An Roinn Sláinte
Department of Health

A Policy on the Development of Graduate to Advanced Nursing and Midwifery Practice

www.health.gov.ie

An Roinn Sláinte
Department of Health

A Policy on the Development of Graduate to Advanced Nursing and Midwifery Practice

www.health.gov.ie

Table of Contents

Table of Contents (continued)

Table of Figures

Table of Tables

Foreword by the Minister for Health

It is just over two years ago since I launched the consultation phase for this policy and I am delighted that we are now publishing our policy on the "*Development of Graduate to Advanced Nursing and Midwifery Practice*".

The Irish health service today faces many complex challenges. However, we now have an agreed vision in Sláintecare – our 10-year plan to reform the health service. Driven by long-term consensus reform, we all have a chance to be co-authors of this next chapter in Ireland's health service. Nurses and midwives are critical to this journey and that is why I am so pleased that we are progressing and supporting this area of reform. This initiative will provide patients with more appropriate, safe and accessible care across a range of services.

Currently, Advanced Nurse and Midwife Practitioners in Ireland play an important role in care delivery across many areas including; our emergency departments, local Injury Units, respiratory care and rheumatology care. The value of these roles is acknowledged and adds to the quality of healthcare in Ireland.
There are, however, areas of advanced practice that are currently under developed within our health services and this policy, I believe, outlines a model to support the development of nurses and midwives to advanced practice. This will ensure full utilisation and appropriate application of the nursing and midwifery resource and optimise both outcomes and impact for patients and services.

The model outlines changes to the way nurses and midwives will be educated to advanced practice level. Having developed the model, the Chief Nurses Office oversaw testing it in a number of demonstrator site projects. The results are showing positive impacts on patient outcomes, waiting lists, access to services and reductions in hospital admissions.

I would to thank all those involved in the development of the policy, the members of the National Steering Committee, the Local Implementation Groups and the Nursing and Midwifery Board of Ireland. I would like to pay particular tribute to Dr Annemarie Ryan, Ms Mary Frances O' Reilly and Ms Berneen Laycock without whose commitment and vision this policy would not have been possible. The development of this Policy through consultation, testing and evidence, is a strong example of successful policy development.

I look forward to full roll out on a nationwide basis and to further integrating our nurses and midwives into our Sláintecare journey.

Simon Harris T.D.
Minister for Health

Foreword by the Chief Nursing Officer

I am delighted to present this policy for the Development of Graduate to Advanced Nursing and Midwifery Practice. This policy aims to maximise the nursing and midwifery response to current and emerging health services challenges. It provides a model to support the development of graduate to advanced practice that will assist in building a critical mass of nurses and midwives working at advanced practice level. By creating a critical mass of nurses and midwives, we know, can contribute effectively and efficiently to addressing population health needs. The evidence has shown that the provision of care by advanced practitioners can increase hospital avoidance, early discharge, improve access to services, integrated care and patient flow through the health services.

Our well-educated, highly skilled and experienced nurses and midwives are a valuable resource and the model outlines a broad-based approach to the education programme required for advanced practice. Placing the patient at the centre the model outlines a system of credentialing to build the capability of the nursing and midwifery workforce throughout the system. This will enable nurses and midwives to practice at the top of their licence, within a minimum timeframe and importantly stay at the point of care delivery. Having advanced practitioners at the point of care delivery will not only support the delivery of integrated care across our health services it will be a key enabler for the delivery of Sláintecare.

It is important to me that policy, once developed achieves the outcomes it intends. To this end the testing of this policy in several demonstrator sites illustrated a number of positive outcomes for patients and services such as, over 60% of patients seen by an advanced practitioner in the unscheduled care setting received their full episode of care and were discharged. This policy now sets the direction for the development of graduate to advanced practice through an evidenced based model.

No policy reaches this stage of development without input from many people. I would particularly like to thank the steering committee and local working groups whose generosity with time, contribution and commitment drove the development of this policy. A special word of thanks to all of those on the Advanced Practice pathway, their invaluable experience weaves the values of compassion, care and commitment throughout the policy document and into care delivery. This is truly where "*policy reaches the patient*". Finally, I would also like to acknowledge the collaborative and extensive work of my office, Dr. Annemarie Ryan and the ONMSD.

This is the second policy from the Chief Nurses office which not only creates a defined career pathway for nurses and midwives and directly improves patient care and outcomes. This policy will have significant impact on healthcare provision and the professions of nursing and midwifery for years to come and I look forward to working with all our partners and stakeholders on this journey.

Siobhán O'Halloran

Dr. Siobhan O'Halloran
Chief Nursing Officer

Values of Nursing and Midwifery

The Office of the Chief Nurse (CNO's Office) was established in the Department of Health in 2015 to ensure that a nursing and midwifery perspective is brought to bear on the development of policy within the Department and to ensure that a clear voice of nursing and midwifery is present in designing the future of Irish healthcare systems. The CNO's Office identifies key health system problems which nursing has the potential to impact positively. It then develops a policy response, building in a process for measuring the outcome and impact of that response. In developing policy, the methodologies used by the CNO's Office include (i) evidence review, (ii) international, comparative analysis with other jurisdictions which have tackled the same problems, (iii) stakeholder involvement, and (iv) national consultation. Policies are designed, tested, modified, and scaled-up carefully; turning what has been learned into practical, evidence-based recommendations.

The mission of the Office is to optimise the contribution of nursing and midwifery to health service priorities in the interests of service users, their families and the wider community. The Office works in partnership with other health and social care professionals, in particular, our colleagues in the Office of the Nursing and Midwifery Services Directorate (ONMSD).

Taking this approach, the Office of the Chief Nurse turned its attention to the area of Advanced Practice (AP).

Values

Values are ingrained principles that guide the actions of nurses and midwives. This policy acknowledges the core values underpinning and guiding the practice of nurses and midwives in Ireland

The three core values identified by the professions are care, compassion and commitment.

Figure 1. Core Values of Nursing and Midwifery

These values and their associated behaviours are the essence of nursing and midwifery practice and form the basis for professional decision making and actions. Taken together, these values represent the unique contribution of nursing and midwifery to safe patient care. The Department of Health (DoH), Health Service Executive (HSE) and Nursing and Midwifery Board of Ireland (NMBI) are committed to supporting nurses and midwives practice these values.

Executive Summary
A policy direction for Graduate to Advanced Practice

Policy objective:
To present a model for graduate to advanced practice capable of developing a critical mass of nurses and midwives to i) address emerging and future service needs and ii) drive integration between services. The overarching principle underpinning the policy is to develop the nursing and midwifery resource in response to patient and service need.

Why we need a policy:
Since the creation of the role of advanced nurse/midwife practitioner in 2001, 336 advanced practitioners have registered, with a further 92 candidates expected to join the register. International bench-marking indicate that this remains a comparatively low number. Challenges still exists to meet the critical mass required. Evidence suggests that creating a critical mass of nurses and midwives as specialist and advanced practitioners has benefits for service provision, such as improved timely access to services, hospital avoidance, reduced waiting lists and integration of services. The move to degree level nursing education in 2002 and subsequent investment in nurse education has provided opportunities for nurses and midwives to demonstrate the added benefit of extended practices, e.g. prescribing of medicinal products and x-ray, to service provision and patient care.

Background to developing this policy:
This policy is underpinned by an evidence review. It was also informed by consultation with key stakeholders including national and international experts, educationalists, regulators, managers, policymakers and chief nurses. Data were drawn from national sources, and the proposed policy was also presented to the Department of Health Policy Committee.

This policy supports the development of graduate to advanced practice by:

- creating, piloting and evaluating the model for graduate to advanced practitioners based on service need within integrated care and service pathways;
- developing a critical mass of advanced practitioners in a flexible, timely fashion that can provide a full episode of care;
- introducing a credentialing pathway that supports nurses and midwives to develop the capability to deliver safe and responsive care in a variety of service settings;
- focusing on a broad-based approach with a health population focus to meet current, emerging and future service needs with advanced practice;
- facilitating interprofessional education to promote integrated delivery of care, and the most efficient delivery of education and practice development; and
- providing recommendations for continued and sustained change

Chapter 1
Introduction

Chapter 1
Introduction

The benefits of advanced nursing and midwifery practice are extensively evidenced in both national and international literature. The nursing workforce in Ireland is both educated and highly skilled, which is a key enabler for increasing numbers of advanced practitioners.

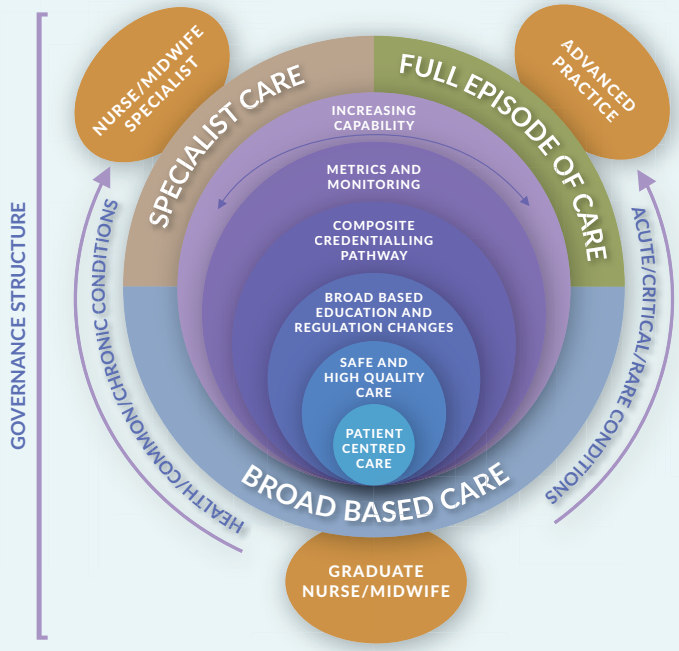
1.1. Overview of the proposed model

The model highlights the interconnected nature of meeting service needs with a developmental pathway that prepares the nursing and midwifery workforce. It is also a regulatory pathway that embraces credentialing and competence, ensuring a capable nurse/midwife provided and managed service. Central to the model is patient-centred care and choice. The model outlines the preparation from graduate through to advanced practice and demonstrates how a nurse or midwife can develop their career using a broad-based educational approach and develop specific competencies that can be measured for service provision. The development and expansion of nursing/midwifery practice within the model is in direct response to service need. The capability of the nurse/midwife is developed from a position of reliance on protocol and procedure to one of independent practice and decision making. This supports the patient health/illness journey whereby the nurse/midwife can manage the uncomplicated to the complicated health conditions.

The model outlines a process for directors of service and policy-makers to support the development of flexible multi-tasked professionals that support the health system and service requirements (Figure 2). The model supports the development of a flexible and responsive professional to meet patient and service need, embracing quality and safety requirements and expedite the development of appropriately skilled staff.

A patient centred focus is inherent to this model. The model proposes a two-year timeframe from graduate level through to advanced practice, which is reflective of current international trends in this area. The model includes a process of a progressive credentialing that allows the Nursing and Midwifery Board of Ireland (NMBI) to annotate a nurse or midwife's registration to recognise continuing achievements. This would then permit the nurse or midwife to commence an advanced practice role while undertaking the formal education requirements.

Figure 2. Model to Advanced Practice



1.2. Supporting integrated care:

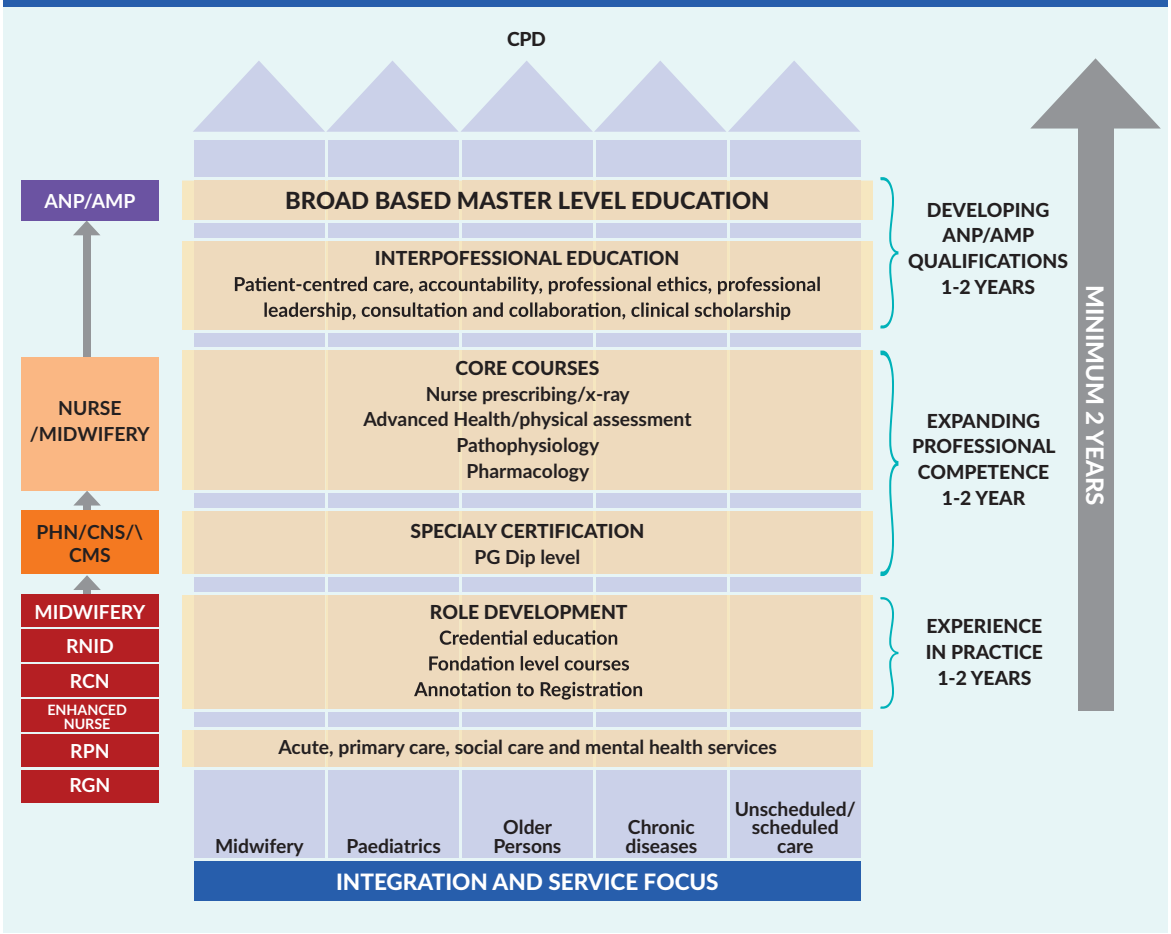
Integrated care as a concept for care delivery was introduced to address challenges in the health and social care systems. The aim of integrated care is to improve outcomes and experiences for the greatest number of patients by putting patient outcomes at the centre of activity. Integrated care is described as preventative, enabling, anticipatory, planned, well-coordinated and evaluated. It looks at processes and outcomes of care rather than at structural and organisation issues (HSE 2016). Within the integrated models of care delivery health care professionals work in partnership across disciplinary boundaries to produce new and more effective models of care. In Ireland currently, there are five Integrated Care Programmes in the areas of Patient Flow, Older Persons, Prevention and Management of Chronic Disease, Children, and Maternity.

This policy is to support and develop the contribution of the nurses and midwives from graduate to advanced level, maximising the knowledge and skills of nurses and midwives at all levels of practice. This policy aims to support care provision being met by the appropriate professional across primary, social and acute care and mental health services.

1.3. The Education Pathway

The education pathway for a nurse or midwife supports the five national integrated pathways (HSE 2016) of care. The initial registration of a nurse underpins the integration focus and is based on a developmental model that embraces credentialed education that can be annotated by the NMBI. The new timeline for development of a RANP/RAMP is two-years from initial registration. In this model it is also possible for specialist practice to develop to meet service need.

Figure 3. Education Pathway to support integrated care and within a service delivery focus for graduate to advanced practice



1.4. Policy Goals and Actions for Graduate to Advanced Practice:

The goals and actions to support achieving the goals for this policy are set out under five principle headings as follows:

GOAL 1	Create a Critical Mass of RANP/RAMP's through a developmental pathway for graduate and specialist nurses and midwives	
Action	**Details**	**Responsibility**
a	Align the development of advanced practice positions for nurses and midwives to the integrated models of care across services to ensure consistent provision of service across geographic areas	HSE
b	Develop advanced practitioners to meet service need, based on HSE data, to include areas such as reduction of waiting lists, hospital avoidance, and supporting access to services in areas where the integration of services can be achieved.	HSE
c	Set a target of 2% of advanced practitioners in the nursing/ midwifery workforce to create an initial critical mass.	HSE
d	Undertake a mid-point review of progress to ensure the achievement of the target for advanced practice development and the appropriateness of the target	HSE
e	Develop a national career advisory service, based on service need that includes succession planning for population health, which supports nurses and midwives in deciding on their individual career pathway.	NMBI
f	Facilitate the current cohort of candidate advanced practitioners to achieve registration where business cases have been agreed, service need has been identified and a vacancy exists.	HSE
g	Determine the minimum dataset required for workforce planning and reporting purposes, including areas of work and specialisations.	DOH
h	Explore the capacity of the Register of Nurses and Midwives to capture and maintain the data required in action 1 g above as provided in the Nurses and Midwives Act (2011).	NMBI
GOAL 2	**Change the way we educate and train graduates, specialists and advanced nurse/ midwife practitioners**	
Action	**Details**	**Responsibility**
a	Introduce a system of credentialing to meet service need based on the interconnected model for graduate, specialist and advanced practice.	NMBI

b	Implement under Section 48 (3) of the Nurses and Midwives Act (2011) a process to annotate the name of a nurse or midwife who successfully completes credentialed education particularly related to skills acquisition.	DOH NMBI
c	Change the registration for nurse/midwife prescribing to become a component of credentialed education in a career pathway for graduate to advanced practice to support integrated and community care.	NMBI
d	Recognise accredited education obtained in other jurisdictions in a clinical career pathway for a nurse/midwife joining the workforce in Ireland.	NMBI
e	Reduce the minimum regulatory timeline for undertaking an advanced practice pathway to 2-years.	NMBI
f	Develop a 1-year graduate certificate type programme as a shortened educational pathway for experienced nurses and midwives to obtain outstanding educational requirements for advanced practice.	HSE NMBI HEI
g	Provide for broader-based education preparation of advanced practitioners to avoid the development of micro-specialisation within a service speciality.	NMBI HEI
h	Establish interprofessional education standards and requirements with other members of the interdisciplinary team that support the concept of capability for role share/exchange between professions.	NMBI CORU MCI HEI
i	Enhance collaborative interprofessional mentoring supports and systems across training programmes within the interdisciplinary clinical teams.	HSE HEI
j	Develop a pathway that allows for advanced practitioners to continue their career journey in research and teaching to Doctoral level.	HEI HSE
k	Develop governance and managerial structures that support collaborative interdisciplinary team working that enable the skills of nurses and midwives at graduate, specialist and advanced practice be maximised for patient-centred care.	HSE
GOAL 3	**Change how we utilise and deploy the nursing and midwifery resource**	
Action	**Details**	**Responsibility**
a	Create governance and accountability structures that enable the advanced practitioners to provide a full episode of care and service supporting other members of the care team.	HSE
b	Provide advanced practitioners with access to diagnostics, referral pathways and appropriate treatments that are required to facilitate the provision of full episodes of care both in acute and in the community sectors.	HSE

c	Support graduate nurses/midwives to meet patient-centred service need and the expansion of the scope of practice within the credentialing model.	HSE
d	Review patient/client presentation times to ensure the service provided by graduate, specialist and advanced practitioners matches the demand within the normal 24/7 patterns of nurse/midwife provision of care.	HSE
GOAL 4	**Measure the impact and effectiveness of the new model**	
Action	**Details**	**Responsibility**
a	Develop a set of KPI's that captures the output activity of advanced practitioners to include numbers of patients seen; numbers of patients accommodated from the waiting list; and data relating to clinical care outcomes, including cost-effectiveness to achieve an on-going economic evaluation of advanced practice roles.	HSE
b	Explore the feasibility of developing an evidence-based evaluation model for advanced and specialist roles underpinned by research, similar to the PEPPA model.	HRB
GOAL 5	**Implementation**	
Action	**Details**	**Responsibility**
Phase I pre-planning	Establish a planning group that will oversee the planning and development of demonstrator projects to test the model.	DoH
	Identify the demonstrator sites for the development of advanced practitioners to meet service need in the areas of hospital avoidance, reducing waiting lists, and supporting access to services in areas where the integration of services can be achieved based on HSE data e.g. frail elderly, rheumatology waiting lists and dermatology waiting lists.	HSE
Phase II Demonstrator implementation	Establish an implementation group of appropriate members that can oversee the demonstrator projects, the implementation and evaluation.	DoH HSE
	Establish local implementation groups, with the appropriate membership that can operationalise the demonstrator projects for specified services utilising the nursing and midwifery resource.	DoH HSE

1.5. Conclusion:

- The model for graduate to advanced practice sets out a mechanism to support the development of a critical mass of advanced practitioners.
- It outlines a change to the way we educate and train nurses and midwives from graduate level by moving to an enabling credentialing system that facilities nurses/ midwives to practice at an advanced level once the capability to practice has been achieved. Nurses and midwives will have recognition of the achievement of new capabilities through annotation on the register.
- The minimum timeframe to achieve registration as an advanced practitioner within this model is reduced to 2 years.
- The model also supports a change to how we utilise and deploy the nursing and midwifery resource by moving to provide a nursing response based on current needs and priorities e.g. integrated care, patient flow, hospital avoidance, waiting list reduction and access.
- To test the model the demonstrator site project implements the model and targets the development of advanced practitioners to meet service need in the areas of hospital avoidance (older persons); waiting lists (rheumatology and dermatology); and access (unscheduled care services).
- Measuring the impact and effectiveness (cost and clinical) of the new model is outlined through measuring the impact on patients, the service, regulatory and education areas. A formal evaluation process is also be carried out.
- In conclusion the measurement and evaluation of implementing the model has led to several recommendations for further development and continued implementation.

Chapter 2
Professional Context

Chapter 2
Professional Context

2.1. Structure of the Nursing and Midwifery Resource in Ireland

The NMBI as a regulator maintains the register of nurses and midwives in Ireland in accordance with the provisions of the Nurses and Midwives Act 2011 (Government of Ireland, 2011). The Register contains ten divisions as outlined in Table 1. The NMBI sets the standards and requirements for the education registration programmes. The standards for entry for each division of the register reflect the scope of practice expectations and the competencies of the nurse/midwife on completion of the programme. Since 2002 the undergraduate programme to prepare nurses in Ireland has been a four-year Bachelor of Science degree.

Table 1. Division of Register of NMBI

Division	Designation Titles	Abbreviation	Qualification
General	Registered General Nurse	RGN	Bachelor of Science
Midwives	Registered Midwife	RM	Bachelor of Science
Children and General (Integrated)	Registered General Nurse/ Registered Children's Nurse	RGN/RCN	Bachelor of Science
Psychiatric	Registered Psychiatric Nurse	RPN	Bachelor of Science
Intellectual Disability	Registered Nurse Intellectual Disability	RNID	Bachelor of Science
Public Health	Registered Public Health Nurse	RPHN	Post Graduate Diploma
Nurse Tutor	Registered Nurse Tutor	RNT	Masters
Nurse Prescribers	Registered Nurse Prescriber	RNP	Post Graduate Diploma
Advanced Nurse Practitioners	Registered Advanced Nurse Practitioner	RANP	Masters
Advanced Midwife Practitioners	Registered Advanced Midwife Practitioner	RAMP	Masters

The distribution of nurses and midwives by regulatory division is illustrated in Table 2. Maintenance on the Register currently requires the payment of an annual retention fee, and this will ultimately be augmented by a competence regime in accordance with the Nurses and Midwives Act 2011. While the data available from the NMBI register reflects the number of qualifications held it does not capture the current area of practice, competencies, capability or work location. There is significant potential to use the Nurses and Midwives Register to collect data capable of informing population health, service and workforce planning. An improved data set would assist in these issues as well as facilitating the development, accreditation and regulation of advanced practice roles.

