

INTERNATIONAL COUNCIL OF NURSES

GUIDELINES ON ADVANCED PRACTICE NURSING 2020



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GLOSSARY OF TERMS

Advanced Nursing Practice (ANP)

Advanced Nursing Practice is a field of nursing that extends and expands the boundaries of nursing's scope of practice, contributes to nursing knowledge and promotes advancement of the profession (RNABC Policy Statement, 2001). ANP is 'characterised by the integration and application of a broad range of theoretical and evidence-based knowledge that occurs as part of graduate nursing education' (ANA, 2010 as cited in Hamric & Tracy, 2019, p. 63).

Advanced Practice Nurse (APN)

An Advanced Practice Nurse (APN) is a generalist or specialised nurse who has acquired, through additional graduate education (minimum of a master's degree), the expert knowledge base, complex decision-making skills and clinical competencies for Advanced Nursing Practice, the characteristics of which are shaped by the context in which they are credentialed to practice (adapted from ICN, 2008). The two most commonly identified APN roles are CNS and NP.

Advanced Practice Nursing (APN)

Advanced Practice Nursing, as referred to in this paper, is viewed as advanced nursing interventions that influence clinical healthcare outcomes for individuals, families and diverse populations. Advanced Practice Nursing is based on graduate education and preparation along with the specification of central criteria and core competencies for practice (AACN, 2004, 2006, 2015; Hamric & Tracy, 2019).

Advanced Practice Registered Nurse (APRN)

APRN, as used in the USA, is the title given to a nurse who has met education and certification requirements and obtained a license to practice as an APRN in one of four APRN roles: certified registered nurse anesthetist (CRNA), certified nurse-midwife (CNM), Clinical Nurse Specialist (CNS), and certified Nurse Practitioner (CNP) (APRN Consensus Model, 2008).

Clinical Nurse Specialist (CNS)

A Clinical Nurse Specialist is an Advanced Practice Nurse who provides expert clinical advice and care based on established diagnoses in specialised clinical fields of practice along with a systems approach in practicing as a member of the healthcare team.

Nurse Practitioner (NP)

A Nurse Practitioner is an Advanced Practice Nurse who integrates clinical skills associated with nursing and medicine in order to assess, diagnose and manage patients in primary healthcare (PHC) settings and acute care populations as well as ongoing care for populations with chronic illness.

FOREWORD

2020 has been named The International Year of the Nurse and Midwife by the World Health Organization. It celebrates both the professionals who provide a broad range of essential health services to people everywhere as well as the bicentenary of the birth of Florence Nightingale, However, the International Council of Nurses (ICN) recognises that this year needs to be more than just a celebration. It needs to be a time of action and commitment by governments, health systems and the public to support the capacity, capability and empowerment of the nursing profession to meet the growing demands and health needs of individuals and communities. Without the nursing profession, millions of people around the world will not be able to access quality, safe and affordable healthcare services. As the largest group of healthcare workers providing the vast majority of care, particularly in the primary care setting, it is not surprising that the nursing workforce investment can yield significant improvement in patient outcomes.

Throughout history, we can see the continual evolution of the nursing profession in order to address the health, societal and person-centred care challenges.

It is for this reason, that as the global voice of nursing, ICN has been calling for investment in nursing, and in particular APN, to address global health challenges. As a Commissioner on the WHO High Level Commission on Noncommunicable Diseases (NCDs), the ICN President witnessed the global community wrestle with solutions to address the need to reduce mortality from NCDs by 30% by 2030. What became clear was that the status quo cannot continue and that governments need to reorient their health systems and support the health workforce, particularly APNs, to effectively respond to promotion, prevention and management of disease. This is echoed in the Astana Declaration with the visionary pursuit of achieving Health for All through Primary Health Care. The foundation for this is nurses working to their full scope of practice. We boldly declare, that APNs are an effective and efficient resource to address the challenges of accessible, safe and affordable health care.

This is clearly evident in Advanced Practice Nursing (APN). Whilst this appears to be a relatively recent concept, distinct patterns can be seen in the transition of specialty practice into Advanced Practice Nursing over the last 100 years. (Hanson & Hamric 2003)

Over this time there has been growing demand for APN globally; however, many countries are in different stages of development of these roles as part of the nursing workforce. In addition, many APN positions have developed on an ad-hoc basis with varying responsibilities, roles and nomenclature. The scope of practice is often diverse and heterogenous across global regions. Often pathways to entry and practice boundaries can be blurred, poorly understood and sometimes contested. This has led to confusion amongst policy makers, health professionals and the public at large.

To seize the richness and opportunities afforded by Advanced Practice Nursing, it is important that the profession provide clear guidance and direction. ICN has been a leader in the development of the professionalisation of nursing since its very beginning in 1899. It has provided guidance on a range of topics related to nursing including the most widely used definition of APN to date.

ICN is seeking to build on this work through the release of these new guidelines on Advanced Practice Nursing. Undertaken with the leadership support of the ICN APN/NP Network, these guidelines have undergone an extremely rigorous and robust global consultation process. They aim to support the current and future development of APN across countries in order to improve the quality of service that our profession offers to individuals and communities.

Our hope is that through the development of these guidelines, some of the barriers and walls that have hindered the nursing profession can be torn down. These guidelines will hopefully support the profession, enable a clearer understanding and assist in the continual evolution of APN. People around the world have the right to quality, safe and affordable healthcare. Advanced Practice Nurses are one of the solutions to making this happen.

Annette Kennedy ICN President Howard Catton ICN Chief Executive Officer

PURPOSE OF THE ICN APN GUIDELINES

The purpose of these guidelines is to facilitate a common understanding of Advanced Practice Nursing and the Advanced Practice Nurse (APN) for the public, governments, healthcare professionals, policy makers, educators and the nursing profession. It is envisioned that the work will support these stakeholders to develop policies, frameworks and strategies supportive of an Advanced Practice Nursing initiative. Those countries that have implemented the APN role can review their current state of Advanced Practice Nursing against these recommended guidelines. This will support consistency and clarity of Advanced Practice Nursing internationally and enable further development of APN roles to meet the healthcare needs of individuals and communities. This work is also important to the progression of research in this field of nursing both within and across countries.

It is recognised that the identification and context of Advanced Practice Nursing varies in different parts of the world. It is also acknowledged that the profession is dynamic with changes to education, regulation and nursing practice as it seeks to respond to healthcare needs and changes to provision of healthcare services. However, these guidelines provide common principles and practical examples of international best practice.

ABSTRACT

In order to meet changing global population needs and consumer expectations, healthcare systems worldwide are under transformation and face restructuring. As systems adapt and shift their emphasis in response to the disparate requests for healthcare services, opportunities emerge for nurses, especially the APN, to meet these demands and unmet needs (Bryant-Lukosius et al. 2017; Carryer et al. 2018; Cassiani & Zug 2014; Cooper & Docherty 2018; Hill et al. 2017; Maier et al. 2017).

In 2002, the International Council of Nurses (ICN) provided an official position on Advanced Practice Nursing (ICN 2008a). Since that time, worldwide development has increased significantly and simultaneously this field of nursing has matured. ICN felt that a review of its position was needed to assess the relevance of the definition and characteristics offered in 2002. This guidance paper defines diverse elements such as assumptions and core components of the APN. The attributes and descriptors presented in this paper are intended to promote a common vision to continue to enable a greater understanding by the international nursing and healthcare communities for the development of roles commonly identified as Clinical Nurse Specialist (CNS) and Nurse Practitioner (NP).



CHAPTER ONE

ADVANCED PRACTICE NURSING

1.1 Introduction

Advanced Practice Nursing, as discussed in this paper, refers to enhanced and expanded healthcare services and interventions provided by nurses who, in an advanced capacity, influence clinical healthcare outcomes and provide direct healthcare services to individuals, families and communities (CNA 2019; Hamric & Tracy 2019). An Advanced Practice Nurse (APN) is one who has acquired, through additional education, the expert knowledge base, complex decision-making skills and clinical competencies for expanded nursing practice, the characteristics of which are shaped by the context in which they are credentialed to practice (ICN 2008a). The Clinical Nurse Specialist (CNS)¹ and Nurse Practitioner (NP) are two types of APNs most frequently identified internationally (APRN 2008; Begley 2010;

1.2 Assumptions about Advanced Practice Nursing

The following assumptions represent the nurse who is prepared at an advanced educational level and then achieves recognition as an APN (CNS or NP). These statements provide a foundation for the APN and a source for international consideration when trying to understand Advanced Practice Nursing, regardless of work setting or focus of practice. All APNs:

- are practitioners of nursing, providing safe and competent patient care
- have their foundation in nursing education
- have roles or levels of practice which require formal education beyond the preparation of the generalist² nurse (minimum required entry level is a master's degree)
- have roles or levels of practice with increased levels of competency and capability that are measurable, beyond that of a generalist nurse
- have acquired the ability to explain and apply the theoretical, empirical, ethical, legal, care giving, and professional development required for Advanced Practice Nursing
- have defined APN competencies and standards which are periodically reviewed for maintaining currency in practice, and
- are influenced by the global, social, political, economic and technological milieu.

(Adapted from ICN 2008a)

Carryer et al 2018; CNA 2019; Finnish Nurses Association 2016; Maier et al. 2017, Miranda Neto et al. 2018).

This guidance paper begins by providing overarching assumptions of Advanced Practice Nursing. In addition, core elements of the CNS and NP are presented in Chapters Two and Three, together with ICN's positions on these nursing roles. In order to facilitate dialogue to distinguish two types of APNs (CNSs and NPs), practice characteristics of the CNS and NP are presented and differentiated in Chapter 4. Country exemplars provided in the Appendices depict the diversity of CNS and NP practice.

The degree and range of judgement, skill, knowledge, responsibility, autonomy and accountability broadens and takes on an additionally extensive range between the preparation of a generalist nurse and that of the APN. This added breadth and further in-depth practice is achieved through experience in clinical practice, additional education, and a master's degree or beyond. However, the core of the APN remains based within the context of nursing and nursing principles (Adapted from ICN 2008a).

Results from research conducted in Australia found that nurses in the field of Advanced Practice Nursing exhibit patterns of practice that are different from other nurses (Gardner et al, 2015). Using an Advanced Practice Role Delineation tool based on the Strong Model of Advanced Practice, findings demonstrate the capacity to clearly delineate and define Advanced Practice Nursing (Gardner et al, 2017). The significance of this research suggests that, from a healthcare workforce perspective, it is possible to measure the level of nursing practice identified as Advanced Practice Nursing and to more clearly identify these roles and positions.

In this paper, the emphasis is on the characteristics and professional standard of the CNS. The title of CNS is used to represent the role or level of nursing as it is a widely identified category of Advanced Practice Nursing worldwide.

² As per ICN's definition of a nurse, the nurse is a person who has completed a programme of basic, generalised nursing education and is authorised by the appropriate regulatory authority to practice nursing in his/her own country. https://www.icn.ch/nursing-policy/nursing-definitions______

1.3 Advanced Practice Nursing Characteristics

Role characteristics can be viewed as features that make Advanced Practice Nursing and the APN recognisable. Descriptions of the domains of education, practice, research, leadership and professional regulation provide guidance when making a clear distinction between advanced versus generalist nursing practice. While the core of APN practice is based on advanced nursing education and knowledge, an overlap of expertise may occur with other healthcare professionals. The breadth and depth of autonomy associated with the APN often arises within a broader and more extensive range in community-based services such as primary healthcare, ambulatory services and out-of-hospital settings. The degree of autonomy may evolve or expand over time as the concept of Advanced Practice Nursing gains recognition.

