Nursing Review, 62(2), 162–170. https://doi.org/10.1111/inr.12169

30. Ahpra & National Boards. (2022). Australian Health Practitioner Regulation Agency—Health profession demographic snapshot reports. https://www.ahpra.gov.au/About-Ahpra/What-We-Do/Data-access-and-research/Health-profession-demographic-snapshot-reports.aspx

31. Australian Government Department of Health and Aged Care. (2014). Nurses – Australia’s Future Health Workforce reports [Text]. Australian Government Department of Health and Aged Care. https://www.health.gov.au/resources/publications/nurses-australias-future-health-workforce-reports?language=en

32. Department of Health Northern Ireland. (2023). Northern Ireland health and social care (HSC) workforce census March 2023 Department of Health. In Health. https://www.health-ni.gov.uk/publications/northern-ireland-health-and-social-care-hsc-workforce-census-march-2023

33. Department of Health Ireland. (2022). Final report and recommendations by the taskforce on staffing and skill mix for nursing. https://www.gov.ie/pdf/?file=https://assets.gov.ie/10054/14bb1eb59fc04bfb9fb9bffd9d2ee352.pdf#page=null

34. NHS Scotland. (2018). NHS Board projected staff post changes: 2019–20. http://www.gov.scot/publications/report-nhs-board-projected-staff-post-changes-2019-20/pages/5/

35. NHS England. (2023). Data saves lives implementation update. In NHS Transformation Directorate. https://transform.england.nhs.uk/key-tools-and-info/data-saves-lives/data-saves-lives-implementation-update/

36. World Health Organization. (2017). National health workforce accounts: A handbook. https://www.who.int/publications/i/item/9789241513111

37. International Labour Organization. (2023). ILO Global Care Policy Portal. https://webapps.ilo.org/globalcare/

38. International Labour Organization. (2023). The value of essential work: World employment and social outlook. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\_798669.pdf

39. World Health Organization. (n.d.). About WHO. Retrieved April 22, 2024, from https://www.who.int/about

40. Whiteing, N., Barr, J., & Rossi, D. M. (2022). The practice of rural and remote nurses in Australia: A case study. Journal of Clinical Nursing, 31(11–12), 1502–1518. https://doi.org/10.1111/jocn.16002

41. Australian Nursing and Midwifery Federation. (2023). The nursing and midwifery workforce in Australia – an overview. https://www.anmf.org.au/media/rixjepl5/nursing-and-midwifery-workforce-overview.pdf

42. Connolly, M. (2023). The national rural and remote nursing generalist framework 2023–2027. Australian Journal of Rural Health, 31(3), 598–599. https://doi.org/10.1111/ajr.13007

43. Australian Government Department of Health and Aged Care. (2023). National Rural Generalist Pathway. https://www.health.gov.au/our-work/national-rural-generalist-pathway#:~:text=The%20National%20Rural%20Generalist%20Pathway%20is%20a%20training%20program%20for,remote%20community%2C%20anywhere%20in%20Australia

44. Health Workforce Scholarship Program. (n.d.). Financial assistance for your training and upskilling. In Health Workforce Scholarship Program. Retrieved April 22, 2024, from https://www.hwsp.com.au

45. Australian Government Department of Health and Aged Care. (2024). HELP for rural doctors and nurse practitioners. https://www.health.gov.au/our-work/help-for-rural-doctors-and-nurse-practitioners

46. NSW Ministry of Health. (n.d.). Rural Health Workforce Incentive Scheme. https://www.health.nsw.gov.au/careers/imagine-rural/Pages/rhwis.aspx

47. Department of Health Victoria. (2024). Regional mental health workforce incentives. https://www.health.vic.gov.au/mental-health-workforce/regional-mental-health-workforce-incentives

48. Baumann, A., & Crea-Arsenio, M. (2023). The crisis in the nursing labour market: Canadian policy perspectives. Healthcare, 11(13), 1954. https://doi.org/10.3390/healthcare11131954

49. Nursing and Midwifery Board of Australia. (2024). Nursing and Midwifery Board of Australia—2022/23 annual summary. https://www.nursingmidwiferyboard.gov.au/News/Annual-report.aspx

50. Kruk, R. (2023). Independent review of Australia’s regulatory settings relating to overseas health practitioners. Commonwealth of Australia. https://www.regulatoryreform.gov.au/sites/default/files/Final%20Report%20-%20Overseas%20Health%20Practitioner%20Regulatory%20Settings%20Review%202023%20-%20endorsed%20by%20National%20Cabinet\_0.pdf

51. Australian Nursing & Midwifery Federation. (2023). Discussion paper – Planning Australia’s 2024-25 permanent migration program. https://www.anmf.org.au/media/gdiblscs/2023-12-12-anmf-submission-dept-home-affairs-planning-australias-permanent-migration-2024-2025.pdf

52. World Health Organization. (2010). WHO Global Code of Practice on the International Recruitment of Health Personnel. https://www.who.int/publications/i/item/wha68.32

53. Nelson, S. (2013). Global trends, local impact: The new era of skilled worker migration and the implications for nursing mobility. Nursing Leadership (Toronto, Ont.), 26, 84–88.

54. Chok, H. N., Mannix, J., Dickson, C., & Wilkes, L. (2018). The factors impacting personal and professional experiences of migrant nurses in Australia: An integrative review. Collegian, 25(2), 247–253.

55. Chun Tie, Y., Birks, M., & Mills, J. (2018). The experiences of internationally qualified registered nurses working in the Australian healthcare system: An integrative literature review. Journal of Transcultural Nursing, 29(3), 274–284. https://doi.org/10.1177/1043659617723075

56. Philip, S., Woodward-Kron, R., Manias, E., & Noronha, M. (2019). Overseas Qualified Nurses’(OQNs) perspectives and experiences of intraprofessional and nurse-patient communication through a Community of Practice lens. Collegian, 26(1), 86–94.

57. Viken, B., Solum, E. M., & Lyberg, A. (2018). Foreign educated nurses’ work experiences and patient safety—A systematic review of qualitative studies. Nursing Open, 5(4), 455–468. https://doi.org/10.1002/nop2.146

58. Tie, Y. C., Birks, M., & Francis, K. (2019). Playing the game: A grounded theory of the integration of international nurses. Collegian, 26(4), 470–476.

59. Kamau, S., Koskenranta, M., Kuivila, H., Oikarainen, A., Tomietto, M., Juntunen, J., Tuomikoski, A.-M., & Mikkonen, K. (2022). Integration strategies and models to support transition and adaptation of culturally and linguistically diverse nursing staff into healthcare environments: An umbrella review. International Journal of Nursing Studies, 136, 104377.

60. Feringa, M. M., De Swardt, H. C., & Havenga, Y. (2018). Registered nurses’ knowledge, attitude, practice and regulation regarding their scope of practice: A literature review. International Journal of Africa Nursing Sciences, 8, 87–97.

61. Health New Zealand Te Whatu Ora. (n.d.). International Recruitment Centre. Retrieved April 22, 2024, from https://www.tewhatuora.govt.nz/for-health-professionals/health-workforce-development/international-recruitment-centre/

62. McQuillan, L. (2022). Canada’s push to “poach” nurses from abroad fuels fears of shortages in developing countries. CBC News. https://www.cbc.ca/news/health/canada-international-nurses-poorer-countries-worried-1.6655231

63. Working in New Zealand. (n.d.). The Green List: Your pathway to New Zealand residency. In Working In New Zealand. Retrieved April 22, 2024, from https://www.workingin-newzealand.com/green-list/

64. Israel Ministry of Health. (2018). Promoting newcomer nurses absorption and the launching of “Renewed” project. https://www.gov.il/en/pages/02082018\_3

65. NHS England. (n.d.). Nursing workforce – International recruitment. Retrieved April 22, 2024, from https://www.england.nhs.uk/nursingmidwifery/international-recruitment/

66. Cabrera, E., & Zabalegui, A. (2021). Bologna process in European nursing education. Ten years later, lights and shadows. Journal of Advanced Nursing, 77(3), 1102–1104.

67. Davies, R. (2008). The Bologna process: The quiet revolution in nursing higher education. Nurse Education Today, 28(8), 935–942.

68. Russo, G., Fronteira, I., Jesus, T. S., & Buchan, J. (2018). Understanding nurses’ dual practice: A scoping review of what we know and what we still need to ask on nurses holding multiple jobs. Human Resources for Health, 16(1), 14. https://doi.org/10.1186/s12960-018-0276-x

69. Mannix, K. (2021). The future of Australia’s nursing workforce: COVID-19 and burnout among nurses. The University of Melbourne. https://www.unimelb.edu.au/\_\_data/assets/pdf\_file/0004/4085194/katelyn\_mannix\_report.pdf

70. McKinsey & Company. (2022). Should I stay, or should I go? Australia’s nurse retention dilemma – Executive briefing. https://www.mckinsey.com/industries/healthcare/our-insights/should-i-stay-or-should-i-go-australias-nurse-retention-dilemma

71. Melnyk, B. M., Tan, A., Hsieh, A. P., Gawlik, K., Arslanian-Engoren, C., Braun, L. T., Dunbar, S., Dunbar-Jacob, J., Lewis, L. M., & Millan, A. (2021). Critical care nurses’ physical and mental health, worksite wellness support, and medical errors. American Journal of Critical Care, 30(3), 176–184.

