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ORIGINAL ARTICLE

Advanced practice nurse roles in Europe: Implementation challenges, progress and lessons learnt

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Abstract

Background: Advanced practice nursing (APN) roles offer improved access to care and increased quality and more timely care. Despite the advantages of APN roles, there is a disparity between European countries when it comes to implementing APN roles.

Aim: To explore the implementation of APN roles in a range of European countries and to explore what factors facilitate or hinder the implementation of these roles.

Methods: A case study evaluation of the process of implementing APN roles. The sample included four countries where APN roles were well developed (Ireland, Spain, Norway and the United Kingdom) and four where APN roles were implemented (Estonia, Slovenia, Cyprus and Romania). Interviews were conducted with key informants ($n = 28$) from government departments, regulatory bodies, nursing associations and universities. The consolidated criteria for reporting qualitative research (CPREQ) has been used throughout.

Limitations: The small number of countries when considering the size of the region and key informants representing the view of only three to four people in each country.

Results: Four themes were identified, including the rationale for the development of the roles, influence, the evolutionary nature of role development and evidence. The data also revealed a mismatch between the perceptions of how the roles develop among the different countries in the early stages of implementation.

Conclusion: Successful role implementation is dependent upon a tripartite approach between managers, practitioners and educators. An evolutionary approach to role development was used. Regulation and policy come later on in the process of implementation.

Implications for nursing policy: APN policy should be based on patient needs rather than on the workforce or professional imperatives. The process of implementation can take 15–20 years in total. Recognising the importance of the relationships between service managers and educators is key to the early development of these roles.

KEYWORDS

Advanced practice nursing, barriers, case study, drivers, Europe, evaluation, implementation, role

BACKGROUND

Universal access to healthcare, particularly primary healthcare, continues to be a priority for the World Health Organisation in Europe and around the world (WHO, 2021; WHO Europe, 2020). Changes in population demographics alongside rising chronic disease rates often put health systems under significant pressure (Goryakin et al., 2020). In addition, health system disparities related to both access and timely care are evident in many European countries (Orzechowski et al., 2020). In many countries, advanced practice nurses (APNs) have been introduced to ensure quicker and more local access to services and to reduce the waiting times for care (Bryant-Lukosius et al., 2017; Htay & Whitehead, 2021).

Globally, APN roles have not developed in the same way and at the same pace even within the same country. A wide variety of different titles have been developed, the most common of which are Nurse Practitioner, Advanced Practice Nurse, Advanced Nurse Practitioner and Clinical Nurse Specialist (ICN, 2020). At the same time, some advanced roles have developed in distinct specialisms such as Certified Nurse Anaesthetist, Advanced Critical Care Practitioner and Emergency Care Practitioner. The myriad of different titles and specialisms means that definition is more important than ever. The International Council of Nurses (2020, p. 6), in their guidelines around advanced practice, defines APN as 'advanced nursing interventions that influence clinical healthcare outcomes for individuals, families and diverse populations. Advanced Practice Nursing is based on graduate education and preparation along with the specification of central criteria and core competencies for practice'.

An APN is defined by the ICN as either a generalist or specialised nurse who has acquired, through additional graduate education at a minimum of a master's degree, an expert knowledge base alongside reasoning skills to enable complex decision-making. The ICN (2020) describes how worldwide the two most common forms of APN are those in specialist nursing or nurse practitioner roles. To delineate APN roles from other specialist roles, it is useful to refer to Hamric's integrative model of advanced nursing practice (Hamric et al., 2014). Hamric's model involves a central competency around direct clinical practice focused on the patient. The core competencies of the APN role are consultation, evidence-based practice, leadership, collaboration with other colleagues, ethical decision-making, and guidance and coaching. This model then incorporates individuals who may be in APN roles providing care for patients with an undifferentiated diagnosis as well as for the practitioners who are providing specialist care to patients with an established long-term condition.

APN roles have been established in Hungary, Finland, Ireland, Spain and the United Kingdom. Maier et al. (2016) outlined how physician substitution in many countries is driven by workforce challenges and increasing demand for healthcare because of demographic changes and rising rates of chronic disease. Maier and Aiken (2015) explored task shifting from physicians to nurses across 39 countries. They identified that 11 countries had implemented extensive task shifting, including Australia, New Zealand, Canada, the United States,

the United Kingdom, Finland and Ireland. Task shifting included the ability to diagnose, refer, treat and prescribe. Further work in 2018 (Maier et al., 2018) examined task shifting in nine European countries. The results show that practitioners in the Netherlands, England and Scotland reported more changes to their roles with greater involvement in diagnosis, prescribing and treatment than other practitioners. Many aspects of the reported practice involved partial task shifting from physicians to nurses raising questions about the continuity of care.