The following sections provide guidelines for identifying Advanced Practice Nursing:

Educational preparation

- Educational preparation beyond that of a generalist or specialised nurse education at a minimum requirement of a full master's degree programme (master's level modules taken as detached courses do not meet this requirement). It is acknowledged that, for some countries, the requirement of a master's degree may be an aspirational goal as they strive to achieve this standard. Transitional programmes and bridging courses can be defined to progress to this standard.
- Formal recognition of educational programmes preparing nurses specifically for Advanced Practice Nursing (CNS or NP) (e.g. accreditation, approval or authorisation by governmental or nongovernmental agencies).
- A formal system of credentialing linked to defined educational qualifications.
- Even though some countries require clinical experience for a nurse to enter an APN education programme, no evidence was found to support this requirement.

Nature of practice

- A designated role or level of nursing that has its focus on the provision of care, illness prevention and cure based on direct and indirect healthcare services at an advanced level, including rehabilitative care and chronic disease management. This is beyond the scope of practice of a generalist or specialised nurse (see <u>Section 2.3</u> for definitions of direct and indirect care).
- The capability to manage full episodes of care and complex healthcare problems including hard to reach, vulnerable and at-risk populations.
- The ability to integrate research (evidence informed practice), education, leadership and clinical management.
- Extended and broader range of autonomy (varies by country context and clinical setting).
- Case-management (manages own case load at an advanced level).
- Advanced assessment, judgement, decision-making and diagnostic reasoning skills.

- Recognised advanced clinical competencies, beyond the competencies of a generalist or specialised nurse.
- The ability to provide support and/or consultant services to other healthcare professionals emphasising professional collaboration.
- Plans, coordinates, implements and evaluates actions to enhance healthcare services at an advanced level.
- Recognised first point of contact for clients and families (commonly, but not exclusively, in primary healthcare settings).

Regulatory mechanisms – Country specific professional regulation and policies underpinning APN practice:

- Authority to diagnose
- · Authority to prescribe medications
- Authority to order diagnostic testing and therapeutic treatments
- Authority to refer clients/patients to other services and/or professionals
- Authority to admit and discharge clients/patients to hospital and other services
- Officially recognised title(s) for nurses working as APNs
- Legislation to confer and protect the title(s) (e.g. Clinical Nurse Specialist, Nurse Practitioner)
- Legislation and policies from an authoritative entity or some form of regulatory mechanism explicit to APNs (e.g. certification, credentialing or authorisation specific to country context)

(Adapted from ICN, 2008a)

The assumptions and characteristics for Advanced Practice Nursing are viewed as inclusive and flexible to take into consideration variations in healthcare systems, regulatory mechanisms and nursing education in individual countries. Over the years, Advanced Practice Nursing and nursing globally have matured with the APN seen as a clinical expert, with characteristics of the role crosscutting other themes that include understanding and influencing the issues of governance, policy development and clinical leadership (AANP 2015; CNA 2019; Scottish Government 2008; NCNZ 2017a). Promotion of leadership competencies and integration of research knowledge and skills have increasingly become core elements of education and role development along with advanced clinical expertise. In the United Kingdom (UK), all four countries use a four-pillars coordinated approach encompassing clinical practice, leadership, education and research. Clinical practice is viewed as the main pillar to develop when faced with funding and human resource issues (personal communication K. Maclaine, March 2019).

1.4 Country Issues that Shape Development of Advanced Practice Nursing

The fundamental level of nursing practice and access to an adequate level of nursing education that exists in a country shapes the potential for introducing and developing Advanced Practice Nursing. Launching an Advanced Practice Nursing initiative is influenced by the professional status of nursing in the country and its ability to introduce a new role or level of nursing. The prominence and maturity of nursing can be assessed by the presence of other nursing specialties, levels of nursing education, policies specific to nurses, extent of nursing research and nursing leadership (Schober 2016).

It is acknowledged that in countries where generalised nursing education is progressing and the country context is considering development of a master's degree education for Advanced Practice Nursing, that transition programmes or bridging courses can be developed to prepare generalist or specialised nurses for CNS or NP roles. Transition curricula have the potential for filling in educational gaps as nursing education in the country evolves toward the master's degree requirement. In addition, it is recognised that there are countries that have clear career tracks or career ladders and grading (e.g. banding) systems in place for nursing role titles, descriptions, credentials, hiring practices and policies. These grading systems or level of roles will impact on implementation of the APN (CNS or NP) as the grading system stipulates a certain level of education and years of experience at each level, including roles at advanced levels. Such a grading system is likely to ensure that nurses working in a specific grade perform at a more consistent level since they would be viewed to have similar education and experience. Protected role titles with clear credentialing requirements help ensure consistent role implementation at the desired level.

Most importantly, these guidelines emphasise that the APN is fundamentally a nursing role, built on nursing principles aiming to provide the optimal capacity to enhance and maximise comprehensive healthcare services. The APN is not seen as in competition with other healthcare professionals, nor is the adoption of the domains of other healthcare providers viewed as the core of APN practice.



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CHAPTER TWO

THE CLINICAL NURSE SPECIALIST (CNS)³

The Clinical Nurse Specialist (CNS) is one commonly identified category of Advanced Practice Nursing (APRN & NCSBN 2008; Barton & Allan 2015; CNA 2019; Maier et al. 2017; Tracy & O'Grady 2019). This section describes the historical background of the CNS, defines the role and explains how a scope of practice and education provide the foundation for the CNS. In addition, credentialing and regulatory mechanisms are defined as well as their importance in establishing the identity and professional standard for CNSs.

2.1 ICN Position on the Clinical Nurse Specialist

The CNS is a nurse who has completed a master's degree programme specific to CNS practice. The CNS provides healthcare services based on advanced specialised expertise when caring for complex and vulnerable patients or populations. In addition, nurses in this capacity provide education and support for interdisciplinary staff and facilitate change and innovation in healthcare systems. The emphasis of practice is on advanced specialised nursing care and a systems approach using a combination of the provision of direct and indirect clinical services (see Section 2.3 for definitions of direct and indirect care). This profile of the CNS is based on current evidence of the successful presence of the role in some countries; however, often the CNS role is present but invisible in settings where these

2.2 Background of the Clinical Nurse Specialist

The expanded role of nursing associated with a CNS is not a recent phenomenon. The term 'specialist' emerged in the United States (USA) in the 19th and early 20th Centuries as more postgraduate courses in specific areas of nursing practice became available (Barton & East 2015; Cockerham & Keeling 2014; Keeling & Bigbee 2005). The origin of the CNS emerged from an identified need for specialty practices (Chan & Cartwright 2014). Psychiatric Clinical Nurse Specialists along with nurse anesthetists and nurse midwives led the way. The growth of hospitals in the 1940s as well as the development of medical specialties and technologies further stimulated the evolution of the CNS. These nurses were considered to practice at a higher degree of specialisation than that already present in nursing and are viewed as the originators of the current CNS role. Even though there has been an evolution of role development internationally over the years, CNS origins were seen to lie comfortably within the traditionally understood domain of nursing practice and thus the CNS was able to progress unopposed (Barton & East 2015).

Similarly, in Canada, CNSs first emerged in the 1970s as provision of healthcare services grew more complex. The concept of the role was to provide clinical consultation, guidance and leadership to nursing staff managing complex and specialised healthcare in order to improve the quality of care and to promote evidenceinformed practice. CNSs were focused on complex patient care and healthcare systems issues which required nurses provide a valuable service. Further research is needed to clearly identify the diversity of the settings and countries where the CNS practices.

As healthcare reform worldwide continues to gain momentum, there will be opportunities for nurses in CNS practice to meet the unmet needs of varied populations and diverse healthcare settings. Crucial to taking advantage of these possibilities is the need to improve understanding of the CNS in the Advanced Practice Nursing context. In order to grasp an increased appreciation and comprehension of the CNS, the requirement for title protection, graduate education (minimum master's degree), and an identifiable scope of practice as part of a credentialing process, is seen as optimal.

improvements. The result of the CNS presence was measurable positive outcomes for the populations they cared for (CNA 2019).

The following reasons for the conception of the CNS role were proposed by Chan and Cartwright (2014: 359):

- Provide direct care to patients with complex diseases or conditions
- Improve patient care by developing the clinical skills and judgement of staff nurses
- Retain nurses who are experts in clinical practice

The CNS role has developed over time, becoming more flexible and responsive to population healthcare needs and healthcare environments. For example, in Sub-Saharan Africa, the CNS is well developed, particularly in the progress made in HIV management and prevention for these vulnerable populations (personal communication, March 2019, B. Sibanda). The fundamental strength of the CNS role is in providing complex specialty care while improving the quality of healthcare delivery through a systems approach. The multifaceted CNS profile, in addition to direct patient care in a clinical specialty, includes indirect care through education, research and support of other nurses as well as healthcare staff, provides leadership to specialty practice programme development and facilitates change and innovation in healthcare systems (Lewandowski & Adamle 2009).

³ It is acknowledged there are countries with Clinical Nurse Consultants (CNC) whose practice is viewed to be consistent with CNS practice (Bryant-Lukosius & Wong, 2019; Carryer et al. 2018; Gardner et al. 2013; Gardner et al. 2016). The use of CNC is country specific and at times used interchangeably with CNS, however, this guidance paper focuses on identifying the CNS.

2.3 Description of the Clinical Nurse Specialist

The CNS is a nurse with advanced nursing knowledge and skills, educated beyond the level of a generalist or specialised nurse, in making complex decisions in a clinical specialty and utilising a systems approach to influence optimal care in healthcare organisations.

Table 1: Characteristics delineating Clinical Nurse Specialist Practice

THE FOLLOWING CHARACTERISTICS, IN VARYING COMBINATIONS, DELINEATE CNS PRACTICE

- Clinical Nurse Specialists (CNSs) are professional nurses with a graduate level preparation (master's or doctoral degree).
- CNSs are expert clinicians who provide direct clinical care in a specialised area of nursing practice. Specialty practice may be defined by population (e.g. pediatrics, geriatrics, women's health); clinical setting (e.g. critical care, emergency); a disease/medical subspecialty (e.g. oncology, diabetes); type of care (psychiatric, rehabilitation); or type of problem (e.g. pain, wound, incontinence).
- Clinical practice for a specialty population includes health promotion, risk reduction, and management of symptoms and functional problems related to disease and illness.
- · CNSs provide direct care to patients and families, which may include diagnosis and treatment of disease.
- · CNSs practice patient/family centred care that emphasises strengths and wellness over disease or deficit.
- CNSs influence nursing practice outcomes by leading and supporting nurses to provide scientifically grounded, evidence-based care.
- CNSs implement improvements in the healthcare delivery system (indirect care) and translate high-quality research evidence into clinical practice to improve clinical and fiscal outcomes.
- · CNSs participate in the conduct of research to generate knowledge for practice.
- CNSs design, implement and evaluate programmes of care and programmes of research that address common problems for specialty populations. (Fulton & Holly April 2018)

While CNSs were originally introduced in hospitals (Delamaire & LaFortune 2010), the role has evolved to provide specialised care for patients with complex and chronic conditions in outpatient, emergency department, home, community and long-term care settings (Bryant-Lukosius & Wong 2019; Kirkpatrick et al. 2013). Commonly, the provision of healthcare services by a CNS includes the combination of direct and indirect healthcare services (refer to <u>Section 2.3</u>) based on nursing principles and a systems perspective (CNA 2014; NACNS 2004; NCNM 2007). It is acknowledged that indirect services of the CNS are highly valued along with direct clinical care and should be taken into consideration when defining scope of practice.