72. Hassmiller, S. B., & Wakefield, M. K. (2022). The future of nursing 2020–2030: Charting a path to achieve health equity. Nursing Outlook, 70(6), S1–S9.

73. Davidson, J. E., Proudfoot, J., Lee, K., Terterian, G., & Zisook, S. (2020). A Longitudinal Analysis of Nurse Suicide in the United States (2005–2016) With Recommendations for Action. Worldviews on Evidence-Based Nursing, 17(1), 6–15. https://doi.org/10.1111/wvn.12419

74. Governance Institute of Australia. (2023). Ethics index. https://governanceinstitute.com.au/app/uploads/2023/11/2023-ethics-index-report.pdf

75. Crisp, N., & Iro, E. (2018). Nursing Now campaign: Raising the status of nurses. The Lancet, 391(10124), 920–921.

76. Burdett Trust for Nursing. (n.d.). About the Nursing Now Challenge. https://www.nursingnow.org/about/

77. Rodríguez-Pérez, M., Mena-Navarro, F., Domínguez-Pichardo, A., & Teresa-Morales, C. (2022). Current social perception of and value attached to nursing professionals’ competences: An integrative review. International Journal of Environmental Research and Public Health, 19(3), 1817.

78. Here for Life. (n.d.). Here for Life campaign. https://herefor.life/

79. NHS England. (n.d.). Healthcare support worker programme. Retrieved April 22, 2024, from https://www.england.nhs.uk/nursingmidwifery/healthcare-support-worker-programme/

80. NHS England. (2022). NHS launches recruitment drive for tens of thousands of nurses, amid record staff vacancies. https://www.england.nhs.uk/2022/10/nhs-launches-recruitment-drive-for-tens-of-thousands-of-nurses-amid-record-staff-vacancies/

81. NHS Scotland. (n.d.). Careers: International recruitment. Retrieved April 22, 2024, from https://www.careers.nhs.scot/shape-your-future/international-recruitment/

82. Scottish Government. (2023). NHS Scotland overseas recruitment. https://www.gov.scot/news/nhs-scotland-overseas-recruitment/#:~:text=800%20additional%20staff%20join%20workforce,funding%20announced%20in%20October%202022

83. APNA. (2024). Primary Health Care Nurses Day. https://www.apna.asn.au/profession/primary-health-care-nurses-day

84. Real Nurses. (n.d.). Get a career in nursing—Real Nursing. Retrieved April 22, 2024, from https://realnurses.co.nz/

85. NHS England. (2022). Commitment to care leavers is a significant step. https://www.hee.nhs.uk/news-blogs-events/blogs/commitment-care-leavers-significant-step

86. Australian College of Nursing. (n.d.). Men in nursing. https://www.acn.edu.au/men-in-nursing

87. The American Association for Men in Nursing. (n.d.). Our values. https://www.aamn.org/our-values

88. University of Wollongong. (2022). New scholarship to help disadvantaged students become next generation of nurses. https://www.uow.edu.au/media/2022/new-scholarship-to-help-disadvantaged-students-become-next-generation-of-nurses.php

89. NHS England. (n.d.). We are the NHS. https://www.healthcareers.nhs.uk/we-are-nhs/we-are-nhs

90. Morris, G. (2022). The importance of male representation In nursing. In NurseJournal.org. https://nursejournal.org/articles/male-nursing-representation/

91. Health New Zealand Te Whatu Ora. (n.d.). The Nursing Pipeline Programme. https://www.tewhatuora.govt.nz/for-health-professionals/health-workforce-development/nursing/the-nursing-pipeline-programme/

92. Thompson Rivers University. (n.d.). Return to Registered Nurse Practice Certificate. https://www.tru.ca/distance/programs/registered-nurse-practice-certificate.html

93. University of Calgary. (n.d.). Professional Education Program (PEP). https://nursing.ucalgary.ca/teaching-and-learning/faculty-development/professional-development-framework/pep

94. Department of Health Victoria. (2022). Refresher pathway for nurses and midwives. https://www.health.vic.gov.au/nursing-and-midwifery/refresher-pathway-for-nurses-and-midwives

95. Government of Western Australia Department of Health. (n.d.). Return to nursing and midwifery. https://www.health.wa.gov.au/articles/n\_r/nursing-and-midwifery-office/nursing-and-midwifery-careers/return-to-nursing-and-midwifery#:~:text=The%20WA%20Nursing%20and%20Midwifery%20Refresher%20Program%20builds%20on%20preceding,of%20Midwives%20(for%20midwives)

96. NSW Ministry of Health. (2020). Re-entry to nursing scholarships. https://www.health.nsw.gov.au/nursing/scholarship/Pages/reentry.aspx

97. NHS England. (n.d.). Back to the Floor programme. In Elearning for healthcare. Retrieved April 22, 2024, from https://www.e-lfh.org.uk/programmes/back-to-the-floor/

98. Health New Zealand Te Whatu Ora. (2024). Return to Nursing Workforce Support Fund. https://www.tewhatuora.govt.nz/for-health-professionals/health-workforce-development/nursing/return-to-nursing-workforce-support-fund/

99. ACT Government. (n.d.). Supporting our future nurses, midwives and allied health workers. https://www.cmtedd.act.gov.au/open\_government/inform/act\_government\_media\_releases/barr/2023/supporting-our-future-nurses,-midwives-and-allied-health-workers

100. Kim, J., Chae, D., & Yoo, J. Y. (2021). Reasons behind Generation Z nursing students’ intentions to leave their profession: A cross-sectional study. INQUIRY: The Journal of Health Care Organization, Provision, and Financing, 58, 004695802199992. https://doi.org/10.1177/0046958021999928

101. Tussing, T. E., Chipps, E., & Tornwall, J. (2022). Next generation of nurses: Considerations for successful recruitment. JONA: The Journal of Nursing Administration, 52(11), 569. https://doi.org/10.1097/NNA.0000000000001211

102. Hassan, H. H., Abdelrahman, S. M., Fahmy, A. M., & Ahmed, F. A. (2021). Factors contributing career change among nurses working at selected hospitals. Minia Scientific Nursing Journal, 010(1), 11–18. https://doi.org/10.21608/msnj.2021.91035.1000

103. American Nurses Credentialing Center. (2023). ANCC Magnet Recognition Program. https://www.nursingworld.org/organizational-programs/magnet/

104. International Council of Nurses. (2007). Positive Practice Environments. https://neltoolkit.rnao.ca/sites/default/files/International%20Centre%20for%20Human%20Resources%20in%20Nursing\_Positive%20Practice%20Environments.pdf

105. Perry, L., Xu, X., Gallagher, R., Nicholls, R., Sibbritt, D., & Duffield, C. (2018). Lifestyle health behaviors of nurses and midwives: The ‘fit for the future’ study. International Journal of Environmental Research and Public Health, 15(5), 945. https://doi.org/10.3390/ijerph15050945

106. Tobin, M. (2021). Imagine: An initiative to support the wellbeing of staff at Bulli District Hospital. In Agency for Clinical Innovation. https://aci.health.nsw.gov.au/ie/projects/imagine

107. Lan, H. K., Subramanian, P., Rahmat, N., & Kar, P. C. (2014). The effects of mindfulness training program on reducing stress and promoting well-being among nurses in critical care units. Australian Journal of Advanced Nursing, 31(3), 22–31.

108. Canadian Union of Public Employees. (2024). Canadian Union of Public Employees. In Canadian Union of Public Employees. https://cupe.ca/

109. Business Wire. (2021). Trauma, turmoil experienced by Ottawa, Kingston, Cornwall, Eastern Ontario RPNs focus of poll. https://www.businesswire.com/news/home/20210514005386/en/Trauma-Turmoil-Experienced-by-Ottawa-Kingston-Cornwall-Eastern-Ontario-RPNs-Focus-of-Poll

110. Almeida, S., Bowden, A., Bloomfield, J., Jose, B., & Wilson, V. (2020). Caring for the carers in a public health district: A well-being initiative to support healthcare professionals. Journal of Clinical Nursing, 29(19–20), 3701–3710. https://doi.org/10.1111/jocn.15398

111. Wilson, V., Donsante, J., Pai, P., Franklin, A., Bowden, A., & Almeida, S. (2021). Building workforce well-being capability: The findings of a wellness self-care programme. Journal of Nursing Management, 29(6), 1742–1751. https://doi.org/10.1111/jonm.13280

112. NHS England. (2022). NHS health and wellbeing framework. https://www.england.nhs.uk/publication/nhs-health-and-wellbeing-framework/

113. Malinen, S. K., Wong, J. H. K., & Näswall, K. (2020). Effective Workplace Strategies to Support Employee Wellbeing During a Pandemic. New Zealand Journal of Employment Relations, 45(2). https://doi.org/10.24135/nzjer.v45i2.24

114. Nursing and Midwifery Health Program Victoria. (n.d.). NMHPV Home. Retrieved April 30, 2024, from https://www.nmhp.org.au/welcome.html

115. Dragon, N., & Fedele, R. (2023, April 5). Rollout begins on new National Nurse and Midwife Health Service—ANMJ. https://anmj.org.au/rollout-begins-on-new-national-nurse-and-midwife-health-service-2/

116. Dafny, H. A., & Muller, A. (2022). Australian nurses’ suggestions for the management of violence in the workplace: ‘The people who make the policy are not the people on the floor.’ Journal of Nursing Management, 30(6), 1454–1461. https://doi.org/10.1111/jonm.13378