Table 2. Distribution of Nurses by Register 2016

Division	Active
Advanced Midwife Practitioner	8
Advanced Nurse Practitioner	192
Children's	4,335
General	53,951
Intellectual Disability	4,740
Midwives	10,563
Nurse Prescriber	916
Psychiatric	8,392
Public Health	2,423
Tutors'	644
Totals	**86,163**

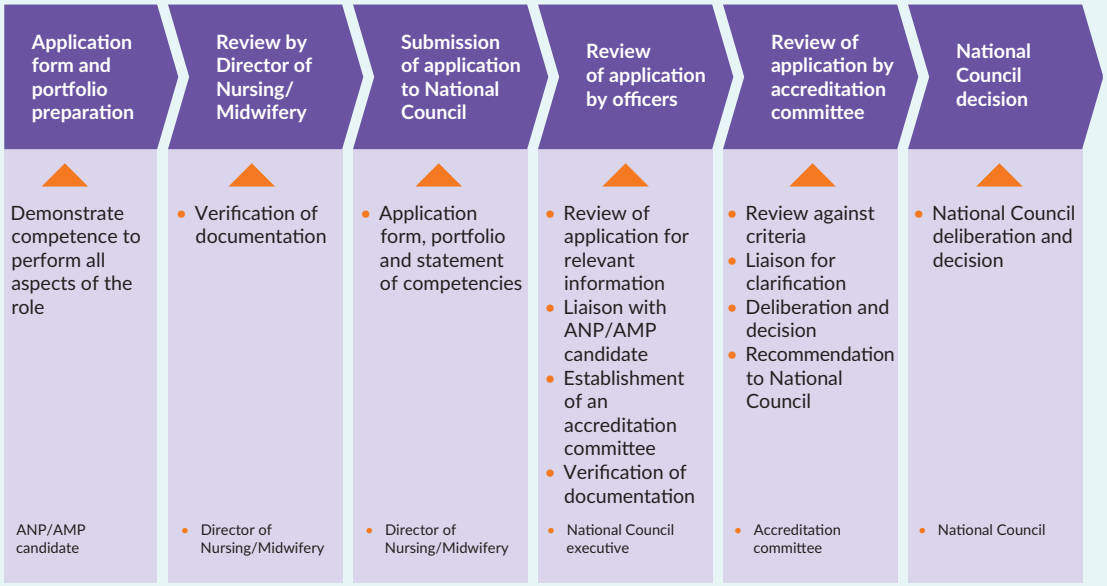
The Irish research (as seen in Table 3) is supported by similar research conducted in the UK which demonstrates that advanced and specialist roles reduce costs and improve efficiency by ensuring the best use of hospital consultant time, freeing up the time of other members of staff, driving innovation and offering value for money (NHS 2015, Rafferty et al 2015). Specialist and advanced practitioners also enable timely seamless and integrated multidisciplinary care by making the right care intervention and referrals at the right time while brokering care between healthcare professionals and other organisations (Rafferty et al 2015). Begley et al (2010) in their study of the respective impact of specialist and advanced practice roles identified strong positive contributions across a range of domains, the impact of specialist and advanced practice roles may seem similar, additional contributions are evident from advanced practitioners particularly in the areas of research activities, the development of guidelines for national distribution and the development of their scope of practice for more complex care provision including the total journey of care up to discharge.

Table 3 - Specialist and Advanced Practice Roles
CNS/CMS and ANP/AMP
• reduced morbidity
• decreased waiting times
• earlier access to care
• decreased re-admission rates
• increased evidence-based practice
• increased use of clinical guidelines by the multidisciplinary team
• increased continuity of care
• increased patient/client satisfaction
• increase communication with patient/client and families
• promotion of self-management among patients/clients
• working on expanding and developing practice (many CNS/CMS are working towards ANP/AMP)
• significant multidisciplinary support for the role
• provision of clinical leadership
• a clinical audit conducted (research conducted by 53%)
• overall no additional cost for CNS/CMS or ANP service
Additional to the RANP/RAMP role
• Developed guidelines for national and local use
• increased patient/client throughput
• working on expanding and developing the scope of practice to include more complex care provision
• demonstrated high job satisfaction

2.2. The Clinical Career Pathway – Graduate, Specialist and Advanced Practice

The Report of the Commission on Nursing: A Blueprint for the Future (Government of Ireland 1998) described a clinical career pathway for graduate nurses and midwives through to specialist and advanced practice. The Commission recommended the establishment of the National Council for the Professional Development of Nursing and Midwifery (NCNM) which subsequently published the original pathway for nurses to advanced practice. The original pathway relied heavily on extensive clinical supervision in the area of speciality once qualified. The NCNM was disbanded in 2010 with some functions assigned to the regulator of nursing and midwifery at that time (An Bord Altranais).

Figure 4 - Overview of NCNM ANP Registration Process - 2010



The key differences in the domains of competence and levels of education associated with the different levels of practitioner are outlined in Table 4.

Table 4 - Levels of Education and Competency per Role		
Graduate Nurse /Midwife	**Clinical Nurse/Midwife Specialist**	**Advanced Nurse/Midwife Practitioner**
Honours degree level 8 NQAI	**Graduate diploma Level 9 NQAI**	**Masters degree Level 9 NQAI**
The graduate nurse demonstrates competencies in the following domains: • professional and ethical practice • a holistic approach to care and integration of knowledge • communication and interpersonal skills • organisation and management of care Personal and professional development	The CNS/CMS demonstrates competencies in the following domains: • clinical focus • patient/client advocacy • education and training • audit, research • consultancy/clinical leadership	The ANP/AMP demonstrates competencies in the following domains: • professional values and conduct competencies • clinical decision-making competency • knowledge / cogitative competencies • management / team • clinical Leadership / professional scholarship

A practical example illustrating the roles of graduate, specialist and advanced practice in the care of patients in a rheumatology service shown in Table 5.

Table 5 - Practical example illustrating the role of graduate, specialist and advanced practice

	Staff Nurse	CNS Rheumatology	RANP Rheumatology
Knowledge of Rheumatology	Develops knowledge of the pathology and diagnosis of rheumatology-related illnesses. Ability to communicate information to clients and their family regarding the current stage of illness.	Links the pathology of rheumatology illness to appropriate treatment options. Understands the pathological differences of various conditions and recognises appropriate drugs in different illnesses.	Teaches nursing and medical staff about new theories. Develops awareness of new evidence-based treatments within nursing and interdisciplinary team. Discusses with the client relevant investigations and treatment options that are acknowledged by their peers as exemplary. Provide clinical leadership by demonstrating advanced theoretical knowledge and clinical skills in managing defined rheumatology conditions.
General Clinical Management	Effectively manages the nursing care of clients/groups/ communities within the hospital.	Articulates and demonstrates the concept of nursing specialist practice by being responsible for own caseload and the provision of specialist knowledge to the identified client group. Possesses specially focussed knowledge and skills in a defined area of nursing at a higher level than that of a staff nurse – performs a nursing assessment, plans and initiates care and treatment within agreed interdisciplinary protocols to achieve patient/client-centred outcomes and evaluates their effectiveness.	Accountable and responsible for advanced levels of decision making which occur through the management of specific client/ patient caseload. Demonstrate expert skill in the assessment and treatment of defined aspects of rheumatology care within a collaboratively agreed scope of practice model. Initiates and maintains open communication with the Multi-Disciplinary Team (MDT). Facilitates a team approach to planned patient care.
Caring for well Rheumatology Patients	Be able to identify the type of rheumatology illness. Offers advice on management strategies and when to refer on. At all times for every interaction with a client, ensures clinical assessments are documented and communicated to other relevant health care professionals.	Identifies the clinical need and provides evidence-based management. Provides a central point for continuity of care. Facilitates access to other services as appropriate. Manages nurse-led clinic. Documents all assessments and communicates to the MDT.	Uses advanced clinical assessment skills to perform a holistic assessment. Introduces and evaluates management programmes that are sensitive to the client's needs in partnership with them. At all times for every interaction with a client, ensures clinical assessments are documented and communicated to other relevant health care professionals.

	Staff Nurse	CNS Rheumatology	RANP Rheumatology
Caring for the Debilitated Clients	Uses clinical assessment guidelines to identify symptoms and clinical need. Recognises potential complications from polypharmacy, drug side effects, frequent clinic appointment and gains advice from the MDT on management strategies.	Advises on self-management, on-going assessment, and advises when complications arise. Devises a self-care plan with the client. Assess, plan, implement and evaluate nursing interventions altering treatments as required with agreed protocols.	Ensures that the service is responsive to changing need and ensures good communication and quick access to service when required. Recognises complications and manages change.
Caring for the Complex Cases	Identifies a need for increased patient and family support and intervention.	Assesses, monitors and evaluates disease activity. Uses expertise, communication and coordination skills to ensure continuity of care between the hospital and the community care setting.	Receives referrals. Works proactively with agencies to promote good quality management tailored to the client's choice and need. Mediates between services and facilitates complex ethical decision making.
Research and Audit	Understands what is meant by evidence-based care. Accesses evidence relevant to rheumatology. Critically appraises audit results and participates in the implementation of the recommendations as appropriate.	Identifies, critically analyses, disseminates and integrates nursing and other evidence in the area of specialist practice. Carries out an audit of key aspects of service. Interprets the outcomes of audit findings and responds with initiatives to improve service provision.	Identifies research priorities for the area of practice. Initiates and coordinates nursing research which ensures the advancement of nursing practice, policy and education informing the wider health agenda. Initiates, participates in and evaluates audit findings to improve/enhance service provision.

This example shows the discrete contributions of each practitioner and also draws attention to the interdependent relationship of service provision. A recent study by Gardner et al (2016) attempted to delineate the differences between graduate, specialist and advanced practice. This study showed differences between the levels in the areas of education, provision of care and autonomy. In summary for example the graduate nurse was found to be involved in more direct care activities.

The capacity to maximise the contribution of nursing relies on a number of practitioners with the appropriate skills and knowledge working together to address the service demands. Kirkham (2014) describes this system. It is not a linear model of care but a composite model where each member contributes their individual skills and knowledge to provide a service as a system.

2.3. Graduate Nurse Practice

The core competencies required by the NMBI for entry to the register at the graduate level are set out in the Standards and Requirements (NMBI 2016). In addition, nurses and midwives have engaged in an expanded scope of practice in response to changes in service need. Scope of practice is not easily described by tasks or procedures and is influenced by the health care context. The NMBI regard expanding the scope of practice as a change in the role of an individual nurse or midwife to include areas of practice that have not previously been within their scope. This also involves the nurse and midwife taking on new roles and responsibilities. Sometimes the scope of practice decisions can be reactive and unplanned and, in these situations, the individual nurse/midwife and the patient can be at risk. The NMBI has therefore developed guidance to assist registered nurses / midwives and their employers to understand the scope of practice and to help with making decisions about expanding the scope of practice in different health contexts. The research indicates that expanded nursing and midwifery practice results in better patient outcomes, enhanced outcomes for healthcare staff and improved service quality (NMBI 2014).

Table 6 - Examples of the expanded scope of practice in Ireland
Sample of Extended Skills /Registered Nurses (ONMSD Oct 2016)
• ECG;
• male catheterisation;
• suprapubic catheter insertion;
• administration intravenous immunoglobulins;
• continuous positive airway pressure (CPAP);
• non-invasive ventilation (NIV);
• swallow assessment;
• doppler Assessment (ABI's);
• foetal Ultrasound (Early Pregnancy);
• suturing (Midwives);
• nurse prescribing (medicinal products);
• nurse prescribing ionising radiation;
• percutaneous endoscopic gastrostomy (PEG) re-insertion;
• venesection;
• casting application (staff nurse within ED setting);
• • cast removal (staff nurse within an orthopaedic setting);

The introduction of nurse/midwife medication and x-ray prescribing is of relevance as they are two illustrative examples of well-supported role expansion. Once educated and trained in either or both of these skills the nurses/midwives become registered prescribers. Today there are 1224 nurses and midwives as prescribers (RN/MPs). The RNPs are spread across 114 clinical areas and 183 health service providers (50 acute hospitals, 126 primary and community services and 7 prison services). This figure also includes 46 RNPs working with private health service providers including those working with G.P.'s. By 2016, the distribution of nurse/midwife prescribers by grade are as follows:

- Graduate Nurse = 354
- CNS / CNM 2 grade = 416
- Advanced Practitioner = 146

The evidence demonstrates that most advanced practitioners incorporate nurse prescribing (medicinal products) as part of their role. In the context of this policy the evidence identifies a number of reasons why nurse and midwife prescribing, as an expanded role is an important consideration in developing a nursing response to patient and health service demands. A large study of non-medical prescribing (NHS, 2015) demonstrates not only a very strong safety record but provides significant evidence of advantages to patients and the system. As part of this study an audit of 1566 participants calculated that an average added value of almost £1,500 per month through savings was delivered from a reduction in medical time previously spent prescribing. This contributed to a probability value of over £32.8m over 12 months (NHS 2015). Increasing the number of non-medical prescribers left more time for other elements of essential medical care and this led to improved patient outcomes, effective use of a highly skilled workforce, waste reduction, improvement in the quality of patient care and cost efficiencies (NHS 2015). This is an important consideration within the Irish context as expanding the number of nurses and midwives that prescribe medicinal products could equally demonstrate added value and efficiencies for services.
In recent times the expansion of practice has become regularised through the introduction of a new grade called the 'Enhanced Nurse'. Introducing this grade is designed to put in place arrangements to allow graduate nurses to expand the practice in response to patient and service need and thereby work to the top of their licence. This constitutes a fundamental change in the role of the graduate nurse and is regarded as a further development of the nursing profession. This now sets the future direction for role expansion in a structured way.

2.4. Clinical Specialist Practice

In 2001 specialist practice roles were introduced. Specialist practice roles are defined by the NCNM as an area of speciality nursing or midwifery practice that

requires the application of specially focused knowledge and skills, which are both in demand and required to improve the quality of patient/client care. Specialist practice includes a major clinical focus comprising of assessment, planning, delivery and evaluation of care given to patients/clients and their families in hospital, community and outpatient settings. The specialist nurse or midwife works closely with medical and para-medical colleagues and may make alterations in prescribed clinical options along with agreed protocol driven guidelines (NCNM 2006).

This resource provides comprehensive nurse-led services in a number of settings including mental health services, older person services and women's health services (NCNM 2005). The roles of Clinical Nurse/Midwife Specialist (CNS/CMS) in Ireland developed further since 2014 and reflected a specialist focus on medical conditions and supporting medical diagnosis, this is elaborated in Appendix 1. The nursing and midwifery workforce in the public health services consists of 35,924 staff. This total includes 1,332 Clinical Nurse Specialists (CNSs), and 44 Clinical Midwife Specialists (CMSs) (Casey et al., 2016). A full national picture of CNS/CMS posts is not entirely visible due to incomplete data set, for example there are CNS/CMS posts recorded as CNM 2 posts. Table 7 below shows the breakdown of CNS/CMS posts per division on the database in 2016.

Table 7 - CNS Distribution - 2016	
CNS by Division	
Clinical Midwife Specialist	44
Clinical Nurse Specialist (General)	882
Clinical Nurse Specialist (Children's)	83
Clinical Nurse Specialist (Mental Health)	287
Clinical Nurse Specialist (Community/Primary Care)	14
Clinical Nurse Specialist (Intellectual Disability)	22
TOTAL	**1332**

In an attempt to rectify the data, the HSE developed and maintained a database of new CNS/CMS's appointed since 2014. The database details both service development and posts across a range of specialities including:

- acute services with 15 specialities including infection prevention and control, pain management and sexual assault services;
- mental health services with 13 specialities ranging from family therapy to deliberative self-harm to psychology of later life;
- midwifery and women's health with 6 specialities from ultrasound to colposcopy;
- specific medical specialities;
- diabetes with 4 subspecialties;

- cardiac with 5 subspecialties;
- cancer services with 4 subspecialties;
- palliative care with 5 subspecialties;
- respiratory with 5 subspecialties, and
- gastroenterology with 3 subspecialties
- community and intellectual disability, with each having only one nurse appointed in recent times to a speciality.

Notably this data indicates that the development of the CNS/CMS roles has evolved in a wide range of specialisations and sub-specialisations. However, variation exists across the country in respect of how these roles have developed and there is a lack of consistency in relation to the scope of practice.

The CNS /CMS is important to meet specialist population and local health care needs. However, due to the specialist nature of these roles, they will not address broad population health care needs or address the broader health service challenges. A "narrow" speciality focus has been used as a challenges of CNS/CMS practice (Casey et al 2015), it remains however an important context for the development of this policy. The emerging case to address the broad population healthcare needs as the specialist practice continues to address specific areas for example heart failure, cancer care or roles CNS in lymphodema management. Advanced practice subsequently needs to evolve to play an import role in addressing the broad population health needs. A solution to support this could be for the major stakeholders, including the HSE and the NMBI, to utilise the health population data in combination with the advanced practice/ specialist data to inform effective workforce planning and coordinated service development based on population need.

2.5. The Current Model of Advanced Practice in Ireland

2.5.1. Current Advanced Nursing and Midwifery Practice (ANP/AMP) Resources

RANP/RAMP roles have been developed in Ireland in response to patient and service need. The essential criteria for advanced practice roles as set out by the NCNM and NMBI, are that the practice is carried out by autonomous, experienced practitioners who are competent, accountable and responsible for their own practice (NCNM, 2008; NMBI, 2014). Additionally, the current Irish criteria require that RANP/RAMP's promote wellness, offer healthcare interventions and advocate healthy lifestyles for patients and their families in a variety of settings in collaboration with other healthcare providers according to an agreed scope of practice. Such practitioners must have a high level of clinical competency and theoretical knowledge along with advanced critical thinking ability (Begley et al., 2010). They further manage a patient caseload, and a key factor in advanced practice is the degree of decision making and accountability rather than the complexity of the tasks carried out. Advanced practice is thus grounded in the theory and practice of nursing and related research, management and leadership theories (Hamric, 2014). More recently the NMBI has defined advanced

practice as a '...career pathway for registered nurses/midwives, committed to continuing professional development and clinical supervision, to practice at a higher level of capability as independent, autonomous, and expert practitioners' (NMBI 2016).
A shared, and key, characteristic of advanced practice roles is their broad-based nature. The preparation of the advanced practice practitioner was originally centred on these broad criteria and core concepts of professional ethics, professional leadership, accountability, clinical scholarship and consultation and collaboration skills. These core characteristics reflect the concepts utilised in the development of advanced practice roles worldwide.

At the commencement of this policy in 2016 there were 192 Advanced Practitioners (Nursing) and 8 Advanced Practitioners (Midwifery) working in acute and primary care settings across the country (Appendix 2).
In explaining the differences between the roles of the CNS and RANP, two examples from current practice are offered of the benefits of role development for service provision.

Example 1 is in the Clinical Care Programme for Epilepsy. The Advanced Practitioner in epilepsy works as part of the team in one of 6 (4 adult and 2 paediatric) regional neurology centres supporting G.P.s across the country to manage patients with a stable/chronic disease in the community. They also guide the less well-controlled patients through the health system providing them with the resources to self-manage their illness and if necessary refer for expert care. The Advanced Practitioner provides timely access to expert care and information and support to patients in prevention activities which includes meeting monitoring and prescription needs. The model of care is a shift from hospital-based care to care in the community and reduces length of hospital stay. Currently there are 16.5 WTE Epilepsy APs within adult services nationally at various stages of professional development i.e. candidate APs, Registered APs. Additionally, this is reported to leave the consultant free to manage the 20% of patients that need medical intervention. The value to the health system has been the reduction of 19,000 bed days nationally (NCPE, 2014). Outreach clinics have been developed in the intellectual disability sector (3), the maternity hospitals (2) and general hospitals (4). An evaluation study SENsE (Higgins et al, 2016), found that the epilepsy specialist nurse (CNS) working alongside and complementing the ANP care, provides an improved experience for patients and better management and coordination of epilepsy care at no net cost. This led to the recommendation to move to an Advanced Practitioner supported service.

Example 2 is from a nurse led ambulatory low to intermediate risk chest pain service. The Advanced Practitioner evaluates the patient who presents with chest pain to the Emergency Department (ED) and risk-stratifies the patient to identify or exclude Acute Coronary Syndrome (ACS). This enables low risk patients to be safely discharged and followed up in the out-patient setting. The primary goal of this service is admission avoidance. This service is Advanced Practitioner led and provides a consult service to ED/Acute Medical Assessment Unit (AMAU). The Advanced Practitioner has the skill and autonomy to assess, treat and discharge the patient appropriately. Discharged patients are referred for further evaluation in the nurse led chest pain clinic within 72 hours. The benefits and patient impacts from this service are evident and include a reduction in the Patient Experience Time (PET) from 17.5 hours to 7.9 hours overall. There is also evidence of admission avoidance of up to 600 admissions per year, 15% of patients seen were diagnosed and treated for cardiac disease; 75% of patients were discharged to their G.P.; and 9% patients were captured at the primary prevention stage and treated accordingly.

Despite the evidence supporting the positive contribution that these roles make to patients and overall service provision, the development of advanced practice roles has been slow. This has resulted in individual roles/posts developing, sometimes in isolation in local areas, rather than as the development of an ANP service. This data also illustrates that given the relative isolation of RANPs and RAMPs which impedes the ability to respond to a whole of service need. The relative underdevelopment of these posts represents a missed opportunity in terms of orientating the workforce to meet changing needs in an effective and cost-efficient manner. Internationally the number of nurses in advanced practice roles still represents a small proportion of all nurses even in those countries that have the longest experience in developing the role. In the United States, Nurse Practitioners (NPs) represent 2.5% of the total number of registered nurses in 2008. In Canada, they accounted for a much smaller share, NPs only representing 0.6% of all registered nurses in 2008 (Delamaire and Lafortune 2010).

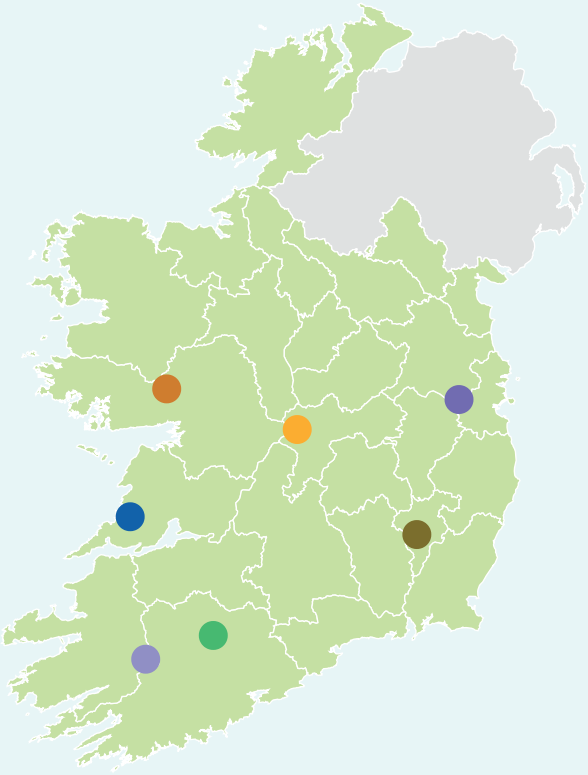
The numbers of ANPs increased to 1.3% of all RNs in 2013 in Canada (OECD, 2016). A report compiled at the end of 2015 from the OECD (Maier et al, 2016) compared the ratios of advanced practice nurses to registered nurses in six countries as illustrated in Table 8 below:

Table 8 - International Comparisons				
Country (Name/title of NP/APN)	Year introduced	Total number of NPs	Activity status of NPs	NP% of all RNs
United States (NP)	1965	174,943	Professionally Active	5.6%
Canada (NP)	1967	4,090	Practising/ employed	1.4%
United Kingdom (England, N. Ireland, Scotland, Wales) (Advanced NP, NP)	1983	n/a	n/a	-
Netherlands (Nurse specialist)	1997	2,749	Registered	1.5%
Australia (NP)	2000	1,214	Registered	0.5%
New Zealand (NP)	2001	142	Practising	0.3%
Ireland (Advanced N/MP)	2001	141	Professionally Active	0.2%

It seems reasonable that a workforce plan could incorporate a target for advanced practice nurses and midwives. Based on the current workforce setting a target for 2% of the nursing/midwifery workforce at RANP/RAMP level by 2021 would yield approximately 700 nurses/midwives providing full episodes of care across services based on service need and requirements.

By way of an example, to demonstrate the impact of having a critical mass of advanced practitioners, a dermatology service provided by a RANP can be found in Appendix 3. Of significance is the range of skills and interventions that the nursing service can add to the care team if provided on a national basis in a critical mass.

Figure 5 - Number of ANPs per Hospital Group (2016)



- IRELAND EAST HOSPITAL GROUP: 24
- SAOLTA HOSPITAL GROUP: 38
- UNIVERSITY OF LIMERICK HOSPITAL GROUP: 16
- NATIONAL CHILDREN'S HOSPITAL GROUP: 10
- DUBLIN MIDLANDS HOSPITAL GROUP: 41
- RCSI HOPSITAL GROUP: 22
- SOUTH-SOUTH WEST HOSPITAL GROUP: 27

CHO's: 22

This picture however is not reflective of the type of specialities that developed to support service need (Fig 5). Consequently, the HSE could align the development of specialist and advanced practice roles for nurses and midwives with the clinical care programmes and models of care to ensure consistent provision of service across geographic areas.

2.6. Enablers and Challenges to the development of Advanced Practice

An examination of the enablers and challenges to the development of advanced nursing roles included credentialing, role clarity and titling clarity, education and training, individual practitioners and their scope of practice, work organisation issues and cost (Casey et al., 2016). The findings suggest that the main enablers include having a model of management, education and regulation that support nurses and midwives to practice to the full extent of their education and training. Having a mechanism of regulation that includes standards of education, practice expectations and support for methods of credentialing were essential issues. Also essential were role clarity and understanding of job expectations.

The challenges were reported as the lack of management support within organisations to support nurse role development and time constraints that curtailed nurses in their ability to participate in advanced care focussed activities. Additionally, confusion regarding roles, responsibilities and clinical jurisdiction were also seen as challenges.