The focus on task shifting between physicians and nurses is only part of the APN story. Some countries have used APN roles to develop nursing specialisations where the focus is on the nursing care of patients with specific health problems or chronic diseases. For some countries, the notion of task shifting between physicians and nurses can hamper the development of APN roles as there is no physician shortage (Scliculna, 2019).

Bryant-Lukosius et al. (2016) developed a framework for APN role implementation. The framework was developed using participatory approaches involving stakeholders drawn from both Europe and North America and resulted in the Participatory Evidence-Informed Patient-Centred Process for APN role development (PEPPA), which outlines a process for introducing and evaluating APN roles (Bryant-Lukosius & Di Censo, 2004). PEPPA enables the development of patient-centred models of APN care. PEPPA provides clarity around APN implementation as it considers role development across three phases from introduction and implementation through to long-term sustainability.

The original work by Bryant-Lukosius and Di Censo (2004) outlined nine steps to role implementation. Steps 1–5 were part of the role introduction and included defining the patient population, describing the current model of care, identification of the new model of care and identifying priority problems and goals. These steps would include the identification of need or unmet need, as well as identifying how patient outcomes could be improved through a new care model. The steps are important precursors to delineate the contribution APNs could make. These steps are followed by the identification and recruitment of stakeholders which will assist with the development and implementation of roles. Bryant-Lukosius and Di Censo (2004) go on to discuss steps 6 and 7, which relate to implementation. These stages involve the identification of educational programmes to support role development and consideration of the potential barriers and facilitators to role implementation. The final two steps relate to the evaluation of roles to ensure longer-term sustainability measuring effectiveness against the initial priority areas and goals for the role.

EXPERIENCE OF THE IMPLEMENTATION OF ROLES IN EUROPE

The implementation of APN roles in Europe, like in many parts of the world, is somewhat variable. Some countries have made considerable progress in developing APN roles while



other countries are at the start of the journey. In the Netherlands, there are 12.6 APNs per 100 000 of the population representing around 1.5% of the total professional nursing workforce. Whereas in Ireland there are 3.1 APNs per 100 000 of the population, representing 0.2% of the total nursing workforce. Several other European countries are in the early stages of discussing APN roles (Maier et al., 2016). The size of the APN workforce will be dependent on several factors, including patient need, care delivery model and the total number of registered nurses within each country. Despite the variability of progress in role implementation across Europe, the contemporary literature often examines implementation from a single country's perspective (Colson et al, 2021; Guerra et al., 2018; Gysin et al, 2019). This study aims to compare countries at different stages of APN implementation and thus add to the body of knowledge about factors that facilitate or hinder the development of such roles.

One study explored the implementation of APN roles in France (Coulson et al, 2021) looking specifically at the prospects for such roles and the challenges associated with implementation. The study examined the scope of APN practice in France and found that the majority of roles are in either long-term conditions or specialist areas like oncology, renal and mental health. The roles fit well with the ICN definition of APN with a focus on patient management often within a defined protocol developed by a physician. Practitioners then planned the care, undertook patient education, altered medications within the scope of the protocol and performed a clear leadership and wider research role. Coulson et al. (2021) illustrate the policy imperatives of access to care and a desire to ensure that quality of care pathways are the main drivers of APN role development. Legislation and regulation appear to occur much later in the implementation phase of role development.

Jokiniemi et al. (2014) explored the process of APN role implementation in Finland via an online survey of expert informants ($n = 25$). The survey revealed 20 years of role development in the absence of legislation and national policy with different regions at different stages on a continuum of role development. Jokiniemi et al. (2014) identified that the nurse manager role was imperative in successful implementation as they act as a catalyst and the key change agent for role implementation. They highlight how an investment from other stakeholders is also required for successful role implementation. This is as well as three key stages for success. The stages involved establishing a niche for the APN role within the wider patient pathway and then advocating for the role to ensure that it is networked and established.

Guerra et al. (2018) examined the implementation of APN roles in Spain describing how they perceive the main differences in the professional profile between a registered nurse and APN. This includes the capacity and capability of APNs to take on more complex caseloads and manage them with greater judgement, independence and accountability. Guerra et al. (2018) go on to describe how APNs in Spain developed into post-registration specialisms covering obstetrics and gynaecology, midwifery, mental health,

occupational health, paediatrics, geriatrics and family, and community nursing. The roles were introduced in various parts of Spain and eventually became regulated following a Royal Decree in April 2005. Post-registration preparation was at the master's level with programmes built around the notion of advanced practice. The evaluation had a 91.5% response rate to the survey ($n = 151$) and suggested that APN activities varied by grade and job role. Some posts like Unit Manager have a greater scope to engage in research, evidence-based practice and education. The level of involvement was also correlated with the educational level of the APN and the degree of specialism.