117. Story, A. R., Harris, R., Scott, S. D., & Vogelsmeier, A. (2020). An evaluation of nurses’ perception and confidence after implementing a workplace aggression and violence prevention training program. JONA: The Journal of Nursing Administration, 50(4), 209. https://doi.org/10.1097/NNA.0000000000000870

118. Hallett, N., & Dickens, G. L. (2017). De-escalation of aggressive behaviour in healthcare settings: Concept analysis. International Journal of Nursing Studies, 75, 10–20. https://doi.org/10.1016/j.ijnurstu.2017.07.003

119. Perkins, C., Beecher, D., Aberg, D. C., Edwards, P., & Tilley, N. (2017). Personal security alarms for the prevention of assaults against healthcare staff. Crime Science, 6(1), 11. https://doi.org/10.1186/s40163-017-0073-1

120. Mayes, C. (2020). White medicine, white ethics: On the historical formation of racism in Australian healthcare. Journal of Australian Studies, 44(3), 287–302. https://doi.org/10.1080/14443058.2020.1796754

121. ACT Health. (2020). Workplace culture framework. https://www.health.act.gov.au/about-our-health-system/culture-review-implementation/workplace-culture-framework#:~:text=The%20Framework%20is%20based%20on,now%20and%20into%20the%20future

122. South Eastern Sydney Local Health District. (2023). Our strategy for transforming person-centred cultures 2024-2029. https://www.seslhd.health.nsw.gov.au/sites/default/files/groups/Nursing\_and\_Midwifery/Strategy/SESLHDN%26MStrategyPlan2023-26%20Final.pdf

123. International Labour Organization. (2019). Eliminating violence and harassment in the world of work – Convention No. 190, Recommendation No. 206, and the accompanying Resolution. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\_721160.pdf

124. Government of Canada. (2024). CCOHS: Violence prevention. https://www.ccohs.ca/topics/programs/programs/violence

125. Registered Nurses’ Association of Ontario (RNAO). (2019). Preventing violence, harassment and bullying against health workers 2nd edition. https://rnao.ca/bpg/guidelines/preventing-violence-harassment-and-bullying-against-health-workers

126. Department of Health and Human Services Victoria. (2016). Our pathway to change: Eliminating bullying and harassment in healthcare. https://content.health.vic.gov.au/sites/default/files/migrated/files/collections/policies-and-guidelines/b/bullying-harassment-healthcare-strategy-april-2016-pdf.pdf

127. NHS England. (2022). Nursing and midwifery retention self-assessment tool. https://www.england.nhs.uk/publication/nursing-and-midwifery-retention-self-assessment-tool/

128. Government of Canada. (2023). Nursing retention toolkit: Improving the working lives of nurses in Canada. https://www.canada.ca/en/health-canada/services/health-care-system/health-human-resources/nursing-retention-toolkit-improving-working-lives-nurses.html

129. NHS England. (2022). Combatting racial discrimination against minority ethnic nurses, midwives and nursing associates. https://www.england.nhs.uk/publication/combatting-racial-discrimination-against-minority-ethnic-nurses-midwives-and-nursing-associates/

130. Cognitive Institute. (2018). Royal Melbourne Hospital targets bullying. In Cognitive Institute. https://www.cognitiveinstitute.org/the-age-royal-melbourne-hospital-targets-bullying-with-professional-accountability-programme/

131. Barrett, R., & Holme, A. (2018). Self-rostering can improve work–life balance and staff retention in the NHS. British Journal of Nursing, 27(5), 264–265. https://doi.org/10.12968/bjon.2018.27.5.264

132. Rizany, I., Hariyati, Rr. T. S., Afifah, E., & Rusdiyansyah. (2019). The impact of nurse scheduling management on nurses’ job satisfaction in army hospital: A cross-sectional research. Sage Open, 9(2), 2158244019856189. https://doi.org/10.1177/2158244019856189

133. CTV News Northern Ontario. (2023). North Bay hospital putting patients at risk with 24 hour nursing shifts, CUPE says. https://northernontario.ctvnews.ca/north-bay-hospital-putting-patients-at-risk-with-24-hour-nursing-shifts-cupe-says-1.6614021

134. Forde-Johnston, C., & Stoermer, F. (2022). Giving nurses a voice through ‘listening to staff’ conversations to inform nurse retention and reduce turnover. British Journal of Nursing, 31(12), 632–638. https://doi.org/10.12968/bjon.2022.31.12.632

135. Australian Nursing and Midwifery Victorian Branch. (2023). The nursing and midwifery rostering project. In On the Record. https://otr.anmfvic.asn.au/articles/the-nursing-and-midwifery-rostering-project

136. NHS Scotland. (2023). NHS Agenda for Change review: Scope. http://www.gov.scot/publications/nhs-agenda-for-change-review-scope/pages/flexibility/

137. Australian Government Department of the Prime Minister and Cabinet. (2023). National strategy to achieve gender equality—Discussion paper. https://www.pmc.gov.au/resources/national-strategy-achieve-gender-equality-discussion-paper/current-state/burden-care

138. Johnston, R. M., Sheluchin, A., & Linden, C. van der. (2020). Evidence of exacerbated gender inequality in child care obligations in Canada and Australia during the COVID-19 pandemic. Politics & Gender, 16(4), 1131–1141. https://doi.org/10.1017/S1743923X20000574

139. NSW Government. (2022). Flexible childcare for our doctors and nurses. https://www.treasury.nsw.gov.au/sites/default/files/2022-06/Dominic-Perrottet-Bronnie-Taylor-Matt-Kean-Brad-Hazzard-Sarah-Mitchell-Flexible-childcare-%20for-our-doctors-and-nurses.pdf

140. Azwar, A., Hidayah, N., Amal, A. A., & Rauf, S. (2019). Career path to nurse job satisfaction in the hospital. Journal of Health Science and Prevention, 3(3S), 107–109. https://doi.org/10.29080/jhsp.v3i3s.298

141. Karlsson, A.-C., Gunningberg, L., Bäckström, J., & Pöder, U. (2019). Registered nurses’ perspectives of work satisfaction, patient safety and intention to stay – A double-edged sword. Journal of Nursing Management, 27(7), 1359–1365. https://doi.org/10.1111/jonm.12816

142. Schwartz, S. (2019). Educating the nurse of the future—Report of the independent review into nursing education. Department of Health. https://www.health.gov.au/sites/default/files/documents/2019/12/educating-the-nurse-of-the-future.pdf

143. Ralph, N., Birks, M., Cross, W., & Chapman, Y. (2017). “Settling for less”: Designing undergraduate nursing curricula in the context of national accreditation. Collegian, 24(2), 117–124. https://doi.org/10.1016/j.colegn.2015.09.008

144. World Health Organization. (2021). The WHO Global Strategic Directions for Nursing and Midwifery (2021–2025). https://www.who.int/publications-detail-redirect/9789240033863

145. Ohlén, J., Furåker, C., Jakobsson, E., Bergh, I., & Hermansson, E. (2011). Impact of the Bologna process in Bachelor nursing programmes: The Swedish case. Nurse Education Today, 31(2), 122–128. https://doi.org/10.1016/j.nedt.2010.05.002

146. Norwegian Ministry of Education and Research. (2018). Long-term plan for research and higher education 2019. https://www.regjeringen.no/contentassets/9aa4570407c34d4cb3744d7acd632654/en-gb/pdfs/stm201820190004000engpdfs.pdf

147. Nursing and Midwifery Council. (2023). Standards framework for nursing and midwifery education. https://www.nmc.org.uk/globalassets/sitedocuments/standards/2024/standards-framework-for-nursing-and-midwifery-education.pdf

148. El Haddad, M., Moxham, L., & Broadbent, M. (2017). Graduate nurse practice readiness: A conceptual understanding of an age old debate. Collegian, 24(4), 391–396. https://doi.org/10.1016/j.colegn.2016.08.004

149. Christiansen, A., Jacob, E., & Twigg, D. (2018). Is it time to consider a four year Nursing Bachelor Degree in Australia? A discussion paper. Collegian, 25(5), 567–571. https://doi.org/10.1016/j.colegn.2018.01.004

150. Saitoh, A., Shimoda, K., Kawabata, A., Oku, H., & Horiuchi, S. (2022). Evaluation of the first Accelerated Bachelor of Science in Nursing program as a second career in Japan. Nurse Education Today, 111, 105275. https://doi.org/10.1016/j.nedt.2022.105275

151. Taneva, D., Paskaleva, D., & Gyurova-Kancheva, V. (2023). Nursing education in some European Higher Education Area (EHEA) member countries: A Comparative analysis. Iranian Journal of Public Health, 52(7), 1418–1427. https://doi.org/10.18502/ijph.v52i7.13243

152. Curtin University. (n.d.). Bachelor of Science (Nursing). Retrieved April 23, 2024, from https://www.curtin.edu.au/study/offering/course-ug-bachelor-of-science-nursing--b-nurs/

153. NHS England. (2020). Blended learning, learn your way. In NHS England Workforce, training and education. https://www.hee.nhs.uk/our-work/blended-learning

154. NHS Employers. (2020). Nursing apprenticeship pathway. https://www.nhsemployers.org/case-studies/nursing-apprenticeship-pathway