Although nurses who practice in various specialties (e.g. intensive care unit, theatre/surgery, palliative care, wound care, neonatal, gerontology) may consider themselves at times to be specialised nurses, the designated CNS has a broader and extended range of accountability and responsibility for improvements in the healthcare delivery system, including an advanced level clinical specialty focus. Based on postgraduate education at a minimum of a master's or doctoral degree, the CNS acquires additional in-depth knowledge, critical thinking and decision-making skills that provide the foundation for an advanced level of practice and decision making.

2.4 Clinical Nurse Specialist Scope of Practice

The scope of practice for the CNS extends beyond the generalist and specialised nurse in terms of advanced expertise, role functions, mastery of a specific specialty with an increased and expanded level of practice that includes broader and more in-depth accountability. The scope of practice reflects a sophisticated core body of practical, theoretical and empiric nursing and healthcare knowledge. CNSs evaluate disease patterns, technological advances, environmental conditions and political influences. In addition, they interpret nursing's professional responsibility to serve the public's need for nursing services. CNSs function as expert clinicians in a specialty and are leaders in advancing nursing practice by teaching, mentoring, consulting and ensuring nursing practice is evidence-based/evidence-informed.

In defining the scope of practice for the CNS, identification of core competencies includes levels of direct and indirect nursing care. These levels of care include assisting other nurses and health professionals in establishing and meeting healthcare goals of individuals and a diverse population of patients (CNA 2014; NACNS 2004).

- **Direct Care** involves direct interaction with patients, families and groups of patients to promote health or well-being and improve quality of life. Direct care:
 - integrates advanced knowledge of wellness, illness, self-care, disease and medical therapeutics in a holistic assessment of people while focusing on the nursing diagnosis of symptoms, functional problems and risk behaviours that have etiologies requiring nursing interventions to prevent, maintain or alleviate;
 - utilises assessment data, research and theoretical knowledge to design, implement and evaluate nursing interventions that integrate delegated medical treatments as needed; and
 - prescribes or orders therapeutic interventions.

- Indirect Care involves indirect provision
 of care through activities that influence the care
 of patients, but do not involve direct engagement
 with populations. Examples include developing
 evidence-based/evidence-informed guidelines
 or protocols for care and staff development
 activities. A CNS providing indirect care:
 - serves as a consultant to other nurses and healthcare professionals in managing highly complex patient care problems and in achieving quality, cost-effective outcomes for populations across healthcare settings;
 - provides leadership in appropriate use of research/evidence in practice innovations to improve healthcare services;
 - develops, plans and directs programmes of care for individuals and populations and provides direction to nursing personnel and others in these programmes of care;
 - evaluates patient outcomes and cost-effectiveness of care to identify needs for practice improvements within the clinical specialty or programme; and
 - serves as a leader of multidisciplinary groups in designing and implementing alternative solutions to patient care issues across the continuum of care. (CNA 2014; NACNS 2004)

2.5 Education for the Clinical Nurse Specialist

A graduate programme (master's or doctoral degree) specifically identified for CNS education from an accredited school/university or department of nursing is viewed as important for providing the necessary preparation for the CNS. The goal of the educational programme is to prepare the nurse to think critically and abstractly at an advanced level in order to assess and treat patients/families/populations as well as to teach and support other nurses and healthcare professionals in complex clinical situations. The educational programme prepares the CNS to use and integrate research into clinical practice, regardless of setting or patient population.

Educational preparation is built on the educational foundation for the generalised or specialised nurse in the country in which the CNS will practice. In support of a minimum standard for master's level education, three Canadian studies have demonstrated that self-identified CNSs who have completed a master's degree are more likely to implement all recognised domains of Advanced Nursing Practice compared to those who are not prepared at the master's level (Bryant-Lukosius et al. 2018; Kilpatrick et al. 2013; Schreiber et al. 2005). Not only do these studies demonstrate that graduate-prepared CNSs function differently than the BScN-prepared nurse, but they also show that the CNSs improve health outcomes at the population health level, and further contribute to innovation and improvement of the unit, organisation and systems levels to improve access to and quality of nursing and healthcare services.

2.6 Establishing a Professional Standard for the Clinical Nurse Specialist

In addition to following the professional standard for the generalist nurse, the CNS is responsible for meeting the standard or defined competencies for advanced practice such as:

- Providing nursing services beyond the level of a generalist or specialised nurse that are within the scope of the designated specialty field of advanced practice for which he or she is educationally prepared
- Recognising limits of knowledge and competence by consulting with or referral of patients/populations to other healthcare professionals when appropriate
- Adhering to the ethical standards articulated by the profession for APNs

A professional standard defines the boundaries and essential elements of practice and connects the CNS to the expected quality and competence for the role or level of practice through the description of required components of care. The identified criteria for the professional standard serve to establish rules, conditions and performance requirements that focus on the processes of care delivery.

Credentialing and Regulation for the Clinical Nurse Specialist

Recognition to practice as a CNS requires submission of evidence to an authoritative credentialing entity (governmental or nongovernmental agency) of successful completion of a master's or doctoral degree programme in a designated clinical specialty from an accredited school or department of nursing. The focus of the educational programme must be specifically identified as preparation of nurses to practice as CNSs. Continuing recognition to practice is concurrent with renewal of the generalist nursing licence and all appropriate professional regulation for CNS practice in the state, province or country in which the CNS practices. In some countries, prescriptive authority is integral to the CNS role and is governed by country, state or province regulations based on the clinical area in which he or she practices. In addition to completion of a CNS educational programme, there may be a stipulation that the CNS must complete an additional certification or

credentialing process in order to demonstrate excellence in practice and competence in the designated field or specialty in which he or she will practice. This requirement is sensitive to the environment in which the CNS initiative emerges and is developed.

Policies that provide title protection and clear credentialing are important for role recognition and clarity. Regulated title protection for the CNS is considered optimal (CNA 2019). Studies on Advanced Practice Nursing have found that countries in which titles and scope of practice are regulated generally achieve greater role clarity, recognition and acceptance by the consumer and other healthcare professionals (Maier et al. 2017; Donald et al. 2010). It is acknowledged that this is especially important for CNSs as these nurses seek to achieve increased visibility in demonstrating the importance of their roles in healthcare systems worldwide.

Refer to Appendix 1 for Credentialing Terminology.

2.7 Clinical Nurse Specialists' Contributions to Healthcare Services

Evidence from systematic literature reviews giving examples of beneficial outcomes of care provided by a CNS include:

- Improved access to supportive care through collaborative case management to assess and manage risks and complications, plan and coordinate care, and monitoring and evaluation to advocate for health and social services that best meet patient/client needs
- Enhanced quality of life, increased survival rates, lower complication rates and improved physical, functional and psychological well-being of populations with complex acute or chronic conditions
- · Improved quality of care
- · Improvement in health promotion
- Contribution to the recruitment and retention of nurses in the healthcare workforce
- Decreased lengths of stay in hospital and reduced hospital re-admissions and emergency department visits

 Reduction in medication errors in hospital wards and operating rooms

(Brown-Brumfield & DeLeon 2010; Bryant-Lukosius et al. 2015a; Bryant-Lukosius et al. 2015b; Bryant-Lukosius & Martin-Misener. 2016; Cook et al. 2015; Flanders & Clark 2010; Kilpatrick et al. 2014)

The multifaceted nature of CNS practice and the variability by which these nurses adapt to diverse requests has created confusion about what CNSs do. As a result, this confusion challenges understanding of the impact of the CNS role on clinical outcomes (Chan & Cartwright 2014). Further collaborative research is needed to improve this gap in knowledge. In addition, CNSs and nurse leaders need to be more proactive in articulating to healthcare funders and decision-makers the value-added contributions of CNSs; this includes their alignment with policy priorities for health system improvement and contribution to healthcare policy and decision-makers in achieving positive outcomes (Bryant-Lukosius & Martin-Misener 2016).

2.8 Differentiating a Specialised Nurse⁴ and a Clinical Nurse Specialist

It is acknowledged that in some countries there are nurses with extensive experience and expertise in a specialty who are not educated through a university or post-graduate degree. For example, in Chile, the specialised nurse is a highly recognised and valued professional of the healthcare team and the healthcare organisation, identified as such based on completion of short courses or incidental training in addition to extensive experience. It is envisioned that in the future, a specialised nurse in Chile could proceed to enter a CNS master's degree educational programme in order to promote change, implement system improvements and enhance quality of care in clinical settings (personal communication, Pilar Espinoza, March 2019). In its regional guide for the development of specialised nursing practice, the World Health Organization Eastern Mediterranean Regional Office (WHO-EMRO) provides the following definition:

"

A specialist nurse holds a current license as a generalist nurse, and has successfully completed an education programme that meets the prescribed standard for specialist nursing practice. The specialist nurse is authorised to function within a defined scope of practice in a specified field of nursing.

(WHO-EMRO 2018: 7)

⁴ In its Regulation Series, ICN provides a Nursing Care Continuum Framework & Competencies (ICN 2008b) and defines the specialised nurse as a nurse prepared beyond the level of a generalist nurse, authorised to practice as a specialist in a branch of the nursing field.

One criterion for designating a specialty for nursing practice stipulates that the specialty is officially recognised and supported by the health system in the country. In addition, levels of specialist nursing practice progress to an advanced level of specialisation such as the CNS based on completion of a clinical master's degree in the area of specialisation, and using the title Registered Advanced Practice Nurse with area of specialty indicated. For example, Registered Advanced Practice Cardiac Nurse (WHO-EMRO 2018).

Similarly, the European Specialist Nurses Organization (ESNO 2015) recommends development of competencies for the CNS to clarify the position and practice of this nurse in Europe. This recommendation includes building a framework corresponding to the features of the specialty in which the CNS will practice. Identification of consistent qualifications would enable the CNS the possibility to move more easily within the member states of Europe. Consistent with the guidelines in this paper, ESNO identifies the CNS as an APN, educated within a clinical specialty at a master's, post-master's or doctoral level.

From the perspective of workforce development and healthcare reform, it is understood that delivery of healthcare services requires a range of personnel and that there would be larger numbers of specialised nurses in staff positions versus CNSs. CNSs with advanced clinical expertise and a graduate degree (minimum of master's degree) in a clinical specialty function collaboratively within healthcare teams. They use a systems approach to coordinate directives of specialty care in addition to providing direct healthcare services. Table 2 below is a useful tool to distinguish the characteristics of the specialised nurse and the CNS.

AREA	SPECIALISED NURSE	CNS
Education	Preparation beyond the level of a generalist nurse in a specialty.	Master's degree or beyond with a specialty focus.
Scope of Practice Job Description	Performs identified activities in a specialty in line with personal level of proficiency and scope of practice. Formulates a care plan in a specialty with identified care outcomes based on nursing diagnoses, and findings from a nursing and health assessment, inputs from other health team members and nursing practice standards.	In addition to advanced specialised direct clinical care, formulates and mobilises resources for coordinated comprehensive care with identified care outcomes. This is based on CNS practice standards, and informed decisions about preventive, diagnostic and therapeutic interventions. Delegates activities to other healthcare personnel, according to ability, level of preparation, proficiency and scope of practice. Advocates for and implements policies and strategies from a systems perspective to establish positive practice environments, including the use of best practices in recruiting, retaining and developing human resources.
Professional Standard & Regulation	Country standard for a licensed generalist nurse in addition to identified preparation (experience and education) as a specialised nurse.	Designated/protected CNS title from a legislative or regulatory agency. Preferred model is transitioning to title protection if it does not currently exist.