A summary analysis of the literature (Table 9) conducted by Elliott et al (2016) identified 13 generic challenges and enablers that were categorised under four structural dimension headings:

Table 9 - Challenges and Enablers to the Development of Advanced Practice

Structural Dimension	Challenges	Enablers
Healthcare system-level:	lack of opportunity to work at a strategic level	networking opportunities
Organisational level:	large clinical caseload; lack of support from nursing or midwifery management medical consultants, and clinical staff; lack of clarity/understanding of role including leadership and research role; lack of clerical/administrative support; lack of authority/ position within the organisation; insufficient resources (e.g. financial/ information technology/library-databases access); lack of time/support for research,	mentorship and support; clear leadership support and role; admin support; accountability; role clarity
Team level:	lack of 'critical mass'/lone position;	being part of a wider team of ANP's
Advanced practitioner-level:	lack of leadership skill development/ education; lack of advanced practitioner (AP) leadership attributes; the level of education; time within the role.	being involved in research; having national standards

2.6.1. Enablers to the Development of Advanced Practice in Irish Context

2.6.1.1. Graduate profession

The introduction of a graduate profession since 2001 has had a marked influence on the development to advanced practice. The point is made that the different roles work in harmony to provide a composite service delivery rather than the working independently

2.6.1.2. Existing Roles

There are advanced practice roles already working within services. The core concepts of professional ethics, professional leadership, accountability, clinical scholarship and consultation and collaboration skills described by Fallsberg and Hamal (2000) are all embedded in these roles. Further development and implementation of advanced practice roles has therefore a platform and a direction to avoid further sub-specialisation and allow the role to reflect the broad-based holistic approach required

2.6.1.3. Regulation

The functions of the NCNM and NMBI are referred to in the Nursing and Midwifery Act 2011 (Government of Ireland, 2011). This Act is silent on the specifics of advanced practice but rather requires the Board to specify criteria for the creation by employers of specialist nursing and midwifery posts. The Board however, may make rules that establish procedures and criteria for registration and specifically the setting of criteria for practice and experience leading to registration and for annotation of registration, including the specification of exams leading to registration (Appendix 4). The Board therefore has powers to determine the standards and requirements for registration of advanced practice and equally to recognise additional qualifications for practice that meet the objective of the Board is to protect the public in its dealing with nurses and midwives and the integrity of the practice of nursing and midwifery through the promotion of high standards of professional education, training and practice.

2.6.1.4. Evidence of achievement

The significant exception to the individualised and often sub-specialist approach for the development of advanced practice in the Irish context is emergency care. By 2016 a critical mass of 78 advanced practitioner posts in this area of care delivery. The posts are dispersed throughout the country. The emergency care role provides care for similar caseloads of patients and therefore can address service challenges. The evidence from the emergency care areas shows improvements such as, timely access and timely treatment for patients with minor injuries, ultimately leading to better patient outcomes. The advanced practice role in minor injuries has also shown positive service impacts by creating capacity for other patients to be seen sooner therefore reducing overall patient experience times (PET) in local injury units.

2.6.2. Challenges to the Development of Advanced Practice in the Irish Context

Significant challenges appear under the heading of work organisation, where the impediments associated with culture and

managerial issues come to the fore. A recent study by Maier and Aiken (2016) reported challenges associated with regulatory restrictions and financial challenges. Despite the benefits to service of the introduction of advanced and specialist roles considerable challenges exist in the Irish health system to the introduction of new roles.

2.6.2.1. Geographical Spread and Service Need

The current number of ANP/AMP is geographically disparate and therefore cannot be focused on broad-based population health challenges. This impacts in terms of collaborative working and service delivery models. This is a multi-dimensional issue involving both service delivery and workforce planning considerations, but it also does not link development with current service context.

2.6.2.2. Lack of Uniformity to Role Development

To date, posts have evolved based on individual role development, not population or service needs. This leads to inconsistent career pathways and interprofessional collaboration There is also a concern in relation to the current model and the perceived attainability of an advanced practice role, but also perceptions and realities associated with career progression, knowledge and skills attainment. While this is an under-researched area there is clear anecdotal evidence that the attainment of an advanced practice role is regarded as unduly cumbersome from a personal professional perspective. This is not in the sense of the level of skills, knowledge, competencies, or capabilities associated with the role, but instead the institutional challenges to the development of such roles, and impediments to the ongoing and seamless recognition of attainments throughout one's career.

2.6.2.3. Current Prolonged Pathway to Advanced Practice

The existing prolonged education path is a challenge as it takes a minimum of 7 years to be registered. The level of knowledge, skills, competency and capability attainment is not currently facilitated in a timely way through a progressive credentialing model as recommended. This will require an accompanying paradigm shift in the recognition and recording of knowledge, skills, competency and capability attainment which facilitates a timely recognition of advances in practice. This will be best achieved through a progressive credentialing model facilitated by the Nursing and Midwifery Act (2011). The absence of ongoing and seamless recognition of attainments delays commencing practice at an advanced level until all educational and clinical requirements are complete.

2.6.2.4. Current Age profile and Work patterns

Another notable characteristic of the current cohort of advanced practitioners is the current age profile, of the 192 RANPs in post in 2016, 32% (n=61) were over the age of 50 years and of the 8 RAMPs in post 50% (n=4) were over the age of 50 years. This raises an important consideration for workforce

planners with regards to succession planning. To maintain the current service supplied by ANP/AMPs the time required to develop an ANP/AMP must be taken into account. Consequently, as part of an overall workforce planning approach the HSE should develop an integrated strategic approach to determine the service and workforce needs including succession planning for graduate, specialist and advanced practitioners at a national, regional and local level that embraces a standardised approach to determining the staffing across the national clinical care programmes.

2.6.2.5. Current Work Patterns

The current work patterns of advanced practice are focused around the provision of service and that requires explorations. Most RANP/RAMP's provide Monday-Friday services either 8am-5pm or 8am-8pm or a service 8-10pm. The advanced practice nurses/midwives in neonatology support a 24/7 service. A fully responsive patient-centred service-led model would require that nurses and midwives provide a service that is commensurate with the presentation times of patients and the illness trajectories.

2.6.2.6. Value of Advanced Practice

The relative under-development of advanced practice roles in numerical terms has alluded to apparent under-value of the advanced practice roles. These roles have fallen into sub-specialisation; therefore the full value has not been realised. The development of the RANP/RAMP roles has embraced sub specialisation, which has also been a feature of the development of the role of the CNS/CMS. Internationally, the USA, Australia and New Zealand have moved away from such sub-specialisation and from disease-specific services, instead reorienting the education and regulation of advanced and specialist practice to provide for more generic areas of practice across services, including community primary health care delivered by providers with enhanced capabilities (Carryer 2015). It is therefore timely to review how the sub specialisations have emerged and reverted to a broad-based approach to the role and title of the RANP/RAMP that reflects current service and population needs.

2.7. Summary

In summary this chapter has described the structure of the current nursing resource in Ireland. The original pathway from graduate to advanced practice is described, this includes the different roles of graduate, specialist and advanced practitioners. Particular attention has been paid to the existing model for advanced practice. The enablers and challenges to developing advance practice in Ireland are explored and described.

The case is made for moving towards a revised model of AP capable of responding to emerging service needs and reform. The next chapter considers the service development and sets out the challenges and how advanced practice can respond.

Summary of the Goals and Actions.

Goal 3 sets out the actions for development to address the challenges outlined in this chapter's review of the professional context of nursing in Ireland.

GOAL 3	Change how we utilise and deploy the nursing and midwifery resource	
Action	**Details**	**Responsibility**
a	Create governance and accountability structures that enable the advanced practitioners to provide a full episode of care and service supporting other members of the care team.	HSE
b	Provide advanced practitioners with access to diagnostics, referral pathways and appropriate treatments that are required to facilitate the provision of full episodes of care both in acute and in the community sectors.	HSE
c	Support graduate nurses/midwives to meet patient-centred service need and the expansion of the scope of practice within the credentialing framework.	HSE
d	Review patient/client presentation times to ensure the service provided by graduate, specialist and advanced practitioners matches the demand within the normal 24/7 patterns of nurse/midwife provision of care.	HSE

Chapter 3
Service Delivery Context

Chapter 3
Service Delivery Context

3.1. Introduction

This chapter describes the service delivery challenges. Developing services to support the effective and efficient use of resources are explored along with examples from practice of current initiatives that are proving worthwhile to the patient experience and the integration of service provision.
Any change in the delivery of services, and associated human resource implications, should be supported by evidence which demonstrates the value to patients and services. The evidence to support the effectiveness and cost efficiency of advanced practice roles is evident in both national and international research. The evidence describes advanced practice as being safe, effective clinical decision makers who make a difference to service delivery and improved patient outcomes. Further Irish research shows that specialist and advanced practitioners make an important contribution to chronic disease management and community care. Specifically, this demonstrates, improved clinical outcomes and improvements in areas of patient satisfaction, communication with patients, length of stay and access to care, and further evidencing a reduction in costs, improved service delivery models and welcome service changes which reflect the needs of patients (Begley et al 2013, Begley, 2010).

3.2. Population, Health Trends and Demographic Challenges

The current population in Ireland is circa 4.7 million with approximately 1.15 million citizens under 19 years of age and 604,000 over 65-years (CSO 2016). The data also shows that the population of those aged 65 and above has increased by 19% and those aged 85 and above by 23 % since 2011. The CSO and TILDA (2014) have predicted continual annual increases with projections of those over 65 years expected to rise by 20,000 per year. As a result, over the next 10 years the demand for healthcare is expected to rise with a projected 37 % increase in demand for public hospital care, a 27 % increase in GP visits, and a 54 % increase in demand for home care and residential care home places (Wren et al., 2016). The TILDA (2014) study, an Irish longitudinal study of ageing concurred and identified these changing demographics and reported that 21.1% of participants aged 80+ years had attended an ED at least once in the previous year. The evidence also suggested a limited use of community health and social care services for patients with evidence of frailty and this is particularly relevant for the age groups identified above.

Current Challenges Identified Through Scheduled and Unscheduled Care (DoH)

ED Performance in 2018 compared with 2017:

In 2018, the number of patients recorded as waiting on trolleys at 8am increased by 2.5% (+2,381) to 98,448, compared to 2017. However, the average daily 8am trolley count nationally was consistently lower between May and October 2018 (5.7% lower overall) compared to the same months in 2017 (Department of Health Data, 2019).

In 2018, ED attendances were 1,290,091, up 3.5% (+43,484) compared to 2017, while there were 156,647 ED attendances by over 75s up 5.0% (+7,426).

In 2018, ED admissions were 346,380, an increase of 9,184 (2.7%) compared to 2017. ED admissions by those over 75 increased by 4.6%, when compared to the same period in 2017.

While admissions were higher overall in 2018 than in 2017, the proportion of attendances which were admitted (admission/attendance conversion rate) fell from 27.0% to 26.8%. The above is supported by international evidence of increasing utilisation of ED services and hospitals working at up to a 100 per cent capacity (DoH, 2015).

Capacity:

Hospitals are increasingly operating at or above capacity, with year-round demand pressures that are further challenged over the winter months. This is impacting on waiting lists and access to services.

Ireland has among the highest acute bed occupancy rates in the developed world (currently at 95%) and far above safe international norms of 85% and long and growing waiting lists across most services.

The public hospital system has seen a growing demand for unscheduled care in recent years. This growth is primarily due to increased presentations, in particular increased presentations of high acuity patients in the over 75 age group. The HSE reported that the key factors contributing to the challenges associated with the care of older patients is the requirement for isolation and the need for multiple inputs to their assessment and care (HSE, 2018).

At the end of 2018, there were over 516,000 patients on the Outpatient Waiting List for a first appointment. While 2018 performance saw some stability with a year-on-year increase of 3%, the number of patients waiting for access to Outpatient services remains too high.

In 2019, demand for inpatient and day case procedures is projected to increase to over 11,500 new patients per month, while demand for first Outpatient appointments is projected to be almost 68,000 new

patients per month. This year, the HSE is due to deliver 1.155 million elective hospital procedures and over one million new outpatient appointments, while the NTPF will deliver 25,000 Inpatient Day Case treatments, 5,000 Gastro Intestinal Scopes and 40,000 first Outpatient appointments. This trend is expected to continue.

The evidence illustrates another important context for this policy. It shows increases in the prevalence of chronic disease in a younger population with those over 50 years of age living with at least one chronic disease (DoH, 2016). The four main chronic conditions in Ireland are; Asthma, Chronic Obstructive Pulmonary Disease, Diabetes and Heart Failure (NHQRS 2016), and these account for approximately 1.68 billion euro of acute hospitals budget (DoH 2016). As a solution the evidence points to the development of primary care models that offer good quality care. It is evident that improving overall health and self-management can reduce the need for an unplanned hospital admission. Moreover, early detection and intervention have been seen to prevent complications or more severe comorbidities of disease (DoH, 2017).

The population changes and associated current, emerging and future demands on the health services provide a necessary impetus for changes in the delivery of health services. As outlined within Sláintecare and the evidence re-orientation of service delivery to improve access and provide care closer to home will ensure a higher availability on preventative health strategies. Caring for people in their community and avoiding unnecessary hospital visits is a significant challenge for the health services today and into the future. These challenges provide an opportunity for the development of nurses and midwives to practice at the top of their licence to meet population and service needs. This also supports the vision of Sláintecare by facilitating development to support integrated care services across hospital and the community. The evidence shows integrated care can address waiting lists, early supported discharge and hospital admission avoidance. This approach is in alignment with national clinical care programmes that are developing to support and standardise care for chronic disease management and older persons care. In the context of Sláintecare the main challenges to service provision in the health services have been identified as:

- Integrated care;
- Waiting lists and access to services;
- Patient flow;
- Unscheduled care access and delivery.

3.3. Advanced Practice Responses to Service Challenges

3.3.1. Integrated Care

Integrated care is based on the principles of well-coordinated, planned, pro-active care improving the patient's journey across

health and social care (Ham and Curry 2011). This approach focuses on the processes of care delivery rather than the structural and organisational service models, health care professionals working in partnership across service boundaries to produce new ways of working (HSE 2016). Advanced Practitioners provide senior clinical leadership within the structure and currently there are five Integrated Care Programmes for patient flow, older persons care, prevention and management of chronic disease, children, maternity.

The integration of services involves connecting healthcare systems through the application of innovative models delivering care to the local population (Hendry et al., 2018). To support this, nurses and midwives are ideally placed to help create that environment given their broad-based knowledge and skills. An example of this is through the development of end to end pathways of care, managing complete episodes of care to support patients from diagnosis to living well with a condition in the community. Through this approach the patient has a focal point of contact, there is continuity of care to support care needs through assessment, engagement and mutually agreed treatment options in conjunction with the wider healthcare team (Longpre and Dubois, 2017). Longpre and Dubois (2017) also identified this supports the development of nurse-led services that can span across hospital to community with a strong focus on prevention, self-management and disease modification.

The Integrated Care Programme aims to address fragmented care, streamline services and improve the health and well-being for individuals through formalising pathways of care between primary and secondary care and adopting a case management approach to care within a multi-disciplinary team (HSE 2015, HSE 2018). To date, the evidence from the Integrated Care Programme for Older Persons is showing a reduction in hospital bed day use and length of stay, reduction in hospital re-admissions and evidence of early supported discharge (HSE 2018, Hendry et al., 2018).

The current challenges to achieving integrated care as described by the HSE (2016) are in addressing the fragmentation in health systems as more people are living longer and with complex co-morbidities. Integrated health service delivery is designed to ensure people receive a continuum of health promotion, health protection and disease prevention services as well as diagnosis, treatment, long-term care, rehabilitation, and palliative care services across all of health care services according to a person's need. The immediate challenges relate to timely access to services as seen in long waiting lists and also in hospital avoidance particularly to the emergency departments of the acute services.

3.3.2. Waiting Lists and Access to Services

There are six areas identified in the current waiting list where ANPs have already been deployed (Table 10). The waiting list is matched below with the current numbers of RANPs in the system. The impact of addressing the waiting lists and providing nurse-led services as a function of integrating with the community are outlined with the following specialities:

Practitioners and CNS roles are detailed in Table 10. This information informed the deployment of Advanced Practitioner roles to demonstrator sites towards building a critical mass. These roles are providing services that are integrated with the community supporting continuity, improved access, improved flow of patient information and reduced duplication of care.

Table 10 - Example of Waiting Lists and RANPs in post - 2018

Speciality	Total people waiting	Waiting > 18 months	RANP's in post	CNS in post since 2014
Dermatology	35,028	2549	2	2
Urology	23,958	1838	1	1
Paediatrics	13,745	134	5 (ED) + 7 speciality areas	1 child health community
Rheumatology	13,605	1339	2	5
Respiratory medicine	11,836	657	0	11
Pain relief	7,073	241	4	2

The evidence has shown that delays in access to scheduled care can lead to further deterioration in health resulting in higher care needs. The Advanced Practitioner role can support this through the development of nurse-led services to facilitate diagnosis, treatment plans and disease modification to reduce scheduled care waiting lists. The nursing response to addressing waiting lists through the development of Advanced

At a national level there is evidence of a sporadic and dispersed approach to advanced practitioner service development. The evidence points out that to address issues such as waiting lists, a strategic approach to planning and deployment of roles is required and should include the demand for scheduled care to plan development of a critical mass of advanced practitioners. The model tested within this policy supports the transition

from competent to capability working as an autonomous practitioner in determining a diagnosis, level of care needs and potential future health care. In planning services that are geographically aligned, and patient-focused evidence suggests that people prefer to access care locally (HSE 2016). Therefore, there are opportunities to develop Advanced Practitioner roles locally within community settings that ensure the local care needs are addressed to reduce pressures on hospital-based outpatient services.

The evidence review by Casey (2015) examined studies that compared the care provided by Advanced Practitioners to the care provided by junior doctors, CNS or G.P.'s. The findings demonstrate that the Advanced Practitioner role is an important inclusion in service provision with the main achievements in cost-effectiveness relating to improved access and improvements in quality of care. Other positive associations of the role relate to the impact on the length of stay and readmissions to acute care. A recent ICN report (2015) found that no matter what setting, nurse practitioner care has proven to be a high-quality and cost-effective means of delivering primary care.

3.3.3. Patient Flow

Improving patient flow is a national priority as the evidence shows poor patient flow leads to unnecessary hospital admissions, longer lengths of stay and an increase in complexity of care needs (HSE 2016). Patient flow is described as the movement of patients, information or equipment between departments, staff groups or organisations as part of a patient's pathway (HSE 2016). As a national strategic priority to patient flow the needs and views of the patient are paramount in developing joint care plans. A patient-centred approach to care-planning supports patient flow with the optimal use of resources while aiming to avoid unnecessary delays in care (HSE 2016). This underpins a safe and timely discharge from hospital to home and is as an important indicator of quality and a measure of effective integrated care (Joint Improvement Team, 2014). Advanced practice roles are integral to patient flow through approaches such as the development of ambulatory care pathways. This improves patient flow by increasing access to outpatient nurse-led ambulatory care settings from the ED and acute medical admission units. Patient flow is also addressed through inpatient nurse-led services working within areas such as the ED and/or chronic disease management to develop and supporting treatment plans as part of an in-patient care pathway and early supported discharge.

Advanced Practitioner roles have the capacity and capability to respond to delays in patient flow throughout the system and improve the delivery of integrated discharges from hospital to community. Roles must be developed to strengthen integration and reduce the numbers of healthcare professionals required to avoid fragmented care in the community (HSE 2014).

3.3.4. Unscheduled care access and delivery

Within Ireland annual attendances to the ED are on average 1.2 million with demand for emergency care expected to rise over the next 10 years (HSE, 2015; Wren et al., 2017). To meet the service needs, advanced nurse/midwife practitioner services have a key role to play in delivering care to support ED services that are cost-efficient and effective. For example, in the treatment of minor injuries and minor ailments the Advanced Practitioner triages, assesses, diagnoses, treats and discharges from the ED or local injury unit. This is decreasing the amount of time patients spend in the ED. This includes evidence of impact on the 6-hour National Patient Experience Times with 95% of patients seen by an Advanced Practitioner rarely exceeding the 6-hour ED target times (SDU 2013). Within the ED or local injury unit the Advanced Practitioner determines immediate care needs, provides initial treatment interventions including diagnostic ordering and specialist referral input. This ensures timely service access, ensures appropriate referral onto specialist services and improves patient flow. Currently there are 29 hospitals that provide 24-hour ED and 11 Local Injury Units offering a variety of services with the most established Advanced Practitioner roles working in minor injuries and cardiology. Nationally there are 78 Advanced Practitioners working in ED with 11 Candidate Advanced Practitioner awaiting registration and a further 17 candidates in training. Based on population health trends there is an opportunity to further develop a critical mass of Advanced Practitioners in the unscheduled care area to deliver older persons care and chronic diseases across all age groups to receive timely, accessible, evidence-based treatment and co-ordinated follow-up.

The RANP within the Emergency Medicine setting has the ability to complete a full episode of care which not only benefits the patient by streamlining their care but also by decreasing the amount of time they spend in the ED. Where there is a RANP delivering a complete episode of care, the 6-hour National Patient Experience Times of 95% (Unscheduled Care Strategic Plan, SDU, 2013) are rarely exceeded. The potential for LIU's and Minor Injury Units to be RANP led and driven is one that has shown benefits for both the patient and the service. These benefits include a more efficient use of resources, decreasing the footfall to ED's, delivery of expert, quality care and improved patient satisfaction. However, it should be noted that while there are 78 RANP's within the emergency medicine service there are geographical disparities.

3.4. Other examples of the Advanced Nurse/Midwife Response to Service Challenges

3.4.1. Hospital Admission Avoidance

The evidence shows that to reduce the demand on acute hospital services, roles

that address hospital admission avoidances are important. Through the proactive management of individuals with a focus on prevention or delay of chronic illness and rapid response to a change in condition results in hospital admission avoidance (Gardner, 2014). Based on reports from the National Patient Experience Survey there was evidence of attendances to healthcare service over a period of 3-6 months with symptoms up to 3 times prior to attending the ED (HIQA 2018). There is also increasing demand for admission avoidance services to support older persons in the community with reports showing that almost 22 per cent of all hospital ED attendees are aged 65-years. This accounts for a large proportion of acute emergency medical admission and total hospital bed days used of up to 47 per cent (HSE, 2015). Within this up to 35 per cent of older persons aged 75 years and over are admitted to hospital and demonstrate loss of function at the time of discharge (HSE 2015). In many instances the original medical condition that required admission to hospital is overshadowed by the ability to self-care on discharge. The development of Advanced Practitioner-led services to have the capacity and capability to address this as a component of preventable hospitalisations including readmissions, ambulatory care sensitive conditions, or other modifiable factors to prevent hospitalisation (Coffey et al 2015). It is also notable that several conditions across all age groups can often be treated successfully in the home, thus avoiding unplanned hospital admission. One such approach is referred to as Hospital at Home, where Advanced Practitioner-led care with support from the multidisciplinary team can provide a higher intensity of monitoring and interventions within defined periods (Reilly et al. 2015). Similarly, there is evidence of Advanced Practitioner roles in community ambulatory care services for respiratory care in the community improving response times, reducing unplanned hospital care and ED presentations with evidence of improved self-management (Baker et al., 2016). Therefore, there are opportunities to strategically develop advanced practice roles that target populations and offer a broad-based generalist approach to care.

A single educational home visit by a nurse one-week post discharge was seen to have an improvement of quality of life, reduced emergency visits and unplanned readmissions (Aquado et al. 2010). Such interventions can also be enhanced with the use of telehealth and electronic interventions. The evidence outlines that any intervention that supports people to stay out of hospital, particularly in the case of older people, within an integrated pathway of care results in better patient and organisational outcomes.

3.4.2. Interdisciplinary Collaboration and Nurse-led / Midwifery-led Services

Recognition and support for nurse-led/ midwife-led change and development is gradually increasing. Nurses and midwives

are making an increasingly vital contribution to the health of the population and to population health. Growing evidence, particularly from New Zealand demonstrates that people receiving care at nurse-led clinics have improved health outcomes for a range of conditions (Pirret 2014). However, no one single health profession has all the knowledge needed to provide total patient-centred care (Orchard et al 2005).

3.5. Summary

There is evidence of an increase in demand for scheduled and unscheduled care with a need to develop services that focus on reduced waiting lists, provide integrated care, improving patient flow and support admission avoidance. The Advanced Practitioner role can respond to these areas to reduce the burden on acute hospital services, bringing care into or closer to the home to improve the patient journey. To achieve this a critical mass of Advanced Practitioners are required to respond to the population needs and deployed strategically to ensure appropriate response and reduce disparities in service provision nationally.

Summary of the Goals and Actions.

Goal 1 sets out the actions for development to address the challenges outlined in this chapter's review of the service delivery context in Ireland.

GOAL 1	Create a Critical Mass of RANP/RAMP's through a developmental pathway for graduate and specialist nurses and midwives	
Action	Details	Responsibility
a	Align the development of advanced practice positions for nurses and midwives to the integrated models of care across services to ensure consistent provision of service across geographic areas	HSE
b	Develop advanced practitioners to meet service need, based on HSE data, to include areas such as reduction of waiting lists, hospital avoidance, and supporting access to services in areas where the integration of services can be achieved.	HSE
c	Set a target of 2% of advanced practitioners in the nursing/ midwifery workforce to create an initial critical mass.	HSE
d	Undertake a mid-point review of progress to ensure the achievement of the target for advanced practice development and the appropriateness of the target	HSE
e	Develop a national career advisory service, based on service need that includes succession planning for population health, which supports nurses and midwives in deciding on their individual career pathway.	NMBI
f	Facilitate the current cohort of candidate advanced practitioners to achieve registration where business cases have been agreed, service need has been identified and a vacancy exists.	HSE
g	Determine the minimum dataset required for workforce planning and reporting purposes, including areas of work and specialisations.	DOH
h	Explore the capacity of the Register of Nurses and Midwives to capture and maintain the data required in action 1 g above as provided in the Nurses and Midwives Act (2011).	NMBI

Chapter 4
Future Model of Graduate to Advanced Practice

Chapter 4
Future Model of Graduate to Advanced Practice

4.1. Introduction

When the evidence, trends and data in relation to advanced practice were taken together, they point to a number of areas which require reform. The Irish data shows us that ANP roles have developed in a sporadic manner across a range of specialisations and sub-specialisations. In contrast the international evidence demonstrates a broad-based population-focused approach as yielding greater outcomes. Similarly, the Irish data shows that the numbers remain relatively low, whereas evidence continues to demonstrate that when nursing is re-engineered as a critical mass the workforce has the greatest potential to impact patient outcomes particularly when focused on specific challenges for example chronic disease management. In supporting the development of advanced practice, the need for educational reform is evident whereby the pathway of education builds on the graduate to advanced practice taking count of a broad-based population approach. The development of AP requires a regulatory system that has the flexibility to recognise competence and skills acquisition as they develop from graduate to advanced practice. All the evidence shows it is possible to measure and quantify the patient and economic value of investing in AP particularly when this investment is targeted at service challenges and developing a critical mass. In summary the evidence presented in the previous chapters makes a case for developing a new model of advanced practice grounded in service delivery.