Many countries in Europe and indeed globally perceive that the lack of regulation of APN roles can act as a barrier to their implementation. Carney (2016) outlined how the systems of regulation for APNs differ between countries. In some countries, the roles remain unregulated. There have been attempts at standardisation and the provision of credentials by professional bodies where regulation does not exist. In a literature review covering 2005–2015, Carney (2016) found there to be 25 papers related to regulation. The papers identify various models of regulation ranging from those run by the state, usually the Ministry of Health, to those reliant on national legislation. Several countries that have no regulation of APN roles include the United Kingdom, Italy and Germany. The conclusion was that without regulation, there were variations in APN preparation, inclusive of the scope of practice with an inherent risk to the safety and well-being of the patients.

There is some literature from European countries that examines the implementation of APN roles, but this tends to focus on the experiences of a single country and relates to the countries where the role has been successfully implemented. There is a dearth of literature exploring the barriers to implementation and how these might be overcome.

This study aimed to identify the progress in the implementation of APN roles in a range of European countries and to explore factors that facilitate or hinder the implementation of these roles. The specific objectives of the study were to:

- Explore with a range of stakeholders from among the regulators, governments, professional associations and education institutions the context behind the development, challenges with implementation, the progress towards the initial goal and the lessons learned.
- Identify the factors that drive, facilitate or hinder the implementation of advanced practice roles and how any barriers were overcome.

METHODS

The study utilised an exploratory case study design (Yin, 2014) to identify the how and why questions around APN role implementation. The case study design allows for the studying of a phenomenon in a real-world context, and it can provide insight into assumed causal links between actions and outcomes (Yin, 2014). In this study, eight case studies were based



on a country that either had implemented APN roles or was in the early stages of APN role implementation. The unit of analysis was key informants who were involved in the implementation of APN roles at a policy level through either the Ministry of Health, a Regulatory Body or a National Nursing Association. A case study design was selected as it can offer insight into the contextual and causal inferences in a complex system that is useful to inform policy implementation and future policy direction (Paparini et al., 2020).

To understand the implementation approaches and challenges, it was necessary to explore with the key informants the process of implementation alongside the factors that facilitate or hinder role implementation. The consolidated criteria for reporting qualitative research (CORE6Q) guidelines (Tong et al., 2007) were adhered to throughout the study. The data were collected using semi-structured interviews, with several key informants interviews conducted by JU, KG, GL and KM. JU is male, and all other interviewers are female. In this study, a key informant is defined as an individual whose social position in the research setting gives them specialist knowledge about other people, processes or happenings that is more extensive, detailed or privileged than ordinary people (Payne & Payne, 2004).

Sample

The study included key informants from countries where APN roles are more established ($n = 4$) and countries where they are still in their infancy ($n = 4$). Purposeful sampling was used to identify the key informants who had experience of APN role implementation from the perspective of the Health Ministry, the Regulator, the National Nursing Association (NNA) and education providers. In some countries, it was not possible to secure an interview with the ministry official, and to collect a variety of views, further interviews were conducted with other key informants. For this study, a key informant was an individual who had taken a lead role in the development or implementation of APN roles at the national level through either a policy, regulatory or educational perspective. A total of three to four interviews were conducted in each country depending upon whether the regulator was independent or part of the Ministry of Health or NNA. A total of 28 interviews were conducted between March and November 2020.

The countries included in this study were Ireland, Spain, Norway and the United Kingdom, where APN roles have been implemented extensively. This was in addition to Romania, Cyprus, Slovenia and Estonia, which are in the early stages of developing APN roles.

Ethics

The study was conducted in accordance with ethical principles and guidelines. The research was given ethical approval from the Northumbria University Health and Life Sciences Ethics Committee approval number 32951. Individuals were invited to participate via email, which was followed up by

the study information. All participants were aware that the study was being conducted as part of the ICN Global Nursing Leadership Programme. Consent was obtained. None of the participants withdrew from the study following recruitment. All interviews were conducted via web conference with the interviewer and participant, recorded and later transcribed verbatim to enable the data analysis. A standardised interview schedule was used for each interview, although the questions were broad, allowing for different priorities to be discussed. Each interview lasted between 45 and 60 minutes.

Data analysis

The data were analysed using a framework analysis approach (Ritchie & Spencer, 1994), which provides a systematic structure for handling large volumes of data as well as enabling comparison (Hackett & Strickland, 2018). Data were analysed by JU and KG to identify themes from the data. The approach has been widely used in policy research and involves five interconnected stages. In practice, some of the stages run concurrently. The first stage is common in qualitative data analysis and involves familiarisation with the data by reading through the transcripts. Following this, the second and third stages involve theme identification and indexing. Theme identification is often done inductively, and themes are constructed from coding the transcript with keywords referred to in the framework analysis approach as indexing. Once themes are identified, the third stage of charting and summarisation takes place. This often occurs alongside the fourth stage of interpretation, where categories are given labels and themes are combined because they are similar. These stages build the thematic framework, enabling the ultimate identification of the main themes and sub-themes (Spencer et al., 2014). Framework analysis uses a matrix approach to assist the researcher in systematically analysing large volumes of data. Within the matrix, a row represents an individual respondent's quotation and the column represents the theme. The matrix provides a visual representation enabling comparisons to be made between respondents (Hackett & Strickland, 2018).