155. University of Massachusetts Boston. (n.d.). Accelerated Bachelor of Science in Nursing. Retrieved April 23, 2024, from https://www.umb.edu/academics/program-finder/accelerated-bachelor-of-science-in-nursing-abs-n/

156. University of Tasmania. (2023). Bachelor of Nursing. In Courses—University of Tasmania. https://www.utas.edu.au/courses/chm/courses/h3o-bachelor-of-nursing

157. The University of Technology Sydney. (2023). Bachelor of Nursing (Accelerated). https://www.uts.edu.au/sites/default/files/2022-07/uts-health-bachelor-nursing-accelerated-2023.pdf

158. Australian Nursing and Midwifery Victorian Branch. (2022). Nursing and midwifery student employment programs. In On the Record. https://otr.anmfvic.asn.au/articles/nursing-and-midwifery-student-employment-programs

159. Queensland Government. (2021). Gold Coast Health: Role description. https://smartjobs.qld.gov.au/jobtools/b\_fileupload.proc\_download?in\_file\_id=34262786&in\_servicecode=CUSTOMSEARCH&in\_organid=15033&in\_sessionid=0&in\_hash\_key=1D65345C9834C3AA045C5D472A587662

160. McGillion, T., Trueman, M., & Mill, D. (2022). An evaluation of the RUSON pilot at Western Health. Western Health. https://westerly.wh.org.au/nursing-midwifery/wp-content/uploads/2022/05/RUSON-Evaluation-Western-Health-May-2022.pdf

161. Kenny, P., Dickson-Swift, D. V., Phillips, D. C., DeVecchi, D. N., Masood, D. Y., & Hodge, D. B. (2019). Evaluation of Registered Undergraduate Student of Nursing (RUSON) pilot program – Final report. https://www.latrobe.edu.au/\_\_data/assets/pdf\_file/0007/1176811/RUSON-Report\_Amanda-Kenny\_V5.pdf

162. Australian Government Department of Education. (2024). Australian Universities Accord Final Report Document. https://www.education.gov.au/australian-universities-accord/resources/final-report

163. Grant-Smith, D., & de Zwaan, L. (2019). Don’t spend, eat less, save more: Responses to the financial stress experienced by nursing students during unpaid clinical placements. Nurse Education in Practice, 35, 1–6. https://doi.org/10.1016/j.nepr.2018.12.005

164. Jayasekara, R., Smith, C., Hall, C., Rankin, E., Smith, M., Visvanathan, V., & Friebe, T.-R. (2018). The effectiveness of clinical education models for undergraduate nursing programs: A systematic review. Nurse Education in Practice, 29, 116–126. https://doi.org/10.1016/j.nepr.2017.12.006

165. NHS England. (2022). National preceptorship framework for nursing. https://www.england.nhs.uk/publication/national-preceptorship-framework-for-nursing/

166. Department of Health Victoria. (2018). Victoria’s clinical supervision framework for mental health nurses. https://www.health.vic.gov.au/publications/clinical-supervision-for-mental-health-nurses-a-framework-for-victoria

167. Padilha, J. M., Machado, P. P., Ribeiro, A., Ramos, J., & Costa, P. (2019). Clinical virtual simulation in nursing education: Randomized controlled trial. Journal of Medical Internet Research, 21(3), e11529. https://doi.org/10.2196/11529

168. Oliveira Silva, G., Oliveira, F. S. e, Coelho, A. S. G., Fonseca, L. M. M., Vieira, F. V. M., Campbell, S. H., & Aredes, N. D. A. (2023). Influence of simulation design on stress, anxiety and self-confidence of nursing students: Systematic review with meta-analysis. Journal of Clinical Nursing, 32(17–18), 5668–5692. https://doi.org/10.1111/jocn.16681

169. The New York State Senate. (2023). NY State Assembly Bill 2023-A3076A. https://www.nysenate.gov/legislation/bills/2023/A3076/amendment/A

170. Olasoji, M., Garvey, L., Sadoughi, N., & Willetts, G. (2023). A qualitative study on undergraduate student nurses’ experience of mental health simulation preclinical placement. Clinical Simulation In Nursing, 84. https://doi.org/10.1016/j.ecns.2023.101455

171. Oxford Medical Simulation. (2024). Maximizing educational impact with extended reality. In Oxford Medical Simulation. https://oxfordmedicalsimulation.com/blog/

172. Nursing and Midwifery Council. (2023). Simulated practice learning. https://www.nmc.org.uk/standards/guidance/supporting-information-for-our-education-and-training-standards/simulated-practice-learning/

173. Olaussen, C., Steindal, S. A., Jelsness-Jørgensen, L.-P., Aase, I., Stenseth, H. V., & Tvedt, C. R. (2022). Integrating simulation training during clinical practice in nursing homes: An experimental study of nursing students’ knowledge acquisition, self-efficacy and learning needs. BMC Nursing, 21(1), 47–47.

174. Jeffries, P. R., Rodgers, B., & Adamson, K. (2015). NLN Jeffries Simulation Theory: Brief narrative description. Nursing Education Perspectives, 36(5), 292–293. https://doi.org/10.5480/1536-5026-36.5.292

175. La Trobe University. (2023). New nursing simulation labs for Albury-Wodonga. https://www.latrobe.edu.au/news/articles/2023/release/new-nursing-simulation-labs-for-albury-wodonga

176. New York State Workforce Development. (n.d.). Health care workforce investment. Retrieved April 23, 2024, from https://workforcedevelopment.ny.gov/health-care-workforce-investment

177. Nursing Times. (2018). Maintaining student enrolment after the removal of bursaries. In Nursing Times. https://www.nursingtimes.net/roles/nurse-educators/maintaining-student-enrolment-after-the-removal-of-bursaries-18-06-2018/

178. Department of Health and Social Care. (2019). Nursing students to receive £5,000 payment a year. https://www.gov.uk/government/news/nursing-students-to-receive-5-000-payment-a-year

179. NHS Business Services Authority. (n.d.). NHS Learning Support Fund (LSF). Retrieved April 23, 2024, from https://www.nhsbsa.nhs.uk/nhs-learning-support-fund-lsf

180. Pringle, E. (2023). “Earn as you learn” to be a nurse. https://healthandcare.scot/default.asp?page=story&  
story=3495

181. Rohatinsky, N., Cave, J., & Krauter, C. (2020). Establishing a mentorship program in rural workplaces: Connection, communication, and support required. Rural and Remote Health, 20(1), 5640. https://doi.org/10.22605/RRH5640

182. Health Canada. (2023). Government of Canada announces support to help address workforce challenges and retention in nursing field. https://www.canada.ca/en/health-canada/news/2023/04/government-of-canada-announces-support-to-help-address-workforce-challenges-and-retention-in-nursing-field.html

183. Stephenson, J. (2018). New nurses to be mentored by retired staff in Scotland. In Nursing Times. https://www.nursingtimes.net/news/workforce/new-nurses-to-be-mentored-by-retired-staff-in-scotland-09-10-2018/

184. RN2Blend. (n.d.). About RN2Blend. Retrieved April 30, 2024, from https://rn2blend.nl/en/over-rn2blend

185. Tuckey, M., & Hutton, N. (2021). RePAIR: Reducing pre-registration attrition and improving retention in radiotherapy. NHS Health Education England. https://www.sor.org/getmedia/a5b2557a-6205-4800-8c6c-c0a90b45e26a/SoR-RePAIR-Report\_Final

186. University of Wollongong. (n.d.). Nursing placements. https://www.uow.edu.au/student/health-placements/nursing/#:~:text=Attending%20a%20workplace%20experience%20or,These%20clinical%20placements%20are%20unpaid

187. Australian Nursing and Midwifery Federation. (n.d.). Member assistance. https://www.anmfvic.asn.au/memberassistance

188. Nurse & Midwife Support. (n.d.). Telephone support. https://www.nmsupport.org.au/accessing-support/telephone-support#:~:text=Why%20not%20call%20us%20today%20on%201800%20667%20877.&text=If%20you%20are%20deaf%2C%20or,through%20the%20National%20Relay%20Service%E2%80%A6%E2%80%A6https://www.uow.edu.au/student/health-placements/nursing/

189. Labrague, L. J., & McEnroe-Petitte, D. M. (2018). Job stress in new nurses during the transition period: An integrative review. International Nursing Review, 65(4), 491–504. https://doi.org/10.1111/inr.12425

190. See, E. C. W., Koh, S. S. L., Baladram, S., & Shorey, S. (2023). Role transition of newly graduated nurses from nursing students to registered nurses: A qualitative systematic review. Nurse Education Today, 121, 105702. https://doi.org/10.1016/j.nedt.2022.105702

191. Ulupinar, S., & Aydogan, Y. (2021). New graduate nurses’ satisfaction, adaptation and intention to leave in their first year: A descriptive study. Journal of Nursing Management, 29(6), 1830–1840. https://doi.org/10.1111/jonm.13296

192. Rush, K. L., Janke, R., Duchscher, J. E., Phillips, R., & Kaur, S. (2019). Best practices of formal new graduate transition programs: An integrative review. International Journal of Nursing Studies, 94, 139–158. https://doi.org/10.1016/j.ijnurstu.2019.02.010