This chapter describes the proposed model of graduate to advanced practice development. The aim of this chapter is to describe a new model for the development of graduate to advanced practice for nursing and midwifery. The development of the model is informed by international evidence and the current challenges and enablers for advanced practice in Ireland. The model comprises of the key features:

- population-based need service,
- education reform,
- flexibility in regulation and
- measurement of impact.

Of critical importance is the centrality of the patient and ensuring nursing services developed with safety and quality at the core.

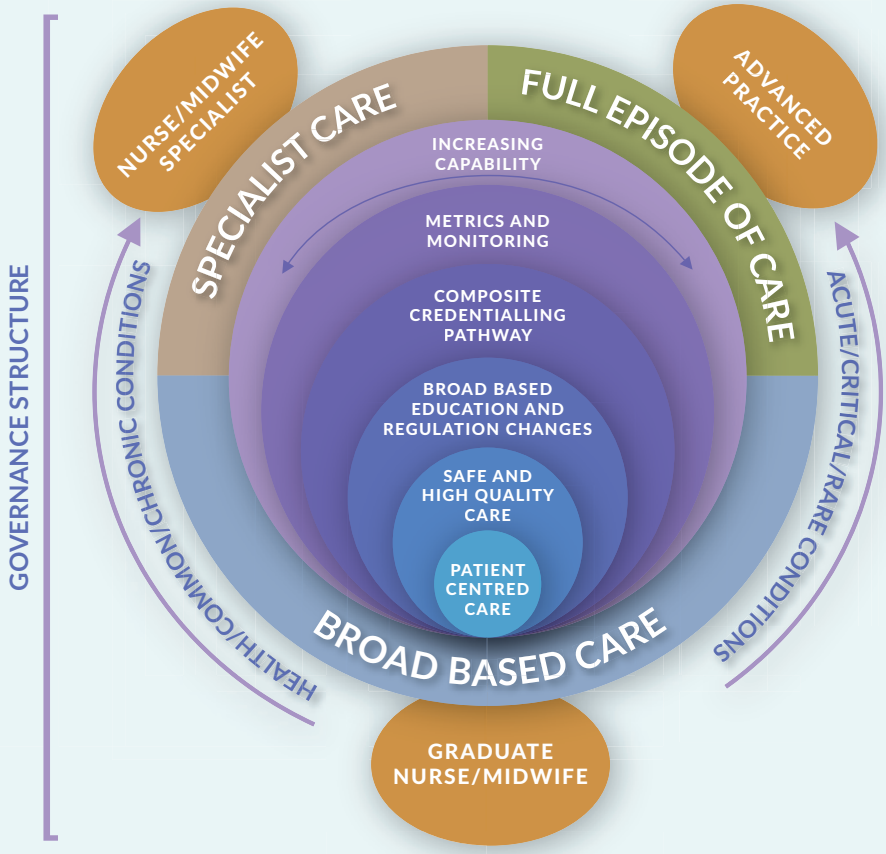
4.2. Overview of the Proposed Model

The patient is central to the model and the nurse/midwife supports the patient journey in health and illness. The model demonstrates how a nurse or midwife can advance their career using a broad-based educational approach and developing specific competencies. In achieving specific competencies, the nurse/midwife develops the capability to extend practice in line with service need and developments. In developing capability, the journey of the practitioner moves from providing care that is dependent

on structure, protocol and procedure to be in a position to utilise their capability in decision-making toward independent practice and decision making. This results in the ability to manage uncomplicated to complicated health conditions. This is enveloped in a regulatory model that builds on competence through credentialing.

The model for graduate to advanced practice incorporates the importance of interconnecting service needs with a developmental pathway for preparing the nursing and midwifery workforce. It acknowledges interprofessional collaboration. The introduction of credentialed education facilitates and recognises competence as it is acquired. This in turn facilitates a timely approach to become an advanced practitioner. It also benefits services as nurses are enabled to commence elements of advanced practice as they are credentialled. This introduces an element of flexibility which in turn can help to address service challenges. This supports collaborative team working from protocol driven, stable management of disease through to complex disease management.

Figure 6 - Model to Advanced Practice



The key features of this model are;

- broad-based education;
- regulation changes build on credentialing;
- measurement; and
- increasing capability.

The model commences with the graduate nurse delivering broad-based practice across common, stable chronic conditions to advanced practitioners delivering complete episodes of care for complex, acute and rare conditions. The pathway moves from a protocol-driven approach towards autonomous nurse-led practice delivering a full episode of care. Role development occurs along a pathway that moves from competence through to capability. Knowledge and skills to support the continued expansion of practice are developed along the way.

4.3. Rationale for Proposing a Competence to Capability model

The concepts of competence and capability have been explored in the literature and are both relevant for advanced practice. Gardner et al (2007) used a capability framework in an effort to determine the level and scope of practice of the nurse practitioners in Australia and New Zealand. This study found that competencies described many of the characteristics of the nurse practitioner but not the complete scope. The concept of capability however assisted this by describing further attributes of the nurse practitioner thus enabling a clearer understanding of all elements for advanced practice. A secondary analysis of data from interviews with 15 nurse practitioners working in Australia and New Zealand described their role as involving:

- using their competences;
- being creative and innovative;
- knowing how to learn;
- having a high level of self-efficacy; and
- working well in teams.

O' Connell, Gardner and Coyer (2014) describe competencies as being appropriate for advanced practice where stable environments exist and identify capability as the combination of skills, knowledge, values and self-esteem which enables individuals to manage change and move beyond competency. The evidence exploring '*capability*' as a framework for advanced practice standards points out a challenge for 'capability' in health care in that traditional education and training concentrates mainly on developing competence. Embracing 'capability' as a framework for advanced practice and education is recommended to focus on maximizing an individual's full potential, developing the ability to adapt and apply knowledge and skills, learning from experience, envisaging the future and helping to make it happen. This set of skills generally arises from the achievement of a specialist practice qualification, experience or through transitional education (NHS Scotland 2008). NHS Scotland's Nursing Practice

Competence and Capability Toolkit was updated in 2013 with the aim of embracing capability at an advanced practice level. To achieve this, it recommends supporting development through a portfolio of learning and competency assessment. The portfolio reflects the key elements of advanced practice and the breadth of clinical settings within which they can be demonstrated (NHS Scotland 2013).

Not all Advanced Nurse Practitioners, for example in Scotland, the United Kingdom and Australia will have undertaken a Masters level course. For individuals currently working in advanced practice posts and not having a formal Masters level qualification, compiling a portfolio of learning and competency assessment can help to demonstrate competence and capability. Education programmes support the development and recognition of advanced practice 'capability' and prepares practitioners to fulfil the requirements and expectations of an advanced practice role, but do not grant the practitioner advanced practitioner's 'status'. Practitioners are expected to achieve and demonstrate competence, confidence and expertise in practice and the required level of knowledge (NHS Scotland 2013).

An example of where this has been recently introduced is in nurses obtaining the skill for endoscopy and colonoscopy in Australia in advance of obtaining certification for advanced practice (Nursing and Midwifery Office Queensland 2014). This is a useful model for adopting in Ireland whereby a skill is obtained, credentialed and the nurse is permitted to practice the skill prior to final certification as an advanced practitioner.

4.4. The Educational Pathway within the Model

The Nurses and Midwives Act (2011) makes provision for the NMBI to approve programmes for post-registration education. Post-registration education leads to registration or annotation in specialist nursing and midwifery education and training. Higher Education Institutes (HEIs) in Ireland provide education for registration programmes and tailored programmes in defined practice areas such as emergency nursing, neonatology and critical care nursing. Educational preparation for both specialist and advanced practice includes a substantial clinical modular component(s) pertaining to the relevant area of practice. The current programmes approved specifically for advanced practice by the NMBI are listed in Appendix 4. This approach supports professional development through a pathway that outlines the expectations of practice, supports it through educational pathways that regulate experiential and reflective learning. Credentialing will allow a nurse and midwife develop from a graduate to an advanced role using a progressive educational approach, through the Model.

The literature illustrates that education, expertise and experience of Advanced Practitioners can result in differing patient outcomes and costs where standardised educational programmes do not exist (Christiansen et al. 2013; Schober and Affara 2006). It is also clear from the evidence that there is a clear bias towards developing educational programmes to support specific areas of nursing such as medical, surgical and emergency nursing and in some disease-specific programmes (Cronenwett et al. 2011). As a result, there are many opportunities for education programmes to develop and the evidence indicates that education should have a much broader approach (Perraud et al. 2006).

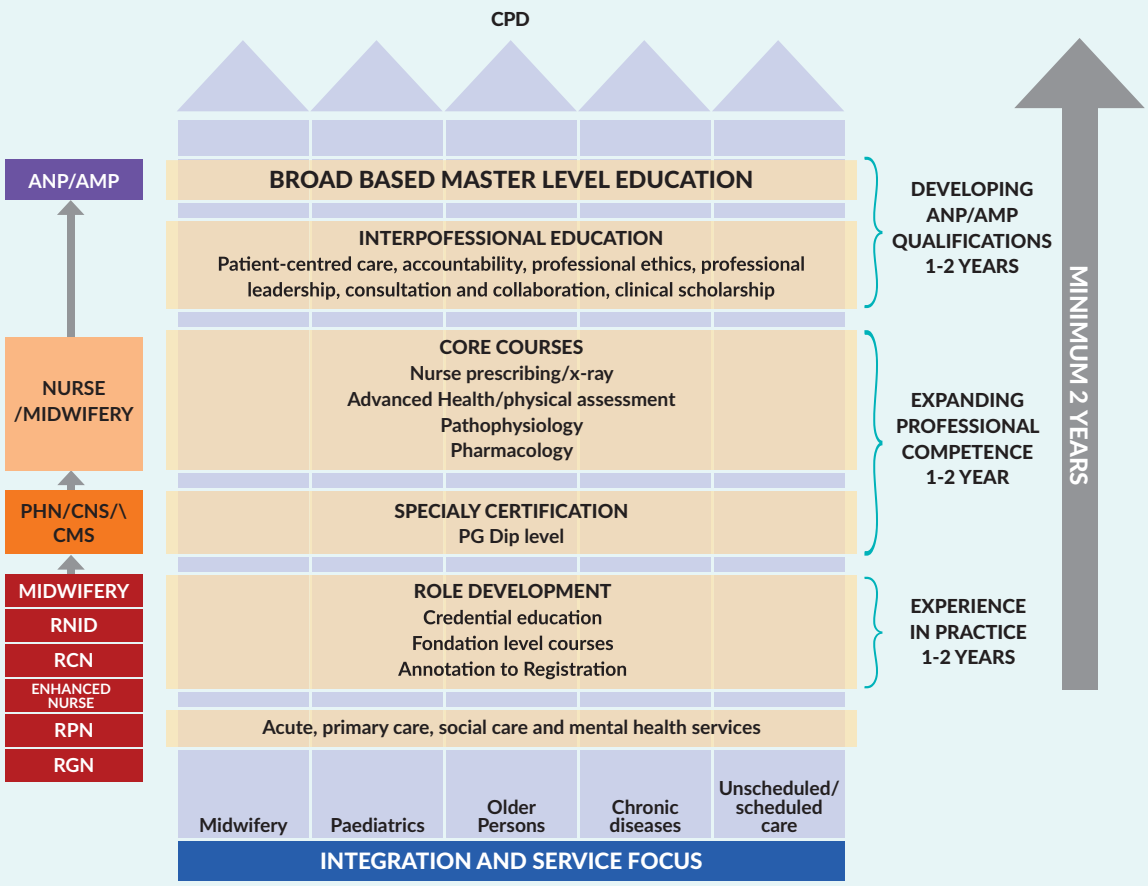
Twelve educational programmes for advanced practice developed by universities across the world were reviewed by Carney (2014). The evidence suggests that curricula for advanced practice would benefit from broadening the content to include:

- comprehensive physical assessment;
- current health issues and solutions;
- community outreach initiatives;
- coaching;
- diagnostic tests relevant to the programme;
- disease management solutions;
- developing interventions to improve patient/client outcomes;
- healthcare developments, logistical models for practice delivery;
- inter-professional approaches;
- incorporation of medicinal prescribing and ionising radiation (x-rays);
- mentorship models;
- nursing specific programmes based on a bio-psycho-social-spiritual model;
- public policy;
- technology advances and outcome measurements.

This high-level content reflects the broad-based knowledge identified as required for Advanced Practitioner preparation to embrace the capability model and further develop advanced practice roles (O' Connell, Gardner and Coyer, 2014). An important consideration for example, in the context of Sláintecare is to include current population health to enable nurses and midwives to respond to the emerging health care needs across many areas.

The education pathway now proposed for a nurse or midwife supports the five national integrated pathways of care (HSE 2016). The new timeline proposed for the development of Advanced Practice is two-years from initial registration. This is also applicable to specialist practitioners who can to develop advanced practice over a one-year period. An outline is presented in Figure 7 below.

Figure 7 - Education Pathway



4.5. Interprofessional Education

The World Health Organisation (WHO, 2010) explored the contribution of interprofessional collaboration to achieving better health and identified interprofessional education as important. They give examples of overlapping competencies between primary care physicians and advanced nurse practitioners identifying them as collaborative competencies, such as diagnosis, treatment, surveillance, health communications, management and sanitation engineering. It is further suggested that

collaborative competencies developed through interprofessional education provide a collaborative practice-ready graduate (AACN 2011). There is plenty of evidence to support interprofessional education as part of an advanced practice programme. Central to the development of advanced roles and delivering the appropriate care is to enable healthcare delivery by the healthcare professional most capable of delivering the care. The core criteria for expansion to advanced roles are identified in a recent report (HSCP 2014) and include autonomy, expert clinical practice, clinical leadership and research. The MacCraith Report (2014), a strategic review of medical training and career structure recommends the further development and expansion of education, in line with, emerging models of care, service requirements, specialist and advanced nursing/midwifery and other clinical roles. This approach will not only enable an appropriate skill mix development but also provide opportunities for clinicians to practice to the optimum of their educational preparation. It also provides an opportunity for interprofessional education in an Irish context. Internationally there is evidence that this approach to education is accepted and the University of Canterbury for example delivers an MSc Advanced Practice (Nursing, Midwifery and Occupational Therapy).

Table 11 below outlines the core areas

Table 11 - Core Learning Areas	
Concept	**Examples of possible curriculum topic areas and subjects. The level is determined by the learning needs identified by the practitioner (specialist or advanced) in consultation with peers and related to role function and evaluation.**
Person-centred care	Core concepts related to nursing and midwifery such as nursing and midwifery knowledge, philosophy and practice including topics such as individualised care, practice models, holistic care.
Autonomy and empowerment	Code of ethics and professional practice, the scope of professional practice, clinical governance, legislation power and empowerment
Professional ethics,	Frameworks for ethical development, frameworks for the management of ethical dilemmas, ethical decision-making
Consultation and collaboration	Frameworks for partnership, team building and development, presentation skills and public speaking
Professional leadership,	Leadership theories, managing change at the individual and organisational level, mentorship, interlevel dynamics, performance management and motivation skills
Clinical scholarship	Research methods applied to practice, critiquing published research, developing implementation plans for research utilisation in practice, developing practice guidelines, developing educational programmes for other nurses/midwives, developing patient education programmes, writing research proposals in consultation with an academic partner publishing research outcomes.

of learning for the model of specialist and advanced practice to determine the educational preparation (Casey et al 2015). Based on the evidence there are opportunities to explore the content of these core modules with other health professionals that would lead to collaborative interprofessional education.

4.6. Regulation to support the Model – A System of Credentialing

The evidence defines the word 'credential' as proof of a person's qualifications and is distinguished from an academic award that denotes a status level of achievement, namely the Master of Science (MSc) in Nursing (Advanced Practice). Casey (2015) considered three credentialing options based on Advanced Practitioner credentialing frameworks from the United States, Australia and New Zealand. There were elements common to all frameworks reviewed such as that all advanced practitioners must have a Bachelor of Science in Nursing prior to completing their MSc in Nursing (Advanced Practice) degree. The Australian national nurse credentialing framework (2011) identified that the option of credentialing should be voluntary and is distinct from recognising a speciality area of practice (CoNNO 2011). Casey (2015) illustrates the Australian framework is based on 13 principles grouped under the elements of:

- Governance and review,
- Operational management,
- Information management,
- Management of re-credentialing and credentialing across specialities/areas of practice.

The US framework includes more 'knowledge areas' outlined below. This credentialing process is based on the premise that Advanced Practitioners will practice to the full extent of their education and training (Institute of Medicine, 2010) and not restricted to a specific area of practice.

Credentialing knowledge area criteria include:

a. health promotion and disease prevention;
b. anatomy, physiology and pathophysiology;
c. interviewing concepts and techniques;
d. health history;
e. signs and symptoms;
f. physical examination;
g. laboratory/diagnostic tests;
h. clinical decision-making;
i. differential diagnosis;
j. pharmacological therapies;
k. non-pharmacological/complementary/alternative therapies;
l. diagnostic and therapeutic procedures;
m. bio-psychosocial theories;
n. patient and family education and counselling; and
o. community resources.

(AANP, 2015)

In the US this is overseen by an independent credentialing organisation and unlike the Australian approach the minimum requirement is that registered nurses must be in practice for four years. All three options reviewed support between 4-6 years in practice before full registration as an advanced practitioner. However, as Casey (2015) points out there is no evidence to support any delay in permitting nurses to practice at the advanced level when they have acquired the relevant education and training. The US process to support this is an assessment of basic knowledge and competencies must be held to a high standard to protect the individual and the public and therefore includes an examination. There is also a requirement for clinical experience to reach 750 hours of supervised practice at an advanced level.

In Australia, Advanced Practitioners are eligible to apply for credentialing after successful completion of the MSc in Nursing (Advanced Practice) and submission of a portfolio that demonstrates meeting the credentialing knowledge area criteria through ongoing education and clinical practice. The regulatory/accreditation body must approve the portfolio in order for credentialing to be granted.

The approach in New Zealand then offers a slightly different approach where advanced practitioners must successfully complete the MSc in Nursing (Advanced Practice). The Advanced Practitioner is then supervised for the first year of practice. This mentoring process supports the transition from the role of the nurse to the role of the advanced practitioner and is supported by four domains of practice that describe the knowledge, skills and attitudes of advanced nursing practice that the candidate must demonstrate. The four domains are:

- Advances practice and improved health care outcomes;
- Assesses using diagnostic capacity;
- Plans care and engages others; and
- Prescribes, implements and evaluated therapeutic interventions.

Needleman (2014) found that nurses and organisations perceive credentialing as an effective mechanism to advance safety, improve quality, improve processes of care, clarify and define the roles of nurses and other team members. It also provides professional support and has been shown to improve job satisfaction. There are many considerations form the evidence for development in the Irish context.

Romano (2014) developed a simple conceptual model of a credentialing pathway. The pathway moves along a trajectory involving the individual nurse performance, the organisation of nursing work/tasks and the organisation leadership and culture. It

incorporates many of the elements of other approaches identified in the literature and other important concepts supporting a high-level nursing response to achieve better patient outcomes.

Importantly for the Irish context, regulation through NMBI already facilitates credentialing for specific skill/knowledge development that may be obtained outside the jurisdiction. NMBI is therefore in a good position to commence recognition of a clinical career pathway, facilitating annotation against the name of a registrant as provided for in the Nurses and Midwives Act 2011. The current model of recognition of supplemental, special purpose, minor and major awards (QQI framework) provides the basis of reconsidering recognition of achievement by nurses and midwives through an annotation process to a name on the register.

Creating a pathway for skill development from graduation in a meaningful, purposive manner ensures the capability of the nurse/midwife to respond and meet service need. In contrast to the RANP/RAMP, the CNS/CMS is not a division of the NMBI and therefore not regulated. There are however, minimum educational requirements specified at the service level to be employed as a CNS/CMS. The current minimum educational requirements to be met are set at post-graduate diploma level in the specialist area. The proposed credentialing model takes account of these minimum educational requirements in addition to specific skill acquisition qualifying for annotation against a registration. Recognition as a CNS/CMS to meet service needs, therefore, requires completion of a post-graduate qualification together with a minimum of 1 year experience working in the specialist area. This is in addition to meeting the requirements set by the HSE to ensure the delivery of safe, effective practice to meet service demands. The flexibility that is offered in this approach to the development and recognition of the CNS/CMS offers employers and practitioners an enabling method to address the changing need of population demand. Tight regulation of the role of CNS/CMS had the potential to inhibit innovation and development. The role of CNS/CMS offers practitioners a career pathway incorporating professional development within an interprofessional team structure. The following pathway is therefore proposed for the development of graduate, specialist and advanced practice nurses and midwives.

The pathway outlines a two-year timeframe from graduate through to advanced practice that is reflective of current international trends of meeting educational requirements. This pathway additionally includes a credentialing framework that the NMBI should consider supporting skill acquisition and competency within a capability continuum. Following recognition by

annotation of a registration with the NMBI, a nurse or midwife can safely commence this practice whilst undertaking further education to achieve a status of specialist or advanced practitioner. This will ensure that the nurse/midwife keeps their skill fresh while also providing valuable service to patients who require the service. The educational pathways require a minimum of two years in the speciality area of practice to gain the required two years of experience. This may occur in conjunction with a master's education programme. The minimum timeframe to achieve registration as a RANP/RAMP within this framework is now 2 years. This pathway assists nurses/midwives to identify the gaps for service need and population health needs. The education decision-making for career development by nurses/midwives can then support succession planning for service need. In embracing a capability continuum through a credentialed education pathway the nurse/midwife can then apply to the NMBI to have their registration annotated on the register to reflect the additional achievement of the skill/credential and they can then practice that skill/competency safely.

4.7. Governance

The development of nursing and midwifery roles along the pathway from graduate to advanced practice places new responsibilities upon the practitioner. Therefore, there is a need for organisations to ensure that robust governance arrangements are in place to encourage, enable and support the safe and consistent development of these roles for patient benefit. Organisations need to assure that robust governance arrangements, surrounding all types and levels of practice, are in place prior to their establishment. This is necessary to allow advanced practitioner roles to function fully. New professional support arrangements, which recognise the nature of the role and the responsibilities involved, will be required and existing professional support mechanisms may not be enough. Good governance regarding role development and implementation must, therefore, be based upon consistent expectations of the level of practice required to deliver a high-quality and safe service.

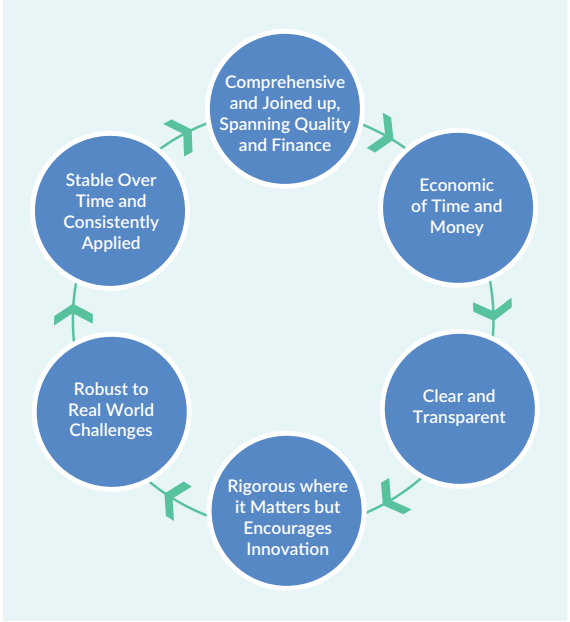
This is best achieved through the benchmarking of such posts against nationally agreed standards and processes as outlined above. Concern about new roles is both prudent and understandable and it has been argued that risks to safety arise when professionals take on roles and responsibilities for which they lack competence or where they practice without adequate safeguards. However, work by the Commission for Healthcare Regulatory Excellence (CHRE, 2009) has emphasised that the activities that professionals undertake at advanced level practice do not lie beyond the scope of existing regulation unless the

nature of their practice changes to such a significant extent that their scope of practice is fundamentally different from that at initial registration.

The benefits of advanced and specialist roles are well established. Therefore, putting in place a local governance structure assures good clinical and corporate oversight of all changes in practice and outcomes.
In a recent paper published by Hudson (2016), on integrated accountability for integrated care, the issues of determining priorities, allocating resources, monitoring progress, ensuring delivery and learning lessons are key outputs from an accountability framework. Corporate, financial and clinical governance are interconnected. Clinical Governance systems which HSE service providers are accountable for include creating environments where continuous improvements in the quality of clinical practice and high standards of care flourish along within accountability and governance structures. The advanced nurse practitioner has a major role in delivering these high standards of care.

Notwithstanding that the key principles outlined in this paper are targeted at the national level, the principles are no less transferable to the local context. The principles shown in the diagram below include;

Figure 8 - Key Principles of Clinical Governance



These key principles of good governance (Fig 8) demonstrate the interconnected factors upon which any oversight structure rests. Establishing comprehensive and joined-up oversight of the system in which an Advanced Practitioner is practising is the essential first component. The oversight of the governance structure must be broad enough to capture all areas affected by the Advanced Practitioner's practice while also deep enough to witness the outcomes. A challenge lies in the governance itself must be economical to both time and finances. A laborious and costly governance structure is self-defeating and soon becomes non-

functioning. The governance structure must maintain transparency in all its dealing in order to remain accountable, fair and honest; this includes open acknowledgement of shortcomings identified and the disclosure of information when appropriate. Through transparency and openness, a rigorous approach is mandated, but this also allows for reasonable flexibility to encourage innovation to problem-solving and solution building. These factors are interconnected to create a governance structure that remains sustainable over time, consistently applied and robust against short-term changes.

