



Factors influencing the development of advanced practice nursing in Singapore

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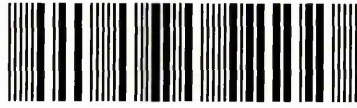
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**Factors influencing the development of advanced practice nursing in
Singapore**

Madrean Margaret Schober

**A thesis submitted in partial fulfilment of the requirements of
Sheffield Hallam University
for the degree of Doctor of Philosophy**

July 2013

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Submitted for the degree Doctor of Philosophy

Title: Factors influencing the development of advanced practice nursing in Singapore

Abstract

The development of advanced practice nursing (APN) roles has become a worldwide trend as healthcare planners explore innovative options for the provision of healthcare services. The integration of these new nursing roles presents a dynamic change for healthcare professionals and the systems in which they practice. Suitable policies should ideally support the inclusion of APN roles and their practice potential, however, a review of the literature found no evidence that demonstrated relevant policymaking, these policy processes and subsequent implementation of the intent of policy. The aim of the research was to investigate APN policy development from the beginning periods of discussion through various stages of decision making to realisation in practice.

An ethnographic design with an instrumental case study approach selecting Singapore as the case was chosen to examine policy development associated with the processes of integrating APN roles into the healthcare workforce. The study consisted of four phases. The first phase involved a review of Singapore documents associated with APN development (N=47). The second phase consisted of interviews with government officials, university dignitaries and academic staff (N=12) who had knowledge of the APN initiative. The third phase included interviews with nursing managers, medical directors and medical consultants (N=11) who were associated with APN implementation. The fourth phase was comprised of interviews and participant observation with APNs (N=15) to ascertain the realities of putting the intent of policy into practice.

A systematic approach using NVIVO computer-assisted qualitative data software for coding the data and organizing the coded data led to a classification of categories and subcategories. Identification of relationships between the categories resulted in an account of policy development and implementation. The findings of the ethnography present a comprehensive and in-depth account of the complexities of policy decision making and the challenges of introducing a new healthcare professional such as an APN. Based on study findings it is argued that an understanding of pivotal stages in policy making could lead to a strategic and coordinated approach supportive of APN development and implementation. Knowledge gained from this research led to the creation of an innovative conceptual policy framework. Critical points to consider when launching an APN initiative emerged from the research and are included in the framework. Although the research was conducted in Singapore the study contributes to a wider understanding of the development of APN roles and relevant policies.

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Glossary of terms

Advanced Practice Nurse	A nurse with education and skills beyond a generalist nurse.
Advanced Nursing Practice	The general discipline related to the advanced practice nurse.
Benchmarking	The process of comparing processes or performance to another that is widely considered to be a standard benchmark or best practice.
Certification	The confirmation of certain characteristics of a person or organization through some form of assessment. A professional certification confirms that a person is certified as being able to competently complete a job or task, usually by the passing of an examination.
Credentialing	The process of establishing the qualifications of licensed professionals.
Internship	Practical experience in a chosen field after completion of an academic education programme in order to use the knowledge learned and put it into practice.
Ministry of Health	In Singapore manages the public healthcare system.
Registry	The compilation and maintenance of a list of names of people who have met specified professional standards.
Singapore Nursing Board	The regulatory authority for nurses and midwives in Singapore.
Status	The position or rank of a person or group within a society. One can earn their status by their own achievements. Some professions enjoy a high social status, regard and esteem conferred upon them by society.

List of acronyms

AACN	American Association of Colleges of Nursing
APN	advanced practice nurse
ANP	advanced nursing practice
CNO	chief nursing officer
CNS	clinical nurse specialist
GP	general practitioner
ICN	International Council of Nurses
MC	medical consultant
ML	medical leader
MO	medical officer
MOH	ministry of health
NEd	nursing educator
NL	nursing leader
NP	nurse practitioner
NReg	nursing regulator
PHC	primary health care
PO	participant observation
SNB	Singapore Nursing Board
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

Chapter 1 Introduction to the thesis

1.1 Introduction

This thesis examines the development of advanced practice nursing in Singapore from the intent of policy to the realisation of the role. The research aimed to explore the development of policy and the policy processes surrounding the advanced practice nursing (APN) initiative along with the subsequent realities of role implementation. Singapore was selected as a country in the early stages of APN development. This chapter introduces the thesis and is divided into five sections. It begins with the background to the study. Next the significance of the research is discussed followed by a section on how my personal interest in the topic arose including methodological considerations relevant to choosing the research strategy. Finally, an outline of each chapter of the thesis is provided.

1.2 Background for the study

The interest in advanced practice nursing has become a worldwide trend. Spiralling healthcare costs and expanding needs for service delivery are forcing key decision makers to explore innovative options for provision of healthcare services. Inclusion of APN roles in the healthcare workforce is one of these options (Buchan & Calman, 2004a; Carryer et al, 2007; Schober & Affara, 2006; WHO, 2002; WHO-PRO, 2001). International surveys conducted from 2001 to 2008 estimated that anywhere from 30 to 60 countries are in various stages of exploring the potential for APN roles (ICN, 2001; Pulcini et al, 2008; Roodbol, 2004). In August 2012 the International Council of Nurses (ICN) noted an increase in these numbers and announced that 78 countries indicated an interest through membership in the ICN International Nurse Practitioner/Advanced Practice Nursing Network.

Advanced practice nurses are registered nurses with further training beyond their initial registration. The International Council of Nurses defines an APN as:

a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A masters degree is recommended for entry level (ICN, 2002).

Advanced practice nurses acquire advanced knowledge and skills that enable them to provide healthcare services that include assessment and diagnosis of disease, ordering diagnostics, prescribing medicines or therapeutic interventions and referral to other professionals. They practice in a wide range of settings such as specialty wards within hospitals, primary healthcare, GP surgeries and rural or remote areas where at times they may be the only healthcare providers. For example, as members of acute or critical care teams APNs collaborate with physicians in case management; in primary health care settings the APN may be the point of entry for healthcare taking on increased autonomy to effectively manage common health concerns and chronic illness.

However, a review of the literature demonstrated that confusion and lack of clarity surround APN role development (see Chapter Two). One international survey conducted by Pulcini et al (2008) representing responses from over 30 countries indicated that more than 14 titles were used to refer to advanced practice nursing and that from country to country and within institutions in the same country there were inconsistencies in role definitions, scopes of practice, educational preparation and regulations for APNs making it difficult to clearly understand role development from the international perspective. Furthermore, in the literature review conducted in preparation for this research, no evidence was found describing policy, the policy-making processes and subsequent implementation of APN roles. Although the international milieu was taken into consideration, this study focused on APN development and policy decisions from the perspective of the Singapore context as an instrumental case study. The next section discusses why this research is important.

1.3 Importance of the topic to research

The consideration of integrating APN roles into healthcare delivery systems is a complex and complicated course of action. A variety of reasons are contemplated when considering APN roles. The motives include: population healthcare needs, public sector reform requiring healthcare workforce planning and professional development for nurses. Various decision makers, healthcare planners, professionals and representatives of academic and healthcare institutions may approach the development and implementation of the role incongruently. Nurses themselves may have varying views of what is meant by an advanced nursing role and why the role is in demand (DiCenso & Bryant-Lukosius (2009); Gardner, G. et al, 2007; Ketefian et al, 2001; Schober & Affara, 2006).

This study set out to gain an understanding of policy and the policy processes associated with the development and implementation of APN roles in order to better comprehend how policy decisions are made and subsequently implemented. It was felt that the knowledge

gained would result in recommendations for strategic approaches that could be useful for the development and implementation of APN roles not only in Singapore but also for other countries in the early stages of exploring this concept. In addition, I envisaged that knowledge of factors influencing APN development and related policy decision-making could also inform those nations continuing to face difficulties in role implementation. The next section discusses my personal interest in the topic.

1.4 Personal interest in topic and methodological considerations

As a nurse practitioner educated in the United States I was introduced to the idea of an advanced nursing role in the early stages of development in the country in the 1970's. At a stage when I was a novice practitioner the country lacked regulations, standards or, in fact, any specific definition to relate to. I faced opposition by other healthcare professionals, limitations on provision of care to the full extent of my expertise and confusion when attempting to explain the role. This environment of frustration and humiliation introduced me early on to the necessity of lobbying key stakeholders for supportive policies. My exposure and experiences with the politics of policy decision-making had begun and as obstacles were met and addressed it left a deep imprint on my awareness of the difficulties of implementing the role. Numerous endeavours in search of role recognition over 30 years in clinical practice included seeking recognition for autonomous practice, prescriptive authority, reimbursement for provision of healthcare services and nurse practitioner specific liability (indemnity) insurance. I wondered if this advancement of a new nursing role that I was so passionate about really had to be so difficult. As my professional career evolved I became increasingly aware of new international APN initiatives that were emerging. My recognition of these worldwide changes led to the acquisition of increased knowledge on the variances in country schemes and the challenges faced. Increased involvement in the international milieu also led to a career change and the launching of my current status as an international healthcare consultant with an expertise in advanced practice nursing role development.

My personal interest in the research topic emerged and was stimulated during a period of time when I had provided international consultancies to over twenty countries that were in the process of APN development or exploring the possibility of introducing new nursing roles into the healthcare workforce. During this time I observed that key stakeholders and professionals repeatedly faced similar difficult situations at multiple levels when considering the concept of advanced practice nursing. As I watched individuals, governments and universities struggle trying to make sense of this role I wondered if there could be better

and more strategic approaches to APN development. These observations raised questions about the complexities of policy decision-making and the subsequent implementation of this new nursing role. As my interest in this topic peaked I was recruited to assume a position as Senior Visiting Fellow at the National University of Singapore to contribute to APN education and development of the countrywide initiative. This move subsequently aligned with my personal interest in the topic and led to my decision to pursue the research. During my five-year residency as an advisor to the APN master's programme in Singapore I contributed to curriculum design, programme delivery and provided comment on role development within the country. My position as a visiting scholar provided an opportunity to study intensely a country in the early stages of APN development. In addition, I recognised that in my academic position I could likely penetrate the network of policy decision-making to better understand its influence on role implementation in the country. I was also accustomed to working with people at government levels and in senior positions of authority thus I had some confidence that gaining this perspective was possible. My experience and presence in the country provided me with the ability to be immersed in the nursing as well as the Singaporean culture.

To provide an understanding of the complex processes undertaken by a range of decision-makers along with the interactions of individuals and their interpretation of related actions ethnography was chosen as the most appropriate methodology. Consistent with the view of Hammersley and Atkinson (2007) I wanted to acquire an analytic understanding of people's perspectives and activities recognising that there may be multiple perspectives and that this methodological approach could provide insight consistent with the aims of the research. I was cognisant that there were benefits to choosing an interpretative approach that takes into account the intricate nature of the world in which policy is developed and subsequently implemented. In planning the ethnography it seemed like a golden opportunity to gain new knowledge about a topic that could have significant benefit to others beyond those involved in the research. My curiosity in learning about people by learning from them by asking questions about their actions, interactions, feelings and experiences as well as by observing their behaviours (Roper & Shapira, 2000) led me to believe that this methodology was consistent with my aims for the research. An instrumental case study approach was chosen to capture the complexity of the Singapore APN scheme. A case study is expected to catch the complexity of a single situation. In the instrumental case study approach the case itself is of secondary interest to the research and is used to gain a general understanding or insight into a topic by studying a specific case (Stake 1994). Yin (1994, 2009) elaborated on Stake's differentiation of types of case studies and advocated the use

of the case study approach to investigate an event or experience within its real life context when the boundaries between the event and the context of the experience are not entirely clear. My hope through the ethnography was to gain an in-depth understanding of the nuances and sequence of events within the Singapore context to acquire insight into the factors influencing APN development in general. My overall aims for the research were:

- To analyse drivers that provided momentum for the introduction of APN roles in Singapore;
- To investigate the processes associated with the development of policy that led to the introduction of APN roles in Singapore;
- To explore the experiences of a sample of key decision makers and APNs in Singapore in order to ascertain how intentions of policy were subsequently realised in practice.

1.5 The structure of the thesis

The thesis is divided into ten chapters. Following the introductory chapter, Chapter Two contextualizes the research with findings from a comprehensive literature review that contributed to the shaping of the study aims. Based on a review of international literature, this chapter examines topics such as the impetus for APN roles; issues defining APN practice; education, regulations and standards for the role; the impact of APNs on healthcare delivery followed by barriers and obstacles to implementation. A detailed account of the methodology chosen for the research is presented in Chapter Three. The chapter begins with a statement of the research aims and is followed by an overview of ethnography including explanations and critiques of interviewing and participant observation as research methods. Chapter Four focuses on the fieldwork for the research. A description of the conduct of the study includes an explanation of the objectives of each of the four study phases and processes of participant recruitment. Planning and the sequence of events for data collection are discussed followed by my approach to data analysis. This chapter ends with a subsection on ethical issues specific to this research. Building on the analysis of the international literature and review of Singaporean documents, Chapter Five presents the contextual development in Singapore. Content in this chapter makes a comparison between details of the Singapore initiative and the international context described in Chapter Two.

Key findings derived from the study are discussed in Chapters Six to Eight. Chapter Six identifies the main drivers that contributed to the momentum for APN roles in Singapore

along with the extent to which these drivers caught the attention of decision makers. This chapter also provides a description of the complexity of the decision-making processes as well as the sensitivity required of the decision-makers that were involved. Chapter Seven presents a discussion of the issues associated with education and role preparation for the APN in Singapore. From programme planning to curriculum design to student selection including student experiences the processes described include difficulties faced and strategies developed. Chapter Eight portrays the multifaceted and at times turbulent dimensions of the beginning phases of APN role implementation. This chapter provides an account of challenges that have been encountered and overcome; forces that were strong enough to forestall development; lessons learned in the process and suggested strategies for sustainability of the role in Singapore. Chapter Nine draws together the main findings identified in the study as a basis for discussing the implications of policy decisions as they impact and are adapted when approaching APN development. A proposal is suggested for a strategic framework taking into consideration policy decisions as well as the pragmatic choices that are made on the ground level in realisation of policy. Chapter Ten examines the main issues and implications identified in the study as a basis for discussing policy and policy decisions that could be responsive to the complex processes of APN development.

The next chapter presents findings from the literature review.

Chapter 2 Advanced Practice Nursing Literature Review

2.1 Introduction

The aim of this chapter is to demonstrate the global presence of advanced practice nursing (APN) and to provide validation from the literature on topics related to APN role development to inform this research. In addition, I sought to ascertain approaches to policy development in order to consider the implications of decision-making processes that may have shaped the evolving nature of the APN initiative in Singapore. This chapter is divided into ten sections. Subsequent sections begin by describing the strategies used in conducting the literature review. Section three identifies drivers for APN schemes that emerged from the international literature. The fourth section presents the range of titles, definitions, scopes of practice, characteristics and competencies used to identify APN roles. The next section addresses topics associated with APN education and role preparation followed by a discussion of regulations and regulatory processes that provide a professional standard for the role. The impact and outcomes of APN services on healthcare delivery are examined in section seven followed by issues associated with implementation of APN roles in section eight. Section nine looks at the future of APN development based on the literature. The chapter concludes with key findings from the literature and identifies gaps in knowledge that justify the aims of the study. The literature review was conducted in March and April 2009.

2.2 Methods for reviewing the literature

Aims of the literature review

The aims of the literature review were to identify and review published and unpublished literature in order to 1) demonstrate the global presence of APNs, 2) provide validation on topics of relevance to APN development and 3) identify policies and policy decision making essential to the integration of APNs into healthcare systems. A comprehensive literature review was conducted to summarise the literature on topics relevant to the APN role, identify policies influencing role development and implementation as well as to search for gaps in the literature. This approach was exploratory and sought to represent relevant literature on the broad topic of advanced practice nursing and to identify recurring themes.

Search strategy

Five strategies were used to obtain relevant literature: 1) Cinahl, PubMed and Scopus electronic databases were searched using free text keywords pertinent to advanced practice nurse; advanced nursing practice; nurse practitioner and clinical nurse specialist. Individual and combined search terms were used to be as certain as possible to obtain

relevant publications; 2) a search of the reference lists of included papers was conducted to identify relevant papers that were not captured in the database search; 3) a purposeful exploration of web sites of professional organizations (e.g. American Association of Nurse Practitioners; International Council of Nurses; Royal College of Nursing, UK) , governmental agencies (e.g. National Council of State Boards of Nursing, USA; New Zealand Ministry of Health; Nurses Registration Board of New South Wales) and research institutions (e.g. National Organization of Nurse Practitioner Faculties, USA; McMaster University, Canada) thought to have relevance to advanced practice nursing was carried out; 4) a review was conducted of literature already on hand as a result of authorship by the researcher of previously published journal articles, book chapters and a book on advanced nursing practice; 5) professional colleagues familiar with nurse practitioners, advanced nursing practice or advanced practice nursing contributed relevant peer reviewed and unpublished literature. This included publications not written in English that were translated for the researcher for the purpose of this review.

Inclusion/exclusion criteria

The ICN (2002) definition (see subsection 2.4.2 for the complete definition) of advanced practice nursing was used as a baseline reference to establish criteria for inclusion/exclusion of cited literature. Specifically, the ICN definition refers to advanced nursing skills, advanced nursing knowledge and advanced nursing education beyond the level of a generalist nurse. Following a review of citations and abstracts, full text of relevant publications were reviewed to determine if the terms 'advanced practice nursing' or 'advanced nursing practice' aligned with the ICN definition. If a publication referred to general nursing and did not clearly address components associated with 'advanced practice nursing' the publication was excluded. The criteria for inclusion and exclusion were based not on the quality of the studies, but on the relevance to the topic. All relevant publications were included irrespective of whether they were empirical studies, narratives, policy documents, essays or opinion papers. Reliance was placed on primary sources, however, secondary sources were considered where they added breadth or depth to what was known or available on the topic. Secondary sources such as systematic reviews (e.g. Horrocks, Anderson, & Sailsbury, 2002; Mantzoukas & Watkinson, 2007), publications with a broad perspective such as authored textbooks (e.g. Hamric, 2009; Schober & Affara, 2006) intended for wide distribution as well as published and unpublished agency reports (e.g. World Health Organization) were included to gain a comprehensive international perspective. Relevant opinion papers, anecdotal articles and conference presentations were reviewed to broaden understanding of the topic and to demonstrate a need for

research.

Assessment of quality

In keeping with the exploratory nature of a comprehensive literature review specific evaluation of the methodological quality of publications was not conducted other than to note that there were few randomised controlled trials and that some of the trials appeared to lack methodical rigour. A tool was not used to formally assess study quality but in reassessing the analysis retrospectively this would have been useful to more formally weight the significance of the various publications. Even though a tool to assess study quality was not used I did take note of methodological strength. Increased attention was paid to research studies versus opinion papers, editorials and conference presentations. Published reports from professional nursing or APN bodies along with country wide surveys and studies that identified topics of relevance to APNs were viewed as compelling additions to the literature analysis.

Method for identification of themes

The principles of a framework developed by DiCenso and Bryant-Lukosius for the research report *Clinical Nurse Specialists and Nurse Practitioners in Canada: A Decision Support Synthesis* (CHSRF, 2009) was used to begin to guide the identification of key themes. In addition, publications authored by the researcher prior to this review were examined to capture the structure, processes, outcome dimensions and descriptors of advanced practice nursing roles. Hard copies of publications were manually categorized according to identified recurring themes. This strategy allowed for constant comparison and repetitive review of the content of the literature. Based on the DiCenso and Bryant-Lukosius framework structure-related features included role description, education, competencies, regulation, scope of practice and practice settings. Process-related components included motivation or drivers for establishing the role along with barriers and facilitators associated with role implementation and practice. Outcome-related aspects included patient, provider and health system outcomes. Consideration of these features led to the identification of the themes discussed later in this chapter.

Overview of findings

After applying the inclusion/exclusion criteria the review of the literature generated 2,200 citations that indicated relevance to the broad topic of advanced practice nursing. Following exclusions based on duplicates or triplicates of articles, elimination after full text review determined content was not relevant to advanced practice roles and exclusion due to an inability to either access full text of a publication or publications that were unavailable in English 464 publications were determined to be directly relevant to objectives of the

literature review. Research studies with defined methodology were found to often be limited in perspective and sample sizes were small. Randomised controlled trials were in the minority and research designs for trials frequently lacked reliability and validity measures. Relevant literature was dominated by publications mainly from Australia, Canada, New Zealand, countries in the United Kingdom (primarily Scotland and England) and the USA. Most publications provided various descriptions of an APN, presented illustrations of where a nurse in this role practices and offered recommended education guidelines for role preparation. Even though systematic and comprehensive literature reviews painted a generally positive view of APNs only two studies were found that presented outcomes of randomised control clinical trials with demonstrated rigour and supportive of APN practice. Although the review of literature was comprehensive it was limited by the subjective nature of most of the publications and was also dependent on the interpretative and analytical perspective of the researcher. The dominance of publications from just a few countries with longer histories of implementing the role limits the possibility of generalising the findings even though common themes and issues were described. A lack of demonstrated rigour in some research studies brought the issue of the validity and reliability of these findings into question.

The following themes emerged from analysis of the literature:

- Justification, motivation and drivers for establishing the APN role;
- Explanation of the role including titles, scope of practice, characteristics and competencies;
- Role preparation and education;
- Standards and regulations;
- Healthcare impact and outcomes;
- Issues of role implementation usually defined as facilitators and barriers.

Although publications referred to the need for regulations, standards and APN specific health policies no literature was found describing policy development, the policy processes or realisation of policy in actual practice. This finding exposes a gap in knowledge justifying my research aim to gain an understanding of policy and policy processes relevant to APN development.

The literature demonstrated that consideration of advanced nursing roles was most often a response to some impetus driving such an initiative. The next section identifies drivers and motivation for the establishment of APN roles.

2.3 International impetus for advanced practice nursing

Nurses in advanced practice roles were found in various healthcare settings and were becoming a central part of healthcare provision worldwide. In assessing the momentum behind APN initiatives several premises appeared in the literature:

- An identified healthcare need for APN services;
- An answer to skill mix and healthcare workforce planning;
- A desire for the advancement of nursing roles and professional development;
- Public demand for healthcare services

APN schemes were context sensitive to the environmental realities in which the concept emerged (see Appendix 1 for a list of countries and associated drivers for APN development). The following subsection presents a discussion of an identified need for APN services.

2.3.1 Identified healthcare need for APN services

A response to identified populations requiring healthcare services was found to be the most common reason for considering the inclusion of APNs in providing healthcare. Fragmented healthcare delivery and lack of access to Primary Care were acknowledged as problems. APNs were considered an option for this predicament. Frequently cited examples of a need for APNs were from the USA where requests for highly skilled nurses in hospital settings and a physician shortage led to the introduction of the roles. As nurses embraced expertise from medicine and other disciplines the expanded roles became more visible (Dunphy, 2004; Keeling, 2009). In the USA advanced practice nursing developed under four categories: certified registered nurse anaesthetists, certified nurse midwives, clinical nurse specialists and nurse practitioners. All four categories developed in response to an identified need or as a consequence of an opportunity to increase the presence of APNs in a new setting (Keeling, 2009). Even though the history in the United States included four separate achievements in changing nursing roles, the evolution that is most often cited internationally is nurse practitioner practice in primary care settings (Buchan & Calman, 2004; Gardner et al, 2004; Marsden et al, 2003). The rapid growth and visible presence of nurse practitioners in the USA provided a model that inspired international momentum. Nurse practitioners in primary care settings offered case management and follow up care for common ailments and illnesses across the lifespan. The emergence of nurse practitioners in the countries of the United Kingdom (UK) was thought to follow a model of

the nurse practitioner role in the USA. Development was attributed to changing demands in the community, especially the disadvantaged or those who did not have access to a GP. These developmental factors were accentuated by a short fall in GP recruitment and reduction in junior doctor hours (White, 2001). Even though nurse practitioners were present in the UK a confusing picture of advanced practice was presented in a survey commissioned by the Royal College of Nursing (Ball, 2006). The survey indicated that positions of nurse practitioner, advanced nurse practitioner, nurse consultant, clinical nurse specialist and specialist nurse were all considered advanced nursing to some degree thus making it difficult to grasp a clear picture of APN practice in the UK. Furthermore, a clearly identified need for nurse practitioner service provision was not substantiated in the literature even though the role appeared to be flourishing.

In attempting to emulate the USA and countries in the UK the arrival of the nurse practitioner in Australia made an important contribution to the health and wellbeing of communities by establishing pathways toward improved services (Gardner et al, 2004). Attributes such as geographical isolation along with inequitable distribution of healthcare services including unmet needs in rural and remote areas, especially to its indigenous populations, stimulated nurse practitioner initiatives throughout the country (Gardner, 2004; Hand, 2001; Hegney, 1997). Similar to Australia, the role of the community health nurse practitioner was created in South Korea to serve isolated rural areas and villages lacking access to fundamental health care (Kim, 2003) as were services for the Pacific Island countries with populations spread over enormous expanses of the Pacific Ocean in thousands of small island communities (WHO, 2001). In promoting initiatives with a focus on APN services some countries targeted a specific population needing healthcare. Sweden and the Netherlands, in exploring the optimal use of nurse practitioners targeted care specific to the elderly and those with chronic illness in community settings (Danielson, 2003; Roodbol, 2008). The development of APN roles in Switzerland was cited as being driven by the healthcare needs of the country's population, however, attention was focused on research and advanced nursing knowledge thus presenting a mixed picture for APN development (De Geest et al, 2008).

The determination of healthcare needs by healthcare planners influenced decisions to include APN roles in healthcare systems. APNs as an answer to skill mix and healthcare workforce planning is discussed next.

2.3.2 Skill mix and healthcare workforce planning

Healthcare workforce planning and the necessity to rethink the skill mix for healthcare service provision, especially in situations with a shortage of physicians or decreasing medical hours for services, provided impetus for APN development. Healthcare planners in the Netherlands, facing a shortage of physicians and nurses, met the structural problems in healthcare provision by adjusting the scopes of practice for doctors and nurses along with the introduction of nurse practitioners to hospital units. The APN role subsequently expanded to meet primary healthcare demands associated with escalating chronic illness in the country (Roodbol, 2005; Roodbol, 2008). Similarly, health authorities in France responding to an anticipated shortage of doctors and an inadequate workforce to meet healthcare demands set out to explore alternatives to service provision that included APNs (C. Debout, personal communication, 2006 & 2008). The New Zealand Ministry of Health, in the midst of radical public sector reform that addressed inadequate delivery of primary care, declared that there were systematic barriers to nursing's capacity to achieve its potential. Legislative and policy initiatives were implemented to enable nurses to more effectively deliver primary care and specialist nursing services resulting in New Zealand's nurse practitioner role (Jacobs & Boddy, 2008).

