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Global Strategy on Human Resources for Health

ICN Policy Brief

Advanced Practice Nursing:
An Essential Component of Country Level Human Resources for Health

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Purpose
Globally, there is high demand and interest in advanced practice nursing (APN) roles as an essential vehicle for innovation and healthcare reform to provide more effective and sustainable models of healthcare.[1] This paper outlines important implications for integrating APN roles in country level human resources for health (HRH) by summarising the evidence on: i) facilitators and evidence-based strategies for effective APN role implementation; ii) the contribution of APN roles for improving health and health system outcomes; and iii) the alignment of APN roles with the World Health Organization's (WHO) Global Strategy on Human Resources for Health[2] and with the United Nation's[3] Sustainable Development Goals.

This paper should be read in relation to the zero draft of the "Health Workforce 2030: A Global Strategy on Human Resources for Health".[2]

Background
Defining the advanced practice nurse and types of APN roles. According to the International Council of Nurses (ICN), an advanced practice nurse is a "registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A master's degree is recommended for entry level."[4] (2008, p.7). Clinical practice is a defining feature of APN roles. However, *what makes the roles advanced and the means through which healthcare reform and innovation can be achieved*, is the integration of clinical practice with responsibilities for education, organisational leadership, professional development, evidence-based practice and research.[5,6,7]

The two most common types of APN roles, the Clinical Nurse Specialist (CNS) and the Nurse Practitioner (NP)[8,9] are the focus of this paper. How CNSs and NPs enact their roles is highly variable in response to population health and practice setting needs. This fluidity makes CNSs and NPs assets for addressing dynamic healthcare system needs, but can also contribute to role confusion. CNSs often have greater responsibilities for non-clinical activities such as education or quality improvement. NPs tend to have greater involvement in clinical care. NPs

also have an expanded scope of clinical practice which gives them the authority to autonomously order diagnostic tests, make diagnoses, and prescribe treatments and medications. In contrast, CNSs have the same scope of practice as a registered nurse. These role differences have important implications for legislation, regulation and education. Determining the types of APN roles that best fit country needs for improving health and health system outcomes is essential for effective role implementation.[5] CNSs and NPs work in a broad range of practice settings including hospitals (acute and ambulatory care), primary healthcare (general and specialised), homes, community agencies and outreach programmes, and in long-term care.

APN role deployment. Countries are in different stages of developing APN roles as part of their nursing workforce. Over 70 countries have or are interested in introducing APN roles.[10] More established APN roles are found in higher income countries but there is documented need for and the growing introduction of APN roles in low and middle income countries.[1,11,12] NPs have been introduced most often to increase access to essential primary healthcare in underserviced rural and remote communities and to address disparities in access to care for vulnerable populations with high needs as a result of their economic, social, cultural, educational or health circumstances in urban settings. CNSs have been introduced to provide highly complex and specialised care, develop nursing practice and support nurses at the point-of-care, and lead quality improvement and evidence-based practice initiatives in response to research advances in treatment and technology. A more recent driver for the introduction of APN roles has been healthcare reform and the need to improve the quality of healthcare and provide more sustainable models of healthcare delivery. Aging populations and increasing demands for care of the elderly, chronic disease management, health promotion and chronic disease prevention and healthcare provider shortages are associated with needs for different healthcare delivery solutions that are amenable to APN roles. The introduction of APN roles is also identified as an important HRH strategy to improve nursing recruitment and retention and to provide opportunities for career advancement.

APN role integration into healthcare systems. There is limited access to current international data examining APN role integration within health systems. Existing data indicates that APN role integration, even for countries where the roles have been established for well over 60 years, is quite limited. The ideal ratio of advanced practice nurses to the number of registered nurses in a country is not known, but provides a crude measure of role integration or the extent to which APN roles make up the nursing workforce and contribute to healthcare delivery. The United States may have the greatest extent of health systems integration with NPs making up 6.5% and CNSs 2.5% of the nursing workforce, followed by Ireland where NPs account for 2% of all registered nurses.[8] In most other OECD countries with established APN roles, CNSs and NPs each make up less than 1% of the nursing workforce. Thus, tremendous potential remains for APN roles globally to improve health and health systems outcomes.

The integration of APN roles into healthcare organisations and systems is challenging, contextual and evolves iteratively over time. In most countries, APN roles are introduced in an ad-hoc manner. As a result, formal policies and practices necessary to support optimal APN role implementation such as legislation, regulation, competencies and education, lag substantially behind the informal introduction of the roles. Many of the challenges encountered occur because APN role implementation stimulates changes and makes evident the need for further change at macro, meso and micro levels. Ireland is one country that successfully utilised a

systematic approach to APN role implementation.[13] However, such an approach may be more challenging to employ in larger countries and those with less centralised models of nursing regulation and healthcare system governance.