As previously highlighted throughout this policy, these roles should not function in isolation, but rather within a service of other graduate/specialist/advanced roles and within the multidisciplinary team to deliver composite care. They are dependent upon the availability of other functions and roles within the organisations as a whole, to maximise their impact, and gain a return on their investment. In order to enable, support and develop these roles, robust governance of these roles within organisations is necessary. It is notable that the Framework for Advanced Nursing, Midwifery and Allied Health Practice published by NHS Wales (2010) and the Scotland Career Framework Guidance (2008) reflected many of the principles outlined above by Hudson (2016) report, albeit specific to these roles that include;

- Clarity regarding the service they work within/deliver;
- Clear objectives to be achieved;
- Strong organisational value on these roles;
- Well thought out process/structures for the development, implementation and evaluation of these roles at local level;
- (Adapted from NHS Wales, Framework for Advanced Nursing, Midwifery and Allied Health Professional Practice 2010).

4.8. Measurement

Measuring the value of nursing and midwifery's contribution to health services is often difficult to quantify in economic terms because of the team-based, holistic nature of the work. This chapter will outline the literature related to evaluation, explore potential performance indicators and describe the data collection for Advanced Practitioners.

4.8.1. Measuring the economic impact of Advanced Practitioners

Efforts have been made by the Research Services Unit of the DoH to quantify the impact in economic terms of the contribution of the effective utilisation of nurses and midwives in delivering health care services. A framework for the measurement of the effectiveness of the nursing contribution in its wider sense to health care provision, was examined that presented several metrics. The metrics provide guiding principles that

shaped an evaluative framework to assess the effectiveness of specialist and Advanced Practitioners seeking to meet the needs of a changing population.

Performance measurement is important as a way of ensuring that the delivery of care is achieving what it is set out to do. An evidence review commissioned by the Department of Health in 2015 found that Key Performance Indicators (KPIs) are being collected on a significant scale throughout a range of organisational types and locations throughout Ireland. The KPI's collected span structural, process and outcomes types. The main KPIs utilised that embrace structural, process and outcomes metrics are around nursing and midwifery workforce which include the CNS/CMS and Advanced Practitioner; quality of nursing/midwifery care; client experience; case management including coordination; diagnosis and intervention; organisation activities to include leadership, education and research.

There are a number of KPIs to be developed to measure the impact of this model. They relate to Patient outcomes and quality of care, professional education, regulation and cost. Performance measurement is imperative, to ensure that delivery of care is meeting the targeted healthcare needs. KPIs contribute to the provision of high quality, safe and effective service, that meets the needs of service users (HIQA, 2012). Significantly there are no national data collection systems that report on Advanced Practitioner nursing activities or outcomes.

The development and rollout of a changed model in relation to advancing practice must be accompanied by the HSEs development of a set of KPI's that can be used to capture the output activity of the Advanced Practitioners including numbers of patients seen; numbers of patients accommodated from the waiting list; research activities of the Advanced Practitioner and data relating to clinical care outcomes, including cost-effectiveness to achieve an on-going economic evaluation of the Advanced Practice roles.

Future additional metrics that should be included are:

- Health status;
- Quality of life;
- Quality of care;
- Patient satisfaction;
- Length of hospital stay; and
- Costs.

In addition, the opportunity to obtain data relevant to the nursing arena should be explored with the Higher Education Institutes and the Regulatory body.

Examples of the KPI's at **regulatory level** include:

- Evaluating the time, it takes to be registered as an Advanced Practitioner;
- The education currently available that can be credentialed in a portfolio; and
- The number of nurses and midwives who obtain registration as an Advanced Practitioner.

Examples of the KPIs at an **education level** include:

- Provision of inter-professional education offered;
- Variety of programmes available to support service need;
- Provision of broad-based education options; and
- The number of collaborative mentorship/ preceptorships offered.

Additional metrics that should be considered for metrics within a structure, process and outcome framework include health status, quality of life, quality of care, patient satisfaction, length of stay and costs. As such, the goal of KPIs is to contribute to the provision of high quality, safe and effective service that meets the needs of the service user (Table 12). The development and rollout of a changed model in relation to advancing practice must be accompanied by the HSEs development of a set of KPI's that can be used to capture the output activity of the CNS/CMSs and RANP/RAMPs including numbers of patients seen; numbers of Healthcare Associated Infections (HCAI's) reduced; numbers of patients accommodated from the waiting list; research activities of the RANP/RAMP and data relating to clinical care outcomes, including cost-effectiveness to achieve an on-going economic evaluation of the CNS/CMS and the RANP/RAMP roles.

Table 12 - Minimum Dataset

Impact	Data being collected	What this demonstrates
Waiting Lists	The number of patients reviewed for the first time by the ANP in scheduled care clinics. The Number of patients reviewed by the ANP in comparison to the number of patients in the clinic	Reduction in volume of waiting list numbers. Impact of ANP in the service
Hospital Avoidance	Location of the patient within the clinical setting when reviewed by the ANP Interventions completed by ANP and outcome of patient eg Referred to ANP clinic instead of acute service	Reduction in ED presentations Increase in patients seen by ANP in the community or primary care Increase no of patients seen in AMAU
Access and Choice	Number of patients reviewed by ANP throughout the healthcare setting. Indirect contacts with patients Average length of time for a patient to be reviewed by an ANP following referral	Impact of ANPs throughout the healthcare setting. Efficiency of ANPs throughout the healthcare setting
Patient Flow	Number of patients had an episode of care delivered by the ANP Location of the patient in the healthcare setting when reviewed by the ANP	Impact of ANPs in unscheduled care Efficiency of ANPs within service

4.9. Summary

The new model sets out a comprehensive integrated approach to advanced practice development built around a pathway which takes a nurse on a journey of competence to capability from protocol-driven care to autonomous practice managing total episodes of care for complex illness. The model is supported by a revised educational approach, a regulatory system based around credentialing. The model draws attention to the importance of developing a system of measuring the impact on patient outcomes and service delivery improvements. The model also acknowledges the need to support major reform with the robust system of clinical governance. The next stage in developing a new approach to advance practice will involve testing of the model. To this end the next chapter sets out the strategy employed to test the model in practice with a view to determining its capacity to deliver on the intended outcomes.

Summary of the Goals and Actions.

Goal 2 sets out the actions for development to address the challenges outlined in this chapter's review of the educational context of nursing in Ireland.

GOAL 2	Change the way we educate and train graduates, specialists and advanced nurse/midwife practitioners	
Action	**Details**	**Responsibility**
a	Introduce a system of credentialing to meet service need based on the interconnected model for graduate, specialist and advanced practice.	NMBI
b	Implement under Section 48 (3) of the Nurses and Midwives Act (2011) a process to annotate the name of a nurse or midwife who successfully completes credentialed education particularly related to skills acquisition.	DOH NMBI
c	Change the registration for nurse/midwife prescribing to become a component of credentialed education in a career pathway for graduate to advanced practice to support integrated and community care.	NMBI
d	Recognise accredited education obtained in other jurisdictions in a clinical career pathway for a nurse/midwife joining the workforce in Ireland.	NMBI
e	Reduce the minimum regulatory timeline for undertaking an advanced practice pathway to 2-years.	NMBI
f	Develop a 1-year graduate certificate type programme as a shortened educational pathway for experienced nurses and midwives to obtain outstanding educational requirements for advanced practice.	HSE NMBI HEI
g	Provide for broader-based education preparation of advanced practitioners to avoid the development of micro-specialisation within a service speciality.	NMBI HEI
h	Establish interprofessional education standards and requirements with other members of the interdisciplinary team that support the concept of capability for role share/exchange between professions.	NMBI CORU MCI HEI
i	Enhance collaborative interprofessional mentoring supports and systems across training programmes within the interdisciplinary clinical teams.	HSE HEI
j	Develop a pathway that allows for advanced practitioners to continue their career journey in research and teaching to Doctoral level.	HEI HSE
k	Develop governance and managerial structures that support collaborative interdisciplinary team working that enable the skills of nurses and midwives at graduate, specialist and advanced practice be maximised for patient-centred care.	HSE

Goal 4 sets out the actions for development to address the challenges outlined in this chapter's review of measurements required to assure the success of the model of graduate to advanced practice.

GOAL 4	Measure the impact and effectiveness of the new model	
Action	**Details**	**Responsibility**
a	Develop a set of KPI's that captures the output activity of advanced practitioners to include numbers of patients seen; numbers of patients accommodated from the waiting list; and data relating to clinical care outcomes, including cost-effectiveness to achieve an on-going economic evaluation of advanced practice roles.	HSE
b	Explore the feasibility of developing an evidence-based evaluation model for advanced and specialist roles underpinned by research, similar to the PEPPA model.	HRB

Chapter 5
Testing the Model of graduate to advanced practice

Chapter 5
Testing the Model of graduate to advanced practice

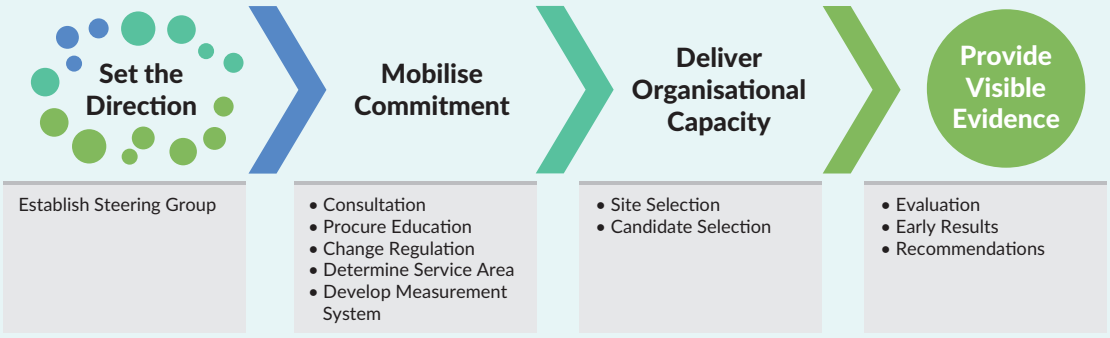
5.1. Introduction

This chapter outlines the strategic approach taken to test and implement the model of graduate to advanced practice in action. The strategy involves 4 phases which include: setting direction, mobilising commitment, delivering organisation capacity and demonstrating impact. This chapter continues to describe how each of these phases progressed and culminates in a set of recommendation embedding the initiative in the system in a sustainable manner.

- governance;
- regulation;
- service implementation;
- education; and
- evaluation.

The steering group operational structure is illustrated below. Local implementation groups were established to drive implementation and deal with emerging challenges.

Figure 9 - Strategy to Test Model



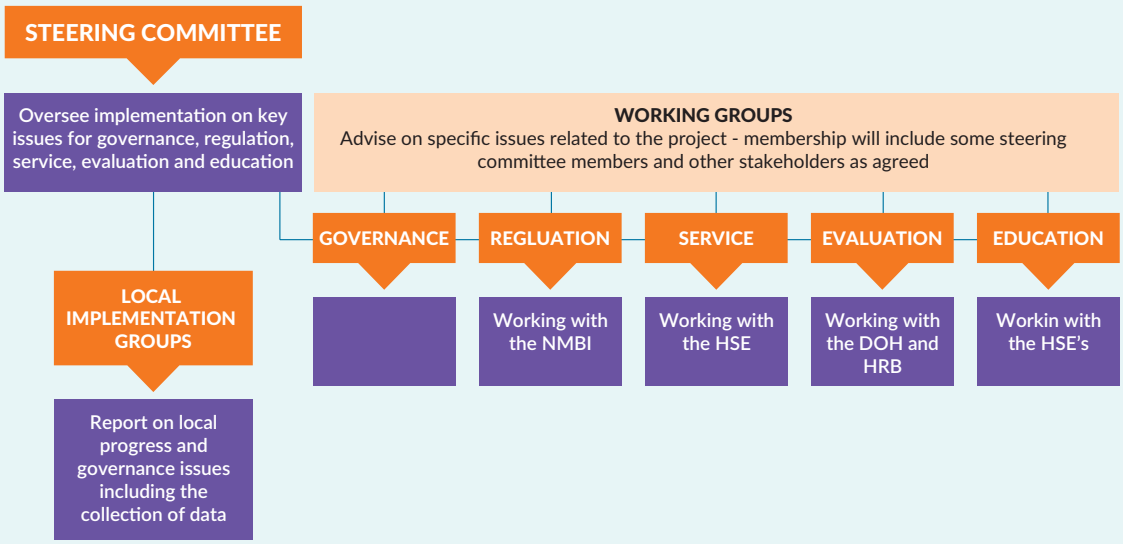
5.2. Setting the direction

Setting the direction involved several steps including:

5.2.1. Establishing the Steering Committee

In testing this policy, a two-year demonstrator project was managed by a National Steering Committee (Appendix 5). The Steering Committee managed the workload associated with the terms of reference through working groups particularly in relation to:

Figure 10 - Structure of Steering Committee and Working Groups



One of the actions listed in the Draft Policy for Graduate, Specialist and Advanced Nursing and Midwifery Practice, approved by the Management Board in February 2017 and membership requested by the Minister for Health, was the establishment of a national steering committee to oversee the two-year implementation period of the policy. The Steering Committee was charged with overseeing the implementation of the key issues of governance, regulation, service, evaluation and education, supported by a working group structure.

The Steering Committee comprised a broad range of interests and expertise, from the Department of Health and HSE acute services and CHO areas, Primary Care and Social Care, Directors of Nursing, representative associations, members of the public and higher education institutions to a representative of the candidate ANPs.

The letters requesting nominations for the Committee were issued. The first meeting of the Steering Committee took place in May 2017 and continued monthly. The agreed Terms of Reference of the Steering Committee can be found in Appendix 7.

Method of working

A Project Initiation Document was drafted to outline the purpose and objectives of the project (Appendix 6). A number of working groups were established, with support from members of the National

Steering Committee. The purpose of the working groups was to pilot and test the recommendations in the draft policy, with a view to addressing issues that may affect the implementation of demonstrator sites and the associated education programme. The Chair of the National Steering Committee convened meetings with the Chairs of the working groups to ensure that the outputs were integrated into the work plan of the Steering Committee and reported on monthly to the committee.

Working Groups
A number of documents were developed in the course of the 2017 campaign through the working group structure. These include:

- requirements and Standards for Advanced Nurse Practitioners (NMB);
- criteria for Registration as an Advanced Nurse Practitioner (NMBI);
- a draft guide to measuring the impact of the ANP initiative (DoH);
- local Implementation Group Terms of Reference document (HSE);
- clinical Supervision document for the cANPs (HSE);
- cANP job description (HSE);
- template for Memorandum of Understanding (HSE);
- template for Site Rotation Service Level Agreement (HSE);
- commencement of Legislation (DoH);
- Nurses Rules (NMBI and DoH); and
- Regulations & Guidelines governing Advanced Practice (NMBI).

5.3. Mobilising Commitment

5.3.1. Broad Ranging Consultation Process

This policy was informed by extensive consultation with a wide range of stakeholders including national and international experts, educationalists, regulators, managers, policymakers and chief nurses. A five-week national consultation process across the country and a web-based survey were conducted throughout April 2017 (see Table 13). Consultation on an alignment with the HSE model of integrated care delivery was also undertaken with the clinical leads of the clinical care programmes and senior management of the HSE.
The participation and contributions from all stakeholders were welcome, with the feedback collected at the ten regional consultations, through an online survey, by email and through Twitter. The e-zine of the NMBI, which has a distribution of approx. 40,000 nurses and midwives, was used to notify and encourage participation by nurses and midwives in the consultation process. Feedback from the national consultations 2017 was received by the following means:

Table 13 - Feedback from Consultations

Source	Submissions received	Anonymous
Survey Monkey	69	Yes
e-mail	16	No

The data collected from the regional consultations, the national consultation process and the submissions were independently analysed by a qualitative research expert who had no conflict of interest in the process or the findings. The consultation findings were provided to the National Steering Committee and these informed their work in the further development of the project.

Summary of the Consultation Findings
Feedback from the consultation process was predominantly positive; for example:

- There that there was broad agreement that an increase in the number of APs was required;
- Working examples where AP was already in place were endorsed such as, an asthma management service in a primary care setting;
- The positive impact of having the right skill mix for care delivery was highlighted;
- There was significant support for a credentialing model; and
- There was also broad agreement that advanced practice had become too specialist and needed to change to provide a broad-based approach to care delivery in line with service challenges.

The feedback provided an opportunity to review the current models of practice that the various working groups then refined in-line with the proposed model. The feedback also identified a number of challenges, for example role definition in the primary care setting is complex and will need further work to provide clarity. The full summary of feedback is available in Appendix 8

5.3.2. Procuring education

The policy set out practical changes within an education framework for graduate, specialist and advanced practitioners that are linked to service needs and integrated care pathways by:

- Developing a critical mass of RANP/ RAMPs in a flexible, timely fashion that can provide a full episode of care;
- Introducing a credentialing pathway for nurses and midwives to equip them with the capability to deliver safe and responsive care in a variety of service settings;
- Streamlining the educational pathway from 7 years to 2 years;
- Facilitating inter-professional education to promote integrated delivery of care, and the most efficient delivery of education and practice development; and
- Focus on ensuring a broad-based availability of service providers to meet current, emerging and future service needs.

The new education model and the significant increase in the number of Advanced Nurse

Practitioners supports the introduction of an integrated model of care by the provision of care within the home, avoiding unnecessary hospital admission, reducing the waiting lists, improving access to service and improving patient flow through the health services.

A tender for a broad-based education programme, to test the model, was developed in collaboration with the HSE, who conducted the competition between May and July 2017. The programme acknowledges and credits prior learning and depending on the development of the candidate ANP, the education programme provides both a one-year and two-year option. The programme commenced in October 2017. The tender included the requirement by the education provider to:

- Design and deliver a curriculum for a 1-year Graduate Certificate Education Programme (QQI Level 9) and a 2-year part-time Masters Education Programme,
- Work in partnership and collaboration with the HSE/ONMSD and services in the design and delivery of the programme to enhance/co-ordinate the ANP experience;
- Ensure flexibility, ease of access, and provide varied evidence-based teaching, learning and assessment methodologies;
- Promote and support experiential learning; and
- Develop advanced assessment, clinical reasoning and decision-making skills to manage patient caseloads, episodes of care and refer as appropriate.

The education programme is designed to provide the ANPs with the educational support to achieve the clinical practice experience and competencies to manage a full episode of care for a patient. The programme develops a broad range of assessment skills and decision-making skills for nurses in the areas of chronic disease management, unscheduled care and older person care.

The programme design and curriculum were required to prepare the ANP to develop and utilise advanced clinical nursing knowledge and critical thinking skills to independently assess, diagnose and provide optimum patient care through caseload management. The holistic management of a caseload, through providing care or making the appropriate referrals within the interdisciplinary team, was to include health promotion, health maintenance, assessment, diagnostics, nursing diagnoses, therapeutic interventions, preventative care, rehabilitation and palliative care.

The core elements of the programme to meet the revised Standards and Requirements and competencies developed by the Nursing and Midwifery Board of Ireland include:

- Nurse prescribing/x-ray

- Advanced assessment, diagnosis and referral
- Diagnostic reasoning and decision-making
- Case management and first point of contact
- Leadership
- Research

The content is in line with the advanced clinical activities identified by Maier and Aiken (2016) when they compared advanced practice in 39 countries. The education programme began on the 23rd of October 2017. The students were allocated places for the academic year 2017/2018 in the consortium led by University College Cork that includes National University of Ireland Galway, University College Dublin and Trinity College Dublin. The course, underpinned by international evidence, credits prior learning and is being delivered at master's degree level.

Minister for Health Simon Harris officially launched the new education programme for Advanced Nurse Practitioners on the 21st of November 2018 in University College Dublin. A further intake of 40 ANPs commenced on the programme in September 2018.

5.3.3. Changing the regulatory framework

The regulation of nursing/midwifery practice is managed by the NMBI. The education model proposes credentialing of specific skill/knowledge development, obtained either in Ireland or outside the jurisdiction, that NMBI would recognise in a clinical career pathway and annotate against the name of a registrant as provided for in the Nurses and Midwives Act 2011. The current model of Category I and Category II approval with the inherent recognition of supplemental, special purpose, minor and major awards (QQI framework) provides the basis of reconsidering recognition of achievement by nurses and midwives through an annotation process to a name on the register. The current approval recognition frameworks of education and training provided by the NMBI is under review to embrace new ways of working.

The key feature of a broad-based education system is that it supports standards based on sectoral occupational profiles while incorporating relevant transversal skills. Additionally, having a unified and coherent system connects further with higher education and training in respect of awards. Specifying learning outcomes as meaningful work-based learning components facilitates understanding and comparability across the systems while facilitating mobility in clear progression pathways. The NMBI developed and approved revised Standards and Requirements that incorporate competencies for Advanced Nursing Practice programmes in 2017. The NMBI also reviewed the registration criteria and Nurses Rules to reflect a more dynamic, flexible registration process that registers the nurse not the post.

The education pathway now proposed for a nurse or midwife supports the five national integrated pathways (HSE 2016) of care. The initial registration of a nurse underpins the integration focus and is based on a developmental model that embraces credentialed education that can be annotated by the NMBI. The new timeline for education development of a RANP/RAMP is two-years from initial registration. In this model it is also possible for specialist practice education preparation to develop to meet service need in a one-year period. Additionally, the NMBI made five sets of Rules that were signed by the Minister for Health to facilitate a new educational, registration and recognition pathway for advanced practice nurses.

5.3.4. Develop a measurement system

The Chief Nursing Office worked with the Health Intelligence Unit, the Business Intelligence Unit and IT department of the HSE, Policy and Strategy, Research and Development and Health Analytics Divisions of the Department of Health to identify opportunities to collect and share data in respect of planning population health needs in Ireland and identifying the nursing response to meet these needs. Further collaboration occurred with the Integrated Care Programmes and the Clinical Care Programmes to identify opportunities to collect and share data sets.
As there are no national data collection systems that report on nursing activity, on advice from the ICT Department of the HSE, tools were designed to collect activity and intervention data of ANPs in the four specialities, in consultation with the ICP and CCR. The tool has the capacity to connect with HIPE and NQAIS data systems.

The minimum data set illustrates the impact of the project on the current service challenges. The data collection template was developed and tested widely with the candidates across the specialities and the clinical care programmes.

This data collection tool is underpinned by the key performance indicators of clinical care and integrated care programmes. In addition to these key performance indicators the nursing intervention is also captured to demonstrate the impact of nursing on the four principle outcomes of the policy. The candidate ANPs were issued with handheld devices to capture the data on a database devised specifically for the purpose. The following reports are available from the data collection:

- The total number of patients seen by the cANP or RANP
- The activity of the cANP is captured throughout the unscheduled care setting, in-patient setting and outpatient setting. This will then be put into context using national activity data systems such as HiPE.

- The total number of patients that were discharged from the ANP service or referred to another healthcare setting by the cANP or RANP
- The total number of patients referred to another healthcare setting by the cANP or RANP from both the unscheduled and inpatient care areas
- The number of patients that were referred to an outpatient clinic from both the unscheduled care and inpatient areas by an cANP or RANP; and
- The interventions carried by the cANP or RANP including: Comprehensive physical assessment; Medication Management; Medicinal Prescribing; Ionising radiation prescribing; Referral to Allied Health Professional; and Referral to another medical/surgical speciality.

5.4. Delivering Organisational Capacity

5.4.1. Selection of Sites

The workforce in the HSE based on the December 2016 personnel census totals 35,835 nurses and midwives. This showed 1332 CNS/CMS employed in the HSE with a number of these with varying education qualifications and therefore potential candidates to develop on the career pathway. It was predicted that to create a critical mass of ANPs by 2021 i.e. 700 ANPs, there was a requirement for 120 nurses and midwives to be supported by the HSE to undertake the education programme in 2017 with further development as illustrated in Table 14.
The timeline is predicted on the successful evaluation of the demonstrator sites. If the evaluation indicates the target can be achieved. As below:

Table 14 – Projected Number of ANPs Registered per year

Year	2017	2018	2019	2020	2021
Intake	120	130	140	140	
Total	174	294	424	564	706

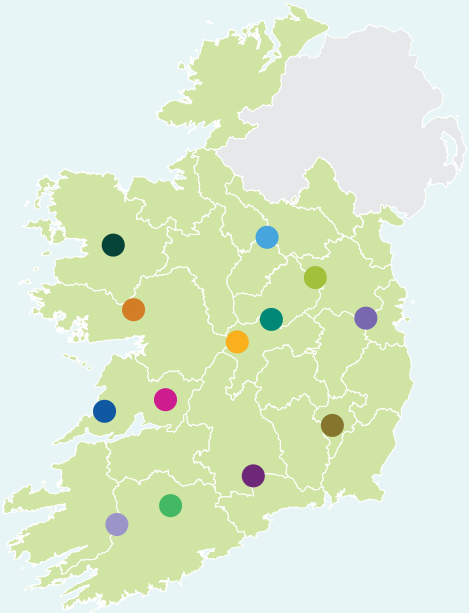
Based on data related to waiting lists from the NTPF, ED attendance and profile of patients attending ED the areas for service development were agreed by the Management Board of the Department of Health. In advance of a letter inviting expressions of interest to participate in the project the criteria for site selection of sites to develop services for ANP was agreed

by the National Steering Committee (see Appendix 9). An invitation to apply with an expression of interest to develop the ANP services was sent to the HSE acute services and CHO areas via the Group Directors of Nursing and the Heads of Social care, Primary care, and the ONMSD of the HSE.