Workforce planning, skill mix and optimal utilization of all healthcare workers presented challenges for healthcare planners while offering an option for decision makers to view APNs as part of the solution (Buchan & Calman, 2004). However, criticism arose most often in the form of editorials and commentaries that these nurses were physician substitutes or 'mini docs' or 'maxi nurses' thus lending support to a view of nurses functioning in a subordinate role rather than separately identifiable nursing practice (Castledine, 1995; CMA, 2006; C. Debout, personal communication, 2006; Duncan, 2006; Ball, 2005). The literature suggested that promotion by governmental authorities lent authority to launching APN initiatives. However, findings in the literature also suggested that this top down approach may limit the full potential for these new nursing roles if the rationale is simply to ease the burden of doctors (Gardener et al, 2004; Jacobs & Brody, 2008).

Nurses do not enter practice with privilege or the professional status of other healthcare professionals. The next subsection describes the desire to enhance professional status and promote professional development as the impetus for APN development.

2.3.3 Professional development for nursing

Nursing leaders in Japan reported that specialisation and the increasing use of technology in medical care promoted development of the master's degree in nursing with an expert

clinical focus to meet diverse healthcare demands. Clinical nurse specialist roles subsequently developed in specialties of psychiatric/mental health; oncology; community; critical care, geriatrics, paediatrics, maternity and chronic adult health (ICN, 2004; ICN, 2005a; JNA, 2002; Usami, 2008). Similarly, Taiwan launched a clinical nurse specialty role in cardiac surgery responding to a request for more highly skilled expert nurses along with a move toward professional development (Chiu-Hui Chen, undated). In Switzerland, physicians were attributed with requesting nurses with higher level clinical skills (De Geest et al, 2008) thus providing an opportunity for nurses to progress professionally and enhance their competencies.

The introduction of APN roles and subsequent professional development was evident in those nations or regions of the world that had exposure to countries with longer histories with these roles. Iceland traced interest in new nursing roles to the return of nurses following completion of master's qualifications in the USA and an enhanced awareness of professional nursing aligned with advanced roles (Schober & Affara, 2006). Following the international momentum for APNs, a legal framework in Spain was developed to encourage advancement for nurses through a process of continuing education and development of advanced competencies (ICN Credentialing Forum, 2005b). The Hospital Authority Hong Kong (Chang & Wong, 2001) introduced the APN concept following experiences in the USA and hoping to motivate nurses to remain in clinical practice. In both Spain and Hong Kong a career ladder was designed to support advancement with a clinical focus for nursing in environments where the only movement up career paths was through positions in management or education. Similarly, Ireland promoted opportunities for nurses to remain in clinical practice with creation of advanced practitioner roles and a clinical career ladder (Furlong & Smith, 2005).

Consistently the literature suggested that APNs contributed to improved healthcare for the public. The next subsection addresses public demand as an impetus for APN services.

2.3.4 Public demand

Anecdotal accounts and editorials described increasing public demand for convenience, quality and specific healthcare services with less attention to professional hierarchies. The literature suggested a growing interest and public acceptance of APN services (Buchan & Calman, 2004; Horrocks et al, 2002; Kinnersley et al, 2000); however, there was no evidence found that public demand drove APN initiatives.

In summary, the literature indicated that the impetus for the development and implementation of APN roles was multifaceted. No single theme was mutually exclusive and

often the thrust for change in nursing roles was a result of more than one incentive for change. This section has acknowledged drivers that were identified as a result of the literature review. A discussion of how motivation for the Singapore scheme compared to international development can be found in Chapter 5 – The Singapore Context.

The concept of APNs presents a new dynamic as well as a new healthcare professional to healthcare systems. Identifying who this person is and what services they will provide emerged as a major challenge. The next section examines issues found in the literature that were associated with international attempts to define APN practice.

2.4 Titling, role definition, scope of practice, characteristics and competencies

In trying to understand topics such as role definition, scope of practice, role characteristics and competencies when referring to APNs the literature indicated that terminology was used inconsistently. This hampered attempts to clearly portray these roles. In addition, titles that were intended to refer to APN roles represented dissimilar activities and services in different countries and settings. This section attempts to discuss these variations in an effort to provide some clarification and is divided into five subsections. It begins by addressing the topic of titling followed by subsections on APN definitions, scopes of practice and role attributes. Finally competencies that were viewed to be essential for APN practice are discussed.

2.4.1 Titling

A title should convey a brief message as to who this person is while also distinguishing the APN from other nursing and professional categories (Styles & Affara, 1997). In the absence of legal title protection potentially any nurse can take on a title associated with advanced practice nursing without having to demonstrate competence or education required for the level of practice. In a survey conducted by the International Council of Nurses (ICN, 2001) of their 120 National Nursing Associations, fifteen countries reported having specific titles for advanced roles. Some countries reported more than one title was in use. Although nurse practitioner, advanced practice nurse, clinical nurse specialist and nurse specialist were mentioned most often, a variety of other titles were used in denoting practice specialty. A follow-up survey conducted by ICN (2008a) continued to find a proliferation of titles with 86 respondents from 32 countries citing the use of 14 different titles referring to advanced practice (see Appendix 2 for a list of country or regional titles used in reference to APNs). Any attempt to identify advanced practice nursing only from the perspective of titling was problematic as functions and responsibilities varied from one setting to another in

relationship even with commonly used titles such as 'nurse practitioner', 'advanced practice nurse' or 'clinical nurse specialist' (Schober & Affara, 2006). The variety in titling made it difficult to clearly identify advanced practice nurses, contributed to confusion in role development, led to varying interpretations as to what to expect of an APN and contributed to difficulty in trying to analyse the literature (Buchan & Calman, 2004; DiCenso, 2008; Gardner et al, 2004; Schober & Affara, 2006). These inconsistencies contributed to disorderly role implementation when introducing APNs to the public and other professionals (Castledine, 2003; DiCenso & Bryant-Lukosius, 2009; Gardner et al, 2004).

The next subsection examines the significance of providing clear role definitions.

2.4.2 Definition of advanced practice nursing

Role definitions within healthcare systems can be viewed as a concise way to communicate what services to expect from a healthcare worker and how these services will be offered. From a regulatory perspective clear definitions are viewed as essential for identification and inclusion of a profession (Styles & Affara, 1997). However, the literature indicated that in addition to confusion surrounding titles there were also inconsistencies in role definitions. Following over a decade of monitoring the growing presence of APNs worldwide, ICN took an official position in recommending a definition for the nurse practitioner/advanced practice nurse (ICN, 2002). This definition was based on an analysis drawn from country specific documents submitted to the ICN International Nurse Practitioner/Advanced Practice Nursing Network (INPAPNN) representing current and potential roles in eleven countries. The ICN position states that the nurse practitioner/advanced practice nurse is:

'a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A master's degree is recommended for entry level' (ICN, 2002, retrieved 11 March 2009 from <http://www.icn-apnetwork.org>)

This definition was suggested as a benchmark for countries in early stages of APN development and emphasised nursing principles as a core value for the role. The ICN definition is the APN definition used in this thesis.

Hamric (2009) suggested defining 'advanced nursing practice' as a 'concept' thus excluding reference to a specific role. This proposal contrasted with the view that a clear definition brings a concise identification of one category of professional workers within a healthcare system. Hamric advocated for APN roles as a 'concept' stipulating that:

'Advanced practice nursing is a function of education and practice preparation and a constellation of primary criteria and core competencies;

Direct clinical practice is the central competency of any APN role and informs all other competencies;

All APNs share the same core criteria and competencies, though the actual skill set varies depending on the needs of the APN's specialty patient population.' (Hamric, 2009, p. 77)

The view of advanced practice nursing as a concept lent flexibility and comprehensiveness when searching for a definition, however, the lack of specificity did not contribute to a clearer understanding of these nursing roles. In addressing nurse-doctor substitution in the UK Sibbald et al (2006) chose to focus on nurses working in advanced roles in primary care regardless of whether they bear the title or define the role as a nurse practitioner. This pragmatic approach chose to ignore titles that appear meaningless but did not add clarity to the confusion that already exists in the literature when attempting to define the role. What the APN does in practice can be explained by the services they provide. The next subsection presents the use of a scope of practice in order to delineate the role.

2.4.3 Scope of Practice for an Advanced Practice Nurse

A scope of practice describes the range of activities associated with recognised professional responsibilities. For the APN, it describes what a person in this role can do, what population can be seen or treated and under what circumstance or guidance the APN can provide designated services (Hanson, 2009; Klein, 2005). The authority supportive of the scope of practice may originate from various sources such as laws and regulations; a professional code of ethics and professional practice standards (Hamric, 2009). In addition, a scope of practice frequently forms the foundation for development of APN educational programmes.

The literature revealed inconsistencies in the use of a scope of practice between countries, internally among states or provinces and between institutions within the same country. Recommendations encouraged development of a general scope of practice along with more specific scopes of practice for the highly specialised APN roles (Dunning, 2002; Castledine, 2003; NCNZ, 2002; ICN, 2008b). No literature was found that demonstrated a single best fit for all circumstances and all APN practice. In assuming a leadership role in guiding nurses worldwide ICN undertook publication of the *Scope of Practice, Standards and Core Competencies* (ICN, 2008b) for APNs in an attempt to provide a point of reference for countries to refer to. Scopes of practice tend to be broad, allowing for flexibility

to respond to the needs of a healthcare environment (ANA, 1996; AANP, 2002; ICN, 2008b). The following example from the USA provides one illustration:

'The scope of an advanced practice registered nurse includes but is not limited to performing acts of advanced assessment, diagnosing, prescribing, selecting, administering and dispensing therapeutic measures, including over-the-counter drugs, legend drugs and controlled substances, within the advanced practice registered nurse's role and specialty appropriate education and certification.'

Source: National Council of State Boards. Model Nurse Practice Act (2004, p. 91).

Additional illustrations of APN scopes of practice from Australia/New Zealand, Canada and Singapore can be found in Appendix 3. Scopes of practice statements ideally promote safe, ethical practice and the delivery of quality healthcare services as well as distinguishing between the different categories of nursing personnel. When well developed the scope of practice makes clear the distinctive practice of the category of nurse practicing under the scope (Schober & Affara, 2006). The next subsection presents characteristics commonly attributed to the APN in order to further differentiate the role from other nursing personnel.

2.4.4 Characteristics of an Advanced Practice Nurse

A survey conducted by ICN (2001) indicated pronounced variability in identifying APN characteristics. Furthermore, this survey found that certain characteristic APN activities decreased significantly when the actions were likely to conflict with traditional role characteristics of other professionals. To provide guidance to the international community ICN (2002 & 2008b) identified APN characteristics taking into consideration current and potential development worldwide. These are viewed as characteristics to aim for in the process of role development:

'Educational Preparation

*Educational Preparation at an advanced level;
Formal recognition of educational programmes;
A formal system of licensure, registration, certification or
credentialing.*

Nature of Practice

The ability to integrate research, education and clinical management;
High degree of autonomy and independent practice; Case
management;
Advanced assessment and decision making skills;
Recognized advanced clinical competencies; The
ability to provide consultant services to other health professionals;
Recognized first point of entry for services.

Regulatory Mechanism – country specific regulations that underpin APN practice

Right to diagnose;
Authority to prescribe medications and treatments;
Authority to refer to other professionals;
Authority to admit to hospital;
Title protection;
Legislation specific to advanced practice.'

(Source: ICN, 2002, retrieved 11 March 2009 from <http://www.icn-apnetwork.org>)

Distinguishing characteristics of the role provided one method to describe the APN in a manner distinctive to the discipline and the individual. The next subsection describes competencies as an additional approach and links specific skills to the APN.

2.4.5 Competencies for advanced practice nursing

Characteristics of the APN tend to be considered as attributes of an individual in the role and competencies are the ability to perform a certain set of skills; however, the literature indicated that this distinction is not always clear. A framework for the APN suggested by ICN (2008b) builds on the competencies of the generalist nurse allowing for the supplementation of new competencies that reflect an expanding level of practice. The ICN framework emphasised that competencies provide guidance in describing the APN with the degree of judgement, skill, knowledge and accountability increasing from the level of the generalist nurse to that of the APN. Competencies were repeatedly presented in the literature as essential features for defining advanced practice (AACN, 1996; ANA, 1995, 2003; CNA, 2006; NACNS, 2005; NCSBN, 2003; NONPF, 2000; NONPF, 200a; RCN, 2008). The Canadian Nurses Association (2002) identified core APN competencies and linked these to role characteristics. Core competencies in Ireland (NCPDNW, 2008) were

connected to a specific advanced nursing post following a job analysis.

Although competencies were commonly used in depicting the APN role (Cattini & Knowles, 1999; MacLaine et al, 2004; NONPF, 2000 & 2002a; RCN, 2008) the concept of assigning or determining role competencies was controversial. In a literature review of clinical competence Watson et al (2002) found that there appeared to be universal acceptance of the need to assess clinical nursing competence but the literature did not demonstrate reliability or validity for this process. Consistent with these findings, Girot (2000) pointed out problems and uncertainty in differentiating different levels of competence. There was no evidence in the literature of research informed competency standards and some researchers suggested that competency based practice in reference to APN roles might unreasonably restrict role development (Gardner et al, 2004; Gardner et al, 2006; McAllister, 1998). Nonetheless, regulatory authorities and professional organizations view the use of role competencies as a way to demonstrate safe practice. Lacking a better alternative, competencies will likely continue to be used as a method to measure nursing practice including APN practice (Schober & Affara, 2006).

In summary, variance in titling, role definition, scopes of practice, characteristics and competencies portray a picture of inconsistency worldwide when attempting to define the APN role. The literature indicated that various approaches had been taken to provide an APN definition and description unique to this role, however, the array of approaches revealed that advanced practice nursing is viewed in diverse and at times contradictory terms. Conceptual clarity in defining APN practice would seem ideal. However, national and international references varied. Clarity and consensus regarding the APN role remained unclear. What is clear is that explicit qualifications and educational directives that reflect the APN scope of practice are viewed as pivotal to APN development and that advanced practice nursing extends in some way beyond general nursing practice.

Establishment of credible and sustainable APN roles is rooted in the type of educational preparation available. The next section examines various approaches in planning educational programmes.

2.5 Education and role preparation

Defining role preparation and education at an advanced level for nurses provides a basis from which to differentiate APN practice from that of the generalist nurse. This section examines these topics and is divided into two subsections. It begins with an overview and guidelines for APN education including development of curriculum and clinical practice. The

second subsection presents international illustrations of educational development linked to the motivation for APN services.

2.5.1 Overview and guidelines for APN education

Historically, education and role preparation for APN roles has varied from the awarding of certificates for post-basic courses to undertaking a formal university programme (ICN, 2008a). The literature demonstrated that not only did the length of programmes vary but also the qualifications obtained upon completion differed. A survey of APN education, practice and regulatory issues conducted by ICN (2008b) confirmed this educational variance but indicated there was a prevalence internationally of APNs obtaining master's degrees. These survey results were consistent with findings cited by Schober and Affara (2006) that indicated even though APN education varies there was an international trend to attain master's level education (see Appendix 4 for programme listings by country). ICN noted the variance in role preparation internationally and developed recommendations for countries to consider in the process of APN development while also acknowledging that opportunities for suitable education vary from country to country (ICN, 2002; ICN, 2008a). Regardless of the sequence of role development the literature indicated that an educational directive that reflects a well-defined APN scope of practice is pivotal for establishing relevant educational preparation (Hanson, 2009; ICN, 2002; ICN, 2008a). The following guidelines are suggested by ICN:

'Educational preparation is at an advanced level ... beyond that expected for entry level for generalist nursing practice. Students have opportunities to gain knowledge, experience and the necessary skills to competently function in an advanced role; Teaching institutions provide qualified faculty and accessible clinical sites ... [to] prepare the student to practice in the context of the country to the fullest extent of the role as defined in a recognized scope of practice; There is formal recognition of educational programmes preparing nurse practitioners and advanced practice nurses; A formal system of licensure, registration, certification or credentialing [for the APN] exists.'

(ICN, 2002, retrieved 11 March 2009 from <http://www.icn-apnetwork.org>)

Even though a variety of resources were accessed when education institutions developed their curricula the literature indicated that USA publications dominated the cited references. Curricula and course development for APN programmes in Hong Kong, Pakistan,

Singapore, and Sweden (Aga Khan University School of Nursing, 2004; Hong Kong Polytechnic University, 2004; National University of Singapore, 2003 & 2006; University of Skovde, 2003) relied on components from guidelines provided by the American Association of Colleges of Nursing (AACN, 1996) and the National Organization of Nurse Practitioner Faculties (NONPF, 1995; 2000; 2002b) in the USA. It was expected that any country adapting these guidelines would modify them to meet their own needs and priorities (AACN, 1996; AACN, 2006). However, recommendations for curriculum planning appeared to be based on collective academic thinking rather than substantive evidence. No corroboration was found in the literature demonstrating outcomes related to specific curricula for sound APN education. No evidence was discovered that demonstrated the achievements of other countries when adapting American publications for APN role preparation.

Advanced clinical experiences are a significant component of APN role preparation, however, identifying and providing relevant clinical experience presented challenges. The literature indicated that the quality of clinical education is associated with the skill, experience, expertise and characteristics of clinical preceptors or tutors implying that a suitable academic background is necessary to function in these roles (Inman, 2003; Spross, 2005). Education authorities in the USA (AACN, 1996; NONPF, 1995; NONPF, 2002; NTF, 2002) advised preparation of faculty at a level equivalent to or above that of the students. The literature demonstrated that new APN programmes relied on physicians to teach clinical components while nursing faculty taught nursing modules. Over time a blending of these teaching strategies led to an interdisciplinary approach for theory and clinical instruction and brought together the medical and nursing components of the role. However, nursing leaders and nursing educators offered criticism that this was a deterrent to true nursing practice (Jacox, 2002; Rogers, 1975; Roy & Obloy, 1978).

The type of regulatory infrastructure in a country can fundamentally affect not only the nature of APN practice but also how students are educated for their roles. Schober & Affara (2006) in reviewing the literature and analysing comments from over 50 key informants found a wide variation in how advanced nursing practice is regulated including standardisation of education institutions. In an effort to promote consistency in the USA, the National Task Force on Quality Nurse Practitioner Education (NTF, 2002) recommended a framework for the review of nurse practitioner programmes to better ensure currency, relevancy and quality of education. ICN (2008a) provided education guidelines for institutions to consider when undertaking programme planning. Such recommendations provided a benchmark against which to influence development but no evidence was found assessing these recommendations when put into practice or how universally these

concepts were utilized in the international context. The next subsection provides country illustrations of the evolving nature of APN role preparation and education.

2.5.2 International illustrations of APN role preparation and education

The literature revealed variations in APN education from country to country with additional internal variations in countries such as Australia, Canada and the USA. Differences appeared to be influenced by the incentive for role development, culture of nursing education in the country and settings where the APN established practice upon completion of their education. The urgent need to establish primary healthcare (PHC) services to populations with unmet healthcare needs presented strong incentive to prepare nurses for expanded roles. Botswana provided an example of the emergence of a nurse practitioner programme following independence of the country in 1966 along with an increased national emphasis on PHC services. As nurses responded to healthcare needs due to a severe shortage of doctors it became apparent that basic nursing education was not adequate as provision of healthcare services required not only nursing but independent medical decisions (NAB, 2001; NHI, 2002). The Ministry of Health responded to this situation by launching a 12-month Family Nurse Practitioner programme that subsequently progressed to 24 months (NHI, 2002; Seitio, 2000). In the face of urgent healthcare needs an immediate response was to offer a brief diploma or certificate preparation. The Cook Islands, Samoa, Fiji, other Pacific Island countries and Timor-Leste are examples of this with support from the World Health Organization (WHO) (Downes, 2007; I. Enoka, personal communication, 2006; WHO-WPR, 2001; WHO, 2005a & 2005b).

Requests for highly skilled and knowledgeable nurses such as APNs commonly occurred in countries with existing or anticipated physician shortages as part of the skill mix in providing essential healthcare services to individuals, families and communities (Buchan & Calman, 2004). Hanucharunkul et al (2007) described how the Institute of Research and Community Health Development in Thailand implemented PHC with teams of physicians, dentists, pharmacists, nurses and other healthcare personnel when staffing community medical centres. Envisioning that one to two nurses would be the only healthcare professionals in many community health centres an estimate was made that 10,000 nurses with advanced education were needed to accomplish healthcare workforce staffing. Similar to Botswana, the Thailand Nursing and Midwifery Council (Hanucharunkul et al, 2007) found that practice responsibilities for these nurses extended beyond the anticipated scope of practice for a generalist nurse and that the initial four month training was inadequate. Nurses were subsequently required to complete a master's programme to become a

community health nurse practitioner (Hanucharunkul, 2008). The experiences of Thailand and Botswana demonstrated the evolving nature of APN education as countries gained experience in evaluating the adequacy of education for these new nursing roles. Countries at times presented a structured and academic approach to the development of APN education. From the start of the nurse practitioner initiative in New Zealand regulatory and professional bodies stipulated that only a nurse with a recognized master's level education could use the title 'Nurse Practitioner' (NNOA, 2003; NZMOH, 2002; NCNZ, 2002). Similarly, the Institute of Nursing Science at the University of Basel in Switzerland viewed the APN educational initiative as driven by an interest in promoting nurses with a higher level of skills and academic knowledge (De Geest et al, 2008; Spirig et al, 2009). Intra-country and inter-country differences conveyed a picture of ambiguity in the planning and provision of APN education. In Australia, Canada and the USA education requirements varied from state to state or province to province. Canada has had an uneven approach to APN education since the 1970s with a sharp division between the clinical nurse specialist educated at the graduate level and the nurse practitioner educated at the certificate level (Easson-Bruno, 2002). A synchronized move toward graduate level education throughout the country was hoped for upon the completion of the Canadian Nurse Practitioner Initiative (2004), however, decision makers at the governmental level resisted this change supporting instead education at the bachelors plus certificate level (A. DiCenso, personal communication, 2009). Nurse practitioners had been present in some capacity in Australia since 1999, echoing a response to community needs observed in the Botswana, Thailand and the USA. However, Gardner et al (2006) concluded that the rapid adoption of the APN concept resulted in little research defining Australian standards for nurse practitioner education. Findings from the Australian Nurse Practitioner Standards Project (Gardner et al, 2004) indicated that the *'prevailing professional and regulatory environment in Australia, in which nurse practitioner programs of education were designed, was diverse, with scant attention to national priorities...* (Gardner et al, 2006, p. 11). Even though this national study found a consensus supporting master's level education, continued role ambiguity was reflected in lack of clarity in terms of education requirements (Gardner, 2006). Preparation of APNs in the USA has occurred for the most part in academic settings (Keane & Becker, 2004). However, similar to other countries in diverse stages of development, the USA faced complex issues when trying to define APN preparation. Nurse practitioner education began as continuing education for the generalist nurse and ultimately progressed to a requirement of master's preparation as entry level into practice (Pulcini & Wagner, 2002). A shift is underway with the recommendation of a Doctorate of Nursing Practice (Hanson, 2009).

Nevertheless, educational requirements vary from state to state and fall under the jurisdiction of nursing and medical boards.

In summary, the literature demonstrated considerable international variation for APN education and role preparation in terms of the focus and content of curricula, duration of programmes, quality of clinical experience provided and the regulatory infrastructure in place to support appropriate educational standards. At times the length and content of education courses and role preparation appeared to be aligned with the impetus for APN roles. The literature indicated a reliance on educational documents from the USA in curriculum planning as well as guidelines recommended by the International Council of Nurses. The next section examines the significance of a regulatory framework and regulatory systems to support APN practice.

2.6 Regulations for APN practice

When ICN examined structure and standards regulating nursing worldwide in 1986 findings indicated that nursing was '*...ill-defined and diverse; educational requirements and legal definition of nursing generally inadequate for the complexity and expansion of the nursing role as it is emerging in response to health care needs*' (ICN, 1986, p.43). The literature indicated that a similar situation of vagueness existed for advanced practice nursing even in countries with longer histories of experience with role development and establishment of appropriate practice standards. Ideally standards for APN regulation permit advanced practice nursing to evolve as a distinct and legitimate part of the healthcare system.

Regulation as defined by ICN includes '*...all legitimate and appropriate means – governmental, profession and private – whereby order, consistency, identity and control are brought to a profession*' (Styles & Affara, 1997, p. 2).

The nature of regulatory environments, as revealed in the literature, had the capability of impeding the evolution of advanced practice nursing or promoting growth and systematic development (Bryant-Lukosius & DiCenso, 2004; Bryant-Lukosius et al, 2004; Gardner et al, 2004; MacLaine et al, 2004). Schober and Affara (2006) found that external factors likely to influence the regulatory environment included:

- Type and stability of the country's political system
- Legal and regulatory traditions of the country
- International trends in regulation
- The degree of specificity or generality sought in the regulatory system
- The rapidity of change in educational standards, practice and technologies

- The time required, cost and expertise ... for enacting or revising regulations
(p. 85)

Credentialing of APN roles and the accreditation of institutions and programmes was considered to be the central function of professional regulation. A credentialing process indicates that an individual, programme or institution meets established standards set by a governmental or nongovernmental body qualified to perform this responsibility. Terms such as licensure, registration, accreditation, approval, certification, recognition or endorsement were used to articulate the different processes (Styles & Affara, 1997). A credential refers to a level of quality that must be met and indicates a limited right for a person or agency to provide specified services (Affara & Styles, 1992). In the case of APNs the recipient of the credential is the APN and in some cases the educational programme or institution. In order to safeguard the public, issues such as legal title protection were taken seriously to ensure that practitioners who have neither the education nor the competencies implied by the title do not provide healthcare services. New Zealand went as far as trade marking the title in the beginning stages of their initiative (NCNZ, 2002). Canada and the UK had not established title protection for APNs (DiCenso, 2009, K. MacLaine, personal communication 2009). The literature suggested that regulatory mechanisms were most often associated with a country's traditions and resources leading to variability in the way the APN role was defined, credentialed and put into practice. As there was no international consensus cautious interpretation was suggested in defining the mechanisms being considered and the rights or protections implied (Schober & Affara, 2006).