Table 2: Differentiating a Specialised Nurse and a Clinical Nurse Specialist



Figure 1: Progression from Generalist Nurse to Clinical Nurse Specialist

Figure 1 depicts the progression from that of a generalist nurse to a CNS and then educated in a CNS specific master's degree programme. This progression provides recognition of the foundation of specialised clinical expertise based on the foundation of a generalist nursing education. A generalist nurse may proceed to enter a CNS programme directly if the candidate meets national and academic criteria for CNS preparation. Completion of a minimum of a master's degree provides enhanced professional as well as clinical credibility for the nurse, who progresses and distinguishes themselves as a CNS. The additional education and clinical expertise gained with an academic degree has the potential to further assure quality of care for diverse populations. Based on standardised and accredited academic programmes, this level of professional development is viewed as essential when seeking to deliver optimal safe and high-quality healthcare by enhancing academic rigor, scientific reasoning and critical thinking.

Refer to <u>Appendix 2</u>, p. 33 for country exemplars of the Clinical Nurse Specialist.



Carolyn Jones

CHAPTER THREE

THE NURSE PRACTITIONER

The Nurse Practitioner (NP) is one commonly identified category of APN (APRN 2008; Barton & Allan 2015; Maier et al. 2017; Tracy & O'Grady 2019). This chapter presents the ICN position on NP, portrays the historical background, describes the NP concept and explains how a scope of practice and appropriate education provide the foundation for clinical practice. In addition, this chapter defines credentialing and regulatory mechanisms and discusses their importance in establishing NPs in a variety of settings.

3.1 ICN Position on the Nurse Practitioner

Narrative descriptions and research demonstrate the effectiveness of NPs within a variety of healthcare settings. The international momentum for NP services is increasing, however several themes need to be confronted and managed to successfully launch and sustain an effective NP initiative. Title protection and a well-developed scope of practice sensitive to a

country's healthcare system(s) and culture are critical. The scope of practice and identified competencies for the NP require a sound educational foundation along with supportive credentialing and regulatory processes. Continued research to provide evidence of the value of NPs in provision of healthcare services will continue to be needed to support the legitimacy of NP practice.

3.2 Background of the Nurse Practitioner

The concept of the NP was initiated in 1965 in the USA based on a public health model to provide primary healthcare (PHC) to children lacking access to healthcare services. The role was based on a person-centred, holistic approach to care with the addition of diagnostic, treatment and management responsibilities previously limited to physicians. However, it was distinct from the medical model in that it focused also on prevention, health and wellness, and patient education (Dunphy et al. 2019). In the mid-1970s, Canada and Jamaica followed the USA's development, aiming to improve access to PHC for vulnerable populations in rural, remote and underserved communities. In the 1980s in Botswana, as the country responded to healthcare reform and population needs of the country spiraled, a Family Nurse Practitioner role was launched. This was followed by introduction of the NP in the four countries of the UK in the late 1980s. In the 1990s and early 2000s, additional countries introduced NPs with ICN and the international healthcare community noting significant increased interest and development worldwide (Maier et al. 2017; Schober 2016).

3.3 Description of the Nurse Practitioner

NPs are generalist nurses who, after additional education (minimum master's degree for entry level), are autonomous clinicians. They are educated to diagnose and treat conditions based on evidence-informed guidelines that include nursing principles that focus on treating the whole person rather than only the condition or disease. The level of practice autonomy and accountability is determined by, and sensitive to, the context of the country or setting and the regulatory policies in which the NP practices. The NP brings a Since its beginnings, the focus of the NP has evolved to include general patient populations across the lifespan in PHC as well as to meet the complex needs of acute and critically ill patients. Enthusiasm for the NP concept and trends toward increasing access to PHC services indicate that growing numbers of NPs are working to expand care in diverse settings; this includes ageing populations and those with chronic conditions in ambulatory settings and home care (Bryant-Lukosius & Wong, 2019; Kaasalainen et al. 2010; Maier et al. 2017; Schober 2016).

The NP concept often develops out of healthcare needs as well as perceived criteria by individual, practicing nurses who envision the enhancement of healthcare services that can be provided to diverse populations by NPs (Steinke et al. 2017). As the NP concept has evolved, comprehensive PHC remains a common focus with a foundation for practice that continues to be based on nursing principles.

comprehensive perspective to healthcare services by blending clinical expertise in diagnosing and treating health conditions, including prescribing medications, and with an added emphasis on disease prevention and health management. NP practice is commonly identified by the patient population, such as family, paediatric, adult-gerontological or women's health, and may be practiced in PHC or acute care settings (AANP 2018; CNA 2018; NMBI 2017; RCN 2018; Scottish Government 2008).

3.4 Nurse Practitioner Scope of Practice

A scope of practice for the NP refers to the range of activities (procedures, actions, processes) that a NP is legally permitted to perform. This scope of practice sets parameters within which the NP may practice by defining what the NP can do, which population can be seen or treated, and under what circumstances the NP can provide care. Furthermore, once defined, the scope of practice and associated competencies are linked to the designated title and form the foundation for developing appropriate education and a professional standard (ANA 2015; AANP 2015; Schober 2016).

The scope of practice for the NP differs from that of the generalist nurse in the level of accountability and responsibility required to practice. Where the NP concept is recognised, establishment of a scope of practice is one way of informing the public, administrators and other healthcare professionals about the role in order to differentiate the qualified NP from other clinicians who are not adequately prepared for NP practice or have not been authorised to practice in this capacity.

ICN position on the Nurse Practitioner scope of practice

A scope of practice for the NP describes the range of activities associated with recognised professional responsibilities consistent with regulation and policy in the setting(s) in which the NP practices. Understanding the country/state/provincial context in which the NP will practice is fundamental when defining a scope of practice for NP provision of healthcare services. In addition, it is essential that development of a scope of practice focuses on the activities of an NP that underpins the more complex knowledge and skill sets of NP practice. ICN takes the following position for a Nurse Practitioner Scope of Practice:

The Nurse Practitioner possesses advanced health assessment, diagnostic and clinical management skills that include pharmacology management based on additional graduate education (minimum standard master's degree) and clinical education that includes specified clinical practicum in order to provide a range of healthcare services. The focus of NP practice is expert direct clinical care, managing healthcare needs of populations, individuals and families, in PHC or acute care settings with additional expertise in health promotion and disease prevention. As a licensed and credentialed clinician, the NP practices with a broader level of autonomy beyond that of a generalist nurse, advanced in-depth critical decision-making and works in collaboration with other healthcare professionals. NP practice may include but is not limited to the direct referral of patients to other services and professionals. NP practice includes integration of education, research and leadership in conjunction with the emphasis on direct advanced clinical care.

Examples of Nurse Practitioner scope of practice from three countries

Each country where the NP is well developed needs a robust scope of practice. Three examples of NP scopes of practice are presented here to provide guidance and dialogue on this topic. Firstly, the American Association of Nurse Practitioners' (AANP) Scope of Practice for Nurse Practitioners states that:

"

Nurse Practitioners assess, diagnose, treat and manage acute episodic and chronic illnesses. They order, conduct, supervise and interpret diagnostic and laboratory tests, prescribe pharmacological agents and nonpharmacologic therapies as well as teach and counsel patients. NPs are experts in health promotion and disease prevention. As licensed clinicians, NPs practice autonomously and in coordination with other health care professionals. They may serve as healthcare researchers, interdisciplinary consultants and patient advocates, in addition to providing a wide range of health care services to individuals, families, groups and communities.

"

(AANP, 2015)

The AANP scope of practice position paper also stipulates the educational level for the NP and notes a level of accountability and responsibility associated with providing advanced high-quality, ethical care to the public.

The Nursing Council of New Zealand (NCNZ 2017a:1) describes the following NP scope of practice and links the scope to six competencies that define the know-ledge, skills and attitudes required of them:

"

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

- 1. Demonstrates safe and accountable Nurse Practitioner practice incorporating strategies to maintain currency and competence.
- Conducts comprehensive assessments and applies diagnostics reasoning to identify health needs/problems and diagnoses.
- 3. Develops, plans, implements and evaluates therapeutic interventions when managing episodes of care.
- 4. Consistently involves the health consumer to enable their full partnership in decision making and active participation in care.
- 5. Works collaboratively to optimise health outcomes for health consumers/population groups.
- Initiates and participates in activities that support safe care, community partnership and population improvements.

-

In the Republic of Ireland, Registered Advanced Nurse Practitioners (RANP) also work within an agreed scope of practice and meet established criteria set by the Nursing and Midwifery Board of Ireland (NMBI 2017). Autonomy for the NP has been highlighted within the scope of practice by designating that the Advanced Nurse Practitioner (ANP):

"

.is accountable and responsible for advanced levels of decision-making which occur through management of specific patient/client caseload. ANPs may conduct comprehensive health assessment and demonstrate expert skill in the clinical diagnosis and treatment of acute and/ or chronic illness from within a collaboratively agreed scope of practice framework alongside other healthcare professionals. The crucial factor in determining Advanced Nursing Practice, however, is the level of decisionmaking and responsibility rather than the nature or difficulty of the task undertaken by the practitioner. Nursing or midwifery knowledge and experience should continuously inform the ANPs/AMPs decision-making, even though some parts of the role may overlap the medical or other healthcare professional role. "

(NCMN, 2008b, p.7)

3.5 Nurse Practitioner Education

Nurse Practitioner education varies internationally and is inconsistent; however, a master's degree at a postgraduate level is considered the minimum standard for entry level NP practice with a designation that the programme is specifically identified for the preparation of NPs (CNA 2008; CNA 2019; Fagerström 2009; Finnish Nurses Association 2014; NCNZ 2017b; NMBI 2017). In the USA, there is a trend for a doctor of nursing practice (DNP) degree as entry level for NP preparation.

The credibility and sustainability of the NP concept is supported by the educational preparation the nurse undertakes to fulfill qualifications for NP practice. Defining the educational preparation for the NP provides a basis from which to differentiate the NP from that of the generalist nurse. Clinical competencies and common core elements of NP clinical practice provide the foundation for programme and curriculum development (Nursing and Midwifery Board of Australia 2014; CNA 2008; NCNZ 2017b; NMBI 2017).

The focus of an educational programme must be identified as the preparation of nurses to practice at an advanced level in clinical settings as NPs. It is essential that NP education includes supervised clinical practice or a clinical practicum, usually for a designated minimum number of clinical hours with an experienced NP or physician. The Republic of Ireland (NMBI 2017) recommends 500 clinical hours; in the UK, the Royal College of Nursing (RCN 2012) stipulates a minimum of 500 supervised (direct and indirect) clinical hours; the requirement in New Zealand is 300 hours (NCNZ, 2017b); and the prerequisite in the USA is a minimum of 500 supervised direct patient care clinical hours (NONPF 2017). In the Republic of Ireland, this description of autonomy is designated for both the ANP and Advanced Midwife Practitioner (AMP).

This section emphasises the significance of establishing a scope of practice for NPs and provides examples to consider when developing an NP scope of practice. Identifying a scope of practice is sensitive to country context and the healthcare settings in which the NPs will practice. In addition, the educational programme and curriculum design should be in alignment with the scope of practice and competencies expected of the NP. This is discussed next in Section 3.5.