RESULTS

Table 1 provides an overview of the four themes and the associated sub-themes identified during data analysis.

The range of interviewees can be found in Table 2. To maintain anonymity, no further demographic data were collected.

Rationale

A wide range of different rationales were articulated for the development of APN roles. Countries that have made considerable progress in implementing APN roles cited a desire to improve the quality of care through the better management of people with long-term conditions in which APNs took a leading role.

**TABLE 1** Final themes and sub-themes from the thematic framework

Theme	Sub-themes
Rationale	Population health need Improved quality of care Health system pressure Financial Workforce gaps Professionalisation
Influence	Medical profession Nursing leadership at the government level Role of National Nursing Associations Role of the International Council of Nurses/World Health Organisation
Evidence	Evidence of role value Building an evidence base Evaluation
Embryonic development	Mismatch between perception and reality Piecemeal development Lack of strategy Regulation Tripartite implementation Importance of clinical leader Disenfranchisement – scope of practice Role availability and pay

implementing the roles we decided to take a look at what the critical problem were for the service. Our Chief Nurse at the time was very good at reminding us to look at ‘what is the problem?’... we had terrible waiting lists for some specialisms, people waiting a long time in the emergency room and a need to improve older people’s care and particularly around chronic disease management.

Participant 10

They also often cited a desire to create a professional career structure or they said that the roles were created in response to a clear population health need in response to health system pressures. Pressures within the existing health services in terms of patient access and waiting times were cited as a reason for the development of APN roles in several countries.

the development of roles initially came out of an industrial dispute... we were trying to avoid industrial action.. so we launched a special commission on nursing and one of the recommendations from that was to develop a career pathway for nurses....

Participant 10

The need to develop nursing as a profession and to increase its status was often cited as a rationale for wanting to develop

TABLE 2 Interview participant information

Country/Role	Gender
Cyprus	
Representative from the Nursing Regulator	Male
Representative from the National Nursing Association	Male
Educationalist	Female
Educationalist	Female
Estonia	
Representative from the National Nursing Association	Female
Educationalist	Female
Educationalist	Female
Ireland	
Representative of the Government Ministry of Health	Female
Educationalist	Female
Representative from the National Nursing Association	Female
Norway	
Representative of the Government Ministry of Health	Female
Educationalist	Female
Representative from the National Nursing Association	Male
Romania	
Representative of the Government Ministry of Health	Male
Educationalist	Female
Representative from the National Nursing Association	Male
United Kingdom	
Representative from the National Nursing Association	Female
Representative from the National Nursing Association	Female
Educationalist	Female
Slovenia	
Representative of the Government Ministry of Health	Male
Educationalist	Female
Representative from the National Nursing Association	Female
Spain	
Representative of the Nursing Regulator	Male
Educationalist	Female
Representative from the National Nursing Association	Female

APN roles. Courses at the master’s level often include competencies around research and leadership as well as coaching and supporting others, thus providing a vehicle for the development of both clinical practitioners and individuals who can lead the profession in the future.

Many countries that were at the start of the implementation of APN roles cited workforce gaps as the rationale for developing the posts. This resulted in a lot of resistance from the medical profession and disagreements among nursing leaders. Many of the participants referred to role substitution and task shifting as being the basis of APN roles.

what started as a role to address unmet need has morphed into task shifting between doctors and nurses because of workforce shortages.

Participant 15

Others referred to the problematic nature of task shifting and role substitution and the fact that this degrades nursing contribution.

many employers identified a deficit in the medical workforce and so advanced practice became a medical substitution model. These employers didn't see the advantage of having advanced nursing practice with a nursing rather than medical model at the centre.

Participant 18

Influence

Many respondents reported that there was opposition to APN roles from the medical profession. This often occurred when the narrative was firmly on the shifting of tasks between professionals. Several people reported that medical practitioners had a strong voice at the government level. When a government nursing advisor existed, they often had less influence or were neutral on the issue of APN roles.

some physicians see the possibility...but the physician's chamber more broadly won't allow advanced practice nursing. They do not want to discuss different levels of competencies in nursing.

Participant 3

Some respondents felt that APN roles could be introduced only if the country's NNA led their implementation and agreed on a policy directive with the government. This is despite the fact that policy is often at a late stage in role implementation.

The key role played by the International Council of Nurses and the World Health Organisation regional office was cited as helpful in raising ministry-level awareness of the contribution that APNs could make to health services and primary care.

I am thinking that maybe ICN can send the letter because when you send the letter to our Ministry of Health, they ask me what they are going to be asked about and that alone has helped get the topic back on the agenda.