The literature indicated that countries often used a registration process to list and identify APNs; however, the terms licensure and registration were often used interchangeably with the differences between them misinterpreted or misunderstood. Registration may require a validation process and possible title protection or even possibly practice privileges thus bringing this interpretation closer to licensure than an interpretation of registration that accounts for basic numbers and demographic details. The terms 'authorization' or 'endorsement' were chosen by regulatory bodies in Australia and New Zealand as mechanisms to define the field, scope and conditions of practice with variations occurring internally (Gardner et al, 2004; NCNZ, 2002; NRB, 2003). New South Wales in Australia tied authorization to the use of the nurse practitioner title and certain privileges so long as the individual conformed to guidelines approved by the Director General of the Health Department (NRB, 2003). In Ireland (NCPDNM, 2008) credentialing took the form of linking the job or site description where an APN might practice to the credentialing of the APN who

will hold the position. In the USA some states require verification of certification from a recognised certifying body to achieve APN licensure to practice. Certification processes ranged from completion of a certification examination to development of a portfolio and/or an oral defence of clinical case studies. Certification was found to be a complex issue as it was used for various purposes from entry into practice and validation of competence to a regulatory requirement (Hanson, 2009; Lewis & Smolenski, 2000).

Credentialing can be considered voluntary or regulated; a clear single regulatory methodology or dual and multiple agency approaches may appear depending on the regulatory environment of the country. APN credentialing in Japan was considered to be a voluntary professional responsibility (ICN Credentialing Forum, 2004). South Korea adopted a joint approach where the credentialing authority is the Ministry of Health and Welfare while the Korean Nursing Association or the Credentialing Centre for Nursing Education administers certification (Kim, 2003). In contrast, the Thailand Nursing Council was the certifying agent and the credentialing authority for APNs (Schober & Affara, 2006). The literature identified that the degree of authority and type of limitation placed on APN privileges, for example prescribing; ordering diagnostics; referrals to other professionals; and admitting privileges to institutions varied from country to country in association with their regulatory practices. Topics such as prescriptive authority and autonomous practice were often controversial and imbedded in the wider debate on APN roles. Certain settings avoided discussing activities such as prescribing but other environments addressed the issue from the beginning. Sweden, as an example, instituted nurse prescribing prior to consideration of APN roles (Buchan & Calman, 2004; Gardner et al, 2004).

Legislation and regulation ideally bestow identity, legitimize the APN role and grant the authority to carry out a variety of activities relevant to APN practice. According to the literature, the challenge is to develop regulations that contribute to strengthening of the profession while also attempting to ensure the addition of competent and capable professionals to the healthcare workforce without being restrictive to APN practice.

As enthusiasm for these new nursing roles evolved studies began to assess the impact of APN services on healthcare delivery. The next section examines the impact and outcomes when APN roles were included in the healthcare workforce.

2.7 Impact and outcomes for APN services

The addition of a new professional role to healthcare provision demands an assessment of the value that this practitioner brings to healthcare. The literature revealed a variety of

publications from editorials, narratives, individual studies, as well as comprehensive literature reviews that attempted to comment on the effect APN services had on healthcare. There was not one dominant study found to be most influential in assessing the influence of APNs but rather there was an accumulation of evidence that emerged to address this issue. This section is divided into four subsections and begins with a discussion of the impact of APNs on healthcare service delivery. This followed by an examination of care management outcomes attributed to APNs. The third subsection describes patient satisfaction with APN services. The final subsection presents the topic of cost effectiveness.

2.7.1 Impact on healthcare service delivery

When considering the initiation of APN services key decision-makers, other healthcare professionals and the public must be convinced that the introduction of alternative options for healthcare delivery will improve the system (Worster, 2005). Various studies provided evidence that patients are generally satisfied with APN care by receiving more information about their illnesses (Kinnersley, 2000; Venning et al, 2000). Clinical outcomes of care provided by an APN were found to be equivalent to or better than GPs or junior doctors in specific settings (Brown et al; 1995; Horrocks et al, 2002; Kinnersley et al, 2000). There was evidence that the integration of APNs into healthcare systems enhanced access to services both in hospital wards and community settings by filling gaps in care (Buchan & Calman, 2004; Gardner et al, 2004; DiCenso & Bryant-Lukosius, 2009). The literature demonstrated that including APNs in provision of healthcare services generally had a beneficial impact.

However, a review of the literature associated with skill mix in the UK (Sibbald, 2003; Sibbald, 2004) concluded that there is a lack of sound substantiation to support effectiveness, efficiency and quality of care. This was complicated by the fact that terminology in relation to APNs is unclear leading to difficulty in analysing the evidence. Findings from this review of 24 papers revealed that cost effectiveness is rarely addressed and negative outcomes on workforce morale and continuity of care were of concern. A literature review conducted in France (Midy, 2003) but almost exclusively based on literature from the UK and North America reported that the willingness or lack of willingness of other professionals to delegate or accept some of the activities associated with APNs influenced the ability of the healthcare team to function effectively. Additionally, this review reported that not all nurses felt prepared to fulfil competencies of diagnosing and prescribing. Buchan & Calman (2004) in addressing skill mix and doctor nurse substitution indicated that substitution of advanced nurses for doctors could be effective; however, the

numbers of studies evaluating an appropriate skill mix are relatively few. Since skill mix issues are often seen as key policy drivers in healthcare planning a consistent research approach was recommended to further assess the impact to service delivery with inclusion of APN services (Richardson et al, 1998; Buchan & Dal Poz, 2002).

2.7.2 Case Management Outcomes

As APNs sought to define their place in healthcare environments questions arose about their competencies in terms of diagnosis, case management and patient outcomes. In a landmark study conducted in the USA, Mundinger et al (2000) investigated outcomes for patients randomly assigned to nurse practitioners or physicians for primary care follow-up and ongoing care after an emergency department or urgent care visit. In ambulatory settings where physicians and nurse practitioners had the same authority, responsibility, productivity and administrative requirements patient population outcomes were comparable. The researchers found no clinically significant differences in patient outcomes of health status or chronic illness status six months after the initial visit. In a two-year follow-up of a sample of patients from the original Mundinger cohort, Lenz et al (2004) found there continued to be no statistically significant differences in health status between the two groups. However, physician designated patients in the follow-up study were found to make more primary care visits thought by the researchers to be related to the high level of elderly in this group. In addition, two systematic literature reviews investigated whether nurse practitioners working in primary care can provide equivalent care to doctors (Horrocks et al, 2002; Vallimies-Patomaki et al, 2003). Findings from these reviews indicated that care provided by nurses led to at least equivalent outcomes to care provided by physicians with increased patient satisfaction with nurse practitioners. In reviewing 11 randomised controlled trials and 23 prospective observational studies, Horrocks et al (2002) found no differences in prescriptions, return consultations or referrals between nurses and doctors, however, nurses ordered more investigations and conducted longer consultations with patients. Horrocks et al (2002) found that the diversity of research approaches and methodologies limited the ability to determine quality of life and health status outcomes related to care by APNs. Similarly, Brown and Grimes (1995), in conducting a meta-analysis of outcomes associated with nurse practitioners' and nurse midwives' practices, found the value of their analysis was limited as only one third of the studies were randomised research designs. Those studies that were randomised trials did indicate greater patient compliance in keeping appointments and following behavioural strategies provided by nurse practitioner care compared to doctors. Non-randomised studies reported

resolution of illness was higher for patients receiving nurse practitioner care while other parameters of care such as drug prescribing and functional status were reported to be equivalent.

Findings from meta-analyses and literature reviews (Brown and Grimes, 1995; Horrocks, 2002; DiCenso & Bryant-Lukosius, 2009) evaluating APN outcomes repeatedly identified limitations in the methods used in data collection and analysis. In a review of the literature, DiCenso and Bryant-Lukosius (2009) found that only 29% of 468 publications related to APN roles were primary studies and of those only 78 were randomised controlled studies on the effectiveness of APN case management. It is worth noting that the first randomised controlled trial comparing nurse practitioners to physicians in a primary care setting that demonstrated equivalent outcomes was conducted in 1969 (Shum et al, 2005). Canadian studies later quantitatively demonstrated equivalence in patient care health outcomes between these two professional groups (Chambers & West, 1978; Sackett et al, 1974; Spitzer et al, 1974). Mention of these early studies coincides with the emergence of the nurse practitioner roles in primary care in the USA and Canada while also revealing that rigorous research was not common in the early developmental phases of the APN roles.

Medico legal issues were used in some countries as an outcome measure of APN services mentioning that even though APNs are accountable for their practice this does not prevent physicians from being included as defendants in lawsuits, however, in Canada lawsuits involving nurse practitioners were only 1.6% of all lawsuits between 1997 and 2001. The 10-year claims history from the American National Practitioner Data bank indicated payments to nurses are rare (1.7% of all payments) and nurse practitioners were responsible for only 4.7% of all nurse payments. Even though some physicians voiced concerns that working with APNs might raise their risk for liability others suggested that the added value of the nurse practitioner or APN on the team could decrease risk due to their good communication skills with patients and families (Worster, 2005).

In summarizing patient, provider and healthcare system outcomes of 78 randomised controlled trials, DiCenso and Bryant-Lukosius (2009) found consistently that APNs were safe and effective for improving health outcomes; improving quality of care and promoting best practices among patients and healthcare providers. Furthermore, there were no reports of negative outcomes or demonstration that APNs provide inferior care. The next subsection examines patient satisfaction with APN healthcare services.

2.7.3 Patient Satisfaction

Literature repeatedly reported satisfaction of varied populations with APN services. Knudtson (2005) found a high level of patient satisfaction in a rural setting with expectations for services being met and satisfied patients likely to recommend nurse practitioner services to others. Carter and Chochinov (2007) found patient satisfaction in emergency departments to be consistently high for nurse practitioners and medical residents but often higher for nurse practitioners. Specifically, nurse practitioners were rated higher in explanation of procedures. Reasons given for dissatisfaction with care were unresolved problems, which was higher for nurse practitioners, and long waiting time for care by residents. A low percentage of patients surveyed did prefer to see a staff physician and were unwilling to see a nurse practitioner but might consider it if it meant a cost saving for the system or resulted in shorter waiting times. It appeared that nurse practitioner encounters that offered additional patient contact such as health information and discharge instructions led to improved communication and shorter length of stay in a healthcare facility and was translated into patient satisfaction.

High levels of patient satisfaction were found in a systematic review analysing care provided by nurse practitioners as compared to physicians (Horrocks et al, 2002). In comparing primary care outcomes in patients treated by nurse practitioners or physicians in an urban academic setting (Lenz et al, 2004; Mundinger et al, 2000) studies found no statistically significant differences for overall satisfaction of care; however Lenz et al (2004) found that physician patients scored higher on visit-based continuity and communication. This finding suggested that further studies would be useful in determining the confounding variables related to patient satisfaction looking more specifically at subthemes related to this topic. While numerous studies indicated that patient populations were satisfied with care provided by APNs (Horrocks, 2002; Kinnersley, 2000); conversely, there was no evidence found indicating dissatisfaction of care provided by APNs. Despite methodological weaknesses in studies there were demonstrated benefits of patient satisfaction associated with accessibility and improved knowledge of their condition (Buchan & Calman, 2004). The value of healthcare is at times associated with the cost of services. The next subsection examines economic implications in relation to APN provision of healthcare services.

2.7.4 Financial implications

APN healthcare services were thought to be a cost savings method for healthcare systems compared to services provided by GPs and medical consultants, however, findings in the

literature were mixed. A literature review conducted by Buchan and Calman (2004) found a shortage of cost effectiveness studies for APNs compared to care provided by other healthcare professionals. Buchan and Calman reported the tendency of studies to describe nurse substitution for doctors in the workforce rather than clearly referring to APN services limited understanding of the financial implications associated with APNs. A literature review of four key outcome measures for nurse practitioners in an emergency department setting (Carter & Chochinov, 2007) concluded that when compared with resident physicians the overall cost for nurse practitioners appeared to be higher on a per patient basis. Sakr et al (2003) concluded that calculations based on a revue cost per workload unit in the minor injury area and emergency department were unclear if comparisons were clearly based on the same criteria as in type or total services provided in a specific timeframe. One nurse practitioner group that was evaluated on patient volume was able to increase numbers of patients seen per an eight hour day if they gave up other professional responsibilities such as assisting with staff orientation or attending lectures. Failure of insurers to reimburse for care unless seen by a physician provided a barrier to accessing nurse practitioner services and contributed to services being coded as provided by a doctor when the service was actually provided by an APN. Carter and Chochinov (2007) concluded that nurse practitioners may be cost effective in high volume, low acuity units rather than lower volume, high acuity departments where additional physician resources have the ability to manage a wider variety of patients; however, data are lacking to support this recommendation.

In summary, the literature demonstrated that generally care provided by APNs is safe and effective. The public was satisfied with care provided by APNs but approached new service provision cautiously especially when accustomed to seeking care from a doctor. The body of literature addressing cost effectiveness is limited with conclusions mixed dependent on what criteria are used for evaluating cost effectiveness. Although the body of evidence supports positive clinical outcomes for APN care most studies have been conducted in primary care settings and further studies in settings such as hospital specialty wards, emergency departments and critical care are needed. Studies evaluating clinical outcomes are limited due to the fact care is sometimes provided by an APN but coded as provided by the GP or doctor. In addition, studies using rigorous methodological approaches are limited. Studies of effectiveness and satisfactory outcomes for APN services are usually compared to physician care. The overlap between medicine and nursing aspects of APN roles likely contributes to this kind of benchmarking but does not necessarily substantiate quality or competent APN care as much as it confirms that the two categories of providers are

providing similar care. It would be helpful to explore the possibility that APNs may provide care in a different manner aligning nursing principles with tasks originally thought to be the province of medicine. More evidence is needed to evaluate outcomes from this perspective. The literature established positive parameters to recommend inclusion of APNs in healthcare workforce planning. Following identification of a title, establishment of a role definition and identification of scope of practice, the APN faces integration into a healthcare system. The next section presents findings from the literature relevant to implementation of the APN role.

2.8 Implementation of the role

Implementation and integration of new nursing roles into healthcare systems was found to be complicated and multifaceted. This section attempts to provide an understanding of the complexities of this process and is divided into three subsections. It begins by presenting the use of practice domains and settings to distinguish practice when implementing the APN role. A subsection that delineates barriers and facilitators of role implementation follows. Finally, facets of the healthcare infrastructure that might impede or support realisation of APN services in healthcare service provision are provided.

2.8.1 Domains and practice settings for APN practice

When implementing the APN role questions arise as to what differentiates advanced practice nursing from other nursing roles. Confusion, vague descriptions, inconsistent use of terminology and the inability to differentiate APNs from other nursing roles dominated the literature (Bryant-Lukosius et al, 2004; Gardner, Chang, Duffield, 2007; Gerrish et al, 2007; Schober & Affara, 2006). In reviewing various advanced practice models and frameworks Spross and Lawson (2005) recommended the use of domains of practice and competency to provide clarity and explain the nature of APN roles. A study of clinical nurse specialist and nurse practitioner competencies present in the UK from 1996 to 1998 delineated domains of clinical activity (Read and Roberts-Davis, 2000; Roberts-Davis & Read, 2001) to distinguish between these roles (see Table 2.1) based on clinical activity.

Table 2.1 - Domains of Nurse Practitioner and Clinical Nurse Specialist Practice**Clinical Nurse Specialist Domains of Clinical Activity**

Condition Specific Domain (differentiated)	Examples: Breast, Stoma, Diabetes, Cardiac, Haematology, Gynaecology, Urology, Oncology, Drug Dependency
Area Specific Domain (differentiated)	Examples: Intensive Care Unit, Coronary Care Unit, Orthopaedic Unit, Nurse Managed Community Hospitals and related services
Clinic Group Specific Domain (differentiated)	Examples: Elderly Mentally Ill, Adolescent Mental Health, Children, Gerontological
Nurse Practitioner Domains	of Clinical Activity
Clinic Group Specific Domain (undifferentiated)	Examples: Homeless, Travellers, Children or Gerontological Specialist (generic)
Area Specific Domain (undifferentiated)	Examples: Accident & Emergency, Minor Injuries Clinic
Community Clinical Nursing Domain (undifferentiated)	Examples: Family or General Practice/Primary Care Nursing, Occupational Health
Public Health Nursing Domain	Examples: School Health, Public Health Visiting

(Read & Roberts-Davis, 2000; Roberts-Davis & Read, 2001)

Consistent with these data the National Association of Clinical Nurse Specialists (NACNS, 2005) in the USA took a similar position and described the Clinical Nurse Specialist (CNS) as an expert clinician in a specialised area of practice. In contrast, the Canadian Nurses Association (2002) provided a framework based on role characteristics and competencies for the CNS and Nurse Practitioners deciding not to align the roles with practice domains or settings. The literature demonstrated that countries tended to use practice settings as one way to classify the roles (see Appendix 5 for a listing of APN roles by country, setting and domain). The use of clinical domains and practice settings was a method to dissociate from the reliance on titles and descriptive terminology but lacked regulatory specificity and failed to take into consideration nonclinical activities such as research and leadership.

Issues blocking or aiding integration into healthcare settings can set the tone for ease or difficulty in role implementation. The next subsection examines barriers and facilitators of implementation.

2.8.2 Issues in APN implementation

Title confusion and professional boundary issues contributed to uncertainty for health care consumers, employers, educators and other professionals as to the meaning, scope, preparation and expectations for APNs (Daly & Carnwell, 2003; ICN, 2008). A study of 296 community mental health nurses in Victoria, Australia identified the medical profession, fear of litigation and government policies as perceived barriers to expanded practice (Elsom et al, 2008). Canadian researchers Bryant-Lukosius et al (2004) provided a similar perspective and identified six themes thought to influence APN role implementation:

- Confusion about APN terminology;
- Failure to clearly define the roles;
- Overemphasis on replacing or supporting physicians;
- Underutilization of all spheres of APN practice;
- Failure to address the contextual factors that can undermine the roles;
- Limited utilization of an evidence-based approach to development, implementation and evaluation.

Role conflict, role overload and variable stakeholder acceptance were offered as additional dilemmas. A more recent study by DiCenso and Bryant-Lukosius (2009) based on a literature review, interviews of key informants and focus group discussions provided additional and similar evidence of these concerns relevant to APN development and implementation. Intraprofessional boundary issues with other nurses were found to frequently present conflict and is discussed next as it relates to role implementation.

Intraprofessional conflict and boundary issues

Historically APN development has been troubled by controversy within nursing communities. The varying demands of the role and role overlap between nursing and medicine were found to contribute to experiences of intraprofessional dissonance (Brykczynski, 2009) and that difficulties among nursing disciplines remain even when relationships improve (Fawcett, Newman & McAllister, 2004). Efforts to develop advanced nursing practice in New Zealand anticipated interprofessional jurisdictional disputes between APNs and doctors but were surprised by intraprofessional conflict (Jacobs & Boddy, 2008). In studying structural rearrangement between nurses and physicians in the Netherlands Roodbol (2005) found that even though physicians believed that the nurse practitioner presence had a positive result on the social identity of nurses in general, nurses did not share this view and did not accept nurse practitioners as part of their professional

group. In reporting on staff nurse/APN relationships Higuchi (2006) and de leon-Demare (1999) cited lack of understanding of APN roles by nursing colleagues as a contributor to friction. Nursing leaders voiced concern that APNs would be seen as cheap doctor substitutes thus losing the unique nature of the nursing profession (Carter & Chochinov, 2007; DiCenso & Bryant-Lukosius, 2009). However, a survey conducted in the UK with 1,201 nurse practitioner respondents found that almost all (98%) reported nursing skills as important to their practice and very few (8%) considered their role to be that of a mini-doctor (Ball, 2006).

In a review of fourteen studies from the UK Jones (2005) identified a range of barriers and facilitators affecting specialist and advanced nursing practice. Conclusions from this review recognised role ambiguity as a pivotal barrier in role development and suggested that clear role definitions would enhance communication with other staff. Roodbol (2005) supported this contention and emphasised that on the one hand the APN is expected to be a nurse; on the other hand role expectations align the nurse with medicine.

Impediments to ease of implementation associated with tension among nursing colleagues appeared to be somewhat of a surprise while according to the literature challenges from physicians was expected. A discussion of interprofessional conflict and boundary issues with medicine follows.

Interprofessional Conflict and Boundary Issues

Interprofessional conflict commonly arose among physicians and APNs over issues of reimbursement or economic threats, limited resources in clinical sites for education, lack of experience in working together and a history of physician/nurse hierarchical structures (Brykczynski, 2009). A view that APNs are in competition with physicians appeared to arise from a physician stance that all healthcare is an extension of medicine thus leading to misunderstanding when APNs see themselves with an autonomous component to their nursing roles (Keeling & Bigbee, 2005). In New Zealand an editorial representing the New Zealand Medical Association commented on nurse practitioner roles and suggested patient endangerment would occur with nurse prescribing. Additional comment mentioned the anticipation that turf battles would occur between nursing and medicine with the inclusion of APNs (Jacobs, 2008). A focus group study (Wilson, 2002) of four GP practices in Yorkshire identified the following concerns with nurse practitioner development:

- Threat to GP status;
- The question of nursing capability and scope of responsibility based on their associated but limited education;

- Structural and organisational barriers.

Recommendations from these British GPs included a general debate of proper skill mix for primary care service provision, joint educational activities and GP preceptorships to enhance understanding of advanced nursing roles.

In order to better understand shared responsibilities between NPs and family practitioners Way et al (2001) conducted a study in rural primary care practices in Canada. Analysis of data collected from 400 unique patient encounters found nurse practitioners were underutilized with respect to curative and rehabilitative care and there was little evidence of collaborative management. Explanations included inability of medicine to share responsibility, lack of interdisciplinary education and lack of familiarity with the nurse practitioner scope of practice. Additional literature proposed that nurse practitioners and physicians should learn behavioural patterns to ease conflict and support collaboration (Bailey et al, 2006; Jones & Way, 2004). In contrast, in studying role boundaries in intermediate care teams with services provided by a variety of health care workers Nancarrow (2004) found that practitioners were not threatened by overlapping roles and concluded that role overlap can enhance healthcare workers confidence in their own area of expertise. Consistent with studies on interprofessional collaboration, this study suggested that joint visiting and sharing work practices in situations of role overlap had the potential for optimizing staff resources. Barrett, et al (2007) confirmed that interprofessional collaboration contributed to positive outcomes for patients, providers and healthcare systems and could be beneficial in overcoming interprofessional conflict.

The literature suggested that even if healthcare professionals approach APN implementation in a collaborative manner there are institutional challenges that must be met. A discussion of infrastructure and support mechanisms follows.

2.8.3 Infrastructure and Support Mechanisms

Bryant-Lukosius et al (2004) suggested that collaborative, systematic and evidence-based processes with a logical framework are likely to facilitate APN implementation. The proposed developmental framework is based on a participatory, evidence-based, patient-focused process (PEPPA) and defines steps to create supportive environments and long-term integration for APNs. The PEPPA framework emphasises the need to engage key decision makers in the implementation process and suggested that better planning could accomplish coordinated implementation. Australian researchers Gardner, Chang and Duffield (2007) used interpretive qualitative methodology of a random sample of nine APNs

in three hospitals to provide support for an operational framework. Data from in-depth interviews were used to define a framework to identify, establish and evaluate advanced and extended nursing roles suitable for consumer healthcare needs. However, study results found little commonality among the nine participants in terms of practice parameters. The small sample size, limited environments sampled and lack of evidence supportive of the framework brings into question whether the framework is generalisable to other settings or countries.

Aiming to identify principal factors that help or hinder development of nurse practitioner roles in the National Health Service, Marsden et al (2003) suggested that appropriate regulatory support is needed to remove restrictions that limit activities such as prescribing and requesting interventions to fulfil the full potential of the role. Similarly, Gardner et al (2004) suggested that overregulation of APNs limits their full potential. Based on interviews with 26 APNs and focus group discussions DiCenso & Bryant-Lukosius (2009) identified infrastructure issues that they felt required attention to support APN practice and implementation. These issues included:

- Updating of drug formularies;
- Development of physician/nurse practitioner collaborative agreements;
- Proper liability insurance;
- Available physical space for practice.

In summary, despite publications supportive of APN roles and literature that generally verifies a positive presence of these roles internationally no literature was uncovered that confirms what process is successful in shaping policy and its association with role implementation in actual practice. The literature revealed that a variety of decision makers have the authority to promote, block or ignore strategies intended to pave the way for APN role development. The lack of consensus for APN related terminology, inconsistent titling and misguided interpretations of the purpose of these roles presented barriers in identifying the full potential for APNs. Frameworks and models were suggested to facilitate implementation but no evidence was found to validate that a logical framework would ease realisation of APN roles. The next section presents a forecast for the future of APNs based on the literature.

2.9 Forecast for the Future

Buchan and Calman (2004) envisioned APN roles as one aspect of the range of healthcare service delivery for the future predicting a broad integrated multiprofessional workforce. However, an improved regulatory environment providing title protection and stipulating educational requirements was seen as a needed measure for patient safety and development of the role. Organizations such as the World Health Organization (2005b) stressed that nursing is an essential part of the healthcare service and supported the education of professionals for different roles within a multidisciplinary or skill mix approach to care.

Canadian researchers DiCenso and Bryant-Lukosius (2009) demonstrated that there are still unfulfilled and unrealized contributions for APN roles in filling the gaps for accessible and equitable health care services. Meeting systemic challenges such as alignment of policy, emphasis on health promotion and need for enhanced interprofessional collaboration were cited as necessary to maximize the use of APN roles in the future. Worster et al (2005) in a descriptive overview of nurse practitioners in Canada agreed that a concerted and cooperative effort by legislative and regulatory bodies is needed to legitimise new nursing roles but suggested that physicians are the best positioned group to lobby for this. A question for future development concerns who will lead and who will follow for effective workforce planning in the emerging healthcare services (O'Brien et al, 2005; Williams, 2000).

The literature suggested that the future of APN roles rests in the ability of researchers to generate evidence of their effectiveness in various healthcare settings (DiCenso & Bryant-Lukosius, 2009; Gage & Hornblow, 2007; Worster et al, 2005). It is no longer acceptable to offer only opinions, examples of past practice and anecdotal description of precedent setting events (Kraus, 2000). Worster et al (2005) emphasised that development of a research programme evaluating clinical outcome trials, assessments of patient satisfaction and economic implications in settings outside of primary care is needed. In addition to strengthening research capacity, Gage & Hornblow (2007) considered dissemination of new nursing knowledge as essential for future autonomous nursing roles. There is agreement in the literature that a solid research agenda would strengthen the future outlook for APN development.