5.4.2. Creating Critical Mass 2017

All the Hospital Groups and some CHO areas responded to the call for expressions of interest yielding a total of over 250 potential sites with a potential 404 nurses available to commence the ANP education programme in 2017. A short-listing exercise based on the aims of the project and the proposed targeted areas of the project was conducted by a sub-committee of the Steering Committee. As the process was oversubscribed, communication was made with the unsuccessful applicants. 124 Candidate ANP's were identified from the applications in the areas of chronic disease management (including COPD, Rheumatology), older person care (including frailty) and unscheduled care (including acute medical assessment) for which funding for education and backfill, was made available to enable the demonstration of a critical mass. The final selection of 124 places were selected across a wide geographical spread that included integration where possible. The selection of places on a hospital group basis is set out below (Fig 11):

Figure 11 - ANP Distribution by Speciality - 2017



IRELAND EAST HOSPITAL GROUP: 33

Unscheduled Care	2
Older Persons Care	2
Respiratory	2
Rheumatology	8

SAOLTA HOSPITAL GROUP: 23

Unscheduled Care	5
Older Persons Care	9
Respiratory	6
Rheumatology	3

UNIVERSITY OF LIMERICK HOSPITAL GROUP: 7

Unscheduled Care	2
Older Persons Care	3
Rheumatology	2

NATIONAL CHILDREN'S HOSPITAL GROUP: 9

Unscheduled Care	7
Rheumatology	2

CHO 2

Mental Health	1

CHO 4

Mental Health	2

CHO 8

Mental Health	2

DUBLIN MIDLANDS HOSPITAL GROUP: 20

Unscheduled Care	3
Older Persons Care	9
Respiratory	2
Rheumatology	5

RCSI HOPSITAL GROUP: 30

Unscheduled Care	11
Older Persons Care	6
Respiratory	8
Rheumatology	4

SOUTH-SOUTH WEST HOSPITAL GROUP: 27

Unscheduled Care	11
Older Persons Care	11
Respiratory	2
Rheumatology	3

CHO 1

Older Persons Care	5
Mental Health	2

CHO 3

Mental Health	1

CHO 5

Mental Health	2

5.4.3. Planning the 2018 Programme

In November 2017 an evaluation meeting discussed the 2017 programme with the aim of planning for 2018. It was agreed that the 2017 project was a success and the cooperation between all interest groups led to the successful introduction of the new broad-based education programme. It is understood that over half of the cANPs will complete the education programme in 2018. The funding was secured for the backfilling or all posts.

The Steering Committee was provided with feedback from the processes and implementation of the 2017 project. The feedback was provided under the themes of what worked well; what lessons were learned/challenges; and what we could improve on.

All of the feedback was then reviewed with the available data surrounding service challenges and planned service developed in order to build critical capacity for 2018. The clinical care programmes and the integrated care programmes were contacted from January through to March. A number of programmes submitted detailed business cases with a view to being considered for the national project should the specialities be extended. The possibility of extending the 4 areas of practice to other specialities was explored. It was also agreed that providing a longer expression of interest timeline would facilitate the CHO's participation in the application process.

5.4.4. Creating Critical Mass 2018

As in 2017, an expression of interest letter was distributed to services in April 2017. In 2018 this was managed by the ONMSD of the HSE. However, despite many efforts both in the Department of Health and the HSE, the allocation of funding for the 2018 intake would only stretch to the permanent backfilling of 30 ANPs. Applications were received from all 7 Hospital Groups and 9 CHO areas and reviewed during May 2018 by the Review Group. Sites were chosen in line with the agreed criteria as set out in the application form and weightings applied from the responses supplied. The outcome was as follows:

- 278 applications for 468.5 posts were received;
- **87** applications for **132** posts did not meet the criteria for consideration;
- Of the remaining applications, **78** applications for **139.5** posts have fulfilled the criteria for consideration in the specialist areas of chronic disease management (Respiratory and Rheumatology), older persons care and unscheduled care;
- **59** applications and **96** posts were proposed as demonstrator sites:
  - Rheumatology x 4;
  - Unscheduled Care x 27;
  - Respiratory x 16; and
  - Older Persons x 49

The final selection that met the criteria for the 30 posts is shown in Appendix 10. The selection of candidates was complete by June 2018 with registration with the colleges by the end of June 2018 and commencement of education with backfill of posts in September 2018.

5.5. Provide Visible Evidence

5.5.1. Evaluation

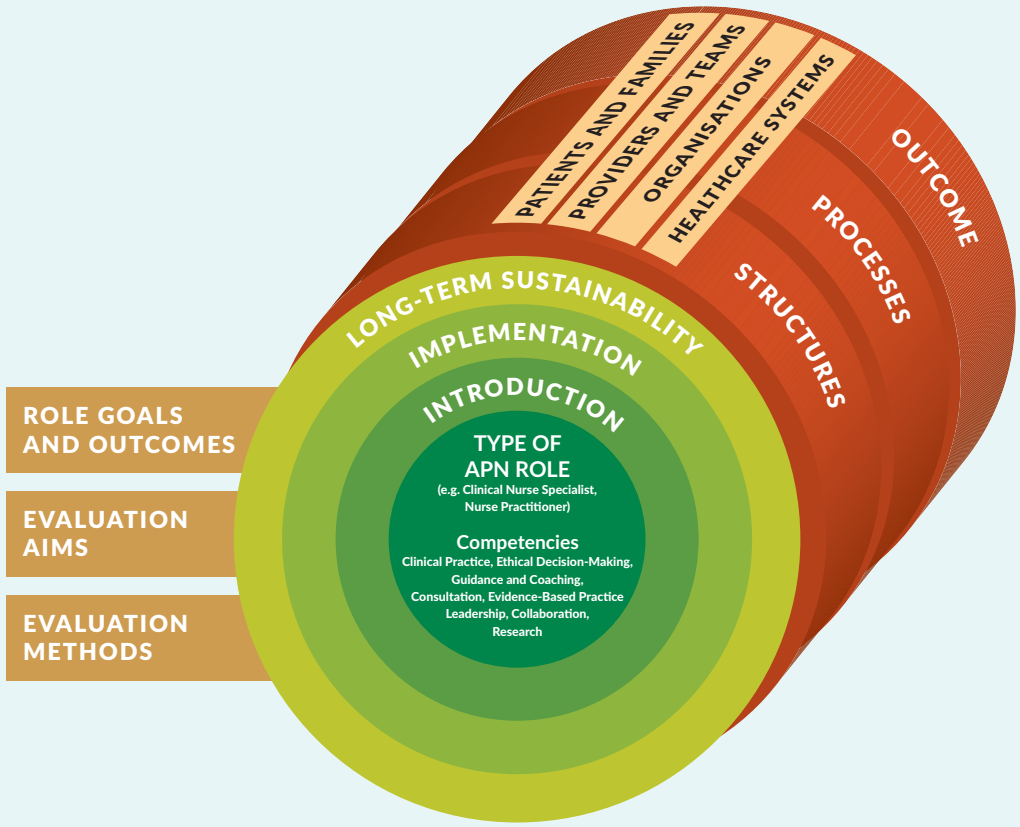
In recent years, there has been increasing interest in quantify¬ing nursing and midwifery's contribution or value in economic terms and while there are strong reasons for identifying and demonstrating such value, the true value of such services is difficult to quantify in definitive economic terms given the often team-based nature of the work and the holistic nature of service provision.

While difficulties do emerge in quantifying impact in economic terms, efforts have been made, including those of the Research Services Unit of the Department of Health, who, when considering the contribution of the effective utilisation of nurses and midwives in delivering health care services, considered a framework for the measurement of the effectiveness of the nursing contribution in its wider sense to health care provision, and proffered a number of metrics. These metrics are associated with patients and families, providers and teams, health service organisations, and the overall health system. These metrics provide guiding principles which should shape an evaluative framework to assess the effectiveness in a changed model representative of a greater number of specialist and advanced practitioners seeking to meet the needs of changing population.

These principles are capable of comprehension within the *PEPPA Plus Framework* which is the evaluative model to assess the effectiveness and ongoing cost efficiency of the revised model. This model is currently in use in Switzerland and Canada. This framework (Fig 12) emanates from the work of Bryant-Lukosius et al (2016) who developed a framework for the evaluation of the impact of advanced practice nursing roles. This framework tacks the metrics proposed by the Department of Health and seeks to identify APN-sensitive outcomes from systematic reviews and requires that it must be broad and flexible enough to accommodate the evolving nature of Advanced Practice roles from development and implementation to long-term sustainability.

PEPPA outlines steps for introducing and evaluating Advanced Practice roles and embraces role specific issues in a Donabedian structure, process and outcome frame. The role, goals and outcomes as they affect patients and families, providers and teams, the organisation and the healthcare system are also measured for impact. The steps for planning and implementation are designed

Figure 12 - PEPPA Evaluation Model, From Bryant-Lukosius and Dicenso (2004)



to create environments to support Advanced Practice role development and long-term integration within health care systems. The goal-directed and outcome-based process also provides the basis for prospective ongoing evaluation and improvement of both the role and delivery of health care services (Bryant-Lukosius and Dicenso 2004). An example of an evaluation in cancer care was found by Donald et al (2014) where patients experienced improvements in care, lower rates of depression, urinary incontinence, pressure ulcers, restraint use and aggressive behaviour with an increase in patient and family satisfaction with services.

This can be achieved with a clear and structured career pathway with a more generic approach to the education of advanced practitioners. Reference points in the form of benchmarks and KPI's were

suggested as useful additions to such a career pathway to enable nurses and midwives to view their progress and develop an individual career pathway to take client and patient needs into account.

5.5.2. Procurement of PEPPA Plus Framework

Evaluation of the ANP model was put to an open national tender competition. The successful research team from a joint UCC/TCD bid proposed the PEPPA Plus framework as an intrinsic part of their overall evaluation of the model. PEPPA is the only validated framework available and was a core evaluation method for the overall evaluation. The research team also included

- Activity-based data of the ANPs;
- Measuring impact against the objectives required. A Logic Framework Approach was utilised. See Appendix 11;
- Using validated tools for recruitment and retention; and perception of interdisciplinary teams; economic evaluation; and
- Surveys/Case Studies.

This approach outlines the comprehensive evaluation of the model and its early stage impact.

5.5.3. Early Results

Examples of early impact from AP case studies in demonstrator site:

Example 1

An Advanced Practitioner was re-deployed from an inpatient to the hospital's emergency department with the aiming of assessing, treating and managing patient within the Advanced Practitioner's speciality. A patient who presents with an acute exacerbation of a long-term condition such as asthma, can be fully assessed, which would include taking an appropriate history and among other things conducting an examination of the chest. The findings were interpreted, a decision is made about the severity of the exacerbation, and then, depending on severity, and risk assessment, the appropriate medication is prescribed (e.g. a bronchodilator and oral steroids). The patient may then be maintained at home, depending on the response, with regular re-evaluation, or referred on. Importantly, the ANP will also spend time working with the patient to understand what has happened, why and how it might be prevented in the future. This demonstrates positive patient outcomes i.e. quicker access to a senior decision maker; it also shows positive service impact as patients with a chronic condition have quicker access to specialist service and may avoid hospital admission.

Example 2:
Another example from South Tipperary General Hospital shows that one new ANP in April 2018 saw all patients that attended the ED with respiratory problems. The patients historically (prior to April 2018) would be admitted. The ANP service supported the discharge home of the patients on the appropriate treatment and follow-up telephone consultation avoiding admittance. As per June 2018, STGH has estimated that this service has the potential to reduce the number of bed days consumed by patients attending the ED with chronic respiratory distress by approx. 1700 per annum.

Additional Early Results
The *Interim Report* (Feb 2019) acknowledges additional early indicators of the Model's success, for example:

- Clinic activity – Advanced practitioners are seeing an increasing number of both new and return patient in outpatient clinics;
- The largest cohort of advanced practitioners are working in areas of older person, respiratory, acute medical assessment units, rheumatology, and emergency care, this confirms that the critical mass is developing in the areas that had identified service challenges;
- All advanced practitioners are undertaking nurse prescribing in ionising radiation and medical products;
- 25.7% of advanced practitioners travel to see patient outside their current location; including community clinics and nursing homes, patient homes and other hospitals;
- Approx. 42% of advanced practitioners plan to extend their practice into community settings;
- 67.4% of patients seen by an advanced practitioner in an unscheduled care setting required no further care and were discharged from the service following a full episode of care; and
- The coordination of care is an important part of the advanced practice role in 60% of patients seen.

5.6. Summary

The evaluation, following the implementation of the model from graduate to advanced practice, provides evidence that the model is capable of developing a critical mass of advanced practitioners to address emerging and future service needs. The evidence demonstrates that this is only possible when using an integrated approach with service development, supported by credentialing and a broad-based education programme. The model has already demonstrated some early results in improved patient outcomes.

Goal 5 sets out the actions for development to address the challenges outlined in this chapter's review implementation of the model of graduate to advanced practice.

GOAL 5	Implementation	
Action	**Details**	**Responsibility**
Phase I pre-planning	Establish a planning group that will oversee the planning and development of demonstrator projects to test the model.	HSE
	Identify the demonstrator sites for the development of advanced practitioners to meet service need in the areas of hospital avoidance, reducing waiting lists, and supporting access to services in areas where the integration of services can be achieved based on HSE data e.g. frail elderly, rheumatology waiting lists and dermatology waiting lists.	HSE
Phase II Demonstrator implementation	Establish an implementation group of appropriate members that can oversee the demonstrator projects, the implementation and evaluation.	HSE
	Establish local implementation groups, with the appropriate membership that can operationalise the demonstrator projects for specified services utilising the nursing and midwifery resource.	HSE
	Ensure that the demonstrator projects are supported by sufficient resources and evaluated with robust measurements.	HSE

Chapter 6
Recommendations

Chapter 6
Recommendations

Recommendation 1

Develop a critical mass of Advanced Practitioners utilising the capability model

Action A — HSE

Maintain the target of 2% Advanced Practitioners in the nursing/midwifery workforce to as an initial critical mass.

Action B — HSE

Provide Advanced Practitioners with prescriptive authority for diagnostics, referral pathways and appropriate treatments required to facilitate the provision of full episodes of care.

Action C — HSE

Ensure a robust governance and accountability structures are in place to oversee the development and implementation of Advanced Practice.

Recommendation 2

Deploy nursing and midwifery resources to impact healthcare service needs

Action A — HSE

Align Advanced Practitioners roles with areas of service challenges to address current and emerging service needs.

Action B — HSE

Monitor patient outcomes to ensure Advanced Practice meets demand.

Action C — HSE

Advanced Practitioners deliver service to meet demands, for example 7/7 service or geographical location.

The implementation and evaluation of the new model lead to the development of the following recommendations which will support ongoing application and sustained change. The Goals that have not yet been completed also inform these recommendations.

Recommendation 3

Streamline the education pathway for graduates to advanced nurse/midwife practitioners

Action A — NMBI

Introduce a system of credentialing to meet service need based on the interconnected framework for graduate, specialist and advanced practice.

Action B — DoH, NMBI

Implement under Section 48 (3) of the NMA, 2011 a process to annotate the name of a nurse or midwife who successfully completes credentialed education particularly related to skills acquisition.

Action C — NMBI

Recognise accredited education obtained in other jurisdictions, in a clinical career pathway for a nurse/midwife joining the workforce in Ireland.

Action D — HSE, HEI

Registration for nurse/midwife prescribing is a component of credentialed education in a career pathway for graduate, enhanced, CNS/CMS and Advanced Practitioners to support integrated and community care.

Action E — HEI

Provide a broader- based education for preparation of Advanced Practitioners to avoid the development of micro-specialisation within a service specialty.

Action F — NMBI, CORU, MCI, HEI

Establish inter-professional education standards that support the concept of role share/exchange within the multi-disciplinary team.

Recommendation 4

Evaluate Service impact

Action A — HSE

Maintain a set of KPIs that capture the output, outcomes and impact activity of the Advanced Practitioners.

Action B - 1 — HSE, HEI

Develop a set of KPI's at education level to include:

- Provision of inter-professional education offered.
- Variety of programmes available to support service need.
- Provision of broad-based education options.
- The number of collaborative mentorship/preceptorships offered.

Action B - 2 — NMBI

Develop at set of KPI's at regulatory level to include:

- Evaluating the time, it takes to be registered as an Advanced Practitioner.
- The education currently available that can be credentialed in a portfolio.
- The number of nurses and midwives who obtain registration as an Advanced Practitioner.

Action C — DoH, HSE

Service decision-makers to utilise data, to review and strategically plan for future requirements of Advanced Practitioners development, which will match service needs.

Chapter 7
Conclusion

Chapter 7
Conclusion

Both nationally and internationally health care trends show an increase in an ageing population with multiple co-morbidities and greater complexity of care needs. To address this, the Irish healthcare system is undergoing major reform under the direction of the Sláintecare strategy, with a decisive shift in care to the community. Each healthcare professional has a unique and valuable contribution to make to support a shift in care to improve the patient journey across the life-cycle of care. This will include the sustainable change to ensure timely access to health and social care based entirely on clinical need. Integrated approaches to service delivery will underpin this with health care professionals working across service boundaries to provide well-coordinated, planned care that is evaluated in conjunction with the patient. To develop an integrated approach the processes of care delivery rather than structural or organisational service models are required. Through integration, nurses and midwives have an opportunity to develop roles and services to deliver care across hospital and community settings and address current challenges in the healthcare system. This includes areas such as patient flow, waiting lists, early supported discharge and hospital admission avoidance. Alignment to national clinical care programmes is key to ensure that the clinical needs of patients are met within locally agreed pathways of care and will support nurses and midwives to practice at the top of their licence within evidence-based practice models.

Within this context, the benefits of advanced practice roles in nursing and midwifery support a change in the delivery of services with evidence of reduced morbidity rates, decreased waiting times, earlier access to care, increased continuity of care and improvements in self-management and quality of life for patients. This requires interdisciplinary collaboration in planning, organising and providing care through enhanced skills and knowledge through robust clinical governance structures. Through this effective communication and coordination of professional roles occurs resulting in strengthened patient outcomes. Integral to this is the development of nurse and midwife-led services working with healthcare professionals in primary and acute care settings providing targeted specific interventions. This will empower patients to take control of their own health and well-being.

To respond to population needs the development of a critical mass of advanced practice nursing and midwifery roles requires appropriate credentialing pathways, education and training and cultural change with managerial support. In response to this, through this policy the model was developed to assist nurses/midwives to progress from graduate to advanced practice level within a time-frame of two years. The model incorporated evidenced-based practice under core concepts of care to facilitate progression from competent

to capability ensuring a high level of self-efficacy through generic knowledge and skills. This is achieved through experience, advanced education, collaboration and consultation and development of metrics that measure impact and are patient centred. A two-year demonstrator project under the direction of the CNO's office supported by a national steering committee was successful in developing a critical mass of Advanced Practitioners targeting four areas of practice based on population need including chronic disease management (respiratory), waiting lists (rheumatology), older persons care (frailty) and unscheduled care, for example acute medical admission units). Integral to this was an educational programme, funding and recruitment processes and revision of regulatory structures within the NMBI. The broad-based education programme delivered by four higher education institutes covered core areas of advanced assessment, clinical reasoning and decision-making skills to manage patient populations. Key performance indicators at local service level measured response including the time to access service, patient experience and interventions with data collection enabled through technology systems. The preliminary results generated from the demonstrator sites identified reductions in waiting times, hospital admissions and improved patient access and satisfaction. Therefore, the recommendations from the model tested within this policy provides a broad-based approach to support nurses and midwives to have the capacity to meet the needs of a changing population across the life-cycle of care.

References

References:

AACN (2011). Care competencies for Interprofessional Collaborative Practice. *Interprofessional Educational Collaborative Expert Panel*

Aguado O., Morcillo C., Delàs J., Rennie M., Bechich S., Schembari A., Fernández F., Rosell F. (2010). Long-term implications of a single home-based educational intervention in patients with heart failure. *Heart & Lung Volume 39, Issue 6, Supplement*, pp. S14-S22

American Academy of Nurse Practitioners (2015). *American Academy of Nurse Practitioners Certification Program*. Available from: https://www.aanpcert.org/ptistore/resource/documents/2013%20CandidateRenewalHandbook%20-Rev%2011%2025%202013%20forNCCA%28FINAL%29.pdf

American Association of Nurse Practitioners (2018). *NP fact sheet*. Available from: https://aanp.org/all-about-nps/np-fact-sheet

Baird B., Charles A.,Honeyman M., Maguire D., Das P. (2016). *Understanding pressures in General Practice*. The Kings Fund, London.

Baker C. N., Brown S. M., Wilcox P. D., Overstreet S., Arora P. (2016). Development and psychometric evaluation of the Attitudes Related to Trauma-Informed Care (ARTIC) Scale. *School Mental Health*, 8, pp. 61–76.

Bauer, J.C. (2010). Nurse Practitioners as an underutilised resource for health reform: evidence-based demonstration of cost effectiveness. *Journal of American Academy of Nurse Practitioners*, 220(4), pp. 228-231

Begley C., Elliott N., Lalor J., Coyne I., Higgins A., Comiskey C. M. (2013). Differences between clinical specialist and advanced practitioner clinical practice, leadership, and research roles, responsibilities, and perceived outcomes (the SCAPE study). *Journal of Advanced Nursing* 69(6), pp. 1323–1337.

Begley C., Murphy K., Higgins A., Elliott N., Lalor J., Sheerin F., Coyne I., Comiskey C., Normand C., Casey C., Dowling M., Devane D., Cooney A., Farrelly F., Brennan M., Meskell P., MacNeela P. (2010). *An Evaluation of Clinical Nurse and Midwife Specialist and Advanced Nurse and Midwife Practitioner Roles in Ireland (SCAPE)*. National Council for the Professional Development of Nursing and Midwifery in Ireland, Dublin

Bergman K., Perhed U., Eriksson I., Lindblad U., Fagerström L. (2013). Patients' satisfaction with the care offered by advanced practice nurses: a new role in Swedish primary care. *International Journal of Nursing Practice* 19, pp. 326-333

Bryant-Lukosius D, Spichiger E, Martin J, Stoll H, Kellerhals S, et al. (2016). Framework for Evaluating the Impact of Advanced Practice nursing roles. *Journal of Nursing Scholarship*, 48, pp. 201-209

Bryant-Lukosius, D., Carter, N., Kilpatrick, K., Martin-Misener, R., Donald, F., Kaasalainen, S., Harbman,P., et al. (2010). The Clinical Nurse Specialist Role in Canada. *Journal of Nursing Leadership: Special Issue*, 23, pp. 140-166

Bryant-Lukosius D., DiCenso A, Browne G, Pinelli J. (2004) Advanced practice nursing roles: development, implementation and evaluation. *Journal of Advanced Nursing* 48 (5), pp. 519-529

Carney,M. (2014). *International perspectives on Advanced Nurse and Midwife practice regarding advanced practice criteria for posts and persons and requirements for regulation of Advanced Nurse/ Midwife practice*. Nursing and Midwifery Board of Ireland

Carryer J., Yarwood J. (2015). The nurse practitioner role: Solution or servant in improving primary health care service delivery, *Collegian*, 22, pp. 169-174

Carter M,R., Tourangeau A,E. (2012). Staying in Nursing: What factors determine whether nurses intend to remain employed. *Journal of Advanced Nursing* 68(7), pp. 1589-1600

Casey A., Coen E., Gleeson M., Walsh R., et al. (2016). Setting the Direction - *A Development Framework Supporting Nursing Practice Skills and Competencies in Acute Medical Assessment Units (AMAUs) and Medical Assessment Units (MAUs).* Office of Nursing and Midwifery Services Director & National Acute Medicine Programme, Clinical Strategy and Programmes Division, HSE, Dublin

Casey M., O'Connor L., Smith R., O'Brien D., O'Leary D., Fealy G., McNamara M., Stokes D., Egan C. (2015). *Evidence review to inform future specialist and advanced nursing and midwifery practice*. UCD/Department of Health

Central Statistics Office (2016): *Census 2016*. Available from: https://www.cso.ie/en/census/

Christiansen A., Vernon V., Jinks A. (2013). Perceptions of the benefits and challenges of the role of advanced practice nurses in nurse-led out-of-hours care in Hong Kong: a questionnaire study. *Journal of clinical nursing*. 2013 Apr; 22(7-8)

Coffey A., Leahy-Warren P., Savage E., Hegarty J., Cornally N., Day M.R., Maher B., Browne J., Sahm L., O'Caoimh R., Flynn M., Hutton S., O'Mahoney A., Arenella K. (2015). *A systematic literature review on tackling delayed discharges in Acute Hospitals inclusive of hospital (re) admission avoidance*. Department of Health.

Coyne I., Comiskey CM., Lalor J.G., Higgins A., Elliot N., Begley C. (2016). *An exploration of clinical practice on sites with and without clinical nurse or midwife specialists or advanced nurse practitioners in Ireland*. BMC Services Research

Cronenwett L., Dracup K., Grey M., McCauley L., Meleis A., Salmon M. (2011). The doctor of nursing practice: a national workforce perspective. *Nursing Outlook*, 59,(1),pp. 9-17

Cuff P.A, Perez M.M. (2016) *Exploring the Role of Accreditation in Enhancing Quality and Innovation in Health Professions Education: Proceedings of a Workshop National Academy of Sciences: Washington*. Available from: http://www.nap.edu/23636

Curry. N, Ham C. (2010). *Clinical and service integration. The route to improved outcomes*. The King's Fund, London

Delamaire M., Lafortune G. (2010). Nurses in advanced roles: A description and evaluation of experiences in 12 Developed Countries. *OECD Health Working Papers* No. 54, OECD Publishing. Available from: http://www.oecd.org/els/health/workingpapers

Department of Health and Children (2011). *Strategic Framework for Role Expansion of Nurses and Midwives: Promoting Quality Patient Care*. The Stationery Office, Dublin.