Participant 14

Evidence

Several participants in countries where APN roles were less well developed cited the need for a strong evidence base to convince the government of the value of APN roles.

In order to influence the scientific committee for public hospitals, we need the evidence of the effectiveness of roles and where the roles should be established.

Participant 4

Evidence from other countries was also seen as valuable, although the transferability of this between different health systems was questionable. Some respondents reported the need to evaluate the early APN roles to help build a strong evidence base for role expansion.

As they (APNs) were appointed we developed a database to collect return information about the number of patients they were seeing, people they took off waiting lists, and the wait times in emergency departments. That was used by the team we commissioned to evaluate the roles as well as providing evidence of impact as we went through each tranche of role implementation.

Participant 8

Evolution of roles

The development of APN roles can be traced back more than 20 years in the countries where the role was well developed. Role development originated through an evolutionary process from the work of clinical service managers, practitioners and educators. This tripartite approach is central to successful role development.

...even with a top-down approach you need buy-in from practitioners, educators, and managers...it's a bit like a jigsaw almost. Often the bit you haven't got is the service side. The hospitals often have no interest in and you need them on board to make it successful.

Participant 6

Countries that were struggling with APN role implementation often identified a lack of engagement from the service managers resulting in practitioners qualifying and returning



to their previous roles. This results in disenfranchisement around pay and not being able to extend their scope of practice.

Many return from their course and they're not in designated roles. They are back in their usual role and working beyond their scope of practice.

Participant 5

Right now APNs get the same salary as registered nurses because we have no special salary for APNs... many look to walk abroad because of the lack of recognition.

Participant 7

Several participants reported that successful implementation could be achieved only through policy, regulation and legislation. They cited Ireland as a model that succeeded with more than 3% of practitioners working at an advanced level.

We are only disseminating information and lobbying on Facebook and in the media. Providing information about what is an advanced nurse practitioner? What they can do?... Maybe in the future, this will be successful, and we can prepare nurses in the same way Ireland did.

Participant 20

This highlighted a mismatch between their perception of how Ireland had implemented APN roles and the reality that the roles existed 10 years before a clear policy mandate and regulation.

DISCUSSION

The findings of this study are in keeping with the PEPPA framework developed by Bryant Lukosius and DiCenso (2004). The PEPPA framework consists of nine steps. The first steps (steps 1–5) relate to the identification of patient need, how roles fit into the model of care and the identification of key stakeholders, and the development of a new model of care that includes APN involvement. In this study, the identification of patient need was a significant finding, with many participants describing the implementation of APN roles without clearly articulating the problem or gap. They are designed to address from a patient or service need perspective. Measuring patient need and in particular unmet need is a challenge (Smith & Connolly, 2019), as unmet need is often a multifaceted concept

that requires multiple measures. These factors include non-use of services, delayed use of services and sub-optimal use of services, all of which can be affected by, amongst other factors, personal choice, financial issues, service availability, culture and ethnicity (Moran et al, 2021). Several authors cite either policy drivers or system pressures as the primary stimulus for APN role development (Gysin et al., 2019; Marsden et al., 2013; Ryley & Middleton, 2015). This presents the APN role as the policy solution as opposed to being specific about the patient or population health need the post hopes to address. The apparent failure to consider how the APN role fits with the model of care may contribute to issues around implementation and may slow the progress or heighten resistance to the role.

One of the most interesting and unexpected findings from this research was the natural history of APN role development, which involved an evolutionary process. Even countries that have gone on to develop legislation and policy around APN roles can trace the initial implementation of the roles back to a close liaison between three key groups of individuals: practitioners, managers and educators. In some countries in the early stages of implementing such roles, clinical managers were not involved in role implementation. This resulted in considerable disenfranchisement among the practitioners who had undertaken an APN programme. These practitioners often returned to their registered nurse role, and while they used many of the skills they had developed during the APN course, they were not facilitated to use the full scope of practice, and they were not remunerated for their additional skills.

Coombs et al. (2007) describe how APN roles evolve through an evolutionary process. Within organisations, there is a move from the early adoption of roles towards a proliferation of roles, which eventually extends into new specialisms. Coombs et al. (2007) draw on the Natural History Framework developed by Bucher (1988) to explain how roles evolve through three stages: emergence, consolidation and transformation. They describe how during the emergence, nursing staff and leaders identify gaps in care and work to convince the hospital management of the need for the role. Roles are developed and implemented through stakeholder engagement. A period of consolidation follows where roles are networked, and policies, educational routes and funding are identified. The final phase (transformation) includes the development of new specialisms and role expansion with the sharing of outcomes and evaluation data nationally and internationally. This Natural History Framework fits with the PEPPA framework (Bryant Lukosius & DiCenso, 2004) as both highlight the need to identify the patient need that the roles are designed to address. Both the natural history and PEPPA frameworks also highlight the important role that stakeholder engagement plays in successful role implementation.