A significant body of literature stressed the need for international consensus on the nature of APN practice in order to provide guidance as countries tailor these roles to their needs and resources (Bryant-Lukosius, 2004; Buchan & Calman, 2004; Gardner, 2004; Schober and Affara, 2006; DiCenso & Bryant-Lukosius, 2009). DiCenso and Bryant-Lukosius (2009)

suggested that without evidence supportive of APN practice they will continue to be vulnerable to ad hoc changes in health policies and economic conditions. Study findings by these researchers demonstrated the dynamic nature and often competing interests of decision makers who shape education, regulation and deployment of APN roles. Their concerns implied that a better understanding of policy decision-making is needed for future development and sustainability of APN roles.

2.10 Conclusion

This chapter sought to contextualise the global presence of advanced practice nursing and has presented topics relevant to role development and implementation based on the international literature. A number of key factors viewed as essential to the successful integration of APNs into the healthcare workforce emerged from the literature. These are 1) the need to establish mechanisms and policies to support the full authority and scope of practice for an APN; 2) the criterion to develop strategies to increase awareness of the function of APNs; 3) a mandate to clearly differentiate the APN role from other healthcare professionals; and 4) the necessity for strong managerial leadership to facilitate effective implementation of the roles. Based on findings from the literature the ideal foundation and facilitative context for an APN initiative are sound policies. The literature consistently confirmed that legislation and standards relevant to the profession are essential in order to authorise nurses to perform to the full capacity of an advanced scope of practice. Evidence was found that without specific policies to address the inclusion of new nursing roles in the healthcare workforce APNs and healthcare systems all too often face a turbulent and chaotic process contributing to stress, tension and conflict. The necessity to have supportive health policies in place to support the authority of APNs to practice to their full potential has been discussed, however, findings from the literature revealed the absence of knowledge on policy decision making, policy development and subsequent realisation in practice. This chapter has sought to emphasise that if an APN cannot work to their full scope of their practice this can be seen as a misuse of human resources and potentially leads to dissatisfaction along with compromise in provision of care. Although the presence of constructive policy was viewed as critical to APN development no evidence was found that demonstrated the important elements of policy development and the relevant policy processes.

This chapter has substantiated that APN roles are a worldwide trend, however, the international literature revealed that there are inconsistencies with respect to titles, scope of practice, clinical responsibilities, educational requirements and regulations between

countries and internally within countries. Titles convey dissimilar meanings in various settings and result in disparate scopes of practice. Education ranges from a generalist nurse who has completed a master's level programme to someone who has continuing education resulting in a diploma or certificate. This lack of consensus at almost every level of development limits the understanding of APN roles and contributes to controversy and uncertainty in implementation as well as confusion in conduct of research. Despite these limitations this chapter has identified common themes. The literature has presented narratives and anecdotal publications describing enthusiasm for the presence of APN roles in a wide variety of healthcare settings. A wide array of publications suggest that APNs contribute positively to healthcare and that they will likely be sustainable in environments where the role is viewed as being important to the health of the country. However, even though randomised controlled clinical trials are beginning to demonstrate the clinical effectiveness of APNs these studies are limited in number and in general there remains a lack of sound substantiation to support effectiveness, efficiency and quality of care. Opinion papers suggest that the addition of APNs to healthcare teams has economic benefits to healthcare systems but cost effectiveness is rarely addressed and there is an indication that initially the addition of APNs could increase costs to healthcare services. Studies on skill mix indicate that not all professionals welcome yet another professional to the healthcare team and the literature further suggests that not all nurses feel prepared to take on duties associated with clinical diagnosing and prescribing. In addition, there are reports of controversy and tension between medicine and nursing resulting in role conflict, anxiety and role strain. In addition, the literature indicated that it is common practice for services provided by APNs to be identified under a classification system that assigns the provided care to a physician and thus analysis of APNs services is limited when the services are not attributed to the APN. Publications repeatedly report patient satisfaction with APN services and no studies were found that indicated a negative impact when APNs provide care. The essence of healthcare planning and policy development includes establishing needs in service delivery thus assessing needs and potential impact based on a research approach was repeatedly recommended in the literature. In an ideal world policy should be based on economic benefit, professional advantage or clinical value. The significance of suitable policies for APNs seems fundamental and implementation of the role should be shaped around these issues. In reality, the literature suggests that key stakeholders and individual champions with various personal and professional agendas dictate and dominate the context in which these changes occur. The drivers for APN roles identified in the literature capture the enthusiasm and interest

supportive of a new nursing role. However, the reality of implementation is marred by the lack of understanding of the complex and multiple factors needed to introduce and sustain such an initiative. The literature demonstrated that limited or lack of knowledge of this multifaceted process can result in chaos and tension especially in early stages of development. There was no evidence found that demonstrated the processes of policy development and associated policy actions that influenced or eased APN development. Furthermore, there was no literature found that investigated policy decision making from the perspective of intent of policy to realisation in practice. Noting this gap in knowledge, this research aimed to clarify these processes from the beginning stages of policy discussions through various stages of decision making to subsequent planning for APN role preparation to key implications of putting policy into practice. It was anticipated that the research would result in a framework that could provide beneficial and anticipatory guidance in avoiding the pitfalls of disjointed implementation of APNs into a healthcare system. Such a framework could be useful not only to Singapore but to other countries exploring the APN concept or attempting to refine APN presence in healthcare systems.

Chapter 3 Methodology

3.1 Introduction

The choice a researcher makes in deciding among a range of methodological options is fundamental in shaping the research study. In selecting a qualitative approach I was cognisant that the field of qualitative research spans a wide range of disciplines and incorporates a variety of research strategies. In exploring my options I selected 'ethnography' as I considered it to have a philosophical foundation best aligned with my research topic while choosing to undertake the study in a different culture. Singapore was selected as a case study for the research where both the societal culture and nursing culture are most different from where I have practiced as an APN. The chapter focuses on the principles of ethnography and the use of a case study approach in relationship to this study. It is divided into eight sections. Subsequent sections begin with an overview of ethnography including an exploration of the history of ethnography and key characteristics of this methodology. In the third section I discuss my rationale for choosing ethnography followed in sections four and five by explanations on the use of interviewing and participant observation as research methods. Relevant issues and dilemmas requiring consideration when adopting ethnography as a research approach are examined in section six followed by a discussion of ethics and ethical issues relevant to this research. The chapter ends with concluding remarks on the methodological choice of ethnography for this research.

3.2 Ethnography

Ethnography is considered by Roper and Shapira (2000) to be a research approach with an emphasis on learning about people by learning from them. This research approach is undertaken by observing behaviours and asking questions about study participants' actions, interactions, experience and feelings (Holloway & Todres, 2006). Hammersley and Atkinson (2007) suggest that the complex history of contemporary 'ethnography' is one of the reasons why this methodology does not have a standard, well-defined meaning and noted that 'over the course of time, and in ... various disciplinary contexts ... its sense has been reinterpreted and recontextualised in various ways, in order to deal with particular circumstances' (p. 2). Even though this statement could be seen as a criticism of attempts to define ethnography, in reviewing various interpretations of the ethnographic approach I thought it well suited to this research (see subsections 3.2.1 – History of ethnography and 3.2.2 Characteristics of ethnography). The philosophical perspective of the ethnographic researcher as overtly or covertly participating in a study in order to appreciate behaviours

not yet clearly understood (Agrosino, 2007) was consistent with the aim for this research. I wanted to be immersed in the culture that I was studying rather than sitting in an office removed from the field and study setting. In addition, I was interested in the prospect that the ethnography could provide an interpretation of cultures or subcultures in Singapore with a resultant description of the patterns of behaviour of individuals and groups of people (Fetterman, 1998; Roper & Shapira, 2000). Specifically, I wanted to gain an understanding of the country's cultures and subcultures related to policy and to healthcare as it pertained to advanced practice nursing. I viewed the societal culture of Singapore as a country in Asia as providing the dominant societal culture with the cultures of policymaking, nursing and medicine providing subcultural contexts.

Ethnography is increasingly used in various disciplines having evolved from origins in social and cultural anthropology to use in sociology, organisation studies, educational research and investigations in healthcare fields such as nursing (Atkinson & Hammersley, 1998; Roper & Shapira, 2000). In addition for the purposes of this study, Pollitt (1990) argued that ethnography makes a valuable contribution to the study of the policy process by revealing conflict and competing perspectives to our understanding of policy decision making. In exploring the world of meanings, choices and resultant behaviours I anticipated that in selecting an ethnographic approach I would gain knowledge of why and how certain policy decisions are made. The next subsection presents an historical overview of ethnography.

3.2.1 History of ethnography

In the late 19th Century and early 20th Century social and cultural anthropologists began collecting data firsthand in the field as opposed to empirical methodologies consisting of testing of hypothesis by means of data collection in the form of quantitative measurement. This shift in data collection is usually identified as the origin of contemporary forms of ethnography. Quantitative research was viewed by early ethnographers as taking place in artificial settings failing to depict the real nature of human social behaviour thus treating social phenomena as static and as more clearly definable than they really are (Atkinson & Hammersley, 1998).

There is a lack of consensus on these early beginnings; however, Malinowski's (1922) interest in documenting the everyday social life of the Trobriand islanders is most often regarded as of most significance with Boas (1928) also developing a more systematic anthropological perspective (Atkinson & Hammersley, 1998). These early anthropologists explored unfamiliar cultures from a colonialist and ethnocentric viewpoint shaped by interest in the methodological query of whether and how other cultures could be understood

(Atkinson & Hammersley, 1998; Holloway & Todres, 2006). Later ethnographic methods, influenced by the Chicago School of Sociology (1917 - early 1940s), looked to examine marginal cultures or subcultures in their own societies. Members from additional disciplines such as sociology and education began to carry out ethnographic studies ultimately paving the way for this approach in nursing research. These developments increased the recognition that understanding should not be restricted only to the study of other cultures but also to the study of one's own social surroundings (Atkinson & Hammersley, 1998; Holloway & Todres, 2006).

The origin of ethnographic participant observation is thought to have its roots in social anthropology; however, it was Robert Park of the Chicago School who encouraged students to study, by observation, the constantly changing social phenomena of Chicago in the 1920s and 1930s. The influence of the 'Chicago School' eventually influenced such fields as education, business, public health, nursing and mass communications (Angrosino, 2007). The Chicago Tradition is depicted as a merging of the two intellectual traditions of pragmatism and formalism. Pragmatism emphasises that social life is not fixed but dynamic and changing thus researchers must become part of life to understand how it changes, participate in life's events, record and relate to the context of the observed setting. This technique is seen as least likely to lead to researchers imposing their own reality on those they seek to understand. Formalism is concerned with the ways in which particular social and cultural forms of life emerge. Social relationships differ from each other; however, they take on forms that display similarities. The researcher's interest is the extent to which that which is observed is typical of other groups or settings with a focus on interactions of people within social settings not individuals as such. The forms of pragmatism and formalism may seem to conflict with each other but it is the researcher's task to understand how they evolve. May (2001) suggested that the more varied the scenes of interaction viewed and circumstances experienced the more one can understand human behaviour and social contexts.

The evolving nature of ethnography also paralleled the institutionalisation of social sciences in Western universities with two sides emerging from the discourse that accompanied this: the positivist (scientific method) paradigm versus the interpretive paradigm with ethnography usually associated with the latter. The tension within ethnography between science and the humanities has been present from the start and has never been resolved (Atkinson & Hammersley, 1998). A main source of tension is the positivist paradigm versus the interpretative paradigm or cognitive theory. Positivism assumes the existence of an objective reality, is typically deductive in approach and establishes known assumptions

about relationships. In contrast, the interpretative or cognitive view, most often associated with ethnography, assumes that the researcher can describe what people think by listening to what they say, is usually inductive in approach and sees the world according to observable behaviour that can be interpreted to better understand actions and interactions (Fetterman, 1989). This brief overview of the evolving nature of ethnography provides some insight as to the essence of this research methodology. The next subsection identifies characteristics of ethnography.

3.2.2 Characteristics of ethnography

Ethnographic studies attempt to explain various perceptions of participants within an interactive social context (Lowenberg, 1993) and are considered by ten Have (2004) as the most demanding way of performing qualitative research. Increasingly this methodology has become more evident in fields of nursing and social policy with their diverse contexts of complex, interactive processes (Roper & Shapira, 2000). Three main methods of data collection are used for ethnography: participant observation, interviews and review of available related documents result in a data source triangulation approach involving comparison of data relating to the same topic but derived from different aspects or phases of the study (Hammersley & Atkinson, 1995). According to Atkinson & Hammersley (1998) cardinal features of ethnography include:

- A strong emphasis on exploring the nature of specific social phenomena rather than setting out to test an hypotheses;
- An inclination to work primarily with unstructured data versus a closed set of analytic categories;
- Investigation of a small number of cases or a single case in detail;
- Analysis of data that includes explicit interpretation of the meanings and functions of human actions, the result of which mainly takes the form of verbal descriptions and explanations.

Other authors provide additional characteristics of ethnography:

- Use of a variety of data collection methods in order to grasp the actual lived reality of a target population (ten Have, 2004);
- Work in the field where the participants of the research live and work (Hammersley & Atkinson, 1995);
- The researcher as the instrument for data collection (Holloway & Todres, 2006);

- Data collection that involves immersion in a setting through participant observation and interviews with key informants (Roper & Shapira, 2000);
- The researcher seeks to uncover the emic or insider view of the members of the setting being studied (Roper & Shapira, 2000);
- Thick description to provide a detailed account of the contextual patterns of relationships (Holloway & Todres, 2006; Roper & Shapira, 2000)

Collectively these two lists present the fundamental features and characteristics of ethnography. Attempting to define ethnography involves dimensions of diversity, differences in ethnographic research and recurrent tensions within the broad spectrum of the ethnography tradition (Atkinson & Hammersley, 1998). The features of ethnography range from the classical form where the researcher is immersed in the culture of a group or culture under study by living and working in their midst for significant periods of time to begin to see the world from the participants' perspective (Parahoo, 2006) to the position of the ethnographers who seek to distance themselves from the conventional view that total immersion in a culture defines ethnographic research (Atkinson & Hammersley, 1998). Earlier debate over methodology concerned the problems of data collection, conjecture and subject matter. Subsequent debate brought forth controversies over the representation and authority associated with the textual character of ethnography. Ethnographic controversy and debate has given a '*critical edge to the recurrent methodological issues: the tensions between disinterested observation and political advocacy, between the 'scientific' and the 'humane', between the 'objective' and the 'aesthetic'*' (Atkinson & Hammersley, 1998, p.112).

The field of nursing and specifically the development of advanced practice nursing is a complex, interactive process that is occurring in diverse contexts. In examining options for a methodological approach for this study I felt that I needed a research methodology that would provide direction as well as guide insights into the context, people and interactions of policy and practice. Consistent with the perspective provided by Roper and Shapira (2000) it was my view that ethnography and ethnographic methods would provide these insights. In linking my perspective to the two lists of ethnographic features described earlier I recognised that I particularly wanted to be immersed in the cultural setting being studied and sought to be actively involved in data collection. My proclivity for working mainly with unstructured data, my interest in uncovering the insider view and a desire to gain an indepth understanding of the unknown also led to my belief that ethnography was an ideal choice for the research. One central feature of ethnography that appealed to me is the investigation in detail of a small number of cases or a clearly defined single case which led

to my choice of Singapore as the case study. An instrumental case study (Stake, 1995) approach was chosen focusing on Singapore as a single case to better understand the complexities of the context of one country in which APN roles are emerging. The justification for selecting this technique is discussed next.

3.2.3 Instrumental Case Study Approach

The methodological choice of ethnography was determined to be well suited for the objectives of the research and the decision was made to select a country specific case as an approach to study in depth the dimensions of the development and implementation of policy relevant to APNs. The decision to select a case study is not a methodological choice but a choice of what is to be studied (Stake, 2008). A case study as defined by Stake (1998) is the study of the individuality and complexity of a single case, attempting to understand it within particular circumstances. Stake proposed three types of case study: intrinsic case study, instrumental case study and the collective case study or study of several cases (Stake, 1998). An instrumental case study technique was selected for this research and is described by Stake (1995) as the study of a case in order to gain a general understanding or provide insight into a particular issue. The case itself is of secondary interest to gaining a clearer perception of a question or issue of concern with attention drawn to what can be learned about the single case. The instrumental case study approach starts with a research question and a need for a general understanding about a question thus the case is instrumental to understanding a broader topic (Stake, 2008). Stake (1995) refers to a case as a specific, complex, functioning integrated system in which '*the parts do not have to be working well, the purposes may be irrational, but it is a system*' (p.2). In a disciplined, qualitative mode of inquiry into a single instrumental case the researcher emphasises episodes of nuance and the sequence of happenings in context. In designing an instrumental case study the emphasis is on interpretation but the study interpretation is not confined to the identification of variables and the development of instruments prior to data gathering. Instead, the emphasis is on placing a researcher in the field to observe the workings of a case and record findings objectively but simultaneously examine meanings or substantiate those meanings with the aim to thoroughly understand the context. In this process the conceptual organisation of the study draws attention to problems and concerns thus building conceptual bridges from what is already known. In ethnography the nature of the setting or case plays a significant role in which the research is developed (Hammersley & Atkinson, 2007).

In selection of a case an opportunity may arise to investigate a situation where the evolving events provide the chance to study history-in-the-making (Hammersley & Atkinson, 2007; Reimer, 1977). Such was the situation and research opportunity in Singapore. I sought to understand processes of policy decision making to realisation in actual practice. Singapore was in the beginning stages of developing policy relevant to integrating APN roles into the healthcare system and I had access to the decision making and implementation environment at multiple levels. Worldwide there are few possibilities of being on the forefront such as this to study this phenomenon as a whole and in depth. In addition, Singapore was unique not only because APN development was taking place in Asia but its population represented diverse Asian cultures mainly from China, Malaysia and India (see Chapter Five). The nursing culture was based on general nursing education at the diploma level that took place in tertiary settings with no experience in primary care settings. Programmes for graduate nursing study occurred out of the country. Selecting Singapore as a case was felt to be closely aligned to the objectives of the research and the methodological choice of ethnography. The research conducted in Singapore was expected to be instrumental to learning about policy and policy decisions as they related to the development and implementation of APN roles. Whereas I chose ethnography to study APN development within these cultures I hoped to be able through using an instrumental case study approach to draw out lessons of wider applicability beyond the context of Singapore.

Case selection and framework

Instrumental casework requires that a case be chosen for the fieldwork building in variety, acknowledging opportunities for intensive study and defining clearly the case to be studied (Stake, 2008). I sought to improve an understanding of policy development and implementation relevant to APN roles. To do this required study of a case that could provide data on the complexities of decision making, setting of policy and realisation in practice. I was aware that Singapore was in the early stages of launching an APN initiative. Recognising that most research to date has been conducted in 'western' countries especially the USA, the UK, Canada and Australia I thought it would be useful to study APN development in a different cultural context. Once I made the decision to pursue doctoral study as well as accept a visiting fellow position at the National University of Singapore the prospect of conducting a study in Singapore seemed optimal. I was known to decision makers, academics, and APNs in the country and had use of the university library and technological systems that facilitated retrieval of publications both international and local. The department in which I was employed provided me supportive services and required my

responses to external authorities along with associated rules. Singapore, as the selected case, offered resources and relevance to my research interest and questions. The literature review revealed a gap in knowledge on the topic of interest to me. Findings from the literature and the research objectives guided the strategies for the case study framework. The literature demonstrated an extensive array of publications on the rationale for considering APNs and comprehensively attempted to define APN practice. However, there was no literature found that demonstrated the processes of policy development and implementation considered to be essential to support nurses to practice to their full potential in an advanced role. In addition to a review of the literature an analysis of any and all Singaporean publications associated with the APN initiative was conducted to verify and corroborate knowledge of policy development, influential decision makers and the policy processes.

Theoretical propositions advocated by Stake (1995) were a starting point for the case design and were useful in guiding the case framework. Questions that were considered included: Why was policy development of interest to APN development? How were decisions made? Who made the policy decisions and facilitated subsequent implementation? Even though the literature did not provide evidence on these questions or this topic it did describe the complexity and the multiplicity of decisions that influenced APN role implementation for the concept to succeed. Having identified policy development and APN implementation as central themes and Singapore as the case I proceeded to ascertain under whose jurisdiction the decisions were made.

3.3 Choosing the study methodology

The decision to take an ethnographic approach using an instrumental case study design was made in order to provide an in-depth understanding from one country's perspective and experiences of the development of APN roles. It was thought that it was quite important to study a different cultural context to where existing research had been undertaken. The choice was made to focus on Singapore since the country was early in its development of their APN initiative and one of the few countries in Asia developing an APN role. Not only was there little documentation of the presence of APNs in this region of the world but publications from Singapore were few. I was in residence in Singapore as a visiting scholar at the Alice Lee Centre for Nursing Studies, National University of Singapore. I viewed my position as being potentially helpful in gaining access to documented accounts, key stakeholders, strategic decision makers, staff nurses and nursing leaders, other healthcare professionals and APNs themselves. However, my

researcher profile representing a respected Singaporean academic institution with international expertise in the nursing discipline was also seen as potentially limiting in its effect on data collection.

Taking these issues into consideration, I felt that a descriptive and interpretive methodology such as ethnography with emphasis on investigating culture would be most suitable in studying what decisions were made in the development of APN roles in Singapore while also examining how decisions impacted role implementation. As a researcher I was interested in:

- Understanding the intent of decisions made by key stakeholders from the beginning of interest in launching an APN initiative;
- Comprehending the links and interactions among the policy decision-makers;
- Appreciating the effect of various decisions on the Singaporean nurses and healthcare system;
- Acquiring insight into the cultural perspectives of policy and APN development in Singapore;
- Gaining knowledge of the 'lived experience' of APNs in actual practice as they implemented these new nursing roles.

Methodological emphasis was placed on a review of documents specific to Singapore, interviewing key decision makers including government officials, academics, nursing and medical leaders and others thought to have influenced procedure and process. Additionally, interviews and participant observation were carried out with APNs and APN interns in order to better understand how decisions made by various agencies or institutions impacted role development and implementation. Ethnography commonly involves the three data collection strategies of interviews, participant observation and examination of available related documents that is viewed by Roper and Shapira (2000) as a natural triangulation of investigative approaches on the same phenomenon. A triangulation approach as conceptualised by Denzin (1978) was chosen for the ethnography and is discussed next.

Triangulation

The concept of triangulation has been widely adopted and developed by qualitative researchers as a way of examining the convergence of both the data and the conclusions derived from them (Denzin, 1994). Denzin (1978) presented a systematic conceptualisation of this research approach and identified four different forms of triangulation: the use of multiple and different sources of data (observation, interviews, documented accounts),

different methods (qualitative and quantitative), different investigators (various interviewers and observers with multiple analyses) and theories (looking at the data from different theoretical perspectives). Lincoln and Guba (1985) advocated for triangulation of data as crucial to naturalistic studies such as ethnography emphasising that no single source of information should be given serious consideration unless it can be validated by one other source. The triangulation approach identified for this research was the use of multiple and different sources of data in order to add rigour, breadth and depth to the analysis (Flick, 1992).

A key characteristic of ethnography is the use of a variety of data collection methods in order to grasp the actual lived reality of a target population (ten Have, 2004). Ethnography often involves a combination of techniques; therefore, it may be possible to evaluate the validity of inferences between indicators and concepts by examining the data relating to the same concept from participant observation, interviewing and documents (Hammersley & Atkinson, 2007). In choosing this approach an attempt has been made to relate different sorts of data in order to counteract possible threats to the strength of the analysis. It was thought that this would improve the probability that the interpretation of the findings are seen to be credible. According to Hammersley and Atkinson (2007) data source triangulation involves the comparison of data relating to the same phenomenon but deriving data from different phases of the fieldwork, different points in the timelines in the settings or the accounts of different participants differentially located in the setting. If diverse kinds of data or different sources lead to the same conclusion we can gain some confidence in the findings. In addition, the principles of sequential triangulation (Morse, 1991; Creswell, 1994) were used for this four phase study. Following the core tenets of sequential triangulation each phase of the study was conducted and analysed separately with the results of the first phase essential or informative for planning the next phase and so on. In addition, the principles of sequential triangulation (Morse, 1991; Creswell, 1994) were used for this four phase study. Following the core tenets of sequential triangulation each phase of the study was conducted and analysed separately with the results of the first phase essential or informative for planning the next phase and so on.

The next section presents interviewing techniques and the interviewing approach chosen for this study.

3.4 Interviewing

Qualitative research commonly uses interviews to provide a detailed exploration of participants' viewpoints of their experiences and the context within which the research is

being conducted. Interviews are well suited for research such as ethnography that requires an understanding of deeply rooted and subtle practices or opinion on complex systems, processes or experiences. Interviews promote in-depth and detailed understanding of the topic or context (Legard, Keegan & Ward, 2003). Digital recording for transcription, coding and interpretation is often used so that complete attention can be given to the conversation. Field notes taken of key words or phrases provide an opportunity for the researcher to clarify opinions expressed in the interview.

Interviews vary from a formal standardised format to unstructured in-depth interviews that allow the respondent to answer without the constraint of preformulated questions with a limited range of answers. In moving from a structured to an unstructured interview a researcher shifts from a context in which an attempt is made to control the interview through predetermined questions to the other end of the continuum in which the respondent is encouraged to answer a question in their own terms (May, 2001). Although structured, semi-structured and informal interviews are described briefly in this section, the emphasis on the unstructured in-depth interview usually associated with ethnographic research was chosen for this study.

The principle behind the structured interview is that each person is asked the same question in the same way so that differences in answers are thought to be real ones not the result of the interview process itself. The interviewer does not prompt personal views or interpretation of meanings (Fontana and Frey, 1994). This method relies on a uniform structure thought to permit comparability between responses; however, evaluations of this interview technique have found a high degree of interview variation (May, 2001).

The semi-structured interview uses techniques from structured methods of interviewing, however, even though questions are usually specified the interviewer uses probing questions to gain additional data. Seeking clarification and elaboration the interviewer moves into a dialogue with the respondent and then records qualitative information. It is thought that these interviews allow people to answer on their own terms but still provide a greater structure for comparability over unstructured interviews (May, 2001).

The open-ended nature of the unstructured or in-depth interview is the central difference from both the structured and semi-structured interview. This approach potentially challenges preconceptions of the researcher and encourages the participant to answer questions from their own perspective rather than a predetermined structure. Criticism of this method suggests that the unstructured format promotes digression from the specific topic while other comments point out that this divergence can reveal something new about the issues being studied (Bryman, 1988). An unstructured interview is thought to achieve a

different focus in that it provides qualitative depth by allowing participants to talk about a topic within their own frame of reference thus providing a greater understanding of their point of view (May, 2001). Unstructured interviews can be designed in various ways. Spradley (1979) recommends initiating the interview with comprehensive questions followed by more specific probing questions to focus the interview. Exploration is conducted around specific issues to gain additional perspectives from the participant (Roper & Shapira, 2000).