In New Zealand, the NP scope of practice identifies six themes or competencies expected of the applicant for registration as a NP in the country (refer to Section 3.4 on Nurse Practitioner Scope of Practice). These themes are linked to an NP education programme. The NP must complete an NCNZ-accredited master's programme and meet the competencies for the NP scope of practice. The programme must be clinically focused at an advanced level. Students may choose to complete a postgraduate diploma (registered nurse prescribing pathway) and then complete the master's programme or complete the prescribing practicum towards the end of the master's programme. The NZ practicum for NPs includes completion of the minimum hours of clinical learning, completion of a clinical practice experience diary, two in-depth case studies and a summative assessment with a mentor as it relates to the required competencies for NP scope of practice (NCNZ 2017b).

Competencies for the NP were established in the USA in 1990 by the National Organization of Nurse Practitioner Faculties (NONPF) and most recently revised in 2017 (NONPF 2017). Identification of Nurse Practitioner core competencies content is seen as supportive of curriculum development. In 2002, as the Advanced Nurse Practitioner (ANP) role evolved in the UK, the Royal College of Nursing (RCN) identified domains and competencies based on those developed by the USA NONPF (RCN 2010). The identified domains included competencies that must be met by the ANP. However, in changing with the times, Advanced Nursing Practice in England is looking to become part of the wider sphere of activity of Advanced Clinical Practice (ACP) which includes a range of non-medical healthcare professionals (HEE, 2017). The other countries of the UK (Northern Ireland, Scotland and Wales) look to develop their own versions of the ACP category.

All-purpose or nonspecific master's degree nursing programmes are not a recommended pathway for NPs. Master's degree education related to nursing management, nursing research or nursing education alone is not considered sufficient preparation for NPs. However, as the role evolves, existing master's level programmes may be adapted to include additional skills specific to NP practice including advanced physical assessment, advanced clinical reasoning and diagnostic decision-making, pharmacology/pharmacokinetics, clinical and professional leadership, and practice-based research (NCNZ 2009; NMBI 2015a; NMBI 2017).

3.6 Establishing a Professional Standard for the Nurse Practitioner

Professional standards and competencies are at the heart of a credentialing system as they define the quality of performance required of a credentialed entity/ institution or the credentialee. Standards set the level of education and performance for entry into practice for the NP along with required renewal of credentials. Competencies define the level and quality of performance the NP is expected to demonstrate as a practicing clinician. A defined scope of practice, a professional standard, policies and procedures are linked with one being the foundation for another (Jhpiego 2016). In countries or regions without a legal or published scope of practice for the NP, practice guidelines and the professional standard are based on the best fit for the circumstances dictated by country context and governing processes for healthcare services. However, it is considered optimal to establish policies, a professional standard and regulatory mechanisms that include title protection, a defined scope of practice and/or a job description.

Credentialing and Regulation for the Nurse Practitioner

Credentialing is a central function of a regulatory system. A credential represents a level of quality and achievement that can be expected in terms of standards met or competence shown by the NP, the programme of study or the institution. Regulatory mechanisms differ and are usually linked to a country's regulatory traditions and resources, as well as the decision of what level of regulation is required to recognise a nurse to work beyond the legally recognised scope of practice for a generalist nurse. Key in establishing a credentialing process for the NP is that the body providing the credential is nationally recognised and accountable for the methods of designated credentialing. In some countries, credentials are renewed periodically but the mechanisms and requirements for renewal must be clear and transparent.

Title protection for the NP should be considered a requirement of the regulatory and credentialing processes. The NP title must convey a simple message of who the NP is and should distinguish the NP from other nursing categories and levels of nursing practice. Title protection also safeguards the public from unqualified clinicians who have neither the education nor the competencies implied by the title.

Continuing recognition for an NP to practice commonly requires renewal of the generalist nursing licence and maintaining national credentialing consistent with designated professional regulation for the setting/state or province in which the NP practices. Prescriptive authority is a component central to full practice potential for the NP and is governed by country, state, or provincial regulation.

Refer to Appendix 1 for Credentialing Terminology.

3.7 Nurse Practitioner Contributions to Healthcare Services

Evidence demonstrates that patients receiving care from NPs have high satisfaction with service provision, fewer unnecessary emergency room visits, decreased waiting times, reduced hospital admissions and readmissions (Begley et al, 2010; Chavez et al. 2018; Donald et al. 2015; Maier et al. 2017; Martin-Misener et al. 2015; Newhouse et al. 2011). Studies to evaluate the quality of care provided by NPs have shown same healthcare services to be comparable to that of physicians in terms of effectiveness and safety (Lentz et al. 2004; Mundinger et al. 2000; Swan et al. 2015). A comprehensive systematic literature review from 2006 to 2016 in emergency and critical care settings findings demonstrated that nurses in advanced practice, including NPs, reduced

length of stay, time to consultation and treatment, mortality, improved patient satisfaction and cost savings (Jennings et al. 2015; Woo et al. 2017).

The scarcity of economic evaluations of CNS and NP roles suggests that there is limited accurate evidence to determine their cost-effectiveness (Marshall et al. 2015). However, systematic reviews of research examining provision of healthcare services indicates that well defined APN roles can result in reduced healthcare costs.

Refer to <u>Appendix 3</u>, p. 35 for country exemplars of the Nurse Practitioner.

CHAPTER FOUR

DISTINGUISHING THE CLINICAL NURSE SPECIALIST AND THE NURSE PRACTITIONER

The origins of Advanced Practice Nursing as discussed in Chapters 2 and 3 provide historical backgrounds for the CNS and NP, noting differences in stages of early development. The emergence of Advanced Practice Nursing worldwide and the introduction of the concepts of the CNS and APN have resulted in robust discussions attempting to identify the distinguishing characteristics of these new roles and levels of nursing practice. Since the mid-1990s (Dunn 1997) and with more recent and parallel development internationally, the definitive characteristics of the CNS and NP have become blurred. Despite this, the two roles remain largely distinct, albeit with some overlap (Rushforth 2015; Tracy & Sendelbach 2019). This section endeavours to distinguish and clarify traits representative of the CNS and NP.

The CNS is an expert clinician with a specialised area of practice identified in terms of population, setting, disease or medical subspecialty, type of care or problem that includes a systems perspective to provision of healthcare services (NACNS 2018). The focus of NP practice emphasises a population focus mainly in PHC but that now includes both acute care and PHC (AACN Certification Corporation 2011). Bryant-Lukosius (2004 & 2008) clarified the essential distinctions between the CNS and the NP through an Advanced Practice Nursing continuum model, emphasising how the CNS focuses more on indirect care supporting clinical excellence from a systems approach while the NP focuses more on direct patient care within diverse clinical settings.



Figure 2: Distinction between Clinical Nurse Specialist and Nurse Practitioner

Source: Bryant-Lukosius, D. (2004 & 2008). *The continuum of Advanced Practice Nursing roles*. Unpublished document.

A recent national study comparing CNSs and NPs in Canada lends support to the above illustration (Bryant-Lukosius et al. 2018). Results from this study demonstrated that while there are many common features, the main differences between the CNS and NP is related to greater CNS involvement in non-clinical (indirect) activities related to support of systems, education, publication, professional leadership and research. Involvement in direct clinical care was high for both the CNS and NP, but differences in scope of practice were reflected in greater NP involvement in diagnosing, prescribing and treating various conditions or illness. Similar to these findings, additional studies (Donald et al. 2010; Carryer et al. 2018) highlight that NPs engage in direct care activities to a greater extent than CNSs.

4.1 ICN Position on the Clarification of Advanced Nursing Designations

Increasingly, countries are undergoing healthcare reform with system changes that include introducing advanced roles and advanced levels of practice for nurses. These dynamic changes in the perception of how nurses provide care require the interface between what is identified as 'traditional' nursing and the medical profession. In addition, this transformation requires suitable education, policy and regulation supportive of APNs (CNSs and NPs) to practice to the full potential of their education. Although enthusiasm for APNs such as the CNS and NP has increased, the available data to accurately depict APN initiatives still remains limited thus hampering full recognition of APN presence worldwide. Data that is available demonstrates wide variation in numbers of APNs and their practice settings with literature mainly dominated by English language publications originating from economically developed countries.

It is the intent of this guidance paper to promote continued dialogue of the concept of Advanced Practice Nursing while also seeking consistency in how APNs are identified and integrated into healthcare systems internationally. Not only do educational programmes need to be specific to the designated APN (e.g. CNS or NP) but relevant policies and a professional standard are required to promote the inclusion of sustainable advanced nursing roles into routine healthcare service provision. To support future potential for the CNS and NP, there is a need to continue to:

- promote clarity of CNS and NP practice
- identify how these nurses contribute to the delivery of healthcare services
- guide the development of educational curricula specific to the CNS and NP
- support these nurses in establishing advanced practice (CNS or NP) roles and levels of practice
- offer guidance to employers, organisations and healthcare systems implementing the CNS and NP
- promote appropriate governance in terms of policy, legislation and credentialing

In an effort to offer clarity for these two categories of nursing, ICN offers Tables 3, 4 and 5 to identify similarities and distinguishing characteristics of the CNS and NP.



CLINICAL NURSE SPECIALISTS	NURSE PRACTITIONERS
Defined scope of practice in an identified specialty	Comprehensive scope of practice specific to the NP with activities that include prescribing, diagnosis & treatment management
Provides direct and indirect care usually to patients with an established diagnosis	Commonly provides direct clinical care to patients with un-diagnosed conditions in addition to providing ongoing care for those with an already established diagnosis
Works within a specialist field of practice	Works generically within a variety of fields of practice and settings
Works in defined practice populations (e.g. oncology, pain management, cardiology)	Works with multiple diverse practice populations
Works autonomously and collaboratively in a team, using a systems approach, with nursing personnel or other healthcare providers and healthcare organisations	Works autonomously and in collaboration with other healthcare professionals
Frequent shared clinical responsibility with other health care professionals	Assumes full clinical responsibility and management of their patient population
Works as a consultant to nurses and other health care professionals in managing complex patient care problems	Conducts comprehensive advanced health assessments and investigations in order to make differential diagnoses
Provides clinical care related to an established differentiated diagnosis	Initiates and evaluates a treatment management plan following an advanced health assessment and investigation based on conduct of differential diagnoses
Influences specialist clinical and nursing practice through leadership, education and research	Engages in clinical leadership, education and research
Provides evidence-based care and supports nurses and other healthcare professionals to provide evidence-based care	Provides evidence-based care
Evaluates patient outcomes to identify and influence system clinical improvements	Frequently has the authority to refer and admit patients
May or may not have some level of prescribing authority in a specialty	Commonly has prescribing authority

Table 3: Characteristics of Clinical Nurse Specialists and Nurse Practitioners

Table 4: Similarities between Clinical Nurse Specialists and Nurse Practitioners

CNSs and NPs
Have a master's degree as a minimum educational qualification
Are autonomous and accountable at an advanced level
Provide safe and competent patient care through a designated role or level of nursing
Have a generalised nursing qualification as their foundation
Have roles with increased levels of competency that is measurable
 Have acquired the ability to apply the theoretical and clinical skills of Advanced Practice Nursing utilising research, education, leadership and diagnostic clinical skills
 Have defined competencies and standards which are periodically reviewed for maintaining currency in practice
Are influenced by the global, social, political, economic and technological milieu
Recognise their limitations and maintain clinical competencies through continued professional development
Adhere to the ethical standards of nursing
Provide holistic care
Are recognised through a system of credentialing