193. Walker, A., Costa, B. M., Foster, A. M., & de Bruin, R. L. (2017). Transition and integration experiences of Australian graduate nurses: A qualitative systematic review. Collegian, 24(5), 505–512. https://doi.org/10.1016/j.colegn.2016.10.004

194. American Association of Colleges of Nursing. (n.d.). Nurse Residency Program. https://www.aacnnursing.org/our-initiatives/education-practice/nurse-residency-program

195. Sutor, A., & Painter, J. (2020). Nurse residency programs: Providing organizational value. Delaware Journal of Public Health, 6(1), 58–61. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8389136/pdf/djph-61-013.pdf

196. Australian Primary Health Care Nurses Association. (n.d.). Transition to practice programs. https://www.apna.asn.au/education/TransitiontoPracticeProgram

197. American Nurses Credentialing Center. (2017). Practice Transition Accreditation Program (PTAP). In ANA. https://www.nursingworld.org/organizational-programs/accreditation/ptap/

198. Lu, H., Zhao, Y., & While, A. (2019). Job satisfaction among hospital nurses: A literature review. International Journal of Nursing Studies, 94, 21–31. https://doi.org/10.1016/j.ijnurstu.2019.01.011

199. Putra, G. N. W., Kurniati, T., & Hidayat, A. A. A. (2017). Job satisfaction and nursing performance through career development. Proceedings of the Health Science International Conference (HSIC 2017). https://doi.org/10.2991/hsic-17.2017.13

200. Nursing Courses. (n.d.). 100+ nursing scholarships in Australia. In Nursing Courses. Retrieved April 23, 2024, from https://nursingcourses.net.au/nursing-scholarships/

201. Jokiniemi, K., Suutarla, A., Meretoja, R., Kotila, J., Axelin, A., Flinkman, M., Heikkinen, K., & Fagerström, L. (2020). Evidence-informed policymaking: Modelling nurses’ career pathway from registered nurse to advanced practice nurse. International Journal of Nursing Practice, 26(1), e12777. https://doi.org/10.1111/ijn.12777

202. NSW Ministry of Health. (2023). Careers as a registered nurse—Becoming a nurse or midwife. https://www.health.nsw.gov.au:443/nursing/careers/Pages/registered-nurse.aspx

203. Pool, I. A., van Zundert, H., & ten Cate, O. (2023). Facilitating flexibility in postgraduate nursing education through entrustable professional activities to address nursing shortages and career prospects. International Nursing Review. https://doi.org/10.1111/inr.12892

204. Skills Pass Healthcare. (n.d.). Your Skills Pass—Healthcare. Retrieved April 23, 2024, from https://criticalcare.yourskillspass.com/public/report.aspx?memberqueryid=24C08538-802F-4FF0-815F-A9D3739F2290&nodeid=72982CFD-4312-48E5-A848-555B164240C5

205. World Health Organization Regional Office for Europe. (2021). Building better together: Roadmap to guide implementation of the Global Strategic Directions for Nursing and Midwifery in the WHO European Region. https://iris.who.int/bitstream/handle/10665/350207/WHO-EURO-2021-4464-44227-62471-eng.pdf?sequence=1

206. Hampshaw, S., Cooke, J., Robertson, S., Wood, E., King, R., & Tod, A. (2022). Understanding the value of a PhD for post-doctoral registered UK nurses: A survey. Journal of Nursing Management, 30(4), 1011–1017. https://doi.org/10.1111/jonm.13581

207. Health Education England. (2015). Shape of Caring: A Review of the Future Education and Training of Registered Nurses and Care Assistants. https://www.hee.nhs.uk/sites/default/files/documents/2348-Shape-of-caring-review-FINAL.pdf

208. Peterson, N. E., Moss, K. O., Milbrath, G. R., Von Gaudecker, J. R., Park, E., & Chung, M. (2015). Qualitative analysis of student perceptions of Bachelor of Science-to-Doctor of Philosophy in nursing programs. Journal of Nursing Education, 54(10), 542–549. https://doi.org/10.3928/01484834-20150916-01

209. NHS Education for Scotland. (2021). Advanced nursing practice (ANP). https://nes.scot.nhs.uk/our-work/advanced-nursing-practice-anp/

210. Department of Health Northern Ireland. (2020). Nursing and Midwifery Task Group (NMTG) report and recommendations. In Health. https://www.health-ni.gov.uk/publications/nursing-and-midwifery-task-group-nmtg-report-and-recommendations

211. Main, P. A. E., & Anderson, S. (2023). Evidence for continuing professional development standards for regulated health practitioners in Australia: A systematic review. Human Resources for Health, 21(1), 23. https://doi.org/10.1186/s12960-023-00803-x

212. Milian, R. P. (2021). Back to basics: Facilitating the recognition of micro-credentials in Ontario PSE. Journal of Innovation in Polytechnic Education, 3(1), 37–46.

213. Déry, J., Paquet, M., Boyer, L., Dubois, S., Lavigne, G., & Lavoie-Tremblay, M. (2022). Optimizing nurses’ enacted scope of practice to its full potential as an integrated strategy for the continuous improvement of clinical performance: A multicentre descriptive analysis. Journal of Nursing Management, 30(1), 205–213. https://doi.org/10.1111/jonm.13473

214. Australian Government Department of Health and Aged Care. (2024). Unleashing the potential of our health workforce – Scope of Practice review. https://www.health.gov.au/our-work/scope-of-practice-review

215. Josi, R., Bianchi, M., & Brandt, S. K. (2020). Advanced practice nurses in primary care in Switzerland: An analysis of interprofessional collaboration. BMC Nursing, 19(1), 1. https://doi.org/10.1186/s12912-019-0393-4

216. Leslie, K., Bourgeault, I. L., Carlton, A.-L., Balasubramanian, M., Mirshahi, R., Short, S. D., Carè, J., Cometto, G., & Lin, V. (2023). Design, delivery and effectiveness of health practitioner regulation systems: An integrative review. Human Resources for Health, 21(1), 72. https://doi.org/10.1186/s12960-023-00848-y

217. Carron, T., Domeisen Benedetti, F., Fringer, A., Fierz, K., & Peytremann‐Bridevaux, I. (2023). Integrated care models in Swiss primary care: An embedded multiple case study. Journal of Evaluation in Clinical Practice, 29(6), 1025–1038.

218. Nursing Council of New Zealand. (n.d.). Scope of practice. https://nursingcouncil.org.nz/Public/NCNZ/nursing-section/Registered\_nurse.aspx

219. Australian Government Department of Health and Aged Care. (2024). Innovative Models of Care (IMOC) Program. https://www.health.gov.au/our-work/imoc-program

220. NSW Ministry of Health. (2014). Multidisciplinary team care—HealthOne NSW. https://www.health.nsw.gov.au:443/healthone/Pages/multidisciplinary-team-care.aspx

221. Morrison, A. (2010). Scope of nursing practice and decision-making framework: Toolkit. International Council of Nurses (ICN). https://www.icn.ch/sites/default/files/inline-files/2010\_ICN%20Scope%20of%20Nursing%20and%20Decision%20making%20Toolkit\_eng.pdf

222. McKenna, L., Wood, P., Williams, A., O’Connor, M., Moss, C., Griffiths, D., Della, P., Endacott, R., & Cross, W. (2019). Scope of practice and workforce issues confronting Australian Enrolled Nurses: A qualitative analysis. Collegian, 26(1), 80–85. https://doi.org/10.1016/j.colegn.2018.04.001

223. Wiggins, D., Downie, A., Engel, R. M., & Brown, B. T. (2022). Factors that influence scope of practice of the five largest health care professions in Australia: A scoping review. Human Resources for Health, 20(1), 87. https://doi.org/10.1186/s12960-022-00783-4

224. Nursing Council of New Zealand. (2023). Enrolled nurse transition information sheet for employers. https://www.nzno.org.nz/Portals/0/Files/Documents/Groups/Enrolled Nurses/2010-07 Information sheet for EN employers.pdf

225. Holm Hansen, E., Bomann, E., Bing-Jonsson, P., & Fagerstrom, L. M. (2020). Introducing Nurse Practitioners Into Norwegian Primary Healthcare-Experiences and Learning. Research and Theory for Nursing Practice, 34(1), 21–34. https://doi.org/10.1891/1541-6577.34.1.21

226. Buurtzorg. (n.d.). Buurtzorg’s model of care. https://www.buurtzorg.com/about-us/buurtzorgmodel/

227. Hirschman, K. B., Shaid, E., McCauley, K., Pauly, M. V., & Naylor, M. D. (2015). Continuity of care: The Transitional Care Model. Online Journal of Issues in Nursing, 20(3), 1.