Informal interviews are used as part of participant observation to gather data that cannot be observed or that could not reliably be obtained through observation (i.e. thoughts & feelings). This technique is used during participant observation to check the participants' observation against that of the researcher's and enhance validity of the study. A general approach to questioning following observed events or interactions promotes better understanding of what has been observed (Roper & Shapira, 2000). Informal interviewing was chosen for this study not only to clarify observed activities during participant observation but also to gain perspectives of the APN role from staff who worked with the APNs and were present in the various healthcare settings.

My rationale for choosing an in-depth unstructured interview approach for this study was to gain a thorough understanding of decisions and the intent of decisions associated with the development and implementation of APN roles in Singapore. To accomplish the aims of the research it was essential that I gain the perspectives and insights of key decision makers as to the intent and processes of policy decisions. In essence, as a researcher, I was penetrating a network and entering a social world unfamiliar to me. I could not be certain of the opinions and information I might encounter that would be useful, therefore, I envisaged needing the flexibility to pursue topics of interest to the research as they arose. For these reasons I anticipated that purposeful yet unstructured in-depth interviews with participants thought to have influenced APN development was best suited for this purpose. Further details on the interview approach will be examined in more depth in Chapter Five: Fieldwork. The next subsection discusses the use of participant observation.

3.5 Participant Observation

Participant observation is viewed as a fieldwork strategy in ethnographic research exemplified by the researcher joining a study population or study setting to record actions, interactions or events that occur. The researcher has the opportunity to gain insights through direct experiential and observational access to the 'insiders' world of meaning. This approach is useful when the behavioural consequences of events form a focal point of the

study (Jorgenson, 1989; Ritchie & Lewis, 2003) as was the situation with this research. To understand participant observation it is helpful to appreciate the variances in this method. Agrosino (2007) suggested that participant observation is not a data collection technique, but rather the role adopted by an ethnographer to facilitate collection of data. Gold (1958) distinguished four types of participant roles. Descriptions of these four types of participant roles follow:

Complete participant - the researcher seeks to be fully engaged in the activities of the participants' who are being studied. The intentions of the investigator are not made explicit thus it is argued the advantage is that it is possible to produce a more accurate understanding not available by other means.

Participant as observer - the researcher takes on an overt role and discloses their presence and intentions to the subject (s) being observed in an attempt to form relationships with the subjects such that they serve both as respondents and informants. The aim is to know and understand more from people within the study setting. In this role the researcher does not attempt to become one of the group studied. Recording of events is fundamental but is limited by the researcher's recall.

Observer as participant - strictly speaking this is not participant observation and is used in studies involving one-visit interviews. Observation is more formal than informal observation or participation of any kind. It is more of an encounter between strangers thus not fully utilizing the strengths of time in the field.

Complete observer - a non-participant role. This role completely removes the researcher from observed interactions and is exemplified by laboratory experiments i.e. one-way mirrors for the mechanical recording of behaviour.

The widely used Gold typology (Gold, 1958; Junker, 1960) can be interpreted as various degrees of researcher participation along a continuum based on the extent to which the researcher engages as a participant in the research setting. At one end of the continuum is the complete observer role with the researcher taking no active part in the setting while attempting to record observations as objectively as possible. At the other end of the continuum is the role of researcher as complete participant, fully engaged in the setting without disclosing his or her identity or intentions. Several dimensions can influence the usefulness of this typology. According to Atkinson and Hammersley (1998) these dimensions include:

- To what extent the researcher is known to any of those being studied;
- What is known about the research and by whom;
- What activities the researcher engages in and how this locates the researcher in relation to conceptions held by the participants;
- How completely the researcher adopts the orientation of insider or outsider.

Roper and Shapira (2000) suggest that most ethnographers move back and forth along this continuum usually spending most of their time in the role of participant-as-observer or observer-as-participant with the use of a chosen role driven by the situation. Using a combination of roles the researcher has the optimal opportunity to observe events and understand meanings.

3.5.1 Strengths and Limitations of Participant Observation

In identifying the strength of participant observation May (2001) commented that researchers are least likely to impose their own reality on the social world they are trying to understand when using this method. In addition, it can be argued that the process of understanding actions or learning about behaviour is absent from other research methods. How and why people change is not as clearly understood when using quantitative methods. Participant observation differs from positivist oriented research (scientific method) in that to assist in understanding social reality it is felt that the researcher must also experience that reality. The researcher's task is to understand the evolving nature of observed behaviours and interactions. Observations of experience are recorded in order to understand the cultural universe that people inhabit (subjective experiences). These observations are conveyed to a wider audience (from field notes) within the context of analysing and explaining data (May, 2001). The objectivity of the data and analyses of participant observation is challenged by pointing out that accounts produced by researchers are constructions reflecting the circumstances of their own production thus contradicting aspirations to capture the nature of the social reality (Atkinson & Hammersley, 1998). It is also argued that without statistical analysis to confirm the significance of observed patterns or trends researchers cannot ensure that the findings from participant observation are not merely the effects of chance (Angrosino, 2007; May, 2001).

Whether the researcher is fully engaged in or completely detached from the setting - ethical problems related to deceptive practices may arise (Angrosino, 2007, p.55).

These concerns speak to objectivity and the possible ethical challenges associated with participant observation as well as qualitative research (see Section 3.7 in this chapter and Chapter 4: Field work for discussion of ethical issues relevant to this research). The next subsection examines the appropriateness of this method for the ethnography.

3.5.2 Suitability of participant observation for this study

One main objective of this study was to examine the extent to which APNs in Singapore achieved the intentions of policy decisions when introducing advanced nursing roles into the healthcare system. I had a desire to not only gain an understanding of the policy decision-making processes but I also wanted to gain insights as to the actual implementation of APN roles in practice in relation to the policies. With this in mind participant observation was chosen as one method of data collection to gain this understanding. I anticipated that there would be movement by myself as the researcher between the roles described in the Gold continuum of participant as an observer and observer as participant. The emphasis of participant observation was expected to be toward participant as observer (Gold, 1958) the majority of the time for this study. The benefit of participant observation was the opportunity to gain insight into the realities of policy as it related to practice by observing what APNs and APN Interns actually did routinely. Further details on the scheduling and conduct of participant observation can be found in Chapter 5: Fieldwork.

3.6 Issues in ethnography

In terms of data collection, the ethnographer faces responsibilities relevant to this methodology. Issues a researcher should acknowledge and consider when approaching data collection are identified in this section. This section is divided into four subsections. It begins with a discussion of reflexivity followed by a description of rapport and emic/etic perspectives when conducting ethnography. Finally the issue of reciprocity in ethnographic research is presented.

3.6.1 Researcher role and reflexivity

In ethnography the researcher is the instrument of data collection entering the setting in which the person or persons are already interpreting and understanding their environments. The aim of understanding is enhanced by the researcher considering how they are affected by the study setting, what goes on within in it and how others, including themselves, act and interpret within the setting. The researcher draws on his or her personal biography in the

research process. The researcher's cultural background is used reflexively to understand actions in context. Part of the reflexivity process (the intentional use of self) is to know and identify which role is being assumed. Reflexivity in terms of its relation to ethnography:

'... implies that the orientations of researchers will be shaped by their socio-historical locations, including the values and interests that these locations confer upon them. What this represents is a rejection of the idea that social research is, or can, be carried out in some autonomous realm that is insulated from the wider society and from the particular biography of the researcher'

(Hammersley & Atkinson, 1995, p. 16)

Depending on the aim of the research, the role of the researcher will vary and in turn will affect the data produced. Reflexivity allows the ethnographer to identify biases and the potential influence on the data and interpretation of the data (Roper & Shapira, 2000). The reflexive aspect views the researcher as part of the setting being studied while also being influenced by the experiences and relationships encountered (Boyle, 1994). For example, in the conduct of participant observation, Roper and Shapira (2000) suggest that the dimensions of time, place, social circumstances, language, intimacy, consensus/validation and bias influence the researcher role. The researcher determines the time designated for participant observation as well as the location where the participant observation is to take place and benefits from events related to the setting. In studying a setting where the researcher is unfamiliar with the language or aspects of the culture obtaining relevant information may be affected. The dimension of intimacy or involvement in the setting affects the ability of the researcher to be closely involved without losing objectivity. Validation can be conducted by checking interpretations with the observed participants and finally bias on the part of the researcher may influence data collection, interpretation and description of findings.

I acknowledged and was concerned that my biography could have an authoritarian and possibly unintentional manipulative effect in both participant observation and the interviews. My position as a visiting scholar at the National University of Singapore assisted me in gaining access to top level decision makers and government officials in Singapore but could have added an imposing presence to some participants. The National University of Singapore is a prestigious academic university in Singapore and rated as not only one of the top universities in Asia but in the world. Nursing was seeking a stronger academic culture but interacting with members of the university faculty appeared to be daunting for some of the nurses in Singapore. In addition, the university department of nursing was at

times seen as not representative of the local nursing culture. As an international consultant with extensive experience in advanced practice nursing and APN roles it was possible that participants might want to provide positive information during interviews and participant observation thus attempting to limit conversation regarding the challenges or negative events surrounding APN development in Singapore. Participants might have felt threatened by the prospect of interaction with a visitor from the United States, a country with an established history of APN roles. As both an expatriate (not from Singapore) and a member of the university culture I anticipated possible resistance to open conversations thus I was conscious of the need to establish rapport for optimum participant observation and interviewing. Establishing rapport is discussed in the next subsection.

3.6.2 Rapport

Participant observation and interviewing involve interacting with the individuals being studied thus developing good rapport or an affinity for the participants is critically important. Rapport refers to the development of mutual trust that permits the free flow of information (Spradley, 1979). The researcher can establish a good working relationship by putting the participant at ease in order to create a climate of trust. This means demonstrating a wish to understand from the perspective of the participant(s) by showing interest and respect while retaining one's own identity. Trust is strengthened when the researcher appears to be comfortable with the setting or situation and with everything the person has to say (Ritchie & Lewis, 2003).

The focused or in-depth interview, most often used in ethnography, is a process of building up trust and cooperation. Spradley (1979) describes the establishment of rapport as a four-stage process:

- Initial apprehension for both the interviewer and interviewee;
- Exploration of each other and determination of how they will proceed;
- Cooperation with each person knowing what to expect of each other;
- Participation in the research.

Building rapport with participants requires patience and diplomacy to better ensure that essential data are collected (Hammersley & Atkinson, 1995). From the beginning of recruitment through all phases of data collection I was extremely conscious of the need to establish rapport. Some of the participants had been introduced to me prior to data collection and others knew of my profile at the university. I envisaged that this could

contribute to building rapport more easily. From informal conversations to professional contacts I sought to gain trust in myself as a researcher and in the research process.

3.6.4 Emic and etic perspectives

The emic perspective as used most often in ethnographic research means the insider view. The emic perspective is the native point of view or is the perception of those who are members of a specific group. The insider view has knowledge of the group culture that they can share with the researcher and can give meaning to their experiences and produce knowledge about the reasons for their actions. The emic perspective is culture or group specific (Holloway & Todres, 2006).

The etic perspective is the view of the outsider who may or may not be a member of the group being studied. The researcher takes an etic or outsiders' view to produce scientific knowledge about what they see and hear (Holloway & Todres, 2006). There is an attempt by the ethnographer to be objective by providing definitions and knowledge from their own cultural background (Roper & Shapira, 2000). Etic categories summarise key analytic issues that the ethnographer has used to organise the study findings or link them to significant theoretical arguments (Hammersley & Atkinson, 2007).

For this study the participants represented the 'emic' perspective of insider with insider knowledge of the culture. For this study I believed that I represented a dual position. As a resident of Singapore and a scholar at the university I was able to access some aspects of insider knowledge that would have been unavailable to a true outsider. However, as an expatriate and visitor to the country I essentially had an outsider perspective. In addition, as a researcher and for research purposes, it was important that I focus on the 'etic' perspective in seeking objective information. This combination provided an interesting and challenging situation in data collection. The next subsection addresses the issue of reciprocity.

3.6.4 Reciprocity

Reciprocity refers to how the researcher might give some thought to giving something in return for the assistance, time and consideration given by the participants (Lewis, 2003). The participants give the researcher information therefore the researcher returns the favour by providing them something that may be useful (Skeggs, 2001). Measures for consideration are an attempt to make research more of an exchange as well as an attempt to encourage participation in the study. Constraints of the researcher in deciding on appropriate measures need to include objectivity, neutrality and distance; therefore, means

of reciprocity could include small cash payments, sharing key findings of the study or acts of reciprocity during field work that might be helpful to the participants (Murphy & Dingwall, 2001). Participants in this study were not given cash payments. All participants were interested in the practical conduct of the study and in obtaining a summary or access to studying findings when available. APNs were informed that it was expected there would be publications. They welcomed the opportunity to contribute to an increased visibility of APN development in Singapore. Many participants inquired about APN development in the USA and some APNs inquired about clinical management in specific cases. The essence of reciprocity for the study was a scholarly exchange of ideas and knowledge.

3.7 Ethics

The ethical issues of ethnography are difficult to separate from the nature and theory of the studies undertaken by the ethnographer (Murphy & Dingwall, 2001). Traditional ethical concerns have been associated with informed consent (consent received from the subject after he or she has been informed about the research), right to privacy (protecting the identity of the participant) and protection from harm (physical, emotional). However, techniques such as in-depth interviewing can be viewed as unethical when the techniques intentionally or unintentionally manipulate respondents; treating them as objects rather than individual human beings who reveal their lives or concerns to the researcher. Fontana & Frey (1998) advise that researchers need to exercise common sense and moral responsibility to participants first, to the study next and to ourselves as researchers last. This section is divided into three subsections and begins with a discussion of informed consent. Subsection two examines the issue of the contract between the researcher and participants. Finally ethics related to field work and field notes is provided.

3.7.1 Informed consent

The researcher has the responsibility to clearly inform subjects of potential positive and negative consequences of the study (Lipson, 1994). Benefits to the researcher include an increased understanding of the participants and issues under study and the contribution to advanced knowledge (Cassell, 1980). It is important what participants are told about the research as regards its purpose and what it will involve for them, including possible consequences stemming from the publication of the findings (Hammersely & Atkinson, 2007). The participation information sheet describes the purpose of the study; how long the participants' involvement or the study will last; what the subject will be asked to do; interactions or procedures that might be uncomfortable; anticipated risks; expected benefits

and how the study results will be used (Roper & Shapira, 2000). A consent form contains brief statements relevant to the study and is signed by the participant to indicate their agreement to participate. The potential of harmful effects from an ethnographic study are minimal and mainly include violations of privacy and confidentiality. Following an explanation of the study a participant should be able to make an informed decision about participation. Dealing with the issues of ethics and informed consent can become complex because permission is usually required from relevant ethics committees or review boards. Discussion of specific ethical issues encountered and the ethical review process for this study can be found in Chapter 4: Field work. In considering ethics a contract between researcher and participant is understood. This issue is discussed next.

3.7.2 Contract between the researcher and participant

A participant who agrees to participate in a research study enters into a defined relationship with the researcher (Roper & Shapira, 2000). When the researcher has gained permission to interview or observe the participant within the terms of the given consent in a sense the participant has entered into a type of contract with the researcher. The terms of the contract are that the participant has agreed to be interviewed or observed for a predetermined length of time, at a predetermined venue, on a particular topic, and under clear conditions of confidentiality. The participant has the right to change their mind at any time (Legard, Keegan & Ward, 2003). Informed consent not only includes an explanation of the purpose, risks and benefits of the study but also emphasises the ability of the participant to refuse participation at any time along with the protection of anonymity and confidentiality (Roper & Shapira, 2000). The nature of fieldwork, an essential part of ethnography, is discussed in the next subsection.

3.7.3 Fieldwork and field notes

The field, fieldwork and field notes are recognized essential concepts in ethnography. The field is the physical environment where the research is taking place. The term fieldwork can refer to the work undertaken in the study in collecting data but also includes the description and interpretation of behaviours, the meaning people give to their actions and the setting in which the study takes place (Holloway & Todres, 2006). Field notes comprise comments and thoughts kept in a journal or diary by the researcher about their experiences. The notations are based on the observations and interviews undertaken in the research setting (Holloway & Todres, 2006). Spradley (1979) identifies condensed accounts as short descriptions made in the field during data collection with expanded writings that extend the

descriptions and fill in the detail as soon as possible after a period of observation or interview. The researcher may note their reactions and problems during fieldwork taking note of any biases (Holloway & Todres, 2006). The nature of field relations requires that the researcher in mindful of the need to build up rapport and trust to minimise any effects of stress, anxiety or ethical dilemmas that might occur. See Chapter Four: Fieldwork for an in-depth discussion of the conduct of fieldwork and ethics for this study.

3.8 Conclusion

This chapter has presented principles characteristic of ethnography and the instrumental case study approach that were thought to be fitting for this investigation. In deciding on the research topic and in defining my research aims I was aware that I wanted to gain an in-depth understanding and insight on policy and policy processes as they impact APN development from the perspective of the study participants. In reviewing research methodologies I recognised that ethnography with its emphasis on culture and the technique of selecting a case study were well suited to the study. The comprehensive review of the international literature undertaken in the area of advanced practice nursing provided a theoretical basis to inform my interpretations of advanced practice nursing. The research reported in this thesis draws heavily upon the work of Atkinson and Hammersley (Atkinson & Hammersley, 1998; Hammersley, 1998; Hammersley & Atkinson, 1995; Hammersley and Atkinson, 2007) with their flexible yet rigorous account of ethnography and upon the technique of case study research as described by Stake (Stake, 1995; Stake, 1998) namely the instrumental case study approach. My recognition that a characteristic of ethnography is often the indepth investigation of a single case led to my choice of this research design.

The philosophical perspective and characteristic of ethnography that focuses on the researcher being immersed in the field and overtly or covertly participating in the conduct of the study appealed to me. I wanted to be engaged in the culture I was studying rather than sequestered in an office removed from the field and the study setting. It was thought that ethnography would provide insights into the complex and complicated issues surrounding policy development relevant to APNs. My desire to uncover an insider view and gain indepth understanding aligned with a mainly unstructured approach to data collection held great appeal for me. The choice of in-depth unstructured interviews offered me the opportunity for intense exploration with participants on topics relevant to the research. The unstructured nature of this style of interviewing and probing follow-up questions provided me with the in-depth perspective that I was seeking. Participant observation in clinical settings offered a view of the lived experience of APNs not only as a more 'natural' method

of data collection but provided comparison of data collected from other sources with the actual day-to-day practice of APNs. Ethnography with its focus on understanding culture was particularly suitable to studying the implementation of APN roles within the Singaporean context and its social culture, policymaking culture, nursing culture, medical culture and healthcare environment.

The decision was made to select a country specific case to study dimensions of policy making relevant to APN roles. Singapore as the case study was selected as a country in the early stages of development. There are few possibilities of being on the forefront such as this to study this phenomenon as a whole and in such depth particularly related to policy making and the realisation of APN policies in actual practice. In addition, publications from outside of western countries with a longer history of these roles and especially in Asia describing APN development are limited. Singapore is unique not only because APN development was taking place in an Asian country but its population represented a diverse population mainly from China, Malaysia and India (see Chapter Five). Not only was the population diversity new to me but the nursing culture was different from my experiences in the USA (see subsection 3.2.3). Whereas I chose to study APN development within this culture and its subcultures I hoped to be able through using an instrumental case study approach to draw out lessons of wider applicability beyond the context of Singapore. An important consideration in the ethnography was reflexivity and the issue of researcher bias. The chapter has discussed my biography in light of the impact it might have on the interpretation of the study findings. Based on definitions of 'etic' and 'emic' perspectives I recognised that in some ways I straddled dualities of being both an insider and an outsider. This could have unavoidably influenced my interpretation of the interviews conducted and the observations made in carrying out the research. I acknowledged that study participants might be cautious in providing me with the in-depth information that I sought due to my position as a visiting scholar and the tendency of Asian populations to be cautious in spontaneously offering information. Recognising the sensitive nature of this issue I constantly distanced myself from the data in order to try to create and support intellectual independence in which my analysis could take place.

The approach of triangulation for this research was identified as the use of multiple and different sources of data in order to add rigour, breadth and depth to the analysis. A key characteristic of ethnography is the use of a variety of data collection methods in order to grasp the actual lived reality of a target population (ten Have, 2004). Ethnography often involves a combination of document review, interviews and participant observation; therefore, it is possible to evaluate the validity of inferences between indicators and

concepts by examining the multiple sources of the data (Hammersley & Atkinson, 2007). In choosing this approach I sought to relate different sources of data in order to counteract possible threats to the strength of the analysis. Data source triangulation involved the comparison of data relating to advanced practice nursing and policy development derived from different phases of the fieldwork, different points in the timelines in the settings and accounts of different participants differentially located in the setting. It was thought that if diverse kinds of data and different sources lead to the same conclusion there would be increased confidence in the findings.

Chapter 4 Fieldwork

4.1 Introduction

The empirical work for this ethnography was carried out in four inter-related phases: review of Singapore documents associated with APN development, interviews with pivotal decision makers influencing policy for the APN initiative, interviews with key healthcare managers facilitating implementation of the roles and participant observation along with interviews of APNs in the field working to put policy into practice. This chapter builds upon the discussion of methodology in Chapter 3 by providing an explanation of the process of conducting the proposed ethnography. The chapter is divided into seven sections. Subsequent sections begin by looking at the aims of the study followed by a summary of the four study phases. Attention is then given to a detailed description of how the fieldwork was carried out. Section four presents the approach to data analysis. Section five examines the establishment of rigour for the research followed by ethical considerations in section six. Concluding remarks can be found in the final section.

4.2 Research aims

The significance of suitable policies supportive of a new nursing role seemed fundamental, however, in a review of the international literature detailed in Chapter Two there was no evidence found that demonstrated the processes of policy development and associated policy actions for APN development. Furthermore, there was no literature found that investigated policy decision making from intent of policy to the actual implementation in practice. This research aimed to clarify these processes from the beginning stages of policy discussions through various stages of decision making to subsequent planning for APN role preparation to key implications of putting policy into actual practice. The overall aims of the research were:

- To analyse drivers that provided momentum for the introduction of APN roles in Singapore;
- To investigate the processes associated with the development of policy that led to the introduction of APN roles in Singapore;
- To explore the experiences of a sample of key decision makers and APNs in Singapore in order to ascertain how intentions of policy were subsequently realised in practice.

Even though I wanted to gain an understanding of the drivers that led to the APN initiative in Singapore I also sought insight into the factors influencing relevant policy development. In addition, acknowledging that policy intentions are most likely modified in their realisation into practice, I was curious as to what extent and by what means APN roles were implemented relative to the intentions of policy.

4.3 Overview of the research

In seeking to address the research aims, the study was carried out in four interrelated but sequential phases (see Figure 4.1 for a representation of the Conduct of the Study and Table 4.1 for Timeline and Sample Size of Study Phases):

- Phase One - review of documents associated with APN development in Singapore;
- Phase Two - in-depth interviews of pivotal stakeholders who influenced policy decisions;
- Phase Three - in-depth interviews of nursing managers, medical directors and medical consultants associated with role implementation;
- Phase Four - in-depth interviews and participant observation of APNs and APN Interns who were implementing the role.

Figure 4.1 Conduct of the Study

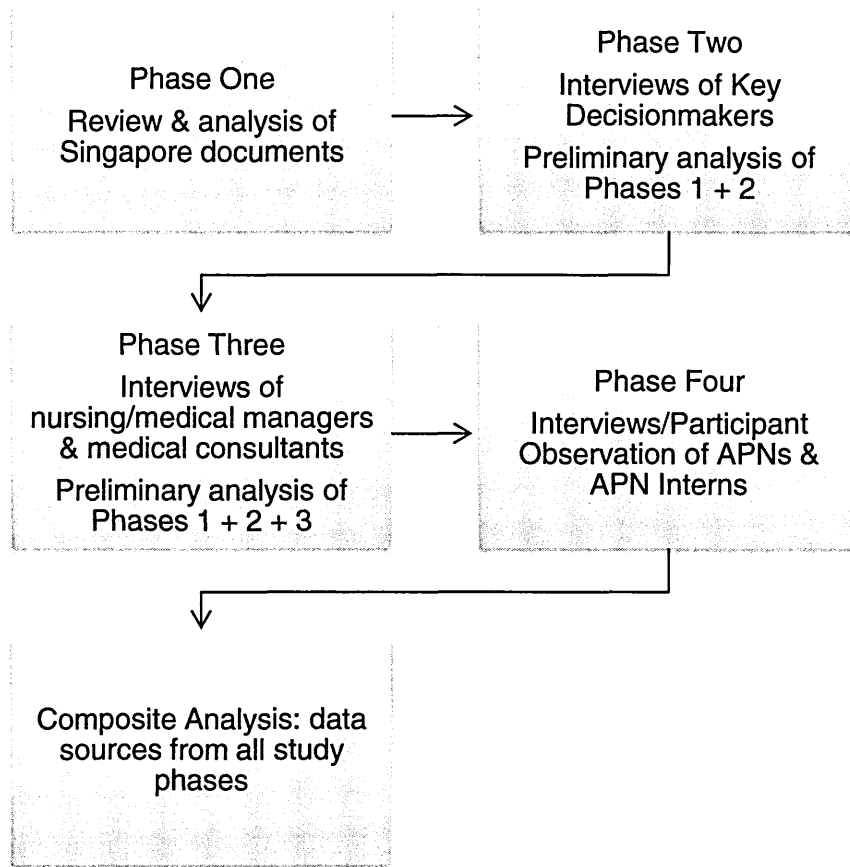


Table 4.1 Timeline and Sample Size of Study Phases

Phase	Focus	Number	Dates Conducted
One	Document review	47 Singapore documents	January to April 2010
Two	Interviews of key government officials, university dignitaries & academic staff	12 participants	June to August 2010
Three	Interviews with nursing managers, medical directors & medical consultants	11 participants	May 2010 to February 2011
Four	Interviews & participant observation with APNs	15 participants	December 2010 to April 2011

All fieldwork was conducted in Singapore to gain an understanding of factors influencing APN development in the country. The four phases of the study are summarised below.

4.3.1 Phase One: Review of Documents

The review of documents provided an in-depth examination of Singapore literature and policy documents to further inform the conduct of the study. In this phase my objectives were to review the existing body of Singaporean documents and literature in order to:

- Identify the range of drivers influencing APN role development in Singapore;
- Identify key decision makers involved in the development of policy related to APN development in Singapore;
- Identify the various policy directives issued in order to achieve APN implementation in Singapore.