At the country and organisation level, the successful introduction of an APN role is facilitated by a goal and outcome orientated approach beginning with an assessment of patient and community needs and early engagement of key stakeholders such as physicians and other healthcare providers, administrators and patients. It is important to discuss and agree on the gaps in the current model of healthcare, define the changes needed and identify the APN role required to achieve identified goals, and how this role will interface and collaborate with other members of the healthcare team. Alignment of APN roles with healthcare quality improvement goals is critical for success. Country level enablers of role development include high quality education programmes with standardised requirements and legislation and regulation that support scope of practice expectations for the role.

Once developed, APN role implementation is facilitated by factors such as recruitment and retention strategies, public awareness of the APN role and national and healthcare setting leadership support. Addressing healthcare funding arrangements is essential to the introduction and long-term sustainability of APN roles. Countries providing dedicated role funding or funding arrangements that align with healthcare priorities and areas of demonstrated need will have greater success in introducing and expanding the reach of APN roles within healthcare systems.[8,11,13,14,15] To promote effective collaboration between advanced practice nurses and physicians, it is important to ensure the introduction of APN roles does not negatively impact on physician income and that physician concerns about liability are addressed. Role clarity is a key enabler during both role development and implementation stages and is intertwined with inter and intra professional relations. For NPs, particularly community-based NPs, role clarity challenges are with physicians whereas for CNSs, role clarity challenges are often with other registered nurses or NPs.

APN role outcomes. APN roles contribute to achieving better care for individuals, better health for populations and lower healthcare costs**.** Alignment of APN roles with patient and population health needs is essential for realising healthcare improvements and efficiencies.[5] Evaluations of APN roles focus on their effectiveness in achieving patient, provider and health system outcomes. Systematic reviews of APN roles consistently show that their outcomes are as good, or better, than their comparators, usually physicians.[16,17,18,19,20] Just as importantly, patients consistently report high levels of satisfaction with care provided by advance practice nurses.

Some examples of key outcomes of CNS-provided care are: 1) improved access to supportive care through case management to assess and manage risks and complications, plan and coordinate care, monitor and evaluate, and to advocate for health and social services that best meet patient/client needs; 2) improved quality of life, increased survival rates, lower complication rates, and improved physical, functional, and psychological well-being of patients with acute or chronic conditions; 3) improved health promotion practices such as immunisation rates, weight management, and participation in cancer screening; 4) improved recruitment and retention by mentoring, educating, and supporting nurses at the front-line of care; and 5) reduced hospital admissions and visits to the emergency department, shortened hospital lengths of stay and decreased use of unnecessary diagnostic tests, through improved case management of patients with high risk and complex conditions.[21,22,23,24,25]

Some examples of key outcomes of NP-provided care are: 1) increased access to primary healthcare for at risk isolated groups, people living in rural and remote regions, and Indigenous Peoples; 2) increased access to high quality care in primary healthcare clinics, reduced wait times in emergency departments and increased timeliness of care in nursing homes; 3) improved health outcomes of high risk patient populations in units such as neonatology, cardiology, neurosurgery, and intensive care; 4) improved quality of disease management and health outcomes for people with chronic diseases such as diabetes and hypertension; and 5) reduced costs in the care of general practice patients and specific patient populations such as those with diabetes, eczema, and those who live in rural areas.[22,24,26,27,28]

Connection to WHO Global Strategy on HRH

APN role contributions to and policy implications for addressing objectives of the WHO's strategy on HRH are outline below.

Objective #1: Implement evidence-based HRH policies to optimise impact of the current health workforces, ensuring healthy lives, effective Universal Health Coverage (UHC), and contributing to global health security. Achieving UHC is reliant on financing, the costs of which are a challenge for every country as a result of burgeoning healthcare budgets. The WHO[29] estimates that 20% to 40% of all healthcare spending is currently wasted through inefficiency and points to ten areas where better policies and practices could reduce expenditures. As indicated in the above summary on outcomes, APN roles are effective for addressing at least five of these ten areas related to overuse of healthcare services, inappropriate and costly staff mix and unmotivated workers, inappropriate hospitalisation and length of stay, errors and suboptimal quality of care, and inefficient mix or level of healthcare interventions. Expanding the introduction of APN roles and strengthening role integration within health systems to reduce inefficiency will result in cost savings that can be re-invested to achieve country goals for UHC. Similarly, alignment of APN roles to address priority unmet health needs and access to care will lead to improved health outcomes and quality of life especially for vulnerable, complex, high risk and hard to reach populations.