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ADVANCED PRACTICE NURSING				
	Clinical Nurse Specialist	Nurse Practitioner		
Education	Minimum standard master's degree Accredited programme specific to the CNS Identified specialty explicit to CNS practice (Refer to <u>Section 2.5</u>)	Minimum standard master's degree Accredited programme specific to the NP Generalist-commonly PHC or acute care explicit to NP practice (Refer to <u>Section 3.5</u>)		
Definition	Expert advanced practice clinicians providing direct complex specialty care along with a systems approach to the provision of healthcare services (Refer to <u>Section 2.3</u>)	Autonomous clinicians who are able to diagnose and treat conditions based on evidence-informed guidelines (Refer to <u>Section 3.3</u>)		
Scope of Practice Job Description	Specialty practice aimed to ensure and develop the quality of nursing, foster the implementation of evidence- based nursing and support the hospital or organisation's strategic plan for provision of healthcare services by providing direct and indirect healthcare services. The CNS provides leadership in advancing nursing practice including research and interdisciplinary education (Refer to <u>Section 2.3</u>)	Comprehensive healthcare practice, autonomous examination and assessment of patients that includes initiating treatment and developing a management plan. Management commonly includes authority to prescribe medications and therapeutics, and conducting referrals along with monitoring acute and chronic health issues, primarily in direct healthcare services. Practice includes integration of education, research and leadership in conjunction with the emphasis on direct clinical care. (Refer to Section 3.4)		
Work settings	Commonly based in hospital or healthcare institutional settings with a specialty focus	Commonly based in PHC and other out of hospital settings or acute care		
Regulation	Legally protected title	Legally protected title		
Credentialing	Licensure, certification or authorisation by a national governmental or nongovernmental agency specific to practice as a CNS. Submission of evidence of completion of a CNS programme from an accredited school of nursing	Licensure, certification or authorisation by a national governmental or nongovernmental agency specific to practice as an NP. Submission of evidence of completion of an NP programme from an accredited school of nursing		
Policy	An explicit professional standard including specific criteria and policies to support the full practice potential of the CNS	An explicit professional standard including specific criteria and policies to support the full practice potential of the NP		

Table 5: Differentiating the Clinical Nurse Specialist and the Nurse Practitioner

In taking this position, ICN recognises the continued need to present guidance for discussion in order to meet the changing healthcare demands of diverse populations and associated healthcare systems along with the changing dimensions of nursing practice. This guidance paper summarises the current situation internationally in respect to the CNS and NP and provides a foundation for moving forward. Advanced Practice Nursing will continue to progress in its development and these professionals should have formal education that responds to the highest standards of the role or level of nursing. Topics that warrant further in-depth discussion include issues of governance, education and ongoing research within and between countries, along with exploration of Advanced Practice Nursing beyond that of the CNS and NP.

Refer to <u>Appendix 4</u> for exemplars where countries use a combination of the concepts of CNS and NP. In several cases the title used is Advanced Practice Nurse when combining attributes of the CNS and NP.

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APPENDICES

Appendix 1: Credentialing Terminology

ACCREDITATION	A process of review and approval by a recognised agency by which an institution or programme is granted time-limited recognition of having met established standards.
CERTIFICATION	The formal recognition of knowledge, skills and experience demonstrated by the achievement of the professional standard set for the CNS or NP. Recognition of competence for a CNS or NP who has met pre-established eligibility requirements and standards.
EDUCATION	The formal preparation of the CNS or NP: at a master's degree or beyond that of a generalist nurse.
LICENSURE	The granting of the authority to practice. The process, sanctioned by law, of granting exclusive privilege to CNSs or NPs meeting established standards, which allows the CNS or NP to practice and to use the specifically protected title of CNS or NP.
REGISTRATION	In a basic sense registration means that an individual's name has been entered into an official register for persons who possess the specific qualifications for CNS or NP. The register is maintained by a regulatory or another official governmental body and usually provides title protection. The register is not a validation of competence for the CNS or NP but simply a listing or registration of the position.

(Sources: Schober & Affara 2006; Cary & Smolenski 2018)

Appendix 2: The International Context and Country Examples of the CNS

At times, the contributions of the CNS are not always visible in the healthcare sectors or programmes where these nurses practice; literature describing the CNS impact on care is sparse and the terms specialist and Clinical Nurse Specialist are often used interchangeably with varied credentials. These factors present a confusing picture when attempting to present an international CNS profile. It is beyond the scope of this paper to identify all countries where the CNS role is present, but this appendix offers country context and exemplars where the CNS role is established and identifiable.

A general overview indicates that in Japan, the first CNS master of nursing graduate programme was in psychiatric/mental health nursing and graduated its first students in 1986. By 2005, Japan had 139 nurses practicing as a CNS (Schober & Affara 2006). The first CNS in Taiwan was employed in 1994 in cardiac surgery. The Hospital Authority of Hong Kong introduced the nurse specialist (not currently identified as a CNS) in 1994 hoping that it would motivate nurses to remain in clinical practice. In South Korea, the Oncology CNS began working at one South Korean hospital in 1994. To earn national CNS certification (established in 2005) nurses must prepare at the master's level of education and pass an examination. Early evaluation of this role provides indications of positive impact on oncology patient care (Kim 2011). The Thai perspective for the CNS emphasises specialisation and expansion of nursing and has been based on the American model in six specialty areas (maternal/newborn, pediatrics, medical/ surgical, mental health/psychiatric, community health and gerontology) (Wongkpratoom et al. 2010).

Iceland traces the development of the CNS in hospital settings to the return of nurses from the USA with master's qualifications (Schober. 2016). Roles similar to the CNS have emerged in other Nordic countries in order to promote research and develop expert clinical roles mainly in conditions such as diabetes, hypertension and psychiatric ailments. Switzerland is in its early development and evaluation of the CNS role (Bryant-Lukosius et al. 2015). Rushforth (2015) considers development of the CNS role in the UK to be inconsistent and not clearly defined.

The following case exemplars provide in-depth country descriptions of successful CNS development.

Canada

CNSs were introduced in Canada to provide highly complex and specialised care, develop nursing practice, 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 (Bryant-Lukosius & Martin-Misener 2015). Three areas of CNS practice include management and care of complex and vulnerable populations, education and support of interdisciplinary staff, and facilitation of change and innovation within the health-care system (Lewandowski & Adamle 2009). Their clinical role within the healthcare organisation enables them to identify care and resource gaps to improve client flow and clinical outcomes as well as to enhance health system policies (CNA 2019). The CNS in Canada does not have a protected title and standardised educational programmes are not yet available (Bryant-Lukosius et al. 2010; CNA 2012; CNA 2019). Canadian researchers (Brvant-Lukosius et al. 2018) found that lack of regulation and title protection poses barriers to CNS full practice potential. This situation for CNSs in Canada appears to be related to the mix of master's- and non-master's-educated Advanced Practice Nurses working as specialists without clear avenues for career advancement, education, credentialing, or methods for knowing which nurses are practicing safely at an advanced level. As a result, the public, health care providers, and administrators are uncertain about what CNSs have to offer and may have unclear expectations about the CNS scope of practice. This lack of clarity and uncertainty poses a risk for the recruitment and retention of CNSs despite evidence supporting the positive impact of the role in the country (CNA, 2019).

New Zealand

In New Zealand, the CNS role has no formal or legal definition thus there is confusion about the CNS and the relevant scope of practice (O'Connor 2016). The qualifications required for a CNS to practice in New Zealand vary at the discretion of employers. A study conducted in New Zealand, that replicated a study conducted in Australia, noted that the scope of practice for the NP and CNS may overlap but are not interchangeable (Carryer et al. 2018). Study findings indicate that the CNS position in New Zealand equates to the clinical nurse consultant in Australia and, similar to studies conducted in Australia (Gardner et al. 2013 & 2015), are the only roles to be defined as Advanced Practice Nursing roles. Carryer et al (2018) suggest that the more prevalent presence of the CNS in New Zealand may be related to employment practices that favor CNS appointments that in turn translate to opportunities for this type of APN practice.

Republic of Ireland

The framework for the development of the CNS in Ireland provides the requirements for nurses seeking this position. The CNS is viewed as a defined advanced area of nursing practice that requires application of specially focused knowledge and skills, which are both in demand and required to improve the quality of patient/ client care in the country. (National Council for the Professional Development of Nursing and Midwifery 2007).

The practice of a CNS includes a focus which consists of assessment, planning, coordination and provision of care, health promotion and patient education. They also communicate and negotiate decisions in collaboration with other healthcare professionals and community resource providers. CNSs represent patient/client values in hospital, community and outpatient settings. The CNS works closely with medical and para-medical colleagues and may make alterations in prescribed clinical options along agreed protocol driven guidelines. Specific responsibilities are represented in a job description rather than the position title.

CNS practice in Ireland is divided into *direct* and *indirect* care (see <u>Section 2.2</u> in this paper). Similar to other country exemplars, *direct* care comprises the assessment, planning, coordination, delivery and evaluation of care and education to patients and their families. *Indirect* care relates to activities that influence others in their provision of direct care. In this capacity, the CNS participates in and implements nursing/clinical research, audits and provides consultancy in education and clinical practice to nursing colleagues and the wider interdisciplinary team. CNSs are, in tandem with their line manager, responsible for their continuing professional development, including participation in formal and informal educational activities, thereby ensuring sustained clinical credibility among nursing, medical and paramedical colleagues (National Council for the Professional Development of Nursing and Midwifery, 2007).

Japan

The Japanese Nursing Association (JNA) established the Clinical Nurse Specialist System in 1994 with the following purpose. Our goal is to contribute to the development of health and welfare as well as improving nursing science by sending CNSs with deepened knowledge and skills in specific specialized nursing fields to the society and provide high level nursing care efficiently to individual, families and population with complicated and intractable nursing issues. The JNA definition of CNS which named Certified Nurse Specialist is the person certified as a nurse with excellent nursing practice competency in a specialized field. CNSs plays the following six roles:

- To provide excellent nursing practice to individual, families and population.
- To provide consultation to care providers including nurses.
- To coordinate among the concerned multi-disciplinary professions to provide required care smoothly.
- To solve ethical issues and conflict to protect the right of individual, families and population.
- To educate nurses to improve care.
- To conduct research activity in their clinical settings to advance and develop professional knowledge and skills.

There are 13 specialized fields as of 2018; Cancer Nursing, Psychiatric Mental Health Nursing, Community Health Nursing, Gerontological Nursing, Child Health Nursing, Women's Health Nursing, Chronic Care Nursing, Critical Care Nursing, Infection Control Nursing, Family Health Nursing, Home Care Nursing, Genetics Nursing, Disaster Nursing are identified. The JNA certifies nurses as CNS upon completion of the CNS curriculum in the master's programme, and passing the certificate examination given by JNA. The title of CNS is protected by trademark registration and allowed to use it by the nurses who are certified by JNA. CNSs contribute to improve quality of nursing in their clinical settings and community by providing not only direct care but also through consultation, education, coordination and ethical coordination to nurses and multi-disciplinary professions. Moreover, CNSs contribute to develop efficient care by accumulating evidence through research (Satomi Sai, Department of International Affairs, Japanese Nursing Association).