Prior to conducting this phase a comprehensive literature review (see Chapter 2) had been undertaken to explore APN development internationally. A comparison of how Singapore was situated in relationship to global development was undertaken following the literature

review and informed by the review of Singapore documents (see Chapter 5). The knowledge gained from the document review was beneficial in setting the scene for APN development in Singapore and helped me identify potential study participants. Document analysis was completed before commencing with Phase Two interviews. Findings from the analysis of documents informed conduct of the next phase of data collection. This phase took four months to complete from January to April 2010.

4.3.2 Phase Two: Interviews of government officials, university dignitaries and teaching staff

To gain an understanding of the policy processes impacting on the APN initiative in Singapore, in-depth interviews were conducted with participants from government agencies and university departments who were associated with or had knowledge of policy and APN development in the country. The objectives were:

- To capture participants' perspectives on the drivers for APN development in Singapore;
- To obtain participants' viewpoints on the processes, facilitators and challenges in the development and implementation of APN roles in Singapore;
- To collect contextual information relating to networks of communication, processes of information exchange and linkages among key decision makers in relation to policy development and APN roles.

I sought to encourage the participants to provide their perspectives of the critical issues influencing the development of policies that led to and were intended to support the APN initiative. This phase was informed by findings from the review of documents in Phase One. Recruitment of participants, conduct of interviews and preliminary data analysis of this phase took place over three months from June to August 2010. Findings from Phases One and Two informed data collection in Phase Three. Analysis of Phase Two data was completed before completion of conduct of Phase Three. Having gained an understanding of the policymaking process from the perspective of those making policy I wanted to next begin to understand of how policy was interpreted in practice by speaking with managers and medical consultants.

4.3.3 Phase Three: Interviews of nursing managers, medical directors and medical consultants

To gain an understanding of issues faced when integrating APNs into the healthcare system in Singapore in-depth interviews were conducted with key nursing managers, directors of medical services and medical consultants who were associated with or knowledgeable of APN development and implementation. The objectives of this phase were:

- To obtain participants' perspectives on the drivers, facilitators and barriers to APN development in Singapore;
- To capture participants' perspectives of the intent of policy as it related to APN implementation in Singapore.

I sought to encourage the participants to provide their perspectives of the critical issues associated with APN development from intent of policy to implementation of the roles within their healthcare systems. This phase was informed by the findings from Phase One and Phase Two thus assisting me to more effectively focus on topics for discussion in the interviews and identify potential participants for this phase. Recruitment of participants, conduct of interviews and preliminary data analysis took place for eight months from July 2010 to February 2011. Analysis of data from Phase Three was completed before proceeding to Phase Four. Findings from Phases One, Two and Three informed conduct of the final phase of the study. Having gained knowledge of the policymaking process a beginning comprehension of how managers and medical consultants interpreted policy I wanted to understand the realisation of policy by gaining knowledge of the lived experiences of APNs as they put policy into practice.

4.3.4 Phase Four - Interviews and participant observation of APNs and APN Interns

In order to acquire a better understanding of the realities of role implementation APNs and APN Interns from a variety of clinical settings and specialties with different lengths of clinical experience were recruited for interviews and participant observation. An APN Intern is a new programme graduate just beginning a minimum one-year clinical experience and as such broadened the range of APN participants. The objective of this phase was:

- To gain insight into the realities of role development and implementation from the perspective of APNs and APN Interns.

I anticipated that the perspective of the APNs and APN Interns would provide a different view of role implementation from managers and medical staff. In addition, recognising that interpretation of policy is often modified from the point of intent to realisation, I was interested in understanding if there were departures from the intent of policy and if so, how this took place. Preliminary findings from previous phases assisted me in focusing on issues for discussion in this phase of the study and allowed me to clarify points that were left unanswered in previous phases. Recruitment of potential participants, conduct of interviews and participant observation plus preliminary data analysis for this phase extended for five months from December 2010 to April 2011. The next section discusses conduct of data collection including how specific approaches varied for each phase of the study.

4.4 Data collection

Ethnography pragmatically involves gathering whatever data are available to shed light on the issues that are the emerging focus of investigation. In general, ethnographers draw on a range of sources of data with the researcher acting as the instrument for data collection. Data collection is mainly unstructured in that it does not follow a fixed and detailed research design. Interpretation of the data collected is generated out of the process of data analysis (Hammersley & Atkinson, 2007). This section describes the processes of data collection for this ethnography including challenges encountered.

4.4.1 Phase One – Review of documents

Documents relevant to the development of APN roles in Singapore were gathered from a range of sources including database searches and consultation with key decision-makers. The database search strategy included but was not limited to electronic databases such as Cinahl and Scopus. Free text searching was used by means of keywords and phrases in the title, abstract or journal name. Search terms included 'advanced practice nurse' or 'advanced nursing practice' or 'nurse practitioner' AND Singapore using connective search terms of 'AND' 'policy'; or 'role development'; or 'healthcare workforce'. Subject headings such as 'APN development in Singapore' and 'healthcare and APNs in Singapore' were also used. The initial search found only three documents specific to Singapore. To broaden the search in an attempt to find any relevant documents a Google Search was done resulting in a broader range of documents. Inclusion criteria for the citations retrieved included all recorded evidence related to advanced practice nursing in Singapore including primary studies, literature and policy reviews, reports, editorials, essays, commentaries,

conference papers and descriptive accounts (any date of publication). Any documents that made reference to general nursing topics or the healthcare system that did not mention APN roles were excluded.

A search was also done of web sites for professional organisations; governmental agencies and research institutions in Singapore thought to have relevance to advanced practice or APN development. These web sites included: Ministry of Health, Singapore at <http://www.moh.gov.sg>; Ministry of Education, Singapore at <http://www.moe.gov.sg>; Singapore Nursing Board at <http://www.snb.gov.sg>; and National University of Singapore at <http://www.nus.edu.sg>. Documents from these sites yielded various regulatory documents, agency or institutional reports and announcements related to advanced practice nursing in Singapore.

I anticipated that there might be additional unpublished literature relating to APN development in Singapore, therefore, contact was made with representatives of governmental agencies and educational institutions to access such documents. A letter of request for documents was sent to contacts and followed up by phone and/or email. These sources included representatives from the Ministry of Health, Ministry of Education, Singapore Nursing Board, the National University of Singapore and hospitals, polyclinics or clinical settings employing APNs. The obtained data was in the form of position papers, meeting notes, documentation of curriculum development and institutional reports. Although 47 documents were retrieved in the processes described several were repetitious in content. Only one was considered an empirical study and the rigour of the study was in question. The same person authored five of the documents and PowerPoint presentations. Governmental reports provided solid evidence on policy but most documents consisted of press releases, brief anecdotal articles, descriptive narratives or editorials. In spite of these limitations the sources did provide contextual data that informed subsequent phases of the study and aided in the identification of potential participants for recruitment.

4.4.2 Phase Two - Interviews of government officials, university dignitaries and academic staff

In order to gain an understanding of the intent of policy relevant to the APN initiative in Singapore a purposive sample of government officials, university dignitaries and academic staff was approached. Contacts were identified based on data acquired during the process of the document review and through university colleagues or other participants who identified them as pivotal to the APN initiative. Purposive selection criteria included individuals who were in decisive positions that influenced APN development in Singapore or

who had knowledge of how policy decisions were made. I was aware that the number of individuals with this knowledge would be limited thus all persons thought to have information beneficial to the study were contacted. Twelve individuals agreed to face-to-face in-depth interviews with three declining to participate. Of those who were contacted but did not participate in the study one person did not respond to the invitation and two chose not to be interviewed. Interviewees included key stakeholders from the Ministry of Health; representatives of the Singapore Nursing Board; and a broad range of decision makers representing the National University of Singapore. Due to the sensitive nature and high profile of their positions I have been intentionally vague in identifying these participants in order to provide them with the anonymity and confidentiality as promised when they agreed to participate in the study.

Prior to scheduling the interviews each participant was sent a letter of invitation (see Appendix 6), a participant information sheet (see Appendix 7) and an example of the consent form (see Appendix 8). Subsection 4.7.2 discusses ethical considerations and provides a description of the process in the conduct of the interviews. An interview topic agenda (see Appendix 9) specific to this phase of the study was used as a guide to explore the participants' knowledge and perspectives of policy decisions. In general this phase of interviews went well with positive responses from the participants and a keen interest in the study. Due to the sensitive nature of the topic and the high profile of the participants I was extremely concerned about confidentiality surrounding the recruiting and interview scheduling. I made every effort to ensure that participants understood the nature of the study and that they were comfortable in participating. In addition, I was cognisant of the potential sensitivity of the information obtained therefore all participants were given a copy of their transcribed interview. Of the twelve participants interviewed in this phase, two responded with requests for minimal deletions to their transcripts. The main challenge was scheduling the participant interviews. Due to the nature of the participants' positions and busy schedules interview times were frequently rescheduled and in three cases there was a delay of two to three months in confirming an interview slot. Once an interview time was agreed to the participants were cooperative and forthcoming in their responses to my questions. On occasion the participants were so enthusiastic with the interview process that the interview extended beyond the one hour that I had requested.

4.4.3 Phase Three - Interviews of nurse managers, medical directors and medical consultants.

In order to gain a better understanding of APN implementation from an institutional perspective a purposive sample of nurse managers, medical directors and medical consultants was identified. Criteria for potential participants were the individual's position within the healthcare sector as nurse managers, medical directors or medical consultants known to be associated with the implementation of APN roles in various clinical settings. Those who were approached represented a range of healthcare specialties, a variety of healthcare settings (hospital and community) and were in key positions of authority associated with APN development within their respective institutions. At the time of data collection there were fewer than 40 APNs practising in Singapore thus the number of persons with knowledge of the realities of role implementation from this perspective was limited. Data obtained from the Phase One document review aided in the identification of potential participants. Participants from Phase Two, academic colleagues and nursing leaders from healthcare settings in Singapore suggested persons who might have information beneficial to the study. Based on the study criteria, twelve individuals were contacted and eleven agreed to face-to-face in-depth interviews. Individuals who were aware of the APN initiative but did not have direct knowledge or actual experience with implementation of the role were not recruited for the study.

Prior to scheduling the interviews each participant was sent a letter of invitation (See Appendix 10), a participant information sheet (see Appendix 7) and an example of the consent form (see Appendix 8). See subsection 4.7.2 for a discussion of ethical considerations and a description of the process in the conduct of the interviews. An interview topic agenda (see Appendix 11) specific to this phase of the study was used as a guide to explore the participants' understanding of policy as well as decisions associated with APN role implementation. I wanted to explore their viewpoints on the realities of implementing new nursing roles into the healthcare workforce from the perspective of those organizing, managing or supervising these processes. At the beginning of the interviews I emphasised that my intent was to gain their opinions on events or decisions made in relationship to APN implementation and that I was not there to judge the success or lack of success with any experience.

There were no significant difficulties with this phase of interviews other than trying to schedule times for the interviews that would not interfere with work schedules and other commitments. Two participants did not initially grasp the importance of privacy for the interviews and thought to meet me in coffee shops. This provided me with the opportunity to

explain the importance of privacy and confidentiality for the conduct of the interview plus remind them that I was recording the interview thus a quiet space was important. Most medical consultants interviewed asked if the study was associated with the National University of Singapore and if study protocol had gone through ethical approval by the university. Participants were cooperative and enthusiastic about the study and wanted to be informed of the study findings.

4.4.4 Phase Four – Interviews and participant observation of APNs and APN Interns

In order to gain an understanding of the realities of implementing new nursing roles in Singapore a purposive sample of APNs and APN Interns was approached for interviews and participant observation. My aim was to gain knowledge of how the intent of policy for the APN initiative was realised in actual practice. Selection criteria included APNs or APN Interns working to implement the role within the Singapore healthcare system. Those approached were purposively identified from a variety of clinical settings and specialties with a range of experience from the novice APN Interns to APNs with up to six years experience. In Singapore, following completion of the APN master's programme, graduates must complete a minimum of a one-year clinical internship prior to application for licensure as an APN. As novice practitioners interns were recruited for the study to represent a perspective of role integration from the beginning stage of implementation. Colleagues in the Department of Nursing suggested APNs who were in practice at the time of data collection and were former students of the academic programme at National University of Singapore. Participants from Phase Two and Phase Three of the study suggested additional possibilities for potential participants. At the time of data collection fewer than 40 APNs or APN Interns were practising in Singapore thus my intent to approach a diverse but representative sample as described in my selection criteria was limited. Fifteen individuals agreed to participate in this phase of the study (see Table 4.2 for a list of participants by length of time as an APN, employing institution, setting and specialty).

Table 4.2 – Phase Four APN and APN Intern Participants

Position – Length of time	Institution	Setting and Specialty
APN Intern	Institute of Mental Health	Emergency services and short term inpatient unit
APN Intern	Hospital	Surgical oncology for women
APN – 18 months	Community Polyclinic	Chronic illness
APN – 2 years	Community Polyclinic	Women's health
APN – 2 years	Institute of Mental Health	Chronic inpatient unit and outpatient evaluation clinic
APN – 3 years	Institute of Mental Health	Adolescent services
APN – 3 years	Hospital	Oncology unit
APN – 3 years	Institute of Mental Health	Long term inpatient unit
APN – 4 years	Hospital based community outreach	Paediatric mental health assessment in schools
APN – 5 years	Hospital	Cardiology, heart failure
APN – 5 years	Hospital	Preoperative clinic
APN – 5 years	Hospital	Mental health – inpatient unit, psychosis clinic and emergency department
APN – 6 years	Hospital	Intensive Care/Critical Care
APN – 6 years	Hospital	Palliative Care: inpatient and outpatient referral
APN – 6 years; Assistant Director of Nursing - 2 years	Institute of Mental Health	Outpatient evaluation clinics and supervision of APNs

Prior to scheduling the interviews and participant observation each participant was sent a letter of invitation (see Appendix 12), a participant information sheet (see Appendix 13) and an example of the consent form (see Appendix 14). Subsection 4.7.2 discusses ethical considerations and provides a description of the processes in the conduct of the interviews and participant observation. An interview topic agenda (see Appendix 15) specific to this phase of the study was used as a guide to explore the participants' knowledge and perspectives of the drivers for the APN initiative, the policy decisions and role implementation.

Unstructured interviews took place preceding and following onsite participant observation

with informal interview techniques used during clinical observation. Interviews offered the APN or APN Intern the opportunity to provide me with comments on their perspectives of role implementation. Direct observation of APNs in clinical practice provided me a deeper understanding and insight into implications and realisation of policy decisions as they affected APN clinical practice. The combination of interviews and participant observation presented me the opportunity to assess if what the APNs stated in their interviews was consistent with what I observed. Participant observation included comment from other members of the participants' clinical settings (i.e. physician preceptors, supervisors and other staff nurses). Follow-up communication by email was conducted with the APNs or APN Interns when necessary to achieve clarity on issues that were not understood during the interviews or participant observation. Detailed field notes were taken during participant observation and were recorded in a journal for analysis at a later time. These notes provided further description and interpretation of the meaning the APNs and APN interns gave to their actions and the settings in which the study took place. Notes of my reflections and observations were taken and added to a journal following each clinical visit.

In outpatient clinic sites I observed APNs interview patients and assess their concerns, establish communication with patients and their families, perform physical examinations, coordinate management plans and discuss referral options with other healthcare professionals. In hospital settings I was able to attend morning grand rounds where cases were presented and discussed among a team of healthcare professionals. I also shadowed APNs as they made rounds on the hospital units with the multidisciplinary teams who made management decisions for inpatient care and follow-up. Clinical observation provided me the opportunity to pay attention to APNs teaching and mentoring other nurses as well as medical officers. I accompanied the APN but was not involved in direct care or clinical interactions with patients but did engage in normal social interaction e.g. greeting patients and their families and explaining my presence in the clinical site. As I followed the APNs I observed interaction not only with the other nurses but also with medical consultants, pharmacists, nursing supervisors and unit receptionists. In the day-to-day processes of providing care I was keenly aware of the ease or difficulty with which the APNs manoeuvred their clinical schedules.

This phase of the study proved to be challenging in the planning and conduct of the research. Experienced APNs were interested and willing to participate in the study while newer APNs and APN Interns were reluctant and did not always receive approval from their nursing managers or supervisors to participate. Of the fifteen APNs and APN Interns who agreed to participate, three agreed to only a one-hour interview citing they did not feel it

appropriate to have a researcher on site in their clinical specialty. Of those who consented to participant observation ten arranged three days of observation with two agreeing to only one day. Due to the busy clinic schedules of the APNs I discovered that it was difficult, inefficient and inconvenient for the participants to schedule interviews on separate days from participant observation. Even though most observation took place for three days, on reflection I think this was excessive as little new information was gained on the third day. In most cases the APNs provided the perspective that I was the first person that had actually observed them in practice and asked them questions about the realities of role implementation. All APNs indicated that they wanted a 'voice' and the ability to speak on behalf of the realities of APN practice in Singapore. Most participants were pleased about the possibility of future publications and stated they were pleased to share their experiences with others. The next section discusses the data analysis conducted for the research.

4.5 Data analysis

In an ethnographic study data analysis does not form a distinct stage but is embodied in the ideas and intuitions that occur during periods of fieldwork (Hammersley & Atkinson, 1995). Writing speculative and inferential notes as part of the process of gathering field notes comprised the beginning stages of the data analysis. This afforded me the opportunity to reflect upon each day's observations and to identify potential analytical ideas that later provided evidence for emerging categories. Every effort was made to make sense of the observations within the context of the aims of the study. Initial thoughts were developed further in subsequent periods of fieldwork and provided both the opportunity to begin progressive focusing of ideas and a means of confirming participants' accounts. All perspectives were considered throughout the progression of the fieldwork and no conclusions were drawn until I went back through the recursive process to clarify interpretations and alternative explanations. The stages of data collection and data analysis, therefore, became an iterative and interactive process of constant questioning and refinement.

Principles of the 'framework' approach to qualitative analysis outlined by Ritchie, Spencer and O'Connor (2003) provided the basis for development of my approach to data analysis. As an inexperienced researcher I felt I needed a 'framework' to refer to as I began the analysis process. Even though I incorporated principles of this 'framework' my approach to data analysis evolved and was shaped by the study's aim, objectives and the issues that emerged during data collection. My approach to data analysis contained four techniques:

- Familiarization with and immersion in the data;
- Identification of a systematic approach for coding data from transcripts and field notes;
- Organizing coded data into major categories and sub categories;
- Interpreting the data set as a whole and identifying the relationships between the different categories.

I was cognisant that in ethnography the analysis of data begins in preparation for the field work and continues through an interactive process to the final phase of writing. According to Hammersley and Atkinson (2007) ethnographic data analysis deals with 'unstructured' data thus the process of analysis involves the concurrent development of analytic categories that capture relevant aspects of these data.

Analysis Outline

All phases of the study were linked sequentially so that findings from early phases informed later phases. Although there was minimal overlap conduct of each phase proceeded following analysis of the data from the preceding phase. (E.g. overlap of phases occurred with the recruitment of participants for Phase Two as documents from Phase One were being analysed). Phase One, review of Singapore documents, was completed and analysed prior to proceeding to Phase Two in order to begin to establish themes and to inform and provide context for this phase. Sequentially Phase Two interviews of government officials, key decision makers and academics were conducted incorporating key findings from the review of documents in the conduct of the interviews. Analysis of Phase Two was completed before proceeding to Phase Three, interviews of nursing managers, medical directors and medical consultants. The analysis of these interviews was conducted, compared and contrasted with the findings from Phases One and Two before proceeding to Phase Four, interviews and participant observation of APNs and APN Interns. Even though there was some overlap in the conduct in all four phases source focused triangulation was conducted sequentially not only to aid in the planning of subsequent phases but also to raise questions that were identified in earlier phases and that might be answered in subsequent phases of interviews and participant observation. The methodological design for this study sought to acquire data from multiple sources in order to seek multiple perspectives and divergent views. Triangulation was viewed as beneficial in the field for verification and attempting to ensure quality and rigor. It was reassuring when triangulation led to corroborating evidence while at the same time inconsistencies in triangulation provided insight and understanding as to why participants

provided different accounts or different data sources led to different conclusions. An illustration of consistency in triangulation of data from all study phases was in verifying the main driver or motivation for launching the concept of APNs in Singapore. From the review of documents through all phases of participant interviews and participant observation with the APNs there was a consensus that the main incentive for APN development was a desire for professional development and enhanced status for nursing in the country. No data was found that disagreed with this finding. On the other hand, for example, findings from the review of documents and Phase One interviews emphasised that policy development was intended to develop a clinical career ladder to incentivise nurses to remain in clinical practice at an advanced level. However, data from Phase Three (manager and medical consultant interviews) and Phase Four (APN and APN Intern interviews and participant observation) found that implementation of the clinical pathway was flawed and contributed to tension in the workplace rather than a solution. At the time of data collection key stakeholders provided the perspective that policies including the clinical career track were proceeding as intended. It was only in the latter phases of the study with accounts from different sources in Phase Three and Phase Four that inconsistencies and problems in implementation were revealed.

The beginning identification of themes emerged from the literature review and analysis conducted prior to carrying out the study. The literature provided a background on the research topic that guided thematic coding and analysis for Phase One: Review of Singapore documents as well as subsequent phases. Extracted data from the review of Singapore documents informed the study by lending itself to initial identification of themes specific to Singapore (See Appendix 16: Categories and Subcategories; Appendix 17: Thematic Matrix and Appendix 18: Documents Summary). Dominant themes such as vision, impetus, role criteria/regulations and standards related to the nature of practice and workforce obstacles/facilitators were coded, compared to themes identified from the literature and documented. The most noteworthy data emerging from Phase One for the purposes of the study was the beginning identification of key decision makers, their spheres of influence and their roles in pivotal decisions that led to policy development. The ability to pinpoint key leaders and their perspectives as presented in publications guided recruitment for participants for Phase Two. In addition, this knowledge led to some insight on policymakers' views and the beginning discussions in Singapore of the APN concept. In the later phases of interviews this information was beneficial in providing focus and guiding interaction during conversations with participants.

Preliminary analyses were done following each phase of Phases Two to Four with a

composite analysis undertaken once data collection was completed (See Figure 4.1 for a diagrammatic representation of the process). The analysis undertaken after each phase informed the analysis of subsequent phases thus Phase One led to Phase Two, Phase Two led to Phase Three and Phase Three led to Phase Four. This process had a cumulative effect as data from all sources were verified and corroborated for prevalent, consistent and dominant themes (see Chapter 3 for a discussion of triangulation as employed in this study).

Whereas, the review of documents set the scene and identified key leaders and decision makers, Phase Two interviews provided the perspectives of these decision makers. For example, having identified professional development and enhancement of nursing status as a key driver based on the document analysis I was able to verify, following transcription and analysis of the interviews, if key leaders from Phase Two concurred or disagreed with the main driver for APNs as identified from the document analysis (see Appendix 19 for illustrations of excerpts from interview transcripts used for coding, Appendix 20 for an early coding scheme and Appendix 21 for 'code jottings' from Phase Two). In the case of this theme there was consensus from the documents and the interviews from Phase Two on the main driver for professional development for nursing roles in Singapore.

Constant comparison of data and analyses from Phases One and Two informed and shaped the interviews for Phase Three: Managers and medical consultants. Information gained from Phases One and Two provided initial knowledge of the APN initiative and relevant policymaking thus enabling me to ask more specific and relevant questions in Phases Three and Four interviews based on earlier data sources. For example, the theme of professional development for nursing as a driver continued to be verified clearly in Phase Three by nursing and medical participants as well as in Phase Four by APNs. However, the theme of role ambiguity and appropriate or inappropriate use of APNs was a dominant theme in Phase Three and Phase Four while reference to this issue was less prominent in the findings from Phases One and Two.

Data analyses of Phases One, Two and Three were completed and compared before proceeding to interviews and participant observation of APNs and APN Interns in Phase Four. Information from the first three phases elaborated on the Singaporean context for APN development while also providing indepth insights that guided interviews and participant observation in Phase Four. APNs and APN Interns provided their perspectives of role development and the realities of implementation. Participant observation provided the opportunity to verify the role in practice as described by the APNs and to compare role implementation relative to how it was envisaged in publications (Phase One) and by

participants in Phases Two and Three. There continued to be a consensus regarding the main driver for the APN initiative whereas in Phase Four findings revealed increasingly disparate views from individual APNs as to the definition of the role, its intended implementation in the healthcare workforce and the intended purpose of policies crafted by key decision makers in Phase Two. For example, data from Phases One and Two described the intent to retain competent clinical nurses by presenting a clinical career ladder. Data from Phase Three indicated that the process for promotion based on clinical performance was blocked by nursing managers and findings from Phase Four confirmed that APNs were not progressing through the clinical career ladder as anticipated. In fact, findings demonstrated that this lack of progression led to tension and anxiety on the ground by APNs. In the composite analysis based on the triangulation of all data sources it was noted that at completion of the study, although well intended, the clinical career path intended to motivate APNs was unsuccessful. The approach to review of relevant documents and the data analysis used in Phases Two to Four are outlined next.

4.5.1 Approach to the review of documents

The intent of Phase One was to provide background contextual information on APN development in Singapore and to inform the conduct of the study. Review of documents was done on 47 documents dated from 2000 to 2009. Data extraction forms were developed using textual terms to capture the focus of the theme or subtheme emerging from the document review in order to extract relevant information. Matrices were constructed to identify how the evidence from different sources added to or challenged information from other sources. A list of categories (see Appendix 16) was developed for data retrieval and analytic purposes. A final thematic matrix (see Appendix 17) was developed and used to inform Phases Two to Four of the study. A summary of the review of documents can be found in Appendix 18. Pertinent findings derived from the review of documents can also be found in Chapter Five - Singapore: the context.