The tripartite evolution of roles is akin to the emergence phase of the Natural History Framework for role development (Bucher, 1988). Although APN roles may be well developed in other countries, this natural history process appears to be repeated within each country and in a specific context. This



is a relatively new finding worthy of further research and exploration to see whether the Natural History Framework is repeated in each hospital or whether it is a phenomenon associated with the emergence of roles that are new to a country. It is clear that as the evolution of the roles takes place, the range of roles expands because of gaps in services, lengthy waiting lists or unmet needs. Clinical leaders, managers and practitioners work with education partners to develop the roles, implement them and identify appropriate outcomes to convince hospital management and policymakers of the value of advanced roles. This, in turn, leads to a greater proliferation of roles and the development of roles into new specialisms.

Jokiniemi et al. (2014) describe how the nurse manager's role is key in implementing APN roles and how they can promote the role, identify the scope of practice and ensure the integration of roles into the existing services. From these case studies, the evolution of roles often occurs 10 years or more before a clear policy or legislation is implemented. One of the key issues with the evolutionary approach to role development is that the roles may involve sole practitioners and are often developed in areas where the need is not the greatest. Managers who are innovative and at the forefront of advancing practice may not be managing services where access is an issue, where the waiting times are long, and where there is a considerable unmet need. Evolutionary role development often leads to piecemeal implementation with organisations having several APN practitioners but many working in isolation. As a result, evolutionary development eventually leads to policy or legislation to allow for a more strategic approach to role development. Many countries in the early stage of APN implementation appeared not to understand the long history of role development in other countries and often perceived that policy and legislation are the starting points of role implementation.

A variety of different rationales were articulated for the development of APN roles. Often educators and representatives of NNAs describe the need for a professional career structure for nursing as the driver behind APN role development. Individuals at the Ministry of Health or regulators described a need for such roles from service delivery or patient perspective. They often described how APNs would help improve the quality of care, provide better access for patients and help tackle issues such as access to healthcare and reduced waiting times. The rationale for the roles was important because building a compelling case for the role not only assists with implementation but also convinces governments of the need for such roles and the value they would bring to healthcare. Kingdon's (1995) policy window and policy streams model suggests that matching the policy solution to the problem is essential if the opportunities to influence health policy are to be realised.

Many countries in the early stages of role development described the need for a clear evidence base on role effectiveness. There is a considerable body of evidence about APN role effectiveness (Donald et al., 2013; Htay & Whitehead, 2021; Morilla-Herrera et al., 2016); as a result, there is a suggestion that in some circumstances, it may be difficult to transfer this to different country contexts. For example, the work

comparing APNs as professional substitutes for other practitioners (Horrocks et al., 2002; Stanik-Hutt et al., 2013) may be more difficult to transfer to countries where there is no shortage of medical practitioners, as the rationale for the development of APN roles will not be clear and further work will be needed to identify the model of care.

The implementation of APN roles needs support from nurses at the national level. Many countries described having no government chief nurse or where the chief nurse is a lone voice. This has often prevented the issue of APN roles from being discussed nationally. NNAs played a key role in trying to get the issue on the agenda, but they often approached this from a professional development point of view rather than highlighting how APN roles could be a policy to help tackle problems and issues in the health services. Many participants described how the medical profession dominated policy influence and how many doctors were personally against APN roles as they perceived that they would replace medical practitioners and fragment care.

Implications for nursing policy

This study has identified several themes in nursing policy development. The study suggests that nursing needs to improve how it engages with policy development by utilising evidence of patient needs. This includes how nursing can address unmet needs or improve the quality and effectiveness of health care. It is vital to ensure that the needs that APN roles are seeking to address and how the role will work within the model of care are foregrounded in any discussions about the roles. This, in turn, should enable the identification of key stakeholders who can be involved in planning the new care model and support new APNs as they take up their new roles. Ensuring that the message about the nursing contribution is clear is key to successful implementation, both locally and nationally. At the same time, investment in the evaluation of APN roles across a range of contexts is essential, so that the evidence base on the effectiveness and contribution of the roles can be built upon.

Professional nursing needs to ensure that APN roles are not exclusively about role substitution. APNs can add considerable value to patient care across a wide spectrum of services, and they have a particular value in supporting patients with long-term conditions. In addition, they can engage with marginalised and often neglected communities in rural locations or those who experience difficulties accessing mainstream services. A strong voice from NNAs and the ICN should continue to champion roles including those that work in specialised areas of practice.

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CONFLICTS OF INTEREST

No conflict of interest has been declared by the authors.

AUTHOR CONTRIBUTIONS

Study design: JU, KG, PA, GL, DCM; data collection: JU, KG, GL, DCM; data analysis: JU, KG, PA; manuscript writing: JU, KG; critical revisions for important intellectual content: PA, GL, DCM.