Specialization in nursing in Turkey was legally defined in 2007. According to the Nursing Law nurses who completed their postgraduate education in the field of nursing were entitled as specialist nurse. Item 8- 'Nurses who have specialized by completing postgraduate programs related to their profession and whose diplomas are registered by Ministry of Health and nurses who are graduates of these programs abroad and whose diplomas are approved as equivalents work as a specialist nurse.' (Law No: 6283 RG:2.5.2007/26510). Although master's education for the Clinical Specialist Nurse exists for a long time (from 1960s) their official position has not been integrated into healthcare systems. Until now, the only setting where nurses can use their specialization areas in in the universities. Recently the Department of Healthcare Services under the Ministry of Health called for an action plan to develop criteria/ qualifications for the employment of CNS as an official position. As of 2019 a task force has been assigned under the Turkish Nurses' Association to explore this possibility (Turkish Nursing Association).

United Kingdom (UK) (England, Northern Ireland, Scotland, and Wales)

The specialist nurse role in the UK started in the 1970s and has been described as a combination of four elements: clinical, education, research and consultation. A study conducted in England, Scotland and Wales found that the majority of the clinical work of the CNS consisted of physical assessment, referral, symptom control and 'rescue' work. However, it was reported that the work of the CNS is often invisible because the management of patients is through complex care pathways and oversimplified. As a result, the CNSs act as 'fail safes' in preventing injury, detecting symptoms and preventing sequelae, preventing or dealing with iatrogenic events and often dealing with issues before they become complaints (Leary et al. 2008). A major issue in the UK is that most CNSs are not educated at the master's level and this has resulted in confusion and inconsistency in terms of complexity of patient and health systems issues the CNSs address. The title CNS is not used consistently in all four UK countries as there is no requlation around the use of this title. Most are highly expert specialised nurses but not Advanced Practice Nurses that meet the criteria for a CNS. Lack of title protection, standardised requirements for education and excessive workloads present barriers to optimal CNS practice in the UK (Prostate Cancer UK, 2014).

United States of America (USA)

The American Association of Colleges of Nursing (AACN) describes CNSs as clinicians who are experts in evidence-based nursing and practice in a range of specialty areas, such as oncology, pediatrics, geriatrics, psychiatric/mental health, adult health, acute/critical care, and community health among others. In addition to direct patient care, CNSs also engage in teaching, mentoring, consulting, research, management and systems improvement. Able to adapt their practice across settings, these clinicians greatly influence outcomes by providing expert consultation to all care providers and by implementing improvements in healthcare delivery systems.

The American Nurses Association's definition (2004:15) states that:

Clinical nurse specialists (CNSs) are registered nurses, who have graduate level nursing preparation at the master's or doctoral level as a CNS. They are clinical experts in evidence-based nursing practice within a specialty area, treating and managing the health concerns of patients and populations. The CNS specialty may be focused on individuals, populations, settings, type of care, type of problem, or diagnostic systems subspecialty. CNSs practice autonomously and integrate knowledge of disease and medical treatments into assessment, diagnosis, and treatment of patients' illnesses. These nurses design, implement, and evaluate both patient-specific and population-based programs of care.

CNSs provide leadership in advancing the practice of nursing to achieve quality and cost-effective patient outcomes as well as provide leadership of multidisciplinary groups in designing and implementing innovative alternative solutions that address system problems and/or patient care issues. In many jurisdictions, CNSs as direct care providers, perform comprehensive health assessments, develop differential diagnoses, and may have prescriptive authority. Prescriptive authority allows them to provide pharmacologic and nonpharmacological treatments and order diagnostic and laboratory tests in addressing and managing specialty health problems of patients and populations. The CNS serves as a patient advocate, consultant, and researcher in various settings.

Appendix 3: The International Context and Country Examples of the NP

It is beyond the scope of this paper to identify all countries where NPs are present; however, this appendix offers exemplars where the NP role is established and identifiable in order to provide examples of established NP initiatives. In addition, new initiatives with active support are described to broaden the perspective of international development. In describing the influence of context, it is worth mentioning the unique approach relevant to Advanced Practice Nursing emerging in England. The Advanced Nurse Practitioner has become part of the wider remit of Advanced Clinical Practice (ACP) which incorporates a wide range of non-medical healthcare professionals under a framework for the ACP workforce (HEE 2017).

Australia

In Australia, the NP title is protected and only nurses who have been authorised by the National Nursing and Midwifery Registration Board of the Australian Health Practitioner Regulation Agency may use the NP title. A master's level education specific for the NP is the minimal level of education required to practice. In 2014 (NMBA, updated 2018), the NP standards were reviewed and the following standards were implemented. The NP: 1) assesses and uses diagnostic capabilities; 2) plans care and engages others; 3) prescribes and implements therapeutic interventions; 4) evaluates outcomes and improves practice. The NP scope of practice is built on the basis of the registered nurse (RN) scope of practice and must meet the regulatory and professional requirements for Australia including the *Registered nurse standards for practice* and *Code of conduct for nurses*. The NP standards build on and expand upon those required of an RN. The NP is expected to understand the changes in scope of practice from the RN and the ways that these changes affect responsibilities and accountabilities (NMBA 2018).

Anglophone Africa APN Coalition

Under the title 'Anglophone Africa Advanced Practice Nurse Coalition Project (AAAPNC): A Proposal to WHO (Africa) Health Systems Leadership' (Sibanda & Stender, 2018) five countries have set a priority to initiate Family Nurse Practitioner (FNP) programmes and to start work on midwifery advanced practice by the end of 2020. Strong support for this initiative is being provided by experts and universities in the UK and the USA. To achieve the aims of the project, the intent is to instigate robust research developing Afrocentric models and frameworks relevant to population needs and healthcare systems. In addition, the intent is to collaborate with representatives in medicine, pharmacy and other healthcare disciplines. In a gesture of support, LeadNurseAfrica dedicated its April 2019 preconference workshops in Ghana to Advanced Practice Nursing

African universities that have agreed to participation in this initiative include: Aga Khan University sites in Kenya, Uganda and Tanzania already in advanced stages of the development of MScN (APN) curriculum in collaboration with the Nursing Council of Kenya; University of Botswana, the only African institution with a master's degree for the FNP that matches international APN standards in education, accreditation and regulatory practice; and The School of Nursing and Midwifery, University of Ghana.

The concept of Advanced Practice Nursing has been identified in South Africa, Kenya, Zambia, Malawi, Swaziland, Botswana, Uganda and Rwanda, but the scope of practice and legislation to formalise their respective practices are not explicit (Sibanda & Stender 2018) and in most African countries achieving the international standard of master's degree education is still aspirational.

Botswana

Country independence, a need for health care reform and a shortage of physicians triggered the need for nurses to accept increased responsibilities for PHC in Botswana, but the nurses ultimately demanded additional education to accomplish this. The first Family Nurse Practitioner (FNP) programme was established at the Institute of Health Science in 1981 followed by revisions of the curriculum in 1991, 2001 and 2007. Candidates must have: 1) a qualified nursing degree, 2) minimum experience of two years as a nurse, 3) be registered with the Nursing and Advance Diploma in Midwifery Council of Botswana, and 4) be in possession of a Botswana General Certificate of Secondary Education or its equivalent. In addition, the University of Botswana offers a master's programme for the FNP with efforts in process to join components of the two FNP educational options. Nurse Practitioners in Botswana provide primary care in outpatient departments, clinics, industrial settings, schools, private practice, and

commonly in nurse/NP managed clinics. Even though there is success in the country, there is still a need for stronger policies and regulatory systems to support the NPs (Seitio-Kgokgwe et al. 2015).

Canada

In Canada, the only Advanced Practice Nursing role with additional regulation and title protection beyond that of the generalist nurse is the NP. NPs can autonomously make a diagnosis, order and interpret diagnostic tests, prescribe pharmaceuticals and perform specific procedures within their legislated scope of practice (CNA 2009). The Nurse Practitioner Association of Canada (2018) offers the following definition:

"

In Canada, Nurse Practitioners (NPs) are licensed by jurisdictional nursing regulators. NPs are graduate prepared health care providers who practice autonomously and independently. NPs provide direct care to patients to diagnose and manage disease/illness, prescribe medications, order/interpret laboratory/diagnostic tests and initiate referrals to specialists.

(NPAC-AIIPC 2018)

Following a federally funded initiative (Canadian NP Initiative) a framework for the integration and sustainability for the NP role in Canada's healthcare system was developed. NPs now practice in a wide variety of settings and in various models of care. The NP scope of practice is defined along with a common role descriptions and liability coverage. The country continues to work to remove federal and legislative barriers for distribution of medical samples, medical forms for disability claims and workmen's compensation (CNA, 2016).

Caribbean Region

Following the example of the NP in the USA and through the assistance of the Pan American Health Organization and Project Hope, NP education began in Jamaica in 1977, and in St. Vincent (discontinued 1987) and the Grenadines. In St Lucia, Dominica, St Vincent and the Grenadines, NPs have prescriptive authority for some drugs and practice mainly in PHC settings with prescriptive authority guided by a specific formulary. In St. Vincent and the Grenadines and St Lucia, NPs have the autonomy to develop their own itineraries. As of 2017, 72 NPs in Jamaica provide healthcare services, mostly in rural areas. Often, they are given pre-signed scripts and sometimes required to run the clinics alone.

In the Caribbean Region, the role of the NP is clearly defined. Education for NPs is offered only at University of the West Indies School of Nursing in Jamaica. The master's degree two-year programme is not funded by the government. Therefore, some nurses are unable to access the education due to cost incurred. Upon completion of the programme NPs are given their job description which outlines their scope of practice. Monthly work schedules are assigned by the Medical Officer, Senior Public Health Nurse or identified by the NPs themselves. Continuing education forms the framework for NPs to update their knowledge base with seminars held monthly. Even though Jamaica has been the leader in NP education and practice in the region, the issue of lack of legislation continues to pose a challenge. In St. Lucia, NPs are given a separate registration/licence while other NPs in the region are required to use their registered nurse/midwife licence to practice. Amendment of the Nursing and Midwifery Act is underway in Jamaica and the Bahamas since 2018. The greatest opposition is from the medical fraternity (personal communication, H. McGrath, March 2019).

New Zealand

The first NP in New Zealand was endorsed in 2001. Title protection was initially established through trademarking, but the trademarking concept is no longer in effect. In 2015, the Nursing Council of New Zealand (NCNZ) removed the requirement that restricted NPs to a specific area of practice and introduced a new more general scope of practice. NPs in New Zealand must have: 1) a minimum of four years of clinical experience prior to entry into an educational programme, 2) complete an approved master's degree programme that includes advanced practice and prescribing competencies, 3) pass an assessment against NP competencies by an approved panel, and 4) register with the NCNZ (Schober & Green 2018).

Oman

The idea of the Advanced Nurse Practitioner (ANP) in Oman was inspired by a 2000 meeting of representative countries of the World Health Organization-Eastern Mediterranean Region (WHO-EMRO) focused on advancing nursing capacity and nurse prescribing. The primary motivation for the ANP in Oman was a shortfall of physicians especially in PHC settings both in number and expertise. In addition, emerging health problems, increased life expectancy and a desire to move care closer to the population and deeper into the community caught the attention of the Ministry of Health (MOH). The MOH and Directorate of Nursing were also aware that nurses, out of necessity, in small healthcare centres were providing services in an extended scope of practice and beyond the level of their generalised nursing education. Following a series of situational analyses by short term WHO consultants and development of a strategic direction by the Directorate of Nursing based on recommendations by a multidisciplinary task force, it was decided to proceed with the APN concept along with on the job training (OJT) for nurses in health centres already functioning in an advanced clinical capacity.