228. Cacchione, P. Z. (2020). Innovative care models across settings: Providing nursing care to older adults. Geriatric Nursing, 41(1), 16–20. https://doi.org/10.1016/j.gerinurse.2020.01.011

229. NHS England. (2023). Professional nurse advocate A-EQUIP model: A model of clinical supervision for nurses. https://www.england.nhs.uk/long-read/pna-equip-model-a-model-of-clinical-supervision-for-nurses/

230. The Queen’s Nursing Institute. (2023). Nursing in the digital age 2023: Using technology to support patients in the home. https://qni.org.uk/wp-content/uploads/2023/02/Nursing-in-the-Digital-Age-2023.pdf

231. Department of Education Victoria. (2020). Victorian School Nursing Program: Advice. https://www2.education.vic.gov.au/pal/victorian-school-nursing-program

232. Alliance for Healthier Communities. (n.d.). Nurse practitioner-led clinics. Retrieved April 24, 2024, from https://www.allianceon.org/nurse-practitioner-led-clinics

233. Government of Western Australia Department of Health. (n.d.). Nurse Practitioner and Team-Based Primary Care Pilot. Retrieved April 24, 2024, from https://www.health.wa.gov.au/Articles/N\_R/Nurse-Practitioner-and-Team-Based-Primary-Care

234. NSW Ministry of Health. (2023). Rural Nurse Practitioners—A framework for service and training in NSW Health. https://www.health.nsw.gov.au/nursing/practice/Pages/rural-nurse-practitioner-framework.aspx#:~:text=This%20framework%20describes%20two%20service,patients%2C%20communities%20and%20priority%20populations

235. Beaney, P., Hatfield, R., Hughes, A., Schmid, M., & Chambers, R. (2019). Creating digitally ready nurses in general practice. Nursing Management (Harrow, London, England: 1994), 26(3), 27–35. https://doi.org/10.7748/nm.2019.e1840

236. American Association of Critical Care Nurses. (n.d.). AACN Synergy Model for Patient Care. Retrieved April 24, 2024, from https://www.aacn.org/nursing-excellence/aacn-standards/synergy-model

237. Cancer Australia. (2023). Australian Cancer Plan. https://www.canceraustralia.gov.au/australian-cancer-plan

238. McLean Care. (n.d.). Technology. In McLean Care. Retrieved April 24, 2024, from https://mcleancare.org.au/technology/

239. Marshall, B., Floyd, S., & Forrest, R. (2011). Clinical outcomes and patients’ perceptions of nurse-led healthy lifestyle clinics. Journal of Primary Health Care, 3(1), 48–52.

240. Department of Health Queensland. (2021). Telehealth strategy 2021-2026. https://www.health.qld.gov.au/\_\_data/assets/pdf\_file/0023/1123853/telehealth-strategy-2021-2026.pdf

241. Cancer Australia. (2022). Utilisation of telehealth services for professional attendances for cancer related services January 2020 to September 2021 – Nationally and by population group. https://www.canceraustralia.gov.au/sites/default/files/publications/utilisation-telehealth-services-professional-attendances-cancer-related-services-january-2020/pdf/covid-19\_and\_cancer\_-\_mbs\_services\_-\_utilisation\_of\_related\_services\_jan\_2020\_to\_sept\_2021\_nationally\_and\_by\_population\_group.pdf

242. Khaw, K. W., Alnoor, A., AL-Abrrow, H., Tiberius, V., Ganesan, Y., & Atshan, N. A. (2023). Reactions towards organizational change: A systematic literature review. Current Psychology, 42(22), 19137–19160. https://doi.org/10.1007/s12144-022-03070-6

243. NHS England. (2022). Flexible working in the NHS – A toolkit for individuals. https://www.england.nhs.uk/wp-content/uploads/2022/06/flexible-working-toolkit-for-individuals.pdf

244. Health Service Executive. (n.d.). HSE Implementation Plan for the Enhanced Nurse/Midwife Contract. In HSE.ie. Retrieved April 30, 2024, from https://www.hse.ie/eng/services/news/newsfeatures/hse-implementation-plan-for-the-enhanced-nurse-midwife-contract/hse-implementation-plan-for-the-enhanced-nurse-midwife-contract.html

245. Department of Health Queensland. (2016). Queensland Stay On Your Feet® Toolkit—Phase 2 Kotters Eight Steps of Change. In Queensland Health. https://www.health.qld.gov.au/stayonyourfeet/toolkits/phase2/kotter

246. Department of Health Northern Ireland. (2018). A district nursing framework 2018-2026 – 24 hour district nursing care no matter where you live. https://www.health-ni.gov.uk/sites/default/files/publications/health/district-nursing-framework2018.pdf

247. Mcbrearty, K., Zordan, R., Mcinnes, E., Murphy, J., Riddell, K., Walker, V., & Jacob, E. (2024). Introduction of a Registered Undergraduate Student of Nursing workforce: A qualitative study of student and registered nurses. Journal of Advanced Nursing. https://doi.org/10.1111/jan.16046

248. Willetts, G., Nieuwoudt, L., Olasoji, M., Sadoughi, N., & Garvey, L. (2022). Implementation of a Registered Undergraduate Student of Nursing (RUSON) program: The nurses’ perspective. Collegian, 29(1), 70–77. https://doi.org/10.1016/j.colegn.2021.04.006

249. Friday, L., Zoller, J. S., Hollerbach, A. D., Jones, K., & Knofczynski, G. (2015). The effects of a prelicensure extern program and nurse residency program on new graduate outcomes and retention. Journal for Nurses in Professional Development, 31(3), 151. https://doi.org/10.1097/NND.0000000000000158

250. Rugs, D., Nedd, N., Deitrick, L., & Hall, K. S. (2020). A literature review of nursing extern program outcomes. Journal for Nurses in Professional Development, 36(6), 328. https://doi.org/10.1097/NND.0000000000000680

251. White, K. A., Fetter, M. E., & Ruth-Sahd, L. A. (2019). Extern programs promote confidence and reduce anxiety with clinical decision making in nursing students. Nurse Educator, 44(5), 239. https://doi.org/10.1097/NNE.0000000000000625

252. Raffelt, A., Sidwell, D., Fennah, W., Davies, S., & Jauncey-Cooke, J. (2018). Incorporating an undergraduate student in nursing program into the workforce: A prospective observational study. The Australian Journal of Advanced Nursing, 35(4), 17–23.

253. Lindsay, D. J., Ahern, T. A., Pardon, M. K., McAuliffe, M. T., & Rannard, S. G. (2023). Student employment models for undergraduate nurses and midwives in Australia: A scoping review. SAGE Open Nursing, 9, 23779608231186026. https://doi.org/10.1177/23779608231186026

254. Crevacore, C. A., Duffield, C. M., & Twigg, D. E. (2019). Undergraduate registered nursing students working as assistants in nursing within the acute care environment: Program development and discussion. Collegian, 26(2), 256–261. https://doi.org/10.1016/j.colegn.2018.07.012

255. Mathews, M., Spencer, S., Hedden, L., Lukewich, J., Poitras, M.-E., Marshall, E. G., Brown, J. B., Sibbald, S., & Norful, A. A. (2022). The impact of funding models on the integration of registered nurses in primary health care teams: Protocol for a multi-phase mixed-methods study in Canada. BMC Primary Care, 23(1), 290. https://doi.org/10.1186/s12875-022-01900-x

256. Australian Primary Health Care Nurses Association. (n.d.). Building nurse capacity—Improving patient outcomes. Retrieved April 24, 2024, from https://www.apna.asn.au/profession/buildingnursecapacity

257. Australian Government Department of Education. (2023). Research Block Grants. https://www.education.gov.au/research-block-grants

258. Australian Research Council. (n.d.). ARC funding schemes. Retrieved April 24, 2024, from https://www.arc.gov.au/funding-research/funding-schemes

259. Australian Catholic University. (n.d.). Our projects. https://www.acu.edu.au/about-acu/institutes-academies-and-centres/nursing-research-institute/our-projects

260. Brindle, D. (2017). Buurtzorg: The Dutch model of neighbourhood care that is going global. https://www.theguardian.com/social-care-network/2017/may/09/buurtzorg-dutch-model-neighbourhood-care

261. Australian College of Nursing. (2022). Value-based health care through nursing leadership (abridged). https://www.acn.edu.au/wp-content/uploads/white-paper-value-based-health-care-abridged.pdf

262. Victoria State Government. (2023). Place-based approaches: Funding toolkit. https://www.vic.gov.au/funding-place-based-approaches

263. Galuska, L. A., Murray, K., Rodriguez, M., & Wilson, R. C. (2023). Strategies to stay: Role enrichment models for retaining Millennial nurses. Nursing Administration Quarterly, 47(1), 64–71. https://doi.org/10.1097/NAQ.0000000000000559

264. Deshpande, S., Sahni, S., Karemore, T., Joshi, J., & Chahande, J. (2018). Evaluation of relationship between leadership style and job satisfaction amongst healthcare professionals. MedEdPublish, 7, 24. https://doi.org/10.15694/mep.2018.0000024.1

265. Lal, M. M. (2019). Leading effectively through change. JONA: The Journal of Nursing Administration, 49(12), 575. https://doi.org/10.1097/NNA.0000000000000816

266. Warshawsky, N., & Cramer, E. (2019). Describing nurse manager role preparation and competency: Findings from a national study. JONA: The Journal of Nursing Administration, 49(5), 249. https://doi.org/10.1097/NNA.0000000000000746

267. Australian College of Nursing. (n.d.). Nurse Unit Manager Leadership Program. In Australian College of Nursing. Retrieved April 24, 2024, from https://www.acn.edu.au/leadership/nurse-unit-manager-leadership-program

268. Westpac Scholars. (n.d.). Future Leaders Scholarships. Retrieved April 24, 2024, from https://scholars.westpac.com.au/scholarships/future-leaders-scholarship/

269. NHS Leadership Academy. (n.d.). Leadership Academy – better leaders, better care, brighter future. Retrieved April 24, 2024, from https://www.leadershipacademy.nhs.uk/