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REFERENCES

- Bryant-Lukosius, D. & DiCenso, A. (2004) PEPPA framework: a participatory, evidence-based, patient-focused process for advanced practice nursing (APN) role development, implementation, and evaluation. *Journal of Advanced Nursing*, 48(5), 530–540. <https://doi.org/10.1111/j.1365-2648.2004.03235.x>
- Bryant-Lukosius, D., Spichiger, E., Martin, J., Stoll, H., Kellerhals, S.D., Fliedner, M., et al. (2016) Framework for evaluating the impact of advanced practice nursing roles. *Journal of Nursing Scholarship*, 48(2), 201–209. <https://doi.org/10.1111/jnu.12199>
- Bryant-Lukosius, D., Valaitis, R., Martin-Misener, F., Donald, L.M.P. & Brousseau, L. (2017) Advanced practice nursing: a strategy for achieving universal health coverage and universal access to health. *Revista Latino-Americana de Enfermagem*, 25, e2826 <http://doi.org/10.1590/1518-8345.1677.2826>
- Bucher, R. (1988) On the natural history of health care occupations. *Work and Occupations*, 15, 131–147. <https://doi.org/10.1177/0730888488015002001>
- Carney, M. (2016) Regulation of advanced nurse practice: its existence and regulatory dimensions from an international perspective. *Journal of Nursing Management*, 24, 105–114. <https://doi.org/10.1111/jonm.12278>
- Colson, S., Schwingrouber, J., Evans, C., Roman, C., Bourriquet, M., Lucas, G. et al. (2021) The creation and implementation of advanced practice nursing in France: experiences from the field. *International Nursing Review*, 68, 412–419. <https://doi.org/10.1111/inr.12684>
- Coombs, M., Chaboyer, W. & Sole, M.L. (2007) Advanced nursing roles in critical care—a natural or forced evolution? *Journal of Professional Nursing*, 23(2), 89–90. <https://doi.org/10.1016/j.profnurs.2006.07.003>
- Donald, F., Martin-Misener, R., Carter, N., Donald, E.E., Kaasalainen, S., Wickson-Griffiths, A. et al. (2013) A systematic review of the effectiveness of advanced practice nurses in long-term care. *Journal of Advanced Nursing*, 69(10), 2148–2161. <https://doi.org/10.1111/jan.12140>
- Goryakin, Y., Thiébaud, S.P., Cortaredona, S., Lerouge, M.A., Cecchini, M., Feigl, A.B. et al. (2020) Assessing the future medical cost burden for the European health systems under alternative exposure-to-risks scenarios. *PLoS One*, 15(9), e0238565. <https://doi.org/10.1371/journal.pone.0238565>
- Guerra, S.S., Salmeron, J.M. & Zabalegui, A. (2018) Profile of advanced nursing practice in Spain: a cross-sectional study. *Nursing and Health Sciences*, 20(1), 99–106. <https://doi.org/10.1111/nhs.12391>
- Gysin, S., Sottas, B., Odermatt, M. & Essig, S. (2019) Advanced practice nurses' and general practitioners' first experiences with introducing the advanced practice nurse role to Swiss primary care: a qualitative study. *BMC Family Practice*, 20, 163. <https://doi.org/10.1186/s12875-019-1055-z>
- Hackett, A. & Strickland, K. (2018) Using the framework approach to analyse qualitative data: a worked example. *Nurse Researcher*, 26(2), 8–13. <https://doi.org/10.7748/nr.2018.e1580>
- Hamric, A.B., Handson, C.M., Tracy, M.F. & O'Grady, E.T. (2014) *Advanced practice nursing: an integrative approach*. St Louis MO: Elsevier.
- Horrocks, S., Anderson, E. & Salisbury, C. (2002) Systematic review of whether nurse practitioners working in primary care can provide equivalent care to doctors. *BMJ*, 324(7341), 819–823. <https://doi.org/10.1136/bmj.324.7341.819>
- Htay, M. & Whitehead, D. (2021) The effectiveness of the role of advanced nurse practitioners compared to physician-led or usual care: a systematic review. *International Journal of Nursing Studies Advances*, 3, 100034 <https://doi.org/10.1016/j.ijnasa.2021.100034>
- International Council of Nurses. (2020). *Guidelines on advanced practice nursing*. Geneva: ICN.
- Jokiniemi, K., Haatainen, K., Meretoja, R. & Pietila, A.M. (2014) Advanced practice nursing roles: the phases of the successful role implementation process. *International Journal of Caring Sciences*, 7(3), 946–954. Available at <http://www.internationaljournalofcaringsciences.org/docs/31.%20Jokiniemi%20Abstract.pdf> [Accessed 16th January 2022].
- Kingdon, J.W. (1995) *Agendas, Alternatives, and Public Policies*. 2nd ed. New York: Longman.
- Maier, C.B. & Aiken, L.H. (2015) Task-shifting from physicians to nurses in Europe and other major OECD countries. *European Journal of Public Health*, 25(3), 36–37. <https://doi.org/10.1093/eurpub/ckv168.006>
- Maier, C.B., Barnes, H., Aiken, L.H. & Busse, R. (2016) Descriptive, cross-country analysis of the nurse practitioner workforce in six countries: size, growth, physician substitution potential. *BMJ Open*, 6, e011901 <http://doi.org/10.1136/bmjopen-2016-011901>
- Maier, C.B., Köppen, J., Busse, R. & team, M. (2018) Task shifting between physicians and nurses in acute care hospitals: cross-sectional study in nine countries. *Human Resources for Health*, 16, 24. <https://doi.org/10.1186/s12960-018-0285-9>
- Marsden, J., Shaw, M.E. & Raynal, S. (2013) Advanced practice in ophthalmic nursing: a comparison of roles and the effects of policy on practice in the UK and New Zealand. *Journal of Research in Nursing*, 18(1), 7–18. <https://doi.org/10.1177/1744987110385990>
- Moran, V., Suhrcke, M., Ruiz-Castell, M., Barre, J. & Huiart, L. (2021) Investigating unmet need for healthcare using the European Health Interview Survey: a cross-sectional survey study of Luxembourg. *BMJ Open*, 11:e048860. <https://doi.org/10.1136/bmjopen-2021-048860>
- Morilla-Herrera, J.C., Garcia-Mayor, S., Martín-Santos, F.J., Kakani Uttumchandani, S., Campos, L., Álvaro, C. et al. (2016) A systematic review of the effectiveness and roles of advanced practice nursing in older people. *International Journal of Nursing Studies*, 53, 290–307. <https://doi.org/10.1016/j.ijnurstu.2015.10.010>
- Orzechowski, M., Nowak, M., Bielińska, K., Chowanec, A., Doričić, R., Ramšak, M. et al. (2020) Social diversity and access to healthcare in Europe: how does European Union's legislation prevent from discrimination in healthcare? *BMC Public Health*, 20, 1399. <https://doi.org/10.1186/s12889-020-09494-8>
- Papirini, S., Green, J., Papoutsis, C., Murdoch, J., Petticrew, M., Greenhalgh, T. et al. (2020) Case study research for better evaluations of complex interventions: rationale and challenges. *BMC Medicine*, 18, 301. <https://doi.org/10.1186/s12916-020-01777-6>
- Payne, G. & Payne, J. (2004). Key informants. In: *Key concepts in social research*. Thousand Oaks, CA: SAGE Publications, pp. 135–138. <https://www.doi.org/10.4135/9781849209397>