Objective #2: Align HRH investment frameworks at national and global levels. There is now clear evidence that how APN roles are introduced substantially influences how well they will be implemented, and in turn, how well they are implemented influences their ability to achieve desired goals and outcomes. A fundamental principle of successful APN role development, introduction and implementation is that the roles must align with the current and projected needs of the healthcare system in which they are situated. The PEPPA framework, a participatory evidence-based and patient-centred process for designing, implementing and evaluating advanced practice nursing roles, was designed to guide effective APN role introduction, implementation and sustainability[5] to achieve this alignment. Now a little more than a decade after its introduction the PEPPA framework is recognised as a best practice for healthcare redesign. It has been implemented in at least 16 countries, translated into several languages, and demonstrated wide applicability to diverse provider roles, models of care, practice settings and patient populations.[30,31]

Quality graduate education is critical to the success of APN roles. The return on this investment is the recruitment and retention of highly skilled nurses who want to advance their education and careers by staying in clinical practice. Without such opportunities, nurses seek

advancement outside of clinical practice, for example, in managerial and administrative positions that do not take full advantage of their expert clinical knowledge and skills to advance healthcare for people and populations.

Objective #3: Build the capacity of national and international institutions for an effective leadership and governances of HRH actions. Leadership is a core competency of advanced practice nurses who are educated to apply concepts of participatory and transformational leadership to facilitate and manage change. Advanced practice nurses exercise their capacity for leadership within practice settings and organisations by working with healthcare teams to develop effective collaborative team processes to benefit patients. They understand the importance of and have the capabilities needed to build strategic partnerships and alliances within and outside the health sector to improve the health of communities and populations. They are educated to appraise and apply evidence in local contexts and to enable others to develop these capacities. Their orientation to quality improvement, intersectoral collaboration and community involvement creates synergies that promote healthcare innovation and enable the achievement of outcomes that would otherwise not be possible. As APN roles evolve, they are also assuming formal leadership roles within healthcare organisations and governments.

Objective #4: To ensure that reliable, harmonised and up-to-date HRH data, evidence and knowledge underpin monitoring and accountability of HRH efforts at national and global levels. As a result of their clinical and evidence-based practice expertise and collaboration with stakeholders (e.g. patients, providers) and decision-makers (e.g. administrators, policy-makers, funders, regulators) at multiple levels within the health system, advanced practice nurses inform and lead the development of policies and practices relevant to HRH. They support effective HRH efforts through research to collect data and generate new knowledge and to synthesise and translate research evidence for uptake into policies and practice. Advanced practice nurses also lead quality improvement and education initiatives that support healthy workplace environments for nurses and other healthcare providers.

Despite the availability of substantive synthesised evidence about the safety and effectiveness of APN roles, a major barrier to effective HRH planning is that healthcare decision-makers are often not aware of this evidence, have difficulty translating the evidence for their particular context, and in general lack a good understanding of these roles in relation to other nursing and health provider roles.[32,33] At country and global levels, knowledge translation tools (e.g. briefing notes, role implementation toolkits, algorithms, policy statements) are needed to improve the use of research evidence related to APN roles and HRH planning. Ongoing evaluation of APN role integration is also required to inform HRH planning about the appropriate supply, deployment and needs for role supports. A generic evaluation framework has recently been developed to provide guidance and to address country specific needs for collecting contextually relevant data about the effective use of APN roles.[34]

Contributions to meeting SDGs

Advance practice nurses can contribute to the following six Sustainable Development Goals.

SDG 1 - No poverty: Advanced practice nurses improve access to healthcare for at-risk hard to reach populations such as those who live in inner cities as well as those who live in rural and remote communities. Access to health promotion and preventive health services as well as

treatment of illness and injury enables people to participate in opportunities for self and paid employment.

SDG 3 -: Good health and wellbeing: Advanced practice nurses improve access to healthcare for at-risk, hard to reach populations such as those who live in inner cities as well as those who live in rural and remote communities. Access to health promotion and preventive health services as well as treatment of illness and injury enables people to gain or regain their health. In turn, this enables opportunities for their participation in social and economic systems.

SDG 4 - Quality education: The opportunity to participate in graduate education is especially important for women who, in many countries, have not had access to higher level education. Advanced practice nurses contribute to the education of other nurses as clinical faculty and preceptors for Schools of Nursing and through education, coaching and mentorship provided to nurses at the point-of care.