270. Bayliss-Pratt, L., Daley, M., & Bhattacharya-Craven, A. (2020). Nursing now 2020: The Nightingale Challenge. International Nursing Review, 67(1), 7–10. https://doi.org/10.1111/inr.12579

271. Australian College of Nursing. (n.d.). Institute of Leadership. Retrieved April 24, 2024, from https://leadership.acn.edu.au/IOL/IOL/home.aspx

272. Wharton University of Pennsylvania. (n.d.). Wharton nursing leaders program. In Wharton Executive Education. Retrieved April 24, 2024, from https://executiveeducation.wharton.upenn.edu/for-individuals/all-programs/wharton-nursing-leaders-program/

273. Johns Hopkins Medicine. (n.d.). Institute for Johns Hopkins Nursing. Retrieved April 24, 2024, from https://www.hopkinsmedicine.org/institute-nursing

274. World Health Organization. (2015). Roles and responsibilities of government chief nursing and midwifery officers: A capacity building manual. https://iris.who.int/bitstream/handle/10665/351684/9789241509473-eng.pdf?sequence=1

275. Mason, D. J., & Salvage, J. (2021). International Council of Nurses’ Global Nursing Leadership Institute: Responding to the pandemic. International Nursing Review, 68(4), 563–570. https://doi.org/10.1111/inr.12726

276. The Queen’s Nursing Institute Scotland. (n.d.). What we do. Retrieved April 24, 2024, from https://www.qnis.org.uk/what-we-do/

277. Kim, Y., Lee, E., & Lee, H. (2019). Association between workplace bullying and burnout, professional quality of life, and turnover intention among clinical nurses. PLoS ONE, 14(12), e0226506. https://doi.org/10.1371/journal.pone.0226506

278. Symenuk, P., & Godberson, S. (2018). Leadership experiences in undergraduate nursing education: A student perspective. International Journal of Nursing. https://www.semanticscholar.org/paper/Leadership-Experiences-in-Undergraduate-Nursing-A-Symenuk-Godberson/a9e75ef206d66befa501ec76117c61182cd8d366

279. Australian College of Nursing. (2020). Emerging Nurse Leader program. In Australian College of Nursing. https://www.acn.edu.au/leadership/emerging-nurse-leader-program

280. American Organization for Nursing Leadership. (n.d.). Emerging Nurse Leader Institute. Retrieved April 24, 2024, from https://www.aonl.org/education/enli

281. Monash University. (n.d.). Vice-Chancellor’s Ancora Imparo Leadership Program. Retrieved April 24, 2024, from https://www.monash.edu/students/future-work/career-connect/lead/ancora-imparo

282. Porteous, D. J., & Machin, A. (2018). The lived experience of first year undergraduate student nurses: A hermeneutic phenomenological study. Nurse Education Today, 60, 56–61. https://doi.org/10.1016/j.nedt.2017.09.017

283. Canberra Health Services. (2024). Emeritus Registered Nurse/Midwife Level 2—Division of Nursing and Midwifery Patient Support Service. https://www.canberrahealthservices.act.gov.au/careers/position-descriptions/emeritus-registered-nursemidwife-level-2-division-of-nursing-and-midwifery-patient-support-service

284. International Council of Nurses. (2019). Nightingale Challenge inspires the next generation of nurse and midwife leaders during 2020 Year of the Nurse and the Midwife. https://www.icn.ch/news/nightingale-challenge-inspires-next-generation-nurse-and-midwife-leaders-during-2020-year

285. Alsadaan, N., Salameh, B., Reshia, F. A. A. E., Alruwaili, R. F., Alruwaili, M., Awad Ali, S. A., Alruwaili, A. N., Hefnawy, G. R., Alshammari, M. S. S., Alrumayh, A. G. R., Alruwaili, A. O., & Jones, L. K. (2023). Impact of nurse leaders’ behaviors on nursing staff performance: A systematic review of literature. INQUIRY: The Journal of Health Care Organization, Provision, and Financing, 60. https://doi.org/10.1177/00469580231178528

286. Carryer, J., Gardner, G., Dunn, S., & Gardner, A. (2007). The core role of the nurse practitioner: Practice, professionalism and clinical leadership. Journal of Clinical Nursing, 16(10), 1818–1825. https://doi.org/10.1111/j.1365-2702.2007.01823.x

287. Connolly, C., & Cotter, P. (2023). Effectiveness of nurse-led clinics on healthcare delivery: An umbrella review. Journal of Clinical Nursing, 32(9–10), 1760–1767. https://doi.org/10.1111/jocn.16186

288. Heinen, M., van Oostveen, C., Peters, J., Vermeulen, H., & Huis, A. (2019). An integrative review of leadership competencies and attributes in advanced nursing practice. Journal of Advanced Nursing, 75(11), 2378–2392. https://doi.org/10.1111/jan.14092

289. Australian College of Nursing. (n.d.). Nurse Director Leadership Program. Retrieved April 24, 2024, from https://www.acn.edu.au/leadership/nurse-director-leadership-program

290. Health Workforce Australia. (2013). Health LEADS Australia: The Australian health leadership framework. https://www.aims.org.au/documents/item/352

291. NSW Ministry of Health. (2022). Nursing and midwifery leadership pathways leadership strategy 2022-2025. https://www.health.nsw.gov.au/nursing/culture/Documents/leadership-strategy.pdf

292. Health Education and Training Institute. (n.d.). NSW Health Leadership and Management Framework. https://www.heti.nsw.gov.au/education-and-training/our-focus-areas/leadership-and-management/nsw-health-leadership-framework

293. Humber River Health. (n.d.). Strategic plan. In Humber River Health. Retrieved April 24, 2024, from https://www.hrh.ca/who-we-are/about-us/strategic-plan/

294. Damm, D. (2020, February 14). Injecting Technologies Into Finland’s Healthcare System. Singularity. https://singularity-phase01.webflow.io/blog/injecting-technologies-into-finlands-healthcare-system

295. Buces, M. (2022, July 22). Oslo, a pioneer in healthcare technology—Eurocities. Euro Cities. https://eurocities.eu/stories/oslo-a-pioneer-in-welfare-technology/

296. Health Service Executive. (n.d.). HSE telehealth roadmap 2024-2027. In HSE Staff. Retrieved April 24, 2024, from https://healthservice.hse.ie/staff/procedures-guidelines/digital-health/hse-telehealth-roadmap-2024-2027/

297. International Council of Nurses. (2021). Remote monitoring of COVID-19 patients, Norway. https://www.icn.ch/news/remote-monitoring-covid-19-patients-norway

298. Accenture. (n.d.). Norway unified digital health systems: Case study. Retrieved April 24, 2024, from https://www.accenture.com/au-en/case-studiesnew/health/power-to-people

299. Vitestro. (2022). Vitestro unveils autonomous blood drawing device, combining artificial intelligence, ultrasound imaging and robotics. https://vitestro.com/vitestro-unveils-autonomous-blood-drawing-device-combining-artificial-intelligence-ultrasound-imaging-and-robotics/

300. Barrie, R. (2023). Nurse-assisting robot rolled out in Finnish hospital as part of pilot. In Medical Device Network. https://www.medicaldevice-network.com/news/nurse-assisting-robot-hospital-pilot/

301. Bruce, G. (2023). Allegheny Health Network to have digital nurses in all 14 hospitals by end of ’24. https://www.beckershospitalreview.com/digital-health/allegheny-health-network-to-have-digital-nurses-in-all-14-hospitals-by-end-of-24.html

302. Garcia Gonzalez-Moral, S., Beyer, F. R., Oyewole, A. O., Richmond, C., Wainwright, L., & Craig, D. (2023). Looking at the fringes of MedTech innovation: A mapping review of horizon scanning and foresight methods. BMJ Open, 13(9), e073730. https://doi.org/10.1136/bmjopen-2023-073730

303. Australian Nursing and Midwifery Federation. (n.d.). Digital capability framework. Retrieved April 24, 2024, from https://www.anmf.org.au/professional/digital-health/digital-capability-framework/

304. Health Service Executive. (2019). Digital roadmap for nursing & midwifery 2019—2024. https://healthservice.hse.ie/filelibrary/onmsd/digital-roadmap-for-nursing-midwifery-2019-2024.pdf

305. Health Innovation Hub Ireland. (n.d.). Health Innovation Hub Ireland – Innovation in Healthcare. Retrieved April 24, 2024, from https://hih.ie/

306. Australasian Institute of Digital Health. (n.d.). Enabling the Digital Health Workforce. Retrieved April 24, 2024, from https://digitalhealthworkforce.org.au/

307. Australian Digital Health Agency. (n.d.). Connecting Australia to a healthier future. Retrieved April 24, 2024, from https://www.digitalhealth.gov.au/australian-digital-health-agency-0

308. Australian Digital Health Agency. (2020). National nursing and midwifery digital health capability framework. https://www.digitalhealth.gov.au/sites/default/files/2020-11/National\_Nursing\_and\_Midwifery\_Digital\_Health\_Capability\_Framework\_publication.pdf

309. Australian Nursing and Midwifery Federation. (n.d.). Digital health resources. Retrieved April 24, 2024, from https://www.anmf.org.au/professional/digital-health

310. Kouri, P., Reponen, J., Ahonen, O., Metsäniemi, P., Holopainen, A., & Kontio, E. (2018). Telemedicine and eHealth in Finland: On the way to digitalization – From individual TeleHealth applications to connected health. http://www.theseus.fi/handle/10024/166525