Department of Health (2010). *Advanced level nursing: A position paper*. Department of Health CNO Directorate, UK. Available from www.dh.gov/publications.com

Department of Health (2004). *The NHS knowledge and skills framework (NHS KSF) and the development review process*. Available from: www.dh.gov.uk/en/publicationsand standards/publication/publicationspolicyand guidance/DH_4090843/

Department of Health (2015). *Emergency Department Task Force Report*. Available from: https://health.gov.ie/blog/publications/emergency-department-task-force-report/

Department of Health (2016): *Health in Ireland Key Trends 2016*. Availablefrom https://health.gov.ie/blog/publications/health-in-ireland-key-trends-2016/

Department of Health (2017). *The Report of the Committee on the Future of Health, Sláintecare Report*. Available from: http://data.oireachtas.ie/ie/oireachtas/committee/dail/32/committee_on_the_future_of_healthcare/reports/2017/2017-05-30_slaintecare-report_en.pdf

DiCenso A., Bryant-Lukosius D. (2009). *Clinical Nurse Specialists and Nurse Practitioners in Canada: A Decision Support Synthesis*. Ottawa: CHSRF

Dillon D., Hoyson P.M. (2013). From graduation to employment: A guide for the new nurse practitioner. *The Journal for Nurse Practitioners*, 10(1), pp. 55-59

Donald F., Kilpatrick K., Reid K., Carter N., Marlin-Misener R., Bryant-Lukosius D., Hurbman P., DiCenso A. (2014). A systematic review of the cost effectiveness of clinical nurse specialists and nurse practitioners: what is the quality of the evidence. *Nursing Research and practice*, 2014, pp. 1-28

Elliot N., Begley C., Sheaf G., Higgins A. (2016). Barriers and enablers to advanced practitioners ability to enact their leadership role: A scoping review. *International Journal of Nursing studies*.

Fagerström L. (2009). Developing the scope of practice and education for advanced practice nurses in Finland. *International Nursing Review* 56(2), pp. 269–272.

Fallsberg M. B., Hammar M. (2000): Strategies and focus at an integrated, interprofessional training ward. *Journal of Interprofessional Care*, 4, pp. 339-350.

National Clinical Programme for Emergency Medicine. (2013). *A guide to enhance Advanced Nurse Practitioner services across Emergency Care Networks in Ireland*.

Gardner G., Duffield C., Doubrovsky A., Adams M. (2016). Identifying advanced practice: A national survey of a workforce. *International Journal of Nursing Studies*, 50, pp. 60-70

Gardner G., Duffield C. (2014). Defining advanced practice nursing. *ANM News*, Dec 13/Jan 14, 21 (6) 7

Gardner G., Gardner A., Middleton S., Della P., Kain V., Doubrovsky A. (2010). The work of nurse practitioners. *Journal of Advanced Nursing*, 66 (10), pp. 2160-2169

Gardner G., Chang A., Duffield C.(2007). Making nursing work: breaking through the role of confusion of advanced practice nursing. *Journal of Advanced Nursing*, 57(4), pp.382-391

Government of Ireland (1998). *Report of the Commission on Nursing. Government Publications: Dublin.*

Hamric A. (2014) Advanced Practice Nursing: An Integrative Approach - fifth edition. *Nursing Standard*, Vol 28 Issue 41 32

Hatem M., Hodnett E., Devane D., Fraser W.D., Sandal J., Soltani H. (2004). Midwifery-led versus other models of care delivery for childbearing women. *The Cochrane Database of systematic reviews 2004*, issue 1.

Harbman, P., et al. (2010). The Clinical Nurse Specialist Role in Canada. *Journal of Nursing Leadership*: Special Issue, 23, pp. 140-166.

Hayes LJ., O'Brien-Pallas L., Duffield C., Shamian J., Buchan J., Hughes F., Laschinger H.K., North N. (2012). Nurse turnover: a literature review - an update. *International Journal of Nursing Studies*. 2012 Jul; 49(7),pp. 887-905

Health Information and Quality Authority (2012). *A Guide to the National Standards for Safer Better Healthcare*. Available from: https://www.hiqa.ie/sites/default/files/2017-01/Safer-Better-Healthcare-Guide.pdf

Health Information and Quality Authority (2018). *Review of information management practices in the Hospital In-Patient Enquiry (HIPE) scheme.* Available from: https://www.hiqa.ie/reports-and-publications/all-publications?field_pub_published_year_target_id=All&keyspub=&page=4

Health Service Executive (2016). *Making a start in Integrated Care for Older Persons A practical guide to the local implementation of Integrated Care Programmes for Older Persons*. Available from: https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/a-practical-guide-to-the-local-implementation-of-integrated-care-programmes-for-older-persons.pdf

Health Service Executive (2018). *National Guideline For Nursing And Midwifery Quality Care-Metrics Data Measurement In Older Person Services 2018*. Available from: https://www.hse.ie/eng/services/publications/nursingmidwifery%20services/national-guideline-qcm-older-persons.pdf

Health and Social Care Professions. (2014). *Interprofessional progressing advanced practice in the Health and Social Care Professions*.

Hendry A., Cariazo A.M., Vanhecke E., Rodríguez-Laso Á. (2018). Integrated Care: A Collaborative ADVANTAGE for Frailty. *International Journal of Integrated Care*. 2018;18(2)

Higgins.A., et al. (2016). *SeNsE report*. Unpublished.

Hudson, A. (2016). *Simpler, clearer, more stable: Integrated accountability for integrated care*. The Health

Institute of Medicine (2011). *The Future of Nursing: leading change, advancing health*. Washington, DC: National Academic Press.

International Council of Nursing (2015). *Nurses a Force for Change: Care effective and cost effective* ICN 2015.

Irish Rheumatology Nursing Forum (2014). *Business proposal for Advanced Nurse Practitioner and Clinical Nurse Specialist Posts*.

Joint Improvement Team Scotland. (2014) *Outcomes framework for older persons*.

Joint Improvement Team (2013). *Strategic Plan 2013-16*. Available from: http://www.jitscotland.org.uk/wp-content/uploads/2014/04/JIT-Strategy-2013-16.pdf

Keepnews David (2013). *Mapping the Economic Value of Nursing: A White Paper*, Seattle: Washington State Nurses Association

Kemppainen V., Tossavainen K., Turunen H., (2012). Nurses roles in health promotion practice: an integrative review. *Health Promotion International*. Vol 28 No 4, 10 August 2012

Longpre C., Dubois C.A. (2015). *Implementation of integrated services networks in Quebec and nursing practice transformation: convergence or divergence?* BMC Health Serv Res.

MacCraith, B. (2014). *Strategic Review of Medical Training and Career Structure: Report on Medical Career Structures and Pathways Following Completion of Specialist Training*. Available from: https://www.icgp.ie/go/library/catalogue/item/6767ED12-9EA0-1E4D-59B9D97854D85778?print

Maier C.B., Aiken L.H. (2016). *Nurses in Advanced Roles in Primary Care: Policy levers for Implementation.* OECD, France.

Massie S. (2015). *Is lack of leadership talent a long-term condition for the NHS?* The King's Fund: London.

National Clinical Programme for Epilepsy (2014). *The National Clinical Programme for Epilepsy: Model of Care*. Available from: https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/epilepsy-model-of-care.pdf

National Council for the Professional Development of Nursing and Midwifery (2010). *Evaluation of Clinical Nurse and Midwife Specialist and Advanced Nurse and Midwife Practitioner Roles in Ireland (SCAPE) Final Report*. National Council for the Professional Development of Nursing and Midwifery, Dublin.

National Council for the Professional Development of Nursing and Midwifery (2008). *Framework for the Establishment of Clinical Nurse/Midwife Specialist Posts 4th Edition.* NCNM: Dublin.

National Council for the Professional Development of Nursing and Midwifery (NCNM) (2005). *A Preliminary Evaluation of the Role of the Advanced Nurse Practitioner*. NCNM: Dublin.

National Council for the Professional Development of Nursing and Midwifery (2004). *An evaluation of the effectiveness of the role of the clinical nurse specialist/ midwife specialist*. NCNM: Dublin.

National Council for the Professional Development of Nursing & Midwifery (2006b). *Clinical Nurse Specialist and Advanced Nurse Practitioner Roles in Intellectual Disability Nursing. Position Paper No 2*. NCNM, Dublin.

National Healthcare Quality Reporting System (2016). Annual Report 2016. Available at [online]: https://health.gov.ie/blog/publications/national-healthcare-quality-reporting-system-nhqrs-annual-report-2016/

Needleman, J.(2014). A framework workshop for nurse credentialing research. Presented at IOM's Future Directions of Credentialing research in nursing: A workshop. Washington DC. NHS Scotland (2013): Nursing and Midwifery Workload and Workforce Planning Learning Toolkit - Second Edition. Available at [online]: https://www.nes.scot.nhs.uk/media/248268/nursing_midwifery_workforce_toolkit.pdf

NHS Wales (2010): Framework for Advanced Nursing, Midwifery and Allied Health Professional Practice in Wales. Available at [online]: http://www.nwssp.wales.nhs.uk/sitesplus/documents/1178/NLIAH%20Advanced%20Practice%20Framework.pdf

Nursing and Midwifery Board of Ireland (2014) International perspectives in relation to Advanced Nurse and Midwife Practice, regarding criteria for posts and persons and requirements for regulation of Advanced Nurse /Midwife Practice. *Nursing and Midwifery Board of Ireland: Dublin. Nursing and Midwifery Office, Queensland (2014): Overview of the planned introduction of nurse endoscopy in Queensland. Available at [online]: https://www.health.qld.gov.au/__data/assets/pdf_file/0024/154581/ne-overview.pdf*

NHS. (2015). Non-Medical Prescribing: An economic evaluation. *NHS Health Education North West*.

NHS. (2014). Visible, Accessible and Integrated Care, capability framework for the advanced practitioner: Nursing in the Community. *NHS Education for Scotland*.

NHS (2009) *Framework for Advanced Nursing, Midwifery and Allied Health Professional Practice*. NHS Wales.

Nursing and midwifery board of Ireland. (2014). Scope of Nursing and Midwifery practice framework. O'Connell, J., Gardner, G., Coyer, F. (2014). Beyond competencies: using a capability framework in developing practice standards for advanced practice nursing. *Journal of Advanced Nursing*, 70 (12), pp 2728-2735.

OECD (2016) Health workforce Policies in OECD Countries: Right Jobs, Right Skills, Right Places, OECD Publishing: Paris.

Orchard CA, Curran V, Kabene S. (2005) Creating a culture of interdisciplinary collaborative professional practice. *Med Educ Online [serial online]*; 10:11. Available from http://www.med-ed-online.org

Perraud, S., Delaney, K.R., Carlson-Sabelli, L., Johnson, M.E., Sheppard, R. and Paun, O. (2006). Advanced Practice Psychiatric Mental Health Nursing, finding our core: The Therapeutic relationship in 21st century. *Perspectives in Psychiatric Care*, 42: 215-226.doi:10.1111/j.1744-6163.2006.00097.x

Philippou, J. (2015). Employers' and employees' views on responsibilities for career management in nursing: a cross sectional survey. *Journal of Advanced Nursing*, vol 71, no.1, pp 78-89.

Pirret, A.M., Neville, S., LaGrow, S. (2014). Nurse Practitioners versus doctors diagnostic reasoning in a complex case presentation to an acute tertiary hospital: A comparative study. *International Journal of Nursing Studies*, 52(3), 710-726.

Nursing and Midwifery Office, Queensland. (2014). Overview of the planned introduction of nurse endoscopy in Queensland.

Rafferty, AM., Xyrichis, A., Caldwell, C.(2015). Post graduate education and career pathways in nursing: a policy brief. *Report to Lord Willis, Independent Chair of the shape of Caring Review*.

Royal College of Obstetricians and Gynaecologists. (2011). High quality womens healthcare: A proposal for change. *RCOG Press*:

Reilly. S., Miranda-Castillo, c., Malouf, R., Hoe, J., Challis, D., Orrell, M. (2105). Case management approaches to home support for people with dementia. *Cochrane database of Systematic Reviews 2015*. Issue 1. Art no: CD008345.doi:10.1002/14651858.CD008345.pub2.

Romano, P. (2014). Investigating casual pathways and linkages. *Presented at the IOM's Future Directions of Credentialing research in Nursing: A workshop*. Washington DC.
Salford NHS. (2014). Salford Integrated Care Programme.

Schober, M., Affara, F. (2006). International Council of Nurses, Advanced Nursing Practice. *Blackwell Science*.

Smith Christopher, Baltruks Dorothea (2015), The Nursing Journey: Recruitment and Retention. GGI: London.

Special Delivery Unit (2013) Unscheduled Care Strategic Plan. Available at[online]: https://www.ntpf.ie/home/PDF/SDU%20UCSP%20Irish%20Logo.pdf
The Council for Healthcare Regulatory Excellence (2009): Annual report and accounts 2009/10. Avaliable at [online]: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/247854/0007_i.pdf

The Irish Longitudinal Study on Ageing (2014): *The Over 50s in a Changing Ireland: Economic Circumstances, Health and Well-Being*. Available at: [online]: https://tilda.tcd.ie/publications/reports/pdf/w2-key-findings-report/Wave2-Key-Findings-Report.pdf

The Scottish Government (2008): Supporting the Development of Advanced Nursing Practice. Available at [online]: http://www.advancedpractice.scot.nhs.uk/media/1371/supporting%20the%20development%20of%20advanced%20nursing%20practice.pdf

Weinberg et al (2014) Full Practice Authority for Nurse Practitioners Increases Access and Controls Cost Bay Area Council Economic Institute; California. http://www.bayareaeconomy.org/files/pdf/BACEI%20NP%20Report%209.8.14.pdf

WHO (2010). Framework for action on Interprofessional education and collaborative practice. Geneva,Switzerland; 2010.

WHO (2014). Workforce 2030, Global strategy on human resources for health: Workforce 2030. *Geneva: World Health Organisation*.

Woods Michelle, Murfet Giuliana (2015) Australian Nurse Practitioner Practice: Value Adding through Clinical Reflexivity. Nursing Research and *Practice. Volume 2015*, *Article ID 829593*, *14 pages*, *http://dx.doi.org/10.1155*/2015/829593 accessed 8/8/16.

Wren, M. A., Keegan, C., Walshe, B., Bergin, A., Eigahn, J., Brick, A., Brick, A., Connolly, S., Watson, D. & Banks, J. (2017): *Projections of demand for healthcare in Ireland 2015-2030: first report from Hippocrates model Economic and Social Research Institute 67*.

Glossary and appendices

Glossary

AACN	American Association of Colleges of Nursing
AMAU	Acute Medical Assessment Unit
APN	Advanced Practice Nurse
CMS	Clinical Midwife Specialist
CNS	Clinical Nurse Specialist
COPD	Chronic Obstructive Pulmonary Disease
CPAP	Continuous Positive Airway Pressure
CSO	Central Statistics Office
DoH	Department of Health
ECG	Electrocardiography
ED	Emergency Department
GP	General Practitioner
HCAI	Health Care-Associated Infections
HEI	Higher Education Institutes
HSCP	Health and Social Care Professionals
HSE	Health Service Executive
KPI	Key Performance Indicator
NCCP	National Clinical Care Programme
NCNM	National Council for the Professional Development of Nursing and Midwifery
NHQRS	National Health Quality Reporting System
NHS	National Health Service
NIV	Non-Invasive Ventilation
NMA	Nurse and Midwives Act
NMBI	Nursing and Midwifery Board of Ireland
NP	Nurse Practitioner
OECD	Organisation for Economic Co-operation and Development
ONMSD	Office of Nursing and Midwifery Service Development
OPD	Out Patient Department
PEG	Percutaneous Endoscopic Gastrostomy
PET	Patient Experience Time
QQI	Quality and Qualifications Ireland
RAMP	Registered Advanced Midwife Practitioner
RANP	Registered Advanced Nurse Practitioner
RCOG	Royal College of Obstetricians and Gynaecologists
RNP	Registered Nurse Prescriber
RSU	Research Services Unit
SDU	Special Delivery Unit

APPENDIX 1
Number of CNS/CMS by Speciality
CNS and CMS in the HSE

CNS/CMS												CNS/CMS						
		HSE West			HSE South		HSE DML		HSE DNE			HSE West		HSE South	HSE DML		HSE DNE	
		CHO Areas										Hospital Groups						
Category	CNS/CMS Post Title	CHO1	CHO2	CHO3	CHO4	CHO5	CHO6	CHO7	CHO8	CHO9		West / North West Hospital Group	UL Hospitals (Mid West)	South / South West Hospital Group	Dublin Midlands Hospital Group	National Childrens & Paed Group	Ireland East Hospital Group	RCSI Hospital Group (NE)
Acute:	Infection Control											2			1		1	2
	Occ Health											1						
	HIV											1						
	Neurology											1						
	Pain Mgt											1			1			
	Vascular											1						
	Rheumatolgy/Joint Replacement												1		1	1	1	1
	Dermatology															1		1
	Infectious Diseases Immunology															1		
	Urodynamics																1	
	Health Promotion														1			
	Tissue Viability												0.5					
	Sexual Assault											3		1			1	
	Haemvigilance												1		1	1		
	Anti Coagulation														2			
Mental Health:	Family Therapy	1																
	Addications	2							2									
	Child & Ad MH	1			1		2	1								1		
	CBT	1																
	Home Based Treatment Acute Adult	1																
	Community MH		8	5	1				1									
	Deliberate Self Harm		1															
	Resistive Schizophrenia		1															
	Demenita Care		1															
	Positive Beh Support MH			1														
	Speiclist First Episode							1										
	Counselling & Psycho Ther							1										
	Psy of Later Life								1									
Midwifery & Womens Health	Ultrasound (CMS)											3.6		2			4	2
	Midwife Lactation Consultant (CMS)																1	
	Midwifery Diabetes (CMS)																2	
	Haematology Obstetrics (CMS)																1	
	Colposcopy (CMS)														1			
	Bereavement & Loss (CMS)														1			
	Colposcopy (CNS)											2						
Community:	Child Health Specilist PHN								1									
ID	Positive Beh									1								
Diabetes	Diabetes								1			4	2	1	1			4
	Diabetes Integrated Care								1				1					
	Paediatric Diabetes															1		
	Childrens Diabetes												1					
Cardiac:	Stroke/Neuro Rehab									1					1		2	
	Heart Failure											2	3.85		1		1	
	Cardiac Rehab											1			1			
	Chest Pain																1	
	Cardiology														2			
Cancer Services:	Breast Care											2.5	1					
	Haematology (Cancer)											1						
	Oncology											1	1		1.5			
	Psycho-Oncology													1				
Palliative Care	Palliative Care		4.5	1.9		2			4.3			2					5.77	
	Childrens Palliative Care															1		
	Palliative Care - Tissue Viability														1			
	Palliative Care - Diabetes														1			
	Palliative Care - Infection Control														1			
Respiratory	CF											1						
	Respiratory											2	3	1	1			
	COPD Outreach																	1
	Pumonary Outreach /Rehab																0.85	
	Advacned Airway Mgt												1					
Gastroentology:	Upper GI											1						
	Lower GI (Colorectal)											4						
	Stoma												1.5					
		6	15.5	7.9	2	2	2	3	11.3	2	0	37.1	17.85	6	20.5	7	22.62	11

APPENDIX 2
ANP/AMP by Division of Register

Division of Register	No.	Area of practice
Children's	12	Ambulatory Care =1 Diabetes = 1 ED = 5 Epilepsy = 2 Haematology = 1 Haem/onc =1 Neonatology = 1
Psychiatric	16	Liaison Mental Health = 3 Dementia = 1 Recovery & Rehab = 1 CBT = 3 Eating disorders = 1 Psychotherapy = 4 Child & Adolescent MH = 1 Forensic MH = 1 Perinatal MH = 1
Public Health	2	Community Older Adults = 1 Child Health & Parenting = 1
Intellectual Disability	2	Gastroenterology = 1 Positive behaviour support = 1
Midwifery	8	Neonatology = 1 Women's health = 1 Women's preventative Health = 2 Diabetes = 2 Emergency = 1 Midwifery care = 1
General	160	ED = 78 ED Cardiology = 4 Cardiology = 5 Heart failure = 3 Diabetes = 8 Ophthalmology = 1 Stroke care = 2 Oncology = 5 Sexual health = 1 Cardiothoracic = 5 Pain management = 4 Haematology = 2 Neonatology = 7 Neurology = 2 Vascular = 1 Older person with dementia = 1 Colorectal = 1 Rheumatology = 3 Womens health = 2 ENT = 1 Wound care = 1 Primary care = 2 Epilepsy = 3 Oncology (radiation) = 4 Dermatology = 2 Urology = 1 Endocrinology = 1 Gastroenterology = 7 Critical care outreach = 1 Lung transplantation = 1 Occupational health = 1 Breast care = 1 Rehab of the older person = 1 Care of older adults community = 1

APPENDIX 3
The roles provided by the CNS and the ANP in Dermatology

	CNS Dermatology Role	RANP Dermatology Role
Receiving Referrals	Dermatology Consultant and NCHDs referral request for dermatology treatments (phototherapy, photodynamic therapy, and wound care), investigation (patch testing) and disease education.	Written referral will be made by GP's, Tissue Viability Nurse and Consultant Dermatologists, Dermatology NCHD's and nurses.
Caseload	Support for patients and their families with chronic and acute skin disease requiring nursing intervention. Patients are reviewed in outpatient, day-care and inpatient settings.	Defined patient caseload including patients with AE, Ps, V.E., B.P. and life-threatening dermatoses. Patients are reviewed in outpatient, day-care and inpatient settings. In addition, a defined caseload will be seen in a domicile setting as per agreed MOU.
Clinical History	Clinical History taking by CNS and discussed with Consultant.	Competent in obtaining a comprehensive health history from patients with AE, Ps, V.E., B.P. and life-threatening dermatoses and their family.
Skin Examination	Skin examination is undertaken by CNS and findings discussed with Dermatology Consultant	Competent in advanced dermatology examination: • Disease Pattern Recognition • Disease Severity • Assessment of Lesion Recognition • Itch Severity Assessment
Making a Diagnosis	The CNS sees diagnosed patients for treatment, investigation or education of their skin disease following diagnosis by the Dermatology Consultant or NCHD.	The RANP will: • Complete a comprehensive health history • Carry out an advanced physical assessment • Interpret the results of investigations • Make a diagnosis • Develop and implement a management plan • The patient will be followed up as their disease severity or treatment management plan requires. • If not improving review and investigate further or refer to Dermatology Consultant.
Requesting/ Interpreting Phlebotomy Tests	Phlebotomy investigations are requested and interpreted by the Dermatology Consultants or NCHDs	The RANP dermatology will request phlebotomy tests based on their patient assessment. Common tests include FBC, U&Es, LFTs, PIIINP, TPMT.
Requesting/ Interpreting Patch Tests	Patch test investigations are requested and interpreted by Dermatology Consultants or NCHDs	RANP will determine and order patch test series following advanced assessment and history taking regarding likely allergen sources. The RANP will review patient following patch test to determine the clinical relevance of results.
Management Plan for Dermatology Conditions	Decisions regarding treatment plans are made by the dermatology consultant. The CNS supports the patient in adhering to the management plan	The RANP Dermatology will implement the appropriate evidence-based action plan and have advanced knowledge of dermatology medications and possible side effects for patients with AE, Ps, V.E., B.P. attending the dermatology service.
Documentation	The CNS adheres to hospital policy regarding documentation	RANP will generate a GP letter following a clinic visit outlining consultation, any investigations planned and follow-up required.
Referral onwards	The CNS discussed the referral with the Dermatology Consultant	The RANP dermatology refers on to members of the Multidisciplinary Team (MDT) for further investigations and review as per agreed referral arrangements
Nursing Audit and Research	The CNS Dermatology carries out regular audits of nursing service provided as below: • Patient waiting times • Effectiveness of minimal erythema dose • testing • Patient clearance rates following phototherapy	The RANP Dermatology will continue active involvement with nursing audit within the department and analyse results, which may change practice. The RANP Dermatology will instigate nursing research in relation Patient outcomes in Bullous Pemphigoid RANP clinics effectiveness of targeted nurse education on eczema management.

APPENDIX 4
Educational Programmes for Advanced Practice

The NMBI currently operate a post-registration education approval system of Category I, Category II and registration education programmes. The NMBI describe continuing education as a lifelong learning process which takes place after the completion of the basic nursing/midwifery education programme. It consists of planned learning experiences which are designed to augment the knowledge, skills, and attitudes of registered nurses and midwives for the enhancement of nursing practice, education, administration and research. Category I courses typically are short and online courses for the Irish nursing and midwifery professions that reflect up to 35-hours of teaching/learning. Completion of a course can earn a nurse/midwife Continuing Education Units often referred to as (CEUs). Within the last 2-years there are almost 2,000 approved Category I courses (NMBI end of July 2016) with 883 courses approved between Jan and the end of July 2016. The NMA 2011(Part 11) also provides for the maintenance of competence on an on-going basis by all nurses and midwives. This section of the NMA 2011 has yet to be commenced.