4.5.2 Approach to data analysis for Phases Two to Four

In addition to the collection of information from relevant documents data for the ethnography was obtained from transcripts of participant interviews and field notes taken during interviews and participant observation. The aim was to compare and contrast the different sources in order to identify recurring features that emerged from the immediate contexts. A 'funnel' structure as described by Hammersley and Atkinson (2007, p.160) was

used over the course of data collection and analysis to narrow the focus in order to capture relevant aspects of the data. Using this approach the processing of data in connection with the research aims and objectives were clarified over time. I developed the following approach for analysis:

Familiarization (know one's data [Hammersley & Atkinson, 2007])

Digital recordings from the interviews were uploaded to the NVIVO 9 computer package for storage, transcription and analysis. Interviews took place over one to two hours with the verbatim transcription taking eight to twelve hours per interview depending on the length and quality of the interview. Transcripts of field notes and preliminary analyses completed at the end of each phase of the study were uploaded to NVIVO 9 for coding (see Appendix 19 for an illustration of excerpts used for coding and Appendix 20 for an example of a coding grid). The intensity and time involved in the transcription process provided me the opportunity to think, reflect and take note of ideas, recurrent topics and analytic categories that captured significant aspects of the data (see Appendix 21 for an example of code jotting developed for analysis and categorizing of data). At every step along the way I returned to compare transcripts and field notes. I periodically sketched diagrams during the various phases to provide me with a visual impression of my interpretation of the data. Early on in the analysis I made hard copy of the transcripts and colour-coded key phrases and quotations according to emerging categories. I found that manually reviewing the data in addition to using NVIVO 9 coding was advantageous because I continuously moved back and forth among transcripts and field notes as I reflected on the interpretation I was placing on the data.

Identification of a systematic approach for coding data

According to Hammersley and Atkinson (2007) coding data for an ethnographic study is the simplest way to organize and reorganize the information. In the initial steps of coding with the NVIVO 9 computer package I developed code grids (see Appendix 20 for an example) along with analytic notes or memos associated with the coding scheme (see Appendix 21 for code jottings). The challenge I faced with the NVIVO 9 computer package was trying to use the full capacity of NVIVO 9 software to facilitate complex forms of analysis while also including this technique as part of the reflexive process. I used the NVIVO9 software initially to assist in data handling and analysis. As the analysis progressed and the body of data grew exponentially I found the coding with NVIVO 9 to be cumbersome and not necessarily representative of the data sources that I was reviewing and comparing. Having assessed this as a deterrent instead of helpful I developed a manual strategy of comparing and analysing data while continuing to utilize the computer package for data storage, retrieval of

data and review of initial coding. I viewed NVIVO 9 as facilitating the analytical process remembering that as the researcher I was central to clarifying meaning and relationships. As I began to code and categorise the data using NVIVO 9 I also reviewed and reread hard copy of transcripts comparing the two sources looking for key categories, subcategories and concepts. What seemed like a duplication of effort was likely due to my inexperience with the NVIVO 9 software package and my familiarity with manual coding. Using the colour-coded highlighted text on the hard copies and the NIVO 9 coding system I compared the results, recorded the range of responses noting recurrent themes and issues that emerged as important to the participants. In reviewing the range of responses I re-examined the sampling strategy and profile of the achieved sample to note any potential gaps or overemphasis in the data along with the diversity of the participants' characteristics and circumstances.

Organizing coded data into major categories and subcategories

Key issues, concepts and categories were identified to construct a framework. A framework of categories and subcategories was developed within which the data could be arranged and sorted based on initial coding and notes taken when reviewing the material during the familiarization stage. Each of the 35 transcripts plus field notes were reviewed repeatedly line by line to not only allow immersion in the data but to also question the interpretation I was placing on the data. The first version of identifiable categories was heavily rooted in the issues informed by the research objectives and document review. This was then applied to sample transcripts (see Appendix 19 for excerpts from transcripts) and then refined as identifiable categories representative of the transcripts. Analytical categories arose from the recurrence or patterning of particular perspectives or experiences. In this step I made decisions about meaning, importance of the issues and connection between the ideas. In categorising phrases or extracted text I interpreted the text and decided on meaning for each phrase or textual extract. I anticipated that a single phrase could have an association with more than one category or subcategory. Data were extracted from the original context and rearranged according to categories and subcategories to begin to present the data for write up. This was not a cut and paste approach but included abstraction and synthesis of the data. Original text was constantly referenced so that the source of a phrase or a quote could be traced and the process of abstraction could be examined and replicated.

Interpreting the data set as a whole

Composite analysis of the data followed preliminary analyses that had taken place after each study phase. After sorting the data according to categories and subcategories I looked for key characteristics of the preliminary data analysis to interpret the data set as a whole.

During this step I returned to the key concepts of the analysis guided by the research aims, objectives and categories that emerged (Hammersley & Atkinson, 2007). Since the focus of the ethnography was gaining an understanding of the intent of policy to realisation in practice it was expected the interpretation would have a strategic component. I considered Gibbs' (2007) emphasis that refers to '*coding as to how you define the data*' (p. 39). Word repetitions and single thought units that expressed a single coherent thought or idea were identified and coded so that in the composite analysis I could track these key concepts or thoughts. Single thought units were group patterned into categories after the identification of recurring meaningful units. For example, identified thought units such as vision for nursing, nursing status, new level of nurse, incentivise nurses, quest for nursing excellence, benchmarking to international practice formed a group pattern into a category coded as impetus for the APN role. As the composite analysis evolved and I looked at the emergence of these and like thought units across all study phases thus a generation of themes categories and theme statements took place. I was cognisant that a category was not created in isolation from other categories thus when I identified a category I realised I made decisions on how to organise the data in ways that were useful for the analysis. Perspectives from three groups of participants (policymakers, managers and APNs) provided three levels of interpretation related to APN policy and implementation. The preliminary data analyses conducted following each phase of Phases Two to Four led to the final composite analysis thus the process involved disentangling multiple strands of data in order to provide a synthesis of analytic categories and chronological arrangements. Findings from the composite data analysis can be found in Chapters 7, 8 and 9. The next section discusses rigor as it relates to qualitative research and specifically this ethnography.

4.6 Establishing rigour

Defining a rigorous approach in qualitative research, specifically ethnography, can appear mysterious and illusive. Just the term qualitative implies an emphasis on processes and meanings that are not measured in terms of quantity or frequency. Qualitative researchers, including ethnographers, seek answers to questions that stress how social experience is created and given meaning (Denzin & Lincoln, 2008). The challenge I faced having chosen ethnography was to determine how I could establish confidence in the findings and to what degree the findings were determined by the participants and not the biases of myself as the researcher. I acknowledged that as a qualitative researcher I needed a model that ensured rigour without sacrificing the relevance of the research.

The work of Lincoln and Guba (1985) has been influential in formalizing rigour in

approaching qualitative research and provided a model for me to follow. Although there are other models for assessing qualitative research the Guba (1981) model, further refined by Lincoln and Guba (1985), is well developed and has been used by qualitative researchers for a number of years. The model is based on the identification of four aspects of trustworthiness for evaluation of qualitative research: credibility, transferability, dependability and confirmability. These aspects are linked to the conventional terms of internal validity, external validity, reliability and objectivity used in quantitative research. A discussion of the criteria for this model as defined by Lincoln and Guba (1985) follows:

- Credibility (truth value or internal validity) – ‘How can one establish confidence in the ‘truth’ of the findings of an inquiry for the respondents with which and the context was carried out? (Lincoln & Guba, 1985, p. 218). Lincoln and Guba focus on the degree to which the findings make sense and establish how confident the researcher is with the truth of the findings based on the research design, participants and context.
- Transferability (applicability or external validity) – ‘How can one determine whether the degree to which the findings of an inquiry may have applicability to other contexts and other respondents? (Lincoln & Guba, 1985, p. 218). Even though each situation in qualitative research is defined as unique and thus not amenable to generalization, the aim of transferability is to give others enough information to judge the applicability of the findings to other settings.
- Dependability (consistency or reliability) – ‘How can one determine whether the findings of an inquiry would be consistently repeated if the inquiry were replicated with the same (or similar) context? (Lincoln & Guba, 1985, p. 218). Variability is expected in qualitative research thus Lincoln and Guba’s concept of dependability implies explainable sources of variability that could be provided for external review.
- Confirmability (neutrality or objectivity) – ‘How can one establish the degree to which the findings of an inquiry stem from the subjects (respondents) and conditions of the inquiry and not from the biases, motivations, interests, or perspectives of the inquirer (Lincoln & Guba, 1985, p. 218). This criterion refers to the degree to which the findings represent the participants and the condition of the research and not other biases.

In referring to these criteria I selected the following techniques for establishing rigour that I thought were relevant to the ethnography. To establish credibility I tried as much as possible to represent the multiple realities of the participants and selected individuals representing a range of field experiences. Participants in all phases of the study were recruited not only based on their knowledge of APN development but also based on the diversity their positions represented whether it was government officials or nursing managers or medicine. APN participants were from diverse clinical settings and had varied length of experience as an APN. A copy of interview transcripts and field notes were provided to all participants. Participants were encouraged to agree or disagree with the documents and were offered options to provide comments for my records. I utilised a triangulation of sources (documents, interviews and participant observation) to ensure that the account was robust, comprehensive and well developed. Although data collection focused on interviews and limited participant observation my presence in the field took place over a period of five years thus adding credibility to my knowledge of the context of the research.

I was aware that my apriori expertise in advanced practice nursing and background as an experienced APN based in the American culture may have influenced the way in which the data sources were approached and interpreted. Issues or ideas that arose from the data analysis that were uncomfortable or unfamiliar to me were discussed with university colleagues from Singapore to verify if this was representative of an Asian perspective. For example, as an APN from the USA independent decision making I associated with this role is in my view as vital to the role, however, this characteristic did not clearly emerge from the data as representative of Singapore APNs. My Asian colleagues and onsite supervisor clarified that speaking up, stepping forth and stating your thoughts are not highly valued in the Asian culture thus the manner in which participants interpreted characteristics of the APN in Singapore would vary from the American context. I feel that this insight improved my approach to data analysis when attempting to describe APNs in Singapore although I cannot say that my bias was totally eradicated. My background of observed success with the role in other contexts led me to have a possibly overly optimistic view of significance and potential for the role. To counter this bias and include a more cautious interpretation to study findings issues of implementation were discussed with colleagues in Singapore and chapter sections were reviewed by my doctoral supervisors and onsite supervisor. All conversations were with individuals who were either sceptical of or unfamiliar with the APN concept. These consultations led to many dynamic conversations and assisted me in my interpretation of the findings.

To address transferability (that the findings may have meaning or relevance to other contexts) I adopted thick description and in-depth data collection strategies thus offering other readers enough information to decide for themselves the applicability of findings to other settings. The thick description technique used explained not only participant perspectives and behaviours but also the context so that the behaviour could be meaningful to an outsider for interpretation. To ensure dependability I adopted a reflexive approach by reflecting on my own background while trying to understand the perspectives of the participants and the situation in order to identify biases or potential influences on the data. In addition, I accessed multiple sources of data, provided participant review of transcripts, presented a detailed description of the methodology and scheduled thorough discussions of findings with my supervisors. An audit trail of my documentation of the research could be made available for external review. I offered a self-critical reflexive account of the methodology used in the research in addition to the triangulation of sources to ensure confirmability. The audit trail included access to raw data, my analysis of the data, procedural notes and journals to add strength to confirmability. In following the Guba (1981) model utilising strategies proposed by Guba and Lincoln (1985) I feel that I have accomplished a rigorous approach to the ethnography. The next section examines ethics relevant to the research.

4.7 Ethics

Researchers have significant ethical responsibilities during the conduct of any study but two features of ethnographic research create particular ethical concern: the methodology is based upon the personal interaction between the ethnographer and the participants and the feature that the ethnographers themselves are the primary data collection instruments (May, 2001). Roper & Shapira (2000) comment that '*Ethical decisions are concerned with what is right or just, in the interests not only of the project, its sponsors ... but also others who are participants in the research*' (p.59).

As a researcher conducting this ethnography I was constantly aware of the potential of these ethical dilemmas and developed specific strategies to address them. Constantly and deliberately I evaluated the effects on the research process by consciously identifying biases brought to the fieldwork and also emotional responses resulting from my experiences. This awareness included an explicit description of my researcher role during data collection. This section describes the processes of ethical approval that were accomplished, approaches used to address ethics in undertaking Phases Two to Four,

issues identified that were specific to the Asian culture and general ethical issues taken into consideration in the overall conduct of the ethnography.

4.7.1 Ethical approval

Ethical approval was received from the Research Ethics Committee at Sheffield Hallam University in Sheffield, UK and the National University of Singapore Institutional Review Board in Singapore. Participant information sheets were provided to participants giving an overview of the aims of the study. A topic agenda was included with the participant information sheet to inform the participants of the issues I was interested in discussing. Participants were clearly advised as to what would be involved should they choose to take part in the study. Written consent was sought and participants were informed that they could withdraw from the study at any time. All participants were provided with a hard copy of their interview transcripts and encouraged to communicate any concerns related to the transcriptions. They were provided with contact details for myself, my lead supervisor in the United Kingdom, my on site supervisor in Singapore and a representative of the Ethical Review Board for the National University of Singapore.

4.7.2 Ethical considerations in conduct of the study

This subsection begins with a discussion of ethical considerations specific to the conduct of the interviews. This is followed by a presentation of my approach to ethical issues in preparing for and conducting participant observation.

Phases Two and Three interviews

The interviews were scheduled for one hour and digitally recorded with the signed permission of the participant. The settings for the interviews were agreed to in advance taking into account the comfort and privacy for the participant. In most cases the interviews were conducted at the participant's work setting. Four participants requested that the interview be conducted in a private room at the university. Prior to the beginning of the interview the participant information sheet was reviewed and each participant was offered the opportunity to ask questions. Both the participant and I signed two copies of the consent form. One copy was given to the participant and the other kept for my records. I transcribed digital recordings in full and field notes were written simultaneously to alert me to key points made by the participant. Interviews (including notes from any discussion) were anonymised and pseudonyms were used to protect the identity of the individuals participating in the study. Transcriptions of interviews and related information were stored either on a password protected university computer or in a locked filing cabinet in my office.

Even though in-depth unstructured interviews were conducted a topic agenda was used as a guide for exploring the participants' viewpoints on the policy decision-making processes in Phase Two and implementation processes of APNs in Phase Three. Interviews did not include a topic agenda that was considered sensitive and there was no indication that the interviews caused distress. At the beginning of all interviews I emphasised that my intent was to gain their perspective and opinions on events or decisions made in relationship to APN development.

Phase Four APN and APN Intern Interviews and Participant Observation

Consent for participation was sought from the participants and from their managers or supervisors in order to obtain approval for the APN or APN Intern to participate in the study and to agree to my presence in the clinical settings. As a data collection strategy participant observation was expected to portray the dynamics of the clinical setting and to access information by encouraging conversation related to the setting in which the participant observation took place. I took on an overt role as observer and disclosed my presence and intentions to the participant being observed along with their patient population but I did not actively engage in any clinical decisions or interventions. The participants introduced me to the patients and their families as a researcher and emphasised that I was studying the APN role not evaluating them or the healthcare services. Patients and their families gave verbal permission for my presence as an observer.

Conduct and recording of the interviews were the same as described earlier for Phases Two and Three interviews. A difference for this phase was that a consent form was signed for both the conduct of the interviews and participant observation. Participant observation was scheduled in polyclinics, hospitals and mental health settings with on site interviews offering me the opportunity to prepare for participant observation and to clarify what had been observed during observation periods. Observation periods were not scheduled sequentially but at the convenience of the APN or APN Intern thus my observation time was with a variety of APNs in different specialties in a given week's timeframe. I emphasised that the study aims and objectives were to gain perspective on APN development not to critique their professional position or clinical practice. During conduct of the study I made note of issues specific to the Asian culture. These are discussed in the next subsection.

4.7.3 Issues specific to the Asian culture

I was cognisant that certain behaviours representative of Singapore and the Asian culture may have influenced data collection. Within the Asian culture a common practice in conversation is to remain reserved with a tendency to offer little information voluntarily. It is

important not to 'lose face' therefore offering incorrect information or making a wrong decision can be viewed as extremely stressful and could have influenced or restricted information a participant might have been willing to provide. There is a high level of respect for authority and hierarchical position in Singapore. I was aware that there might have been a tendency, considering my academic position, to either tell me what the participant thought I might want to hear or to provide information that might impress me. Finally, speaking out of the mainstream of thinking is not encouraged in the Asian culture. This may have affected interaction and possibly their willingness to engage fully in the study. During interviews and participant observation I was sensitive to these issues by building rapport with the participants and arranging interview settings that were private and that they were comfortable with. All participants were provided copies of their interview transcripts in an attempt to assure them that the information I acquired would not bring shame on them in any way. Repeatedly, I reassured them that they could withdraw from the study at any time and that I would make every effort to provide them anonymity as a study participant.

4.7.4 General ethical issues

This subsection provides an overview of general ethical issues relevant to the conduct of the study. These include informed consent, anonymity, impact on service delivery, future publications and safety.

Informed consent

Written informed consent was obtained from all participants. Prior to obtaining consent they were provided information about the purpose of the study, who is doing the research, how the data will be used, what participation in the study required of them, what topics will be discussed and how much time is expected if they chose to participate. At all times I emphasised that informed consent was voluntary. Since I represented an academic institution in Singapore and have international expertise in advanced practice nursing I acknowledge that in some instances my persona might have caused a participant to feel pressured or obliged to participate in the study or conversely might have caused a participant to avoid participation in the study. All participants were informed that I had no influence over their professional positions. The potential for reassessment of consent was taken into consideration during data collection and the participants were allowed to withdraw at any time.

Anonymity

As the researcher I knew the identities of the participants and was very concerned about

protecting their anonymity due to the high profile of their positions in Singapore. Due to the nature of the study the on site doctoral supervisor or persons requesting a summary report may assume a participant's identity based on the use of pseudonyms and quotes in the data included. I acknowledge this is a common problem in ethnographic studies and made every attempt to take this into consideration in writing up the study. I sought to preserve anonymity of the participants by using pseudonyms and altering non-relevant details. In order to preserve the anonymity of strategic decision makers when including quotes in the thesis I have used the code ML for medical leader and NL for nursing leader. However, I recognised that due to the nature of the ethnography I could not give absolute guarantees that the identities of people and places would remain concealed.

Impact on service delivery

In the case of onsite participant observation with APNs and APN Interns I was sensitive to the demands on the work schedule of the participant. In my initial approach to an APN or APN Intern I made clear the intent of the study and emphasised that I would function on the periphery as an observer. In the observation of day-to-day APN practice I did not provide any clinical care; however, I willingly assisted in nonclinical tasks e.g. assisting a patient to a chair in the waiting area. Access to the observation site was negotiated with the appropriate managers and supervisors. I was also sensitive to the work environment of the APN or APN Intern and developed a system to inform others not actively involved in the study but present during the observation period that there was a research study in progress.

Future publications

Future publications are likely to include a small number of quotations from key participants. The quotations will be edited to ensure that there is no personal information relating to the identity of the individual participant or organisation where the data was collected or other information that would enable the participants or organisations to be identified.

Safety

There were no emergent safety issues that had to be dealt with. In the case of any observation of unsafe practice related to unresolved or undisclosed issues I planned to review the situation in a confidential discussion with the Head of Department, Alice Lee Centre of Nursing Studies. Any further actions would have followed the procedures of the university and the clinical institution.

4.8 Conclusion

This chapter has provided an account of the planning of the research including issues arising in the conduct of the study. The overall aims of the ethnography have been identified. The empirical work was carried out in four inter-related phases: review of Singapore documents associated with APN development, interviews with pivotal decision makers influencing policy for the APN initiative, interviews with key healthcare managers facilitating implementation of the roles and participant observation along with interviews of APNs in the field working to put policy into practice. The objectives of each study phase are presented and each phase has been summarised including a discussion describing how each phase relates to the other in the composite analysis of the data.

The approach to data analysis in this research contained four techniques: familiarization with and immersion in the data; identification of a systematic approach for coding data from transcripts and field notes; organizing coded data into major categories and sub categories; interpreting the data set as a whole and identifying the relationships between the different categories. All phases of the study were linked sequentially so that findings from early phases informed later phases. Data analysis dealt with large amounts of data thus the process of analysis involved the concurrent development of analytic categories that captured relevant aspects of these data. A description of the approach to coding and development of categories leading to the comprehensive analysis is presented.

The four aspects of trustworthiness as defined by Lincoln and Guba (1985) guided the establishment of rigour for the research and are discussed as they relate to the techniques used in the management of the study. Using a technique of triangulation I sought to acquire data from multiple sources in order to seek multiple perspectives and divergent views. Sources included data collection from a review of documents, interviews and participation observation. All phases of the study were linked sequentially so that findings from early phases informed later phases. Source focused triangulation was developed not only to aid in the arrangement of subsequent phases but also to raise questions that were identified in earlier phases and that might be answered in subsequent phases of interviews and participant observation. Triangulation was viewed as beneficial for verification of findings and attempting to ensure quality and rigor of the study.

Ethical concerns that were taken into consideration are considered including issues specific to the Asian culture. My position as both participant and investigator is addressed. The value of this dual identity was in my ability to gain insight into aspects of the intent of the policy processes and the actual implementation of APN roles, which would otherwise have

been problematical to access. However, this did present challenges in respect to ensuring rigour and situational ethics in pursuing the ethnography. By undertaking a reflexive approach I considered the impact my profile might have in the field. Every effort was made to acknowledge my role in the conduct of the study recognising that the ethnography involved interpretation of data influenced by my own values, biases and decisions.

Chapter 5 Singapore: the context

5.1 Introduction

Singapore was selected for this study as a country in the early stages of APN development thus a fitting environment to pursue the aims of the research. In order to better understand the setting this chapter discusses the context of Singapore as background to the study. The chapter is divided into five sections. The subsequent section begins with a brief summary of the demographics of the country. The next section presents an overview of nursing in Singapore including the interest in advanced practice nursing. Section four examines how contextual events surrounding APN development in Singapore were similar or dissimilar to key findings from the literature review. Information obtained from a review of documents and other sources of literature relevant to the Singaporean context are included to substantiate issues that were known prior to the research and that informed the conduct of the study. The final section provides concluding remarks.

5.2 Demographics of Singapore

Located in Southeast Asia the Republic of Singapore became an independent nation in 1965. According to the Singapore Department of Statistics (Population Trends June 2012) the population of Singapore is approximately 5.31 million with 3.29 million identified as citizens. The remainder of the population are permanent resident foreign workers or more transient non-residents. Of significance, the number of foreigners on short-term permits (termed 'non-residents') has increased 24-fold in 35 years. Singapore is multiracial with the majority population Chinese followed by Malay and Indian minorities. There are four official languages: English, Mandarin Chinese, Malay and Tamil. English is the working language and the mandatory first language in all schools (Retrieved 13 April 2013 from <http://www.moe.gov.sg>). For the resident population in Singapore, Buddhism is the most prominent religion with significant numbers of the citizens identifying religious preferences of Taoism, Islam, Christianity, Hinduism, Sikhism or no religion at all (Singapore Department of Statistics, 2011).

Singapore has a highly developed and successful market economy. By the 1990's it had become one of the world's most prosperous nations, with a highly developed free market economy through strong international trading links. Exports, particularly in electronics, chemicals, informational technology, pharmaceuticals and services provide the main source of revenue for the economy (The World Factbook, 2012). This allows it to purchase natural resources and raw goods that it does not have. In addition, Singapore has a strategic port making it more competitive than many of its neighbouring countries and makes it one of the

busiest in the world, surpassing Hong Kong (Maritime Port Authority, Retrieved 8 April 2013 from <http://www.mpa.gov.sg>) The Singaporean economy is known as one of the most innovative, most competitive, and most business-friendly (World Economic Forum, 2010). The 2013 Index of Economic Freedom ranks Singapore as the second freest economy in the world. According to the Corruption Perceptions Index (Transparency International, 2010) Singapore is consistently ranked as one of the least corrupt countries in the world, along with New Zealand and the Scandinavian countries. Consequently, Singapore attracts a lot of foreign direct investment because of its location, corruption-free environment, skilled workforce, low tax rates and advanced infrastructure.

The Ministry of Education (Retrieved 13 April 2013 from <http://www.moe.gov.sg>) directs education policy and controls the development and administration of state schools, which receive government funding, but also has an advisory and supervisory role to private schools. In 2000 the Parliament of Singapore passed the Compulsory Education Act (Cap 51) (Retrieved 13 April 2013 from <http://www.moe.gov.sg/initiatives/compulsory-education/>), which codified compulsory education for children of primary school age, and made it a criminal offence if parents fail to enrol their children in school and ensure their regular attendance. The World Bank (Retrieved 8 April 2013 from <http://www.data.worldbank.org>) found that the literacy rate (age 15 and over can read and write) for both men and women in Singapore was 96% in 2010.

Healthcare is mainly under the responsibility of the Ministry of Health (<http://www.moh.gov.sg>). Philosophically Singapore's healthcare system is designed to ensure that everyone has access to different levels of healthcare in a timely, cost-effective and seamless manner with the Ministry of Health falling under an organised and hierarchical structure (see Appendices 22 & 23). Singapore implements a universal healthcare system and co-exists with private healthcare systems. Individuals and families are free to choose providers within the government or private healthcare delivery system and can walk in for a consultation at any private clinic or government polyclinic within the community. In total there are 25 hospitals and specialty centres. Of these eight are acute general hospitals, a women's and children's hospital and a psychiatry hospital. All acute general hospitals and specialty centres are run as private companies wholly owned by the government (Retrieved 13 April 2013 from <http://www.moh.gov.sg>). In 2000 Singapore was ranked 6th in the World Health Organisation's ranking of the world's health systems (WHO, 2000) with access to improved water and sanitation facilities for most of the population. There is a high level of immunisation and adult obesity is below 10% (WHO, 2010). In summary, Singapore has a highly literate population and is a prosperous multicultural

city/state controlled by a central government. The healthcare system functions mainly under the Ministry of Health, provides universal healthcare coverage and has a high ranking by the World Health Organisation compared to other countries.

5.3 Nursing in Singapore

Historically, nursing education in Singapore has been based on an apprentice model influenced by Australian and British systems of training (MOH, 1997). Most nurses are educated in three-year diploma programmes at two Singaporean polytechnics. Post basic specialty courses are available in ten disciplines with graduates of these courses awarded an Advanced Diploma (MOH, 2012). A three-year undergraduate BSc (nursing) programme was established in Singapore in 2006 following the creation in 2005 of the Alice Lee Centre for Nursing Studies at National University of Singapore. Prior to this nurses educated at the diploma level accomplished top up BSc (nursing) degrees through Australian based distance learning courses (Kong, P.S.K., 2000).