SDG 5 - Gender equality: APN education and employment opportunities empower women with the knowledge, skills, confidence and capabilities to assume clinical leadership positions within a country's healthcare system. These opportunities enable great social and economic security and wellbeing for women thereby reducing gender inequalities.

SDG 8 - Decent work and economic growth: APN is a satisfying and fulfilling career opportunity for women. It builds on their knowledge and skills as nurses to enable them to apply their advanced knowledge and skills in new and challenging healthcare settings. Advanced practice nurses, in turn, are of benefit to the country's people and communities. Achieving a healthier population is important for economic growth.

SDG 10 - Reduce inequalities: Developing APN roles in a country reduces inequalities by improving the social and economic wellbeing and status of women and by improving access to healthcare and the potential for a healthier life to some of the most vulnerable populations within countries.

SDG 17 - Partnerships for the goals: APN roles are being implemented in low, middle and high income countries around the world to address country-specific health needs and goals. Within countries, advanced practice nurses are well positioned to develop inter-sectoral partnerships to achieve health, education and economic goals.

Key messages to policy makers

Advanced practice nursing roles, such as the CNS and NP, are a powerful instrument for healthcare innovation and reform because they achieve policy priorities related to:

- Improving health outcomes for disadvantaged, complex, and hard to reach patient populations (e.g. indigenous people, homeless, immigrants, elderly, mentally disabled, at risk children and youth and those living in rural, northern and remote communities) by increasing access to specialised, acute and general primary healthcare services.
- Reducing the burden of chronic illness by achieving a better balance in the delivery of health promotion and chronic disease prevention services.
- Achieving efficiencies through the appropriate mix of providers, reduced complications, decreased acute care service use and the more appropriate use of community and homecare services that best meet patient needs.

- Improving the quality of healthcare services through the development and uptake of best practices by patients and providers.
- Improving patient healthcare experiences and satisfaction with care through enhanced healthcare team functioning, continuity of care, care coordination and system navigation.
- Strengthening the nursing profession through increased access to graduate education, leadership and career laddering opportunities.
- Improving the recruitment and retention of nurses through education, coaching and mentorship at the point-of-care.

Recommendations for National Nursing Associations (NNAs)

NNA leadership is essential for the development, implementation and sustainability of APN roles. The leadership challenge for NNAs at all levels is to create the organisational and health system conditions for APN roles to improve the health status of people in countries around the world. Even though APN roles may take on functions traditionally provided by physicians, emphasising the advanced nursing contributions of these roles will increase the likelihood that implementation efforts are met with success and will generate less resistance than an emphasis on role substitution. It is also important to appreciate that while autonomy is a hallmark of APN roles, realising its full achievement requires supportive legislative and regulatory changes. Such changes are not easily achieved and require significant time, effort and resources. Change is usually slow, incremental and hard-won. It is facilitated when the goals of NNAs and other stakeholders are aligned to identify policy windows of opportunity. Collaboration with intersectoral stakeholders at the national and international levels is central to this effort.

At the international level NNA leaders can collaborate across countries to:

- Leverage existing resources for APN education, practice and policy.
- Explore the possibilities for resource sharing across countries.
- Achieve greater consensus on role definitions and terminology to promote APN role clarity.
- Implement policies to prevent “brain drain” of nursing leaders, educators, researchers and advanced practice nurses in countries where APN roles are just getting started.
- Ensure open access to resources for APN role development.

At the country level NNA leaders can collaborate across sectors to:

- Advocate for systematic and evidence based approaches to role development, implementation and evaluation.
- Connect with key stakeholders around shared policy concerns to create conditions for healthcare organisation and system transformational change.
- Build leadership skills and consensus among healthcare stakeholders on health systems solutions that utilise APN roles.
- Advocate for dedicated funding to support APN education and practice.
- Promote role clarity by establishing clearly defined APN roles with consensus on standards of care and role competencies.
- Establish a national knowledge translation plan to promote understanding and awareness of APN roles, reduce barriers to role uptake, and educate APN stakeholders and healthcare decision-makers about the benefits of the role.

- Advocate for the effective increase in use of information technology to increase access to education through distance learning.
- Create networks of communities of practice to develop advanced practice nurses.

About ICN

The **International Council of Nurses (ICN)** is a federation of more than 130 national nurses associations representing the millions of nurses worldwide. Operated by nurses and leading nursing internationally, ICN works to ensure quality nursing care for all and sound health policies globally.

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