The first ANP, educated in a USA NP master's degree programme, began practice in Oman in 2016. Since that time, additional nurses have completed programmes abroad and at Sultan Qaboos University. The ANPs practice in their field of expertise and/or teach in the College of Nursing, SQU. The OJT for nurses practicing beyond their scope of practice was implemented in 2017 with 25 nurses enrolled from all governorates of Oman. Based on this success, the trajectory for these nurses is to support them from their extended role based on OJT to progress to the specialist role (Bachelor in Community Health Nursing) and then to the ANP role with a focus on family health (personal communication, M. Al-Maqbali, April 2019).

Republic of Ireland

In Ireland, the Advanced Nurse Practitioner (ANP) emerged as a result of the Commission of Nursing report, which recommended this development in 1998 (Government of Ireland 2008). The first ANP post in Minor Injury Emergency Care was accredited in 2002 (National Council for the Professional Development of Nursing and Midwifery, 2008a). Since then, the ANP presence continues to develop. The intention is to establish a critical mass of approximately 700 ANPs by 2021, which goes towards the target of 2% of ANPs within the nursing workforce (Office of the Chief Nurse, Department of Health 2017). To facilitate this development, the Nursing and Midwifery Board of Ireland (NMBI) published National Standards and Requirements for the Education of ANPs at master's level at the end of 2017. Standards and Requirements for prescriptive authority had already been in place (NMBI 2015a and 2015b). ANP core competencies in Ireland include: (1) autonomy in clinical practice, (2) expert practice, (3) professional and clinical leadership, and (4) research (National Council for the Professional Development of Nursing and Midwifery 2008b). The title Registered Advanced Nurse Practitioner (RANP) is protected through the NMBI.

United Kingdom (UK) (England, Northern Ireland, Scotland, Wales)

The first nurses graduated from the Royal College of Nursing (RCN) Nurse Practitioner programme in 1992 (RCN 2008). The first 15 students led the way for NPs who now practice throughout the UK. During the early formative years as RCN developed an accreditation system for educational institutions, the first UK educational competencies emerged (Barton & Allan 2015). Those competencies were based on consultancy skills, disease screening, physical examination, chronic disease management, minor injury management, health education and counseling. The RCN competency framework (2008) provided criteria for new courses with these baseline competencies establishing a standard for ANP practice outcomes (Barton & Allan 2015).

Following devolution, the four countries of the UK (England, Northern Ireland, Scotland, Wales) developed their own approaches to health and social care and therefore also to associated workforce policy regarding Advanced Practice Nursing. As a result, the NP developed in different ways and educational preparation ranges from a generic approach to a growing tendency to establish preparation at the master's degree level. Despite enthusiasm for the role, regulation for ANP has not been established in the UK.

There is a move to a wider perspective of Advanced Clinical Practice (ACP) emerging in the UK since 2017 (HEE, 2017). Identifying with ACP incorporates a wide range of non-medical healthcare professionals within the multiprofessional ACP category extending to allied health professionals. Therefore, use of 'advanced' titles vary within and across institutions. England has taken this further to include pharmacists and social workers. In Scotland, there are separate nursing and paramedic work streams and work has started to widen to other allied health professionals. The focus in Northern Ireland is currently nursing but discussions have started regarding expanding this to allied health professionals (personal communication, K. Maclaine, 8 March 2019). In a September 2018 briefing, the Council of Deans of Health (2018) in the UK provided a briefing paper to identify UK country differences:

Wales: A framework for Advanced Nursing, Midwifery and Allied Health Professionals Practice in Wales was developed in 2010 and reviewed in 2012. This framework derived content and built on Scotland's advanced practice toolkit for nursing (2008), including the supporting principles. In alignment with ACP, Wales has seen the emergence of many advanced practice roles.

Scotland: Scotland has had an advanced practice toolkit since 2008 and a framework for Advanced Nursing Practice since 2012. Scotland has developed a national approach to Advanced Nurse Practitioner (ANP) education based on expectations identified in 2017 by the Transforming Nursing Advanced Practice Group. The country has a goal to develop an additional 500 Advanced Nurse Practitioners over the coming years with funding support of the Scotlish Government.

England: The Multi-professional Framework for Advanced Clinical Practice (ACP), published in 2017, is expected to be implemented in 2020. The ACP framework sets out an agreed definition of ACP for health care professionals to work at a higher level from initial registration. Currently, advanced practice is not regulated in the UK, therefore Health Education England (HEE) are developing an Academy for Advancing Practice for governance of education and quality of healthcare services. **Northern Ireland:** Northern Ireland published an Advanced Nursing Practice framework in 2014 (NIPEC 2014) to provide clarity about the Advanced Nurse Practitioner role. The framework is intended to act as a guide for commissioners, workforce planners, executive directors of nursing, education providers, employers and managers of nurses, including nurses themselves. Education requirement is through a master's programme including a non-medical prescribing being an essential component. The graduate receives an award title, for example, an 'MSc in Advancing Practice Education in [Profession]'.

Western African Sub-region

The idea of having an APN programme in the Western African region has been considered for some time but, as of April 2019, this is still aspirational with proposals not reaching a logical conclusion (personal communication, April 2019, O. Irinoye). There was an attempt to start an APN programme in Nigeria in 2011 working with stakeholders in Nigeria and the University of Maryland, USA (Irinoye, 2011). The hope was for three universities to incorporate the Family Nurse Practitioner (FNP) Programme into postgraduate programmes. The initiative has been stalled due to funding issues and the need to work on policy dimensions for introducing this new cadre of nurses into the healthcare workforce. However, discussions have resumed with the intention to include FNP content into the current revision of the postgraduate programme to benefit nurses who are in or plan to start private practice.

Appendix 4: Country exemplars of adaptations or variations of CNS and NP

As countries and regions identify and implement Advanced Practice Nursing the evolution of these roles or levels of nursing are not always specific to CNS or NP. Sometimes the approach is seen as a blended role of CNS and NP, in other instances language translation or healthcare culture influences the portrayed perspective of Advanced Practice Nursing and the APN. This appendix provides exemplars of this variance.

Germany

The situation in Germany is complex while progressing with Advanced Practice Nursing. There are nursing councils in isolated federal states with the process under construction since 2016. The challenges for German APNs include problems for registration, title protection and autonomy. Since 2000 to the present time there are model projects and concepts in individual clinics for APNs. Opportunities for study programmes in various cities in Germany are steadily increasing. Position papers from nursing associations have supported the role. The German Council of Economic Experts has called for care to be implemented on an evidence-based level. In addition, the advice is given that nursing care should be taken in the context of the assessment of population needs (personal communication March 2019, S. Pelz, S. Inkrot, A. Schmitt, C. von Dach).

Hong Kong

In Hong Kong, the Hospital Authority of Hong Kong introduced the nurse specialist role in 1994, then changed the title classification to APN in 2000 and then subsequently established an advanced rank position of

Nurse Consultants in 2009 to facilitate these nurses to make greater impacts on services at system level. The Hospital Authority is the healthcare provider in the public sector. Hong Kong also has a large private healthcare sector where nurses provide services using their advanced competencies to serve clients in different specialties and settings.

The Hong Kong Academy of Nursing is formed, led by nurse leaders in Hong Kong, from both public and private sectors. The Academy, representing essentially all specialties in practice, has a system in place to accredit the Academy Colleges and certify members and fellows who fulfill the curriculum and clinical experience requirements and have passed examinations at the advanced practice level. The Government of Hong Kong in 2018 instructed the Nursing Council of Hong Kong to set up a group to make a proposal on scope of practice, core competencies and training mechanisms for an advanced practice register under the Nursing Council. The scheme will initially be on a voluntary basis and will then be considered by the government to convert it into a statutory registration regime (personal communication, F. Wong, March 2019).

The Netherlands

In the Netherlands, Advanced Practice Nursing is a combination of the role of the NP in direct patient care, and of the CNS in being a leader in nursing, for example by improving the quality of healthcare, by doing scientific research and by enhancing the quality of the professional care team (personal communication, March 2019, Ms. I.H. de Hoop, President Dutch Nurse Practitioner Association). In 1997, the role was an initiative of a hospital, the University Medical Center in Groningen to improve nursing care at an advanced level. A new healthcare act ended the act that prohibited medical care by nonphysicians. This opened the possibilities to create a position for nurses to provide complex healthcare services for a well-defined group of patients to improve continuity of care. The first master's programme at the Hanze University of Applied Science commenced at the end of 1997 with 16 students using a USA programme as a model. The vision of the APN gained strength and within a few years nine universities of applied science offered the master's programme combining theory and practice (P.F. Roodbol in Schober, 2017). Development from 1997 to 2019 is largely due to support from the Dutch government.

Even though the concept of 'Nurse Practitioner' was known in the Netherlands, the title was not translatable to Dutch thus the title NP was not protected, therefore the only possibility in the law was to establish legislation for specialisation. Using the title 'nurse specialist' in Dutch, it became possible to protect the title and establish a registration process. Title protection allowed for identification of the role with the consequence of malpractice removal from the register with no possibilities to continue to practice if a nurse misrepresents his or her position in the healthcare system. Factors that have promoted progress in the Netherlands are a clear definition of Advanced Practice Nursing, legal registration (title protection) and credentialing to offer safe and responsible care and cure (P.F. Roodbol in Schober 2017). As of February 2016, approximately 2,750 nurse specialists have been educated and registered in the country. The shortage of physicians that prompted the introduction of the role in the Netherlands has been resolved, but the numbers of nurse specialists continue to increase. These nurses are accepted as a professional that provides high quality care and friendly advice (J. Peters in Schober & Green 2018).

Singapore

The Advanced Practice Nurse (APN) is a protected title in Singapore, and the APN role is a hybrid of the NP and CNS role. The National University of Singapore (NUS), under the auspices of the Yong Loo Lin School of Medicine, established the master of nursing programme in 2003. Since then, this is the only programme accredited by the Singapore Nursing Board (SNB) to provide APN education, and it is a pre-requisite for APN certification. The programme initially offered academic preparation in adult health and mental health. In 2009, offerings were extended to a critical care track and subsequently a pediatric track was offered in 2012. Following completion of a two-year master's programme, graduates must complete a minimum of a one-year structured internship and pass the national licensing examination, objective structured clinical examination (OSCE), before applying for APN certification, licensure and registration with the Singapore Nursing Board (SNB). All APNs must meet minimum clinical practicum hours and achieve required CNE points for annual renewal of their APN practice licenses with SNB.

SNB details the APN scope of practice and core competencies for APNs. The core competencies are organised into four domains. They are professional, legal and ethical nursing practice; management of care; leadership and management; and professional development. Each competency domain has associated competency standards, with each standard representing a major function/functional area to be performed by an APN.

In 2018, the Singapore Ministry of Health, NUS Alice Lee Centre for Nursing Studies and the NUS pharmacy department co-developed and co-hosted the threemonth national collaborative prescribing programme (NCPP) to prepare APNs and pharmacists for prescribing under a Collaborative Practice Agreement with medical practitioners. The programme is offered twice a year. As of April 2019, 74 APNs and pharmacists have completed the programme, and received or were waiting to receive the authority licenses to prescribe medications without the requirement of physician signatures (www.pharmacy.nus.edu.sg/national-collaborative -prescribing/) (personal communication April 2019, Zhou Wentao, NUS Programme Director (Master of Nursing).

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