311. NHS England. (n.d.). Learning handbook. https://www.england.nhs.uk/improvement-hub/wp-content/uploads/sites/44/2015/08/learning-handbook-action-learning-sets.pdf

312. Schwaiger, C. (2023). Dutch hospital info chief as medical chatbot is rolled out: Let’s not regulate AI to death. In Www.euractiv.com. https://www.euractiv.com/section/health-consumers/news/dutch-hospital-info-chief-as-medical-chatbot-is-rolled-out-lets-not-regulate-ai-to-death/

313. Saban, M., & Dubovi, I. (2024). A comparative vignette study: Evaluating the potential role of a generative AI model in enhancing clinical decision-making in nursing. Journal of Advanced Nursing. https://doi.org/10.1111/jan.16101

314. Yelne, S., Chaudhary, M., Dod, K., Sayyad, A., Sharma, R., Yelne, S., Chaudhary, M., Dod, K., Sayyad, A., & Sharma, D. R. (2023). Harnessing the power of AI: A comprehensive review of Its impact and challenges in nursing science and healthcare. Cureus, 15(11). https://doi.org/10.7759/cureus.49252

315. Rony, M. K. K., Parvin, Mst. R., & Ferdousi, S. (2024). Advancing nursing practice with artificial intelligence: Enhancing preparedness for the future. Nursing Open, 11(1). https://doi.org/10.1002/nop2.2070

316. Australian Government Department of Health and Aged Care. (2023). Genetics and genomics. https://www.health.gov.au/topics/genetics-and-genomics

317. Israel Innovation Authority. (2023). Mosaic initiative for personalized medicine – Prevention of suffering, saving of lives. https://health.gov.il/services/tenders/doclib/121118-mosaic-brief.pdf

318. Eckert, M., Rickard, C. M., Forsythe, D., Baird, K., Finn, J., Gilkison, A., Gray, R., Homer, C. S., Middleton, S., Neville, S., Whitehead, L., Sharplin, G. R., & Keogh, S. (2022). Harnessing the nursing and midwifery workforce to boost Australia’s clinical research impact. The Medical Journal of Australia, 217(10), 514–516. https://doi.org/10.5694/mja2.51758

319. Smith, S., Gullick, J., Ballard, J., & Perry, L. (2018). Clinician researcher career pathway for registered nurses and midwives: A proposal. International Journal of Nursing Practice, 24(3), e12640. https://doi.org/10.1111/ijn.12640

320. Australasian Nursing & Midwifery Clinical Trials Network. (n.d.). Australasian Nursing & Midwifery Clinical Trials Network. In Australasian Nursing and Midwifery Clinical Trials Network. Retrieved April 24, 2024, from https://anmctn.com.au/

321. Wray, J. (2020). Clinical Nurse Specialist (CNS), Nurse Practitioner (NP), Advanced Clinical Practice Nurse (ACPN) or Advanced Practice Registered Nurse (APRN): What’s in a title? https://blogs.bmj.com/ebn/2020/07/05/clinical-nurse-specialist-cns-nurse-practitioner-np-advanced-clinical-practice-nurse-acpn-or-advanced-practice-registered-nurse-aprn-whats-in-a-title-the-icn-guidelines-on-advance/

322. International Council of Nurses. (2020). Guidelines on advanced practice nursing. https://www.icn.ch/system/files/documents/2020-04/ICN\_APN Report\_EN\_WEB.pdf

323. Rovito, K., Kless, A., & Costantini, S. D. (2022). Enhancing workforce diversity by supporting the transition of internationally educated nurses. Nursing Management, 53(2), 20. https://doi.org/10.1097/01.NUMA.0000816252.78777.8f

324. Australian Institute of Health and Welfare. (2023, September 7). Profile of First Nations people. Australian Institute of Health and Welfare. https://www.aihw.gov.au/reports/australias-welfare/profile-of-indigenous-australians

325. Department of Health and Aged Care. (2022). Nursing factsheets. https://hwd.health.gov.au/nrmw-dashboards

326. Congress of Aboriginal and Torres Strait Islander Nurses and Midwives. (2022). “Gettin em n keepin em n growin em” (GENKE II). https://issuu.com/catsinam1/docs/catsinam\_education\_plan\_2022\_v18.0\_final

327. Congress of Aboriginal and Torres Strait Islander Nurses and Midwives. (2023). Strategic plan 2023-2028. https://dgc5bd.a2cdn1.secureserver.net/wp-content/uploads/2023/11/CATSINaM-Strategic-Plan-2023-2028\_FINAL.pdf

328. Australian Government Department of Health and Aged Care. (2022). National Aboriginal and Torres Strait Islander health workforce strategic framework and implementation plan 2021–2031. https://www.health.gov.au/resources/publications/national-aboriginal-and-torres-strait-islander-health-workforce-strategic-framework-and-implementation-plan-2021-2031?language=en

329. Department of Health Queensland. (2016). Aboriginal and Torres Strait Islander health workforce strategic framework 2016-2026. https://www.health.qld.gov.au/\_\_data/assets/pdf\_file/0023/628340/aboriginal-torres-strait-islander-workforce-framework.pdf

330. Department of Families Fairness and Housing Victoria. (2021). Aboriginal workforce strategy 2021 – 2026. https://www.dffh.vic.gov.au/publications/aboriginal-workforce-strategy-2021-2026

331. NSW Ministry of Health. (2016). NSW Health good health – great jobs: Aboriginal workforce strategic framework 2016-2020. https://www1.health.nsw.gov.au/pds/ArchivePDSDocuments/PD2016\_053.pdf

332. NSW Ministry of Health. (2023). NSW regional health strategic plan 2022-2032. https://www.health.nsw.gov.au/regional/Publications/regional-health-strategic-plan.pdf

333. Indigenous Services Canada. (2022). Government of Canada announces recruitment and retention allowances to triple through to 2025 for Indigenous Services Canada nurses in remote and isolated communities. https://www.canada.ca/en/indigenous-services-canada/news/2022/08/government-of-canada-announces-recruitment-and-retention-allowances-to-triple-through-to-2025-for-indigenous-services-canada-nurses-in-remote-and-i.html

334. Wiapo, C., Sami, L., Komene, E., Davis, J., Wilkinson, S., Cooper, B., & Adams, S. (2023). From kaimahi to enrolled nurse: A successful workforce Initiative to increase Māori nurses in primary health care. Nursing Praxis in Aotearoa New Zealand, 39(1). https://doi.org/10.36951/001c.74476

335. National Aboriginal Community Controlled Health Organisation. (n.d.). Aboriginal Community Controlled Health Organisations (ACCHOs). In NACCHO. Retrieved April 25, 2024, from https://www.naccho.org.au/acchos/

336. Canadian Indigenous Nurses Association. (n.d.). Canadian Indigenous Nurses Association. Retrieved April 25, 2024, from https://indigenousnurses.ca/

337. Mehus, G., Hætta, A. B. K., Emaus, N., & Okstad, L. (2023). The history of Sámi nursing education and the path toward regulations on a national guideline for Sámi nursing education in Norway. AlterNative: An International Journal of Indigenous Peoples, 19(2), 504–509. https://doi.org/10.1177/11771801231168762

338. NSW Ministry of Health. (2022). Aboriginal cultural training – Respecting the difference. https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2022\_028.pdf

339. Northern Territory Health. (2016). Aboriginal cultural security framework 2016-2026. https://health.nt.gov.au/\_\_data/assets/pdf\_file/0010/1035496/aboriginal-cultural-security-framework-2016-2026.pdf

340. Krohne, K., Døble, B., Johannessen, A., & Thorsen, K. (2018). “We feel included”: Education and inclusion of health care staff with minority language in elder care. Journal of Multidisciplinary Healthcare, 12, 9–19. https://doi.org/10.2147/JMDH.S178458

341. Calenda, D., Pitkänen, P., & Sippola, A. (2019). Integration of foreign-born nurses in Finnish social and health care organizations: Evidences, challenges and responses. Journal of Immigrant & Refugee Studies, 17(2), 152–167. https://doi.org/10.1080/15562948.2018.1428843

342. Northern Territory Health. (2019). NT Health inclusion strategy – Plan of actions 2019-2022 – Respecting people with diverse sexualities and gender identities. https://health.nt.gov.au/\_\_data/assets/pdf\_file/0005/735314/NT-Health-Inclusion-Strategy-Respecting-People-with-Diverse-Sexualities-and-Gender-Identities.pdf

343. NHS England. (2022). NHS equality, diversity, and inclusion improvement plan. https://www.england.nhs.uk/long-read/nhs-equality-diversity-and-inclusion-improvement-plan/

344. Australian College of Nursing. (2021). Nursing leadership in diversity and inclusion – Guiding principles. https://www.acn.edu.au/wp-content/uploads/guiding-principles-nursing-leadership-in-diversity-and-inclusion.pdf

345. Canadian Federation of Nurses Unions. (2019). Equity and inclusion toolkit. https://nursesunions.ca/wp-content/uploads/2019/06/CFNU\_EquityToolkit\_EN.pdf

346. International Labour Organization. (2022). Inclusion of lesbian, gay, bisexual, transgender, intersex and queer (LGBTIQ+) persons in the world of work: A learning guide. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---gender/documents/publication/wcms\_846108.pdf