The current courses approved for advanced practice by the NMBI include:

- MSc Nursing (Advanced Practice) from UCD
- Post Graduate Certificate Nursing (Advanced Practice) from UCD
- Graduate Certificate Nursing (Advanced Practice) from UCD
- Nursing (Advanced Practice Gastroenterology) Graduate Certificate from UCD
- MSc Nursing (Advanced Practice Prescribing Pathway) from UCD
- MSc Advanced Practice with Prescribing from NUIG
- Nursing (Advanced Nursing Practice in Emergency Nursing including Nurse Prescribing Certificate) MSc, PGD from TCD
- Nursing: Advanced Nurse Practitioner in Emergency Nursing MSc, PGD from TCD
- Advanced Pain Management MSc from UCD
- Advanced Pain Management with Prescriptive Authority MSc from UCD
- Global Perspectives on Clinical Specialist and Advanced Practitioner Roles in Nursing or Midwifery – Minor, Special, Supplemental Award from UCC
- Independent Study in Advanced Nursing or Midwifery Practice – Minor, Special, Supplemental Award from UCC

(Source NMBI August 2016)

A number of these courses prepare nurses and midwives for Advanced Nurse Practitioner, Advanced Midwife Practitioner, Clinical Nurse Specialist and Clinical Midwife Specialist posts. Specifically since 2012-2016 163 nurses and midwives have been funded to undertake courses leading to registration as a RANP/RAMP.

The proposed CNS/CMS Role and preparation is:
Clinical care is a significant part of the CNS/CMS role in Ireland. The CNS/CMS caseload involves working with the MDT to provide specialised assessment, planning, delivery and evaluation of care using protocol driven guidelines. The CNS/CMS role maximises the team impact on patient outcomes.

Care delivery and caseload management is delivered in line with core concepts of *clinical focus, patient/client advocacy, education and training, audit and research, consultancy, organisation and management of care, holistic approaches to care and interpersonal relationships.*

Qualifications/Requirements for the Role:

- Be registered with the NMBI
- Provide evidence through a portfolio of continuous professional development associated with the role
- Provide evidence through a portfolio of experience in the area of practice equivalent to a minimum of one year
- Provide evidence of achieved capabilities for the role through peer and self-evaluation
- Provide evidence through a portfolio of credentialed education required for the role
- Provide evidence of formal post-registration/credentialed education in the area of practice that is equivalent to a level 9 (QQI) major award.

The proposed ANP/AMP Role and preparation is:
The ANP/AMP caseload involves holistic assessment, diagnosis, autonomous decision making regarding treatment, provision of interventions and discharge from a full episode of care. Care delivery and caseload management is provided by ANP/AMPs in line with the core concepts of *person-centred care, autonomy and empowerment within accountability in clinical practice, professional ethics, consultation and collaboration, professional leadership, clinical scholarship.*

Qualifications/ Requirements for the Role:

- Be registered with the NMBI
- Provide evidence through a portfolio of continuous professional development associated with the role
- Provide evidence through a portfolio of experience in the area of practice equivalent to a minimum of two-years
- Provide evidence of experiential learning necessary for the role to an equivalent of 500 hours
- Provide evidence through a portfolio of achievement of the core concepts/ competencies/capabilities for the role through peer and self-evaluation
- Provide evidence through a portfolio of credentialed education required for the role
- Provide evidence of formal post-registration/credentialed education in the area of practice that is equivalent to a level 9 (QQI) major award.

APPENDIX 5
Membership of the Steering Group

Proposed Membership of the Steering Group for Graduate, Specialist and Advanced Practice

- Chairperson: Dr Anne-Marie Ryan
- Acute Hospitals Division, Department of Health and HSE
- National Human Resources, Department of Health and HSE
- Primary Care Division, Department of Health
- Office of the Nursing and Midwifery Services, Health Service Executive (HSE)
- Group Directors of Nursing
- Group CEO
- CHO Manager
- Patient representative
- Clinical Nurse (Student representative of the ANP cohort)
- Acute Medicine Programme, HSE
- Clinical Strategy and Programmes,
- Clinical Representative of the demonstrator sites
- Primary Care, HSE
- Social Care Division, HSE
- Irish Association of Directors of Nursing (IADNAM) to include Acute Hospitals and DPHN representation
- SIPTU/INMO
- NMBI
- Nursing Academic with Expertise in Specialist, Advanced Practice and Practice Expansion
- International Expertise – credentialing, advanced practice

APPENDIX 6
Project Initiation Document

Project Initiation Document / Scope Document for Demonstrator Projects

Project Title	Developing Graduate to Advanced Nursing and Midwifery Practice
Project Number	N/A
Project Sponsor / Senior Responsible Officer (SRO)	Siobhan O'Halloran
Division	CNO Office
Unit	
Project Lead	Anne-Marie Ryan
Version Number	1.1
Business Plan Reference and Priority	Not applicable for 2016

Purpose of the Project

The purpose of this project is to pilot, in demonstrator areas, the model for graduate, specialist and advanced practice and explore if the model is capable of creating a critical mass of nurses and midwives to drive integration between services in response to patient and service need.

The pilots will take place in service areas that require patients to receive timely access to care, avoid hospital admission, and support the patient to stay as close to home as possible. The pilots will concentrate on service areas that address chronic disease management and older person care through a facilitative education and regulatory pathway.

Objectives

The objectives of the project relate to meeting service need, creating flexible education pathways and a responsive regulatory model to:

1. Develop a pathway for graduate and specialist nurses and midwives in two HEI's that supports each of the pilot areas so that X number of RANP/RAMP's can be created;
2. Determine the areas for the initial development of CNS/CMS and RANP/RAMP roles;
3. Put in place new regulatory supports for graduate, specialist and advanced practitioners that recognise educational and competency achievements;
4. Introduce a process to develop a system of credentialing in the NMBI in September 2017 to meet service need based on the interconnected model for graduate, specialist and advanced practice. Implement under Section

48 (3) of the NMA 2011 a process to annotate the name of a nurse or midwife who successfully completes credentialed education particularly related to skills acquisition over the two –year implementation process;

5. Commission and develop a 1-year graduate certificate type programme that can begin in September 2017 in two HEI's, with X number of places, subject to available finances, as a shortened educational pathway for experienced nurses and midwives to obtain outstanding educational requirements for RANP/RAMP in the selected pilot areas;
6. Commission a revised two-year masters level broad-based education programme for RANP/RAMP's that meets the regulatory standards of the NMBI;
7. Establish with the NMBI and other regulators interprofessional education standards and requirements with other members of the interdisciplinary team that support the concept of capability for role share/exchange between professions;
8. Identify and recruit a critical mass of nurses capable of impacting on service issues (timely access to care, avoiding hospital admission, and supporting the patient to stay as close to home as possible) and are willing to engage in a developmental pathway;
9. Explore with the HSE CNS/CMS and RANP/RAMP's access to diagnostics, referral pathways and appropriate treatments that are required to facilitate the provision of full episodes of care both in the acute and in the community sectors by 2018;
10. Develop with the HSE and the NMBI the appropriate governance infrastructure for the practice of nurses and midwives to provide integrated care;
11. Identify an I.T. solution that builds on existing ICT solutions and are integrated with the ICT architecture of the HSE to manage data generated from the pilot projects;
12. Develop with the HSE, by the end of 2018, a set of KPI's that capture the output activity of the CNS/CMS and the RANP/RAMP to include numbers of patients seen; numbers of patients accommodated from the waiting list; and data relating to clinical care outcomes, including effective medicines management and cost-effectiveness to achieve an on-going economic evaluation of the CNS/CMS and the RANP/RAMP roles;
13. Develop an evidence-based evaluation model for advanced and specialist roles underpinned by research, potentially similar to the PEPPA model.

High-Level Requirements

The high-level requirements for the project are as follows

- Within each of the ten areas;
  - Establish Local Implementation Groups
  - Identify the local project/s
  - Agree tasks for implementation
  - Agree the local governance arrangements
  - Identify the educational requirements and supports
  - Put in place the necessary educational supports
  - Identify and recruit nurses to undertake the education pathway
  - Agree the data to be collected
  - Agree the evaluation model
  - Identify the ICT solution to capture data
  - Agree reporting

Assumptions and Constraints

The following assumptions are being made;

- Data for each pilot area is available eg: Rheumatology waiting list data.
- The ICT solution is currently in place and can be built upon.
- HR - Existing resources in the system will fill the roles and there is capacity in the HSE to backfill any vacancies created;
- Support from the main stakeholders including the regulator and staff associations;

The following constraints are known;

- Current Culture of Care provision
- Current Authority and Accountability for Decision-making
- Integration of services and working across settings
- Resistance to change – nurses and other health professionals
- Governance – changed governance to a service led model
- Regulatory - changes to the standards and requirements for registration
  - New credentialing concept with annotation

Anticipated Costs Breakdown

Work is ongoing with regard to identifying the individual estimated costs of the demonstrator projects. This will be completed in January 2017 and will be influenced by the numbers needed at each site to create a critical mass capable of delivering the required output.

An initial consideration of the total policy implementation costs are broken down as follows:

Implementation Costs (over 4 years)	Project Operational Costs	ANP Information
ANP posts €35m Backfilling of ANP posts €18m Education x1 year €1.5 Education x 2 year €4m **Total €58.5m**	Estimates are in development but initial costings would indicate approximately €600k per project	Current ANPs employed 153 Current posts vacant (funding issues) 47 AMPs trained but not in post 141

In order to create the additional ANP's to meet the 2% target by2021 an additional 500 ANPs to the current 200 are required. This requirement will generate a €35,000,000 pay bill for this additional resource to the system (calculated 500 x €70,000 salary). This will arise over a four year period or approximately €9m per annum. In the first instance it is proposed to pilot these proposals through a number of demonstrator projects.

The resource will require educational support but there are many nurses in the system that have some element of the education required so using an average calculation of €10,000 per nurse and the need to educate approx. 150 nurses this will accrue an education bill of approx. €1,500,000 for the one-year course over the 4 years. Approximately 200 nurses/midwives will require to undertake the two-year masters education programme at approx. €20,000 at the cost of €4,000,000 plus backfilling of the post for 1 year (€70,000) is €14,000,000 totalling approx. €18,000,000. This would be the subject of a procurement process which may produce savings. In addition these costings do not take account of any existing funding in the HSE.

The additional costs involve backfilling of some of the posts at an average of €70,000 per backfill. It is proposed that 100 ANP's are developed each year. This at maximum (not anticipated) will accrue a bill of approx. €7,000,000.

There are currently 47 ANP posts not filled in the HSE mainly due to funding issues related to appointing people to approved posts. Filling these posts will cost €3,290,000 (calculated 47 x €70,000).

There are currently a further 141 nurses who have been supported to undertake the ANP education pathways so require no education funding.

High-Level Risks

The following are known high-level risks:

1. Funding will be secured
2. Resources will be available
3. There will be local cooperation from the necessary professional bodies
4. There will be an impact on existing services
5. Courses will be developed
6. A critical mass can be established
7. Regulatory structures will be put in place
8. Governance arrangements can be put in place

Summary Milestone Schedule

	2017				2018			
Pilot Model for Graduate Specialist AP Nurses and Midwives	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
Identify the ten areas to pilot in	X							
Establish a steering committee	X							
Implementation plan for piloting in one area - Ex: Rheumatology	X							
Identify Local Implementation Groups		X						
Agree tasks for implementation		X						
Data collection		X						
Agree evaluation criteria and key performance indicators		X						
Evaluation Model		X						
Go Live			X					
Identify Resource to collect data		X						
Education			X					
Develop 1 Yr Higher Diploma		X						
Develop 2 Yr Masters Programme to include elements of Chronic Disease Mgt, Older Persons Care, Children's Services, Acute Care		X						
Identify nurses		X						
Regulation		X						
Get new course approved by NMBI		X						
Put in place a Statutory Instrument (S.I.) for annotation on registration					X			
IT Solution goes live			X					
Interim Report Produced					X			
Final Report Produced								X

Summary Budget
The budget required is in development.

Resourcing
The following resources are required for this project.

- Anne-Marie Ryan – Project Manager
- Project Support – project assistant; researcher support; admin support

Stakeholder List
The following stakeholders are directly involved in the project as sponsors.

Organisation	Sponsor Name
HSE:	Dr. Aine Carroll
	John Hennessy
	Mary Wynne
	Brian Murphy
	Rosarii Mannion
NMBI:	Mary Griffin
	Essene Cassidy

Champions for the project have been identified and include:

- Professor Gary Courtney
- Professor Eilis Mc Govern
- Dr David O'Hanlon

Other Stakeholders identified to date are:

- Acute Hospitals Division, Department of Health and HSE
- National Human Resources, Department of Health and HSE
- Primary Care Division, Department of Health
- Office of the Nursing and Midwifery Services, Health Service Executive (HSE)
- Group Directors of Nursing
- Group CEO
- CHO Manager
- Patient representative
- Clinical Nurses / Midwives
- Acute Medicine Programme, HSE
- Clinical Strategy and Programmes,
- Clinical Representative of the demonstrator programmes
- Primary Care, HSE
- Social Care Division, HSE
- Irish Association of Directors of Nursing (IADNAM) to include Acute Hospitals and DPHN representation
- SIPTU/INMO
- NMBI
- Nurse Educationalists
- Higher Education Providers of Nursing/Midwifery education and Interprofessional education

Legal Considerations
There are no specific legal considerations. There are legislative issues related to developing and enacting of Rules by way of an S.I. to annotate a nurse's name on the Register of Nurses (NMA 2011 48 (3)).

Assigned Project Manager
Dr. Anne-Marie Ryan

Name and authority of the Sponsor
Dr. Siobhan O'Halloran Chief Nursing Officer

APPENDIX 7
Terms of Reference for the Steering Group

Proposed Terms of Reference for the Steering Group for Graduate to Advanced Practice Demonstrator Projects

This steering group will:

- Advise on and oversee the development of the service supports, educational provision and regulatory requirements to enable the preparation of a nursing service capable of meeting service need to
  - reduce waiting lists in for example adult and children's rheumatology services;
  - address chronic disease management caseload from a broad-based approach by developing Clinical Nurse Specialist (CNS) and Registered Advanced Nurse Practitioner (RANP) in for example AMAUs and integrated care for the community
  - prevent people attending hospital for example older persons when care can be provided in the community
  - develop a responsive care service for example - urgent care children's service
- Advise and oversee the selection of the sites for the demonstrator projects and the establishment and operation of the local implementation groups.
- Set out clearly the evaluation criteria upon which the impact of service provision is determined
- Oversee the development of the evaluation process of both the education programme and integration of nurse services in the demonstrator sites.
  A feature of the evaluation for both the education programme and the implementation of the demonstrator projects is achieving integrated care in the community.
- The objectives of the demonstrator projects are to:
  - contribute to service needs and reduce waiting lists, keep patients at home or as close to home as possible and create pathways of integrated care
  - test the capability of the model to deliver better outcomes (Patient/Staff and Economic
  - create a critical mass of RANP/RAMP's through a developmental pathway for graduate and specialist nurses and midwives
- Support the local implementation groups to deliver the programmes of education, and service utilisation in the demonstrator projects to include the related policies, access and referral procedures and governance arrangements and monitor progress.
- Oversee, and review the reports of the local implementation groups.
- Make recommendations around implementation and monitoring of the model including the necessary education, training, governance and guidance required to achieve interprofessional collaboration.

APPENDIX 8
Consultation Feedback

Green	Signifies feedback already incorporated into the policies
Amber	Signifies feedback is being addressed in light of the planning and development of demonstrator projects
Blue	Signifies feedback that is not within the scope of the current policies

Consultation Workshops (n=4 with 19 participants)	
Figure of 2% for ANPs and the rationale for this figure.	The topic of nurses as managers rather than managers managing nurses was discussed and it was agreed this was the way forward.
The details of eligibility for these services, who is eligible and how the services would be accessed (very relevant to home care packages); Private versus public care price models for example the therapies areas and independent charges for nursing services. The significance of pricing and eligibly should not be underestimated (inc IT/billing/cost associated) how to cost such?	It was advised that some of the structures in the Primary care teams are not in place and still at a theoretical stage. Need to be aware of the impact of this on the policy.
There was a discussion regarding the proposed reporting relationships in relation to the CHO structure and who had responsibility for the budgets and the governing structures in the community.	Risk if all Primary Care Teams not functioning well before implementation. Risk in relation to GPs and enquires if any issues had been raised by the INMO/Consultant/GP unions or any IR problems. Draft polices have not been circulated to that area as of yet.
An example was discussed relating to Asthma which led to a reduction of GP return visits. Other examples in the UK where discussed including the types of routine work see by GPs which could be seen by nurses.	DoH needs to consider allied professionals (upskilling and roles) not merely focus on development of nursing
Question whether we need reconfiguration or redefinition of community nursing role	There was a discussion regarding the papers and how they can positively impact the services and the effect they could have on waiting lists.
Discussions around policies would need a cultural change for professionals and patients. Questions in relation to patient education to know where to receiving need to be avoided.	There was a discussion around the OECD report which referred to using the right skillmix to treat the patient. This discussion led on to conversations regarding examples of Nurse prescribers been employed in an ED's and how this positively impacted waiting times/discharge times.
Envisaged that nurses will both work across the community and acute systems so as not to become de-skilled. How in practice will nurses work in both the Acute and Community systems?	Need to have a clear definition of the role of the GP and the role of a nurse for current negotiations with GPs regarding the management of chronic diseases. Caution was advised for having two separate avenues for patients may lead to problems.

Written Submissions to the Consultation (n=4)	
Budget impact and economic evaluation	Review of services from practice nurses
Interdisciplinary learning and evidence based practice	Anticipated costs of the demonstrator projects A budget impact assessment with economic evaluation will add rigour to the proposal
Funding and resource implications – diagnostic equipment, ICT and admin	Is the G.P. part of the primary care team?
Funding for change in staff mix	Is the triage nurse palatable to the G.P.?
ABF in the OPD and community at a very early stage	Need to demonstrate in the projects ED avoidance and a reduction in the waiting lists
Research services and community costing programme	Are legislative changes required to refer to the ED?
Inconsistent eligibility to services across the country	Need to support a change in culture
Regulations regarding referrals – (follow-up requested of the unit)	Governance of the shared record
Promotion of multidisciplinary team-based learning is recommended	Establishment of Education Standards (core syllabus, competencies and assessment) in evidence-based practice/ clinical effectiveness.
Specific education and training in clinical effectiveness, evidence based practice, implementation science and human factors is recommended	

HSE Feedback	
Develop the role of the practice nurse in the papers and career pathways	Need to backfill posts for this to be successful - 10 ANP's = €700k
Develop prescribing and compliance with medicines including de-prescribing as indicators in the demonstrator projects	Need to monitor x-ray prescribing by nurses throughout the system
Pharmacist needs to be part of the PHCT for integrated care	Develop broadly educated nurses to ANP level to provide care across services and chronic disease management in order to get to critical mass

Possible Demonstrator Project and assistance	
Elderly and Respiratory useful demonstrator projects Endoscopy Cancer Survivorship Mental health (CAMHS)	Telemedicine ANP Acute services ANP for the AMAU's and ED's Rheumatology waiting lists I.D. Liaison
NCEC will forward info on education and training for clinical effectiveness and improvement science	HSE may be of assistance in practically and projects with good practice examples which may result in quick wins.

APPENDIX 9
Criteria for Demonstrator Site Selection

Criteria for Selecting the Sites

Purpose

The purpose of this document is to outline the approach to select the pilot sites for participation in the demonstrator projects.

The demonstrator projects are required to meet service need objectives of: Access to service; hospital avoidance; early discharge; patient flow; waiting lists.

Opportunity for the development of Clinical Nurse Specialist (CNS) and Registered Advanced Nurse Practitioner (RANP), in particular roles in chronic illness management, community integrated care for older persons and ambulatory care needs to be explored in detail.

The current issues are evidenced through data from presentations to ED; Waiting lists and Delayed Discharges from the acute services.

No.	Criteria	Rationale	Ranking
1	**Impact on meeting Service need**	A core principle of the policy is to contribute to service needs and reduce waiting lists, keep patients at home or as close to home as possible and create pathways of integrated care.	1-low use 5-moderate use 10- high use
2	**ICT Infrastructure**	A core output from the pilot is to test the capability of the model to deliver better outcomes (Patient/Staff and Economic). Therefore ICT capacity at local level to measure these via access to: iPIMS/PAS/NIMIS/other, Financial Systems and HR Systems along with ICT support at local level (given the pilot timeline) are a key factor.	1 – low level of capacity and support 2 – moderate level of capacity and support 3 – high level of capacity and support
3	**Governance**	Hospital/Hospital Group infrastructure to facilitate provision of service from hospital to community and community to hospital governance is a key output from the policies. Similarly local governance to facilitate the demonstrator project is key. Therefore the stage of development of the Hospital/Hospital group structure and link with the CHO is a key enabler in the project. This will be measured under the following;	
		1 Group Director of Nursing agreement	1-No 2-Yes
		2 Director of Nursing agreement	1-No 2-Yes
		3 Group HR lead agreement	1-No 2-Yes
		4 Service identified and Plan submitted	1-No 2-Yes
4	**Within a group with Model 4, 3, & 2**	The policy needs to be tested across a HEI and a range of services. Therefore the ideal is that the demonstrator projects are ideally at a maximum within two geographical hospital groups , that include two HEI's given the timeframe for the project.	1 – No 2 – Yes

APPENDIX 10
Creating a Critical Mass of RANP/RAMPs

The purpose of this paper is to outline the proposed areas for development of RANP/RAMP's as demonstrator projects.
The areas have been identified through examination of the waiting lists and patient presentation to the emergency departments, the internal consultation process with Units in the Department following review by the Management Board on the 14 November, and also through engagement with the HSE management leads, and the nursing leads in the NCCP of the HSE and the ONMSD.
The examples below are indicative at this stage and subject to further review and amendment.

Objectives of the demonstrator projects are to:

1. Create a critical mass of RANP/RAMP's through a developmental pathway for graduate and specialist nurses and midwives;
2. Change the way we educate and train nurses and midwives from graduate level;
3. Change how we utilise and deploy the nursing and midwifery resource.
4. Measure the impact and effectiveness of the new model
5. Implement 1-4 above through demonstrator projects over the next 2 years.

Table 1 below outlines the proposed Impact / Outcome of Demonstrator projects to service need in areas of chronic disease management (COPD, Rheumatology), Older person care (Frail Elderly), acute care (ED, AMAU), Children's services (Children urgent care) Endoscopy.

Services Objective	Areas for Demonstration									
	COPD	Rheumatology	Frail Elderly	ED	AMAU's	Cancer Survivorship	Children urgent care	Endoscopy	I.D. Liaison	Mental Health
Access	X	X	X	X	X	X	X	X	X	X
Hospital avoidance	X		X	X		X	X		X	X
Early discharge	X		X		X	X			X	
Patient flow	X	X	X	X	X	X	X	X		X
Waiting lists	X	X						X		

APPENDIX 11
Logic Model Evaluation

Logic Model
Evaluating the impact of a critical mass of ANPs on the Irish healthcare system using a Logic Framework Approach (LFA)

Definition of a Logic Model

"A logic model is a graphic display or 'map' of the relationship between a programme's resources, activities, and intended results, which also identifies the programme's underlying theory and assumptions"
(Kaplan and Garrett, 2005).

Logic models can illustrate the relationships and assumptions of what a programme aims to achieve and the expected deliverable changes.

This process may identify gaps and barriers during the implementation phase of a project and help to crystallise the underlying assumptions and anticipated outcomes.

A Logic Model supports the research process for evaluation as it compels the participants (policy makers, clinicians, healthcare managers) to fully articulate and clearly define the aims and vision of the ANP policy from individual or sectoral healthcare perspectives. While the Logic Model process makes explicit what is often implicit (Jordan 2010). It enables and facilitates communication required between the various stakeholders to examine the underlying assumptions of this ANP programme. Having a clear visual model of the ANP programme supports communication and collaboration at local organisational levels thereby facilitating both formative and summative evaluation. The flexibility of the Logic Model adapts to high-level organisational evaluation needs that can be integrated within different local contexts (Helitzer, 2010). The Logic Model can identify best practice solutions groups in certain practices while highlighting both unintentional and intended outcomes. It is intended that the Logic Model for each service area, chronic disease management (rheumatology and respiratory medicine), older persons care, and unscheduled care will foster stakeholder collaborations on sharing perspectives and goals. Significantly the Logic Model process should bring individual team members together who may have worked individually rather than in a team setting previously.

The evaluation team in conjunction with the candidate APs (APs) based in the four speciality areas of (rheumatology, respiratory, older persons and unscheduled care), developed a series of participatory programme logic models. These identify the relationships between inputs (resources allocated to this initiative), outputs (direct interventions by ANPs), outcomes (benefits for patients) and impact on patient's lives (i.e. quality of Life). These models were developed through a qualitative approach, with ANPs

in each of the clinical areas as well as being informed by data collected in the Introduction phase of the PEPPA Plus Framework. The approach used in the development of the logic models was based on that advocated by the Centre for Disease Control (CDC 2006) and enabled the identification of inputs, activities, outputs, outcomes and impacts that relate to the role of ANPs. Using activity-based data collected by the APs and the existing data available in the health services, in cooperation with the National Clinical and Integrated Care Programmes of the HSE, the evaluation team designed a study methodology to identify the impact of a critical mass of candidate ANPs being recruited to the Irish healthcare system. This tool provides information on the type of clinical care provided by the ANP. The development of the Programme Logic Model and, the clinical context in which the ANP is situated, enabled the following activity-based data to be collected from ANPs:

- Total number of patients seen
- Assessments
- Follow-up visits
- Diagnostic investigations
- Intervention/management plans
- Medication prescribing
- Multidisciplinary meetings
- Consultations by phone
- Consultation with GPs
- Consultation with primary/secondary healthcare providers

The sample, at this phase of the research, included ANPs. Data were collected from primary and secondary sources.

An Roinn Sláinte
Department of Health

www.health.gov.ie