- Ritchie, J. & Spencer, L. (1994) Qualitative data analysis for applied policy research. In: Ritchie, J., Ormston, R., McNaughton Nicholls, C., & Lewis, J. (Eds.) *Qualitative research practice: a guide for social science students and researchers*. 2nd edition. London: SAGE.
- Ryley, N. & Middleton, C. (2015) Framework for advanced nursing, midwifery and allied health professional practice in Wales: the implementation process. *Journal of Nursing Management*, 24(1), E70–E76. <https://doi.org/10.1111/jonm.12291>
- Scliculna, C. (2019) Specialist nursing evolution in Malta. Proceedings of the ESNO Congress 2019. Available at: https://www.esno.org/assets/files/3-c_Corinne-Scliculna-Specialist_Nursing_Evolution_in_Malta.pdf [Accessed 16th January 2022].
- Spencer, L., Ritchie, J., O'Connor, W., Morrell, G. & Ormston, R. (2014) Analysis in practice. In: Ritchie, J., Lewis, J., McNaughton Nicholls, C. & Ormston R. (Eds.) *Qualitative research in practice: a guide for social science students*. 2nd edition: London: SAGE.
- Stanik-Hutt, J., Newhouse, R.P., White, K.M., Johantgen, M., Bass, E.B. & Zangaro, G. et al. (2013) The quality and effectiveness of care provided by nurse practitioners. *The Journal for Nurse Practitioners*, 9(8), 492–500. <https://doi.org/10.1016/j.nurpra.2013.07.004>
- Tong, A., Sainsbury, P. & Craig, J. (2007) Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357. <https://doi.org/10.1093/intqhc/mzm042>
- WHO. (2021). *Universal health coverage*. Geneva: WHO. Available at: https://www.who.int/health-topics/universal-health-coverage#tab=tab_1 [Accessed 16th January 2022].
- WHO Europe (2020). *European programme of work: united action for better health in Europe*. Copenhagen: WHO Europe. Available at: <https://www.euro.who.int/en/health-topics/health-policy/european-programme-of-work/european-programme-of-work-20202025-united-action-for-better-health-in-europe> [Accessed 16th January 2022].
- Yin, R. (2014) *Case study research: design and methods*. 5th edition. Thousand Oaks, CA: SAGE.

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