The establishment of the Singapore Nurses Association in 1957 provided a professional nursing organisation with a goal to raise the profile of nursing (SNA, 2007). This view, as stated in the organisational mission statement, plus additional findings from the review of documents implies an early interest in nursing advancement leading to the launching of the advanced practice nursing initiative (Ang, C., 2002). It is worth noting that the Singapore Nurses Association (SNA, 2007) developed and maintains active association with the International Council of Nurses (ICN) including benchmarking professional standards against global advancements in nursing. This organisational link is increasingly visible as nursing in Singapore progressed to APN development and adapted ICN recommendations. The development of the APN role is in its infancy in Singapore. As the nursing culture and the country embraced the APN concept (Ang, C., 2002; Kannusamy, P., 2006) a master of nursing degree was stipulated as the educational requirement (Health Professional Portal, Retrieved 01/02/2010 from <http://www.hpp.moh.gov.sg/>). The first group of students began study in 2003 (Kannusamy, P., 2006) under the direction of the National University of Singapore Medical School. As of June 2012 over 100 nurses had completed the APN programme that has functioned since 2009 within the Department of Nursing at the university. Although it is possible for nurses to study outside the country most are expected to enter the APN programme subsidised by the Ministry of Health and offered in Singapore (personal communication, 14 June 2012, Singapore Nursing Board). Nursing in Singapore has come a long way since the arrival of the French nuns in 1885 (MOH, 1997). Over the

years steady positive developments have enhanced the image and status of the nursing profession. The introduction of APN roles is one of those developments.

5.4 The Singaporean context and the literature: a comparison

Key findings from a comprehensive review of international literature relevant to advanced practice nursing can be found in Chapter two. This section aims to examine where Singapore sits in relation to the global picture and is divided into six subsections addressing: impetus for the APN role; defining the APN; role preparation, regulations and standards, role implementation and APN outcomes.

5.4.1 The literature and impetus for APN roles

Initiatives geared to the launching and development of APN roles are sensitive to the environmental realities in which the concept emerges. In investigating the momentum behind APN initiatives worldwide several premises appeared in the literature (see Chapter 2: Literature Review):

- An identified need for APN services;
- An answer to skills mix and healthcare workforce planning;
- A desire for the advancement of nursing and professional development;
- Public demand for APN services.

A review of Singaporean documents indicated that the main drivers for APN roles were an aspiration for enhanced professional status for nursing and a desire to keep nurses in clinical practice (Ang,C., 2002; Kannusamy, P., 2006). Even though there was interest in integrating APNs into the healthcare workforce, no evidence was found of a clear need for these services in Singapore. There was no indication that APNs were being considered initially as an option in workforce planning or for an answer to fragmented care that had been identified in existing healthcare services. This contrasts with findings from the international literature that indicated that the main drivers in most countries were associated with a need to provide accessible, affordable and quality healthcare services to specific populations by integrating APN services.

5.4.2 The literature and defining the APN

The literature identified various approaches to defining and describing an APN. This diversity supported the perception that advanced practice nursing is viewed inconsistently

worldwide. In comparison, Singapore presented clear documentation on how decision makers in the country viewed the APN role from a policy perspective in the Nurses and Midwives (Amendment) Regulations 2006 and the Nurses and Midwives (Composition of Offences) Regulations 2006. The legally protected title in Singapore is “Advanced Practice Nurse” (Singapore Nursing Board, 2006). Processes for role development, implementation, regulation and creation of the APN masters programme (NUS, 2003; NUS, 2006) used this title from the beginning of development. Singapore adapted the role definition provided by the International Council of Nurses (2002):

An Advanced Practice Nurse (APN) is an umbrella term given to a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for extended practice (Kannusamy, P., 2007, p. 36).

The Singapore Scope of Practice for the APN (see Appendix 3) are also an adaptation of the International Council of Nurses recommendations, however, the term ‘furnish’ was used in reference to pharmacologic interventions indicating that the Singaporean APN was not granted full prescriptive authority. The Singapore scope of practice differs from some other countries in that sharing knowledge and expertise with other nursing staff and nursing research are part of the designated APN scope of practice, whereas this is not included in the scope of practice examples from Australia/New Zealand and Canada (see Appendix 3). To further define the APN role the Singapore Nursing Board provides a list of competencies expected of a person in this role when referencing details on how to become registered as an APN in Singapore. From the perspective of policy and documentary definition the Singaporean descriptors for an APN present clarity in comparison to findings representative of the global picture.

5.4.3 The literature and role preparation

The literature indicated that there is considerable international variation for APN role preparation in terms of the focus and content of curricula, academic level and duration of programmes, quality of clinical experience provided and the regulatory infrastructure in place to support appropriate educational standards (Pulcini et al, 2008). Singapore offers its own example of this variation with both an Advanced Diploma (8 month duration) at a post-basic level in a chosen specialty and a master’s degree programme (24 month duration) available. Even though the Singapore Nursing Board does not consider the graduate of an Advanced Diploma programme an APN, completion of the programme is viewed as advanced in terms of enhanced skills obtained. The literature demonstrated that

internationally there is a reliance on documents from the USA for curriculum development along with consideration of recommended guidelines from ICN. A review of documents specific to Singapore and its approach to curriculum design found a similar reliance. The requirement of master's level education is consistent with the international recommended entry level for an APN.

5.4.4 The literature: regulations and standards

When possible, regulations and standards should confer identity, legitimize roles and grant the authority to carry out activities that are relevant to APN practice (Schober & Affara, 2006). The literature, however, suggested that environmental obstacles and differences in opinion take place in the way the role is regulated. Issues falling under the jurisdiction of potential regulation include titling, scope of practice, educational requirements, verification of credentials as well as competencies. In Singapore the body designated to define as well as enforce regulations for nursing is the Singapore Nursing Board. Matters associated with credentialing of an individual APN, the accreditation of education programmes and programme content fall under the jurisdiction of this governmental body. The Singapore Nursing Board also considers infractions of regulations and standards governing APN behaviour. The review of documents demonstrated that regulations for APNs in Singapore are in place and arise from the Nurses and Midwives (Amendment) Act 2005 that provided for the Nurses and Midwives (Amendment) Regulations 2006 and the Nurses and Midwives (Composition of Offences) Regulations 2006 (Singapore Nursing Board, 2006). The Act cited as the Nurses and Midwives Act states that an 'Advanced Practice Nurse' means a registered nurse who is certified and licensed as an APN. Details are provided in the Act on how to access an application form for certification along with a description of the APN Register. The register together with APN regulations came into existence following approval from the Minister of Health (Singapore Regulations 2006). These regulations provide a legal framework for the register of APNs along with the mechanisms and criteria for APN certification and licensure. In addition, two designated committees – the APN Training Committee and the APN Accreditation Committee were introduced under the auspices of the Singapore Nursing Board to accredit courses, oversee certification of APNs and monitor circumstances relating to APN practice (SNB, 2006). Based on the review of documents the regulations and standards set by policy for APNs in Singapore surpass what was found in the literature for most other countries.

5.4.5 The literature and role implementation

The implementation of advanced practice nursing services is fraught with complex challenges. Despite extensive publications supportive of APN roles internationally no literature was uncovered that confirmed a single process that demonstrated strategies for ease of role implementation. The literature demonstrated that a lack of a consensus for terminology defining the APN, inconsistent titling and multiple interpretations of the purpose of these roles presented limitations in recognising the comparative value and full potential of the APN. In the initial stages of planning, even though policy lagged behind establishment of education and role preparation, Singapore exhibited clarity from the perspective of identifying a legally protected title and in defining a scope of practice, competencies and role characteristics. Even though Singapore is in the early stages of role development a study done of the first cohort of APNs revealed information on various aspects of practice and role development (Kannusamy, P., 2006). A longitudinal study of 15 APNs using a 28-item questionnaire was conducted during 3, 6 and 12 months of clinical internship following participants' completion of the master's programme. Disappointments with role implementation cited in this research included: unclear directions on role development, inability to focus entirely on clinical care due to other competing responsibilities and lack of support from the healthcare team. Participants reported satisfaction with autonomy and empowerment in patient care, ability to influence clinical care, collaboration with the medical team and respect from other healthcare professionals. This publication suggested that annual surveys of the same cohort of APNs would be conducted as well as surveys of subsequent APN cohorts, however, no further research was found that provided evidence of the role development in Singapore.

5.4.6 The literature and outcomes of APN services

The literature provided evidence that care provided by APNs is safe and effective. Patients are satisfied with care provided by APNs, however, the body of literature addressing cost effectiveness is inconclusive. Evidence supports positive outcomes for APN care in primary care settings; however, few studies were conducted in settings such as hospital specialty wards, emergency departments and critical care. There were no studies found demonstrating the impact of APNs on healthcare service delivery in Singapore. Therefore, there was no evidence found confirming patient satisfaction or dissatisfaction nor was there substantiation that APN services were a cost effective addition to healthcare in the country.

5.5 Conclusion

This chapter has presented the contextual environment of Singapore as background for the research. In comparing Singapore to the global milieu impetus for the APN role was somewhat dissimilar. The document review revealed that the priority the country placed on retention of nurses in clinical practice and professional nursing development was the main motivation for the role. This contrasts with most other countries that introduced APNs to the healthcare workforce with a designated population need for healthcare services. Whereas findings indicated uncertain and varied regulatory environments internationally, in contrast, Singapore provided clear regulations and standards along with specific processes for the APN to follow. However, the order in which policy was put in place was not sequential as key policy decisions followed the start up of the APN education programme. Introduction of the first cohort of APNs in their practice settings preceded rather than followed the establishment of regulations and standards. Similar to findings internationally, creation of curriculum and programme development was reliant on knowledge and documents obtained mainly from the United States. There were no impact studies found to demonstrate the effectiveness of the presence of APNs in the country. No documents were found to suggest that a strategic framework specific to Singapore was in place for implementation of APN roles.

The next chapter discusses key study findings that demonstrated the motivation for the APN role in Singapore and the policies that were developed to support the role.

Chapter 6 Initial stages: The impetus and policy development for APN roles in Singapore

6.1 Introduction

This chapter presents the findings arising from the interviews held with government officials, directors of medical services, chief nursing officers, university dignitaries and academic staff during Phases Two and Three of the study. Information from Phase One: Review of documents was drawn upon to validate events and dates. The chapter is divided into six sections. The remaining sections of the chapter begin by presenting a timeline that identifies the periods over which discussions, decisions and policy responses occurred. This is followed by a discussion of the three main drivers that propelled the APN scheme in Singapore: the intention to promote professional development of nursing; the anticipation that APNs could fill gaps in provision of healthcare; an expectation that APNs would add value to healthcare services. The fourth section elaborates on the networks of communication, processes of information exchange and key linkages among pivotal decision-makers who made crucial decisions in policy development. The importance of key stakeholders in the decisions and subsequent actions is emphasised. The fifth section examines the significance of timing, resources and opportunity in attempting to launch a new initiative. The concluding section highlights key findings regarding the initial stages and policy processes that were revealed in the research.

6.2 Policy development timeline

From the late 1990s fascination with the advancement of nursing in Singapore progressed from informal and formal discussions among key decision makers, nursing leaders and representatives of medicine to policy development. The discourse gave shape to proposals that led to a clinical career track for nursing, the introduction of a master's level nursing education programme along with regulations and standards for APN practice. This section is divided into four subsections that present critical time periods in decision-making and policy development. They are:

- Late 1990s: Exploring a new nursing role
- 2000 – 2001: Uncertainty and opposition
- 2001 – 2002: Strong support at the top
- 2003 – 2006: Momentum and progress

In this section decision makers are identified in relation to the decisions they influenced and the critical nature of each decision in the initial stages of policy development for the evolving initiative. Policy decisions and associated timelines supportive of education and role preparation can be found in Chapter 7 and for role implementation in Chapter 8. The following subsection discusses the exploration of the possibility of a new nursing role for Singapore.

6.2.1 Late 1990s: Exploring a new nursing role

In the late 1990s cautious preliminary discussions were held among like-minded people who held various opinions supporting a view that nursing in Singapore needed to improve and catch up with contemporary developments similar to other countries in the developed world. The following quote illustrates the context:

‘The Minister’s [Minister of Health] mandate was to provide a world-class healthcare system. Whilst medicine was pushing new frontiers nursing was lagging behind. We saw a need to position ourselves to be a vital player in helping to transform Singapore as a world-class healthcare centre and by doing so clinically the nurses can shine. As nursing leaders we took it upon ourselves to get our act together to make sure the APN initiative is being pushed. We were very aggressive in the way in which we actually looked into how we want to deliver care’ [Participant 3NL]

Individuals who displayed interest in professional development for nursing included key government stakeholders, directors of nursing as well as other nursing representatives and spokespersons from medicine. The Minister of Health wanted to re-examine the nursing profession and how it related to the healthcare industry. This was recognised to some extent when a Nursing Task Force was set up in 1997 to review the roles of nursing in Singapore. The Nursing Task Force Report recommended introducing nurse clinicians as an alternative career path for nursing advancement comparable to nurse educators and nurse managers. The formation of this task force and its resultant recommendations incentivised various working groups to continue to discuss the concept of an advanced clinical nursing role in the country. The following key points emerged from these discussions:

- Stakeholders were embarrassed with the state of nursing in Singapore in comparison to other countries where nursing was viewed to have a more professional status and image;

- A shared desire for nursing to be comparable to professional nursing in other developed countries;
- Nursing leaders and healthcare administrators wanted to provide a career structure to retain nurses in clinical practice.

A consensus emerged that it was time for nursing to move forward professionally although the specifics of what that advancement should be was unclear. The concept of an advanced 'nurse clinician', 'advanced practice nurse' or 'nurse practitioner' had been mentioned in the guise of exploratory discussions. Definition of such a role and its possible addition to the healthcare system was far from certain. The next subsection defines a period of uncertainty in the continued dialogue of the advancement of nursing and identifies opposition that served to block progress in the developmental phases of the APN initiative.

6.2.2 2000 – 2001: Uncertainty and opposition

The Minister of Health at the time was uncertain of the appropriateness of an advanced nursing role and was opposed to academic preparation not only for advanced practice nurses but also for all nurses. In addition, the Chief Nursing Officer was not strongly supportive of advanced nursing roles and was not convinced of the need for academic education for nurses. There was no advocate in a position of authority to promote the scheme. The following quote illustrates the context:

‘The Minister did not see the value of an academic degree for nursing and did not believe in academics for nursing thus was not interested in the high level of the APN’ [Participant 4NL]

In spite of this lack of support, nursing working groups comprised of directors of nursing, assistant directors of nursing and additional invited nursing representatives continued to hold discussions and continued to request support for advanced nursing roles. However, key decision makers at the top level blocked progress. Due to the nature of the blockage at this stage backing and sponsorship for APN roles appeared to have reached an impasse. Key people in positions of authority at the time such as the Minister of Health and the Chief Nursing Officer had the power and influence to move the idea forward but were not supportive of the concept. The next subsection describes how a change in key decision makers transformed the momentum and inspired progress for the APN initiative.

6.2.3 2001- 2003: Strong support at the top

Multiple changes in key decision makers occurred during this time that propelled the momentum for the APN concept. A new Minister of Health who was a strong supporter of nursing was appointed. The new Minister was not totally convinced at first of the value or need for the APN role but following conversations with key stakeholders who were supportive of advanced practice nursing he became persuaded of its potential value and supported the APN initiative. As a result, in July 2001 the new Minister of Health announced a new career structure that provided a clinical track intended for nurses to progress in their careers and remain in clinical practice. Once the Minister broadcast the news of the clinical career structure the APN scheme began to move forward. As this decision was being developed and put forward the Nursing Service Branch of the Ministry of Health began working with the National University of Singapore to develop an educational programme for APNs. The new Minister of Health was in a position to make two appointments that were also key to progress: a new Chief Nursing Officer who was an active proponent for the APN role and a new Director of Medical Services who became a key champion for multiple developments supportive of APNs. It was critical at the top level that the Minister of Health approved and supported the APN concept; however, the new Director of Medical Services for the Ministry of Health and the new Chief Nursing Officer were pivotal in using their authority and networks in subsequent processes of negotiation and decision-making. As key individuals in positions of authority they regularly engaged in conversations with each other as well as with influential decision makers at the governmental level and within the university to gain support for the APN scheme. The Director of Medical Services conducted discussions with other key stakeholders, especially members of the medical fraternity, championed the APN concept and supported the legislative processes within the arena of the Ministry of Health. In addition, as a physician with university connections he actively utilised diplomatic ties with the Dean of the School of Medicine and the Director, Division of Graduate Medical Studies at National University of Singapore to enlist their aid in guiding the APN masters programme through the university approval processes. The following quote depicts the context:

'For quite a long time there had been a drive amongst the nurses to enhance the professionalization of nursing in Singapore. For a variety of reasons it never really took hold. The policy makers had not embraced it, which is something that is critical for Singapore medicine in the future. At that time I was the Director of Medical Services. I had three major priorities: disease management models; how to get a

culture for clinical quality improvement in hospitals; [and] training more generally ... for medical specialists. As I got into the issues it became clear you cannot rely on well-trained medical manpower. It can't just be physicians. We were not realising the full value potential of the nursing community' [Participant 8ML]

Findings revealed that as the Director of Medical Services identified an agenda for the Ministry of Health recognition emerged that there was a need to extend beyond medicine to accomplish this. In the process there was an increasing awareness of the nursing potential and specifically the possibilities for advanced practice nurses. As one person in a position of significant influence this perception became key to pivotal decisions that followed. Once the Minister of Health gave official approval to proceed with the APN initiative the Chief Nursing Officer (CNO) was tasked to appoint a programme manager to organise a master's programme and create a curriculum. As a strong advocate for the APN role the new CNO collaborated with the new Director of Medical Services at multiple levels to move the initiative forward. Every effort was made by the CNO to advocate for an advanced nursing role that was visible, clinically based and yet retained essential characteristics of nursing. In addition, in the capacity as Registrar for the Singapore Nursing Board, the CNO was pivotal in championing the formal title for the role as well as facilitating regulatory changes that needed to reach the Attorney General's Chambers for review and approval. This quote illustrates a perspective of the contributions and decisions of key people:

'Three wise men [Director of Medical Services, Ministry of Health; Dean of the School of Medicine; Director, Graduate Medical Studies – all physicians in influential positions] opened the door to the masters in nursing as good value education of nurses. Initially the Minister [of Health] was not interested. The Director of Medical Services badgered the Minister until he gave up and said do whatever you want. The Minister and Permanent Secretary contributed to funding and forward movement. Pivotal people are necessary' [Participant 4NL]

A change in key decision makers and their spheres of influence was critical in facilitating progression of the APN initiative. During this period there was not only support at the top levels of authority for the advancement of nursing but APN roles were seen as legitimate at multiple levels of the decision making process. Actions were put in place supportive of the feasibility of the role and the concept of the APN became a realistic scheme. The next subsection describes the continued momentum as backing for APN roles continued to evolve.

6.2.4 2003 – 2006: Momentum and progress

Once the Minister of Health for Singapore announced a directive in 2001 that established a clinical career path for nursing multiple transformative changes began to occur. In 2003, the National University of Singapore in conjunction with the Ministry of Health established an 18-month master of nursing programme to pave the way for advanced practice nursing in the country. Initially hospitals were asked to select and fund top nurses for the course. Both the employing institutions and the Ministry of Health funded subsequent cohorts. The first cohort of APN students enrolled in January 2003. Although the first cohort of students completed their education programme in May 2004, guidelines for practice had not yet been established. Regulations and standards for practice were in process but had not been finalised. The scheme was moving forward while aspects of supportive policies lagged behind initial role development.

Regulations and standards for APNs were announced in 2006 with the release of the Nurses and Midwives (Amendment) Regulations 2006 and the Nurses and Midwives (Composition of Offences) Regulations 2006 following approval by the Minister of Health. The main changes in the Regulations provided for a legal framework to be set up for a Register for Advanced Practice Nurses (APNs) as well as the mechanisms and criteria for APN certification leading to licensure. This was a critical moment for Singapore as evidenced by this quote on behalf of the Singapore Nursing Board:

‘The Singapore Nursing Board has made several changes over time that support nursing practice to remain relevant and stay aligned to international practice. The APN initiative is a relatively new effort for Singapore but nevertheless is a good step for many more important milestones to come, for the profession as well as to safeguard public safety and interest’ (Participant 1Reg)

The regulations and subsequent standard setting for APN practice that were announced in 2006 were put in place after the first cohort of APN candidates graduated in May 2004. The second cohort of students enrolled in 2005 and graduated in May 2006 as the regulatory standards were being released and implemented. As a result, the initial introduction of APN roles to the healthcare system occurred prior to full implementation of regulations for APN practice. Programme graduates returned to their employment settings as qualification processes and standards were being developed. In spite of this lag between implementation of roles and establishment of policy, progress was now being made toward realisation of the APN concept.

In summary, the policy development timeline depicts progression from informal and formal

discussions among individuals interested in promoting advanced nursing roles to the release of official regulations (policy) defining APN practice in Singapore. This section has presented periods of progress in exploring the idea of a new nursing role and portrays developmental progress mixed with hesitation and obstruction in the decision-making processes. Stages of discussion along with pivotal decisions that were made along the way are identified. Of significance is the focus on strategic thinking by a small number of people who influenced progress and sustained the momentum for the scheme. The next section presents the main drivers that provided impetus for the APN initiative in Singapore.

6.3 Drivers influencing APN development in Singapore

Even though the literature demonstrated the worldwide momentum for Advanced Practice Nursing, I was particularly interested in what motivated interest in Singapore. Analysis of study findings identified three main drivers that contributed to the launching of an APN initiative in the country:

- Driver 1: The intention to promote professional development for nursing;
- Driver 2: The anticipation that APNs would fill gaps in healthcare;
- Driver 3: An expectation that APNs would add value to provision of healthcare services.

All study participants clearly described their perspectives on the driving momentum for the APN concept with slight variances in their views of the main drivers. The three main drivers identified are examined in this section together with discussion of the issues underpinning each driver. The first subsection portrays the significance of a desire for the professional development of nursing.

6.3.1 Driver 1: The intention to promote the professional development of nursing

The intention to promote professional development for nursing in Singapore was revealed as a pervasive theme providing the main momentum for the advanced practice nursing initiative. All participants communicated a view that the time had come for nursing in Singapore to move forward and occupy a visible place as clinicians and practitioners alongside other healthcare professionals. Nursing leaders, government officials, physicians and academics unanimously advocated for improved recognition of nursing. This view was aligned with a determination to advance the profession benchmarked against international

standards. Findings exposed a hope that the advent of the APN role would lead to a new level of professional maturity for Singaporean nursing. Two factors underpinned this driver:

- The anticipation of enhanced status for nursing;
- A desire to retain nurses in clinical practice and in clinical leadership roles.

Most participants hoped that the changes surrounding the APN concept could contribute to enhanced distinction for nursing as they struggled with the realisation that nursing currently lacked the positive recognition experienced by other healthcare professions. Nursing leaders and key physician participants acknowledged that top secondary school students usually made other career choices rather than choosing nursing and voiced views that increased status and ranking of nursing could change that. A physician leader expressed encouragement for an improvement in nursing's image with this quote:

'For too long nursing has been thought of as nothing more than the handmaiden of the doctor unable to make any decision. They basically get out a few forms for the doctor to sign ... for bed making you don't need nurses. You just need a chamber maid. Everyone has to challenge and evolve' [Participant 9ML]

Nursing leaders concurred that it was time for nursing in Singapore to advance. The following quote represents the viewpoints of most nursing participants' regarding nursing in Singapore:

'We wanted nursing to move forward and [we] wanted the career structure ... it was necessary to maintain the clinical role and do right by nurses ... nursing has always been struggling to gain recognition; to do that it is really good to acquire advanced knowledge and skills' [Participant 4NL]

An academic for the APN programme agreed and emphasised that the opportunity for the role and associated preparation would be beneficial for the profession:

'Look around the world there are APNs – we do not have; look around the world there are degree nurses – we do not have. This is an improvement for the profession and I am glad. It is a proud moment to see our ... masters prepared nurses graduating' [Participant 7NL]

Concurring with the aspiration to acquire increased professional status a nursing leader described the expectation that APN development would move nursing into the modern age:

'Nursing is no longer a delegated function from the medical profession but one in which we can rise and do well ... equipped with the necessary knowledge and skills we will make a breakthrough for nursing, if we do not do it now once the opportunity goes we will have lost our chance altogether ... a more informed workforce will definitely change the status quo. As nurses are better educated and move up the value chain I think they will influence how nursing is practised and managed. In the world I think APN roles and nurse practitioner roles in some countries have really taken off very well. Singapore should not be lacking because being a developed country ourselves ... we should in no way be doing underdeveloped practices in a developed setting' [Participant 3NL]

Repeatedly findings demonstrated that expectations to enhance the status of nursing were high and accentuated further by views that greater importance needed to be given to nurses interested in remaining in clinical practice. Historically, as nurses looked at promotion and career development in Singapore the career tracks available to them were progression along paths for management or education. A nurse aspiring for improved remuneration and a higher level of recognition had no choice but to leave clinical practice to achieve these goals. There were no options for career advancement for nurses who preferred clinical practice. Key decision makers hoped to change this situation with the introduction of the APN role and its emphasis on clinical expertise and clinical leadership. A nursing leader engaged in initial policy decisions leading to the launching of the APN initiative emphasised that the original intent was to retain clinical nurses:

'We wanted to keep clinical nursing at the bedside and anticipated selecting mature expert clinical nurses to grow and expand the nursing role ... We did not want to lose good clinical nurses and thought they should move from bedside up to clinical leadership ... our vision was for clinical nursing and clinical leadership' [Participant 3NL]

Establishing a clinical career ladder was viewed as a way to accomplish this. Stakeholders in positions outside of nursing supported the idea and indicated a desire to incentivise nurses. One high-level decision maker representing medicine provided this quote:

'... part of our scheme was creation of a clinical track. Before this the only way to move forward in the system was to become a manager. You could not really get up [progress] by being a really good nurse professional. Three tracks were created: the

managerial track, the clinical track and the teaching track. It meant you could go up this [career] ladder without becoming a manager. This is new.' [Participant 8ML]

Most participants envisaged that expert handpicked nurses should move into this new nursing role after completing an advanced education programme. All participants expressed hope for the expansion of clinical nursing in Singapore and voiced support for advanced nursing education, a clinical career path and a supportive environment for this to take place. A high-ranking decision maker described this perspective in the following quote:

'In the past we used to have scholarships that sent nurses for bachelors and masters degrees overseas. One of the recurrent problems ... was that these scholars would come back and ... find themselves stuck in the system. They often were not given tasks on jobs that made full use of their training. In some cases there was rejection and you end up with them [returning nurses] being disillusioned. We needed ... to create ... an environment that would embrace these individuals. The idea was that if you had a higher degree of qualification, you went into a different level ... of service, enjoyed better terms and so on. And each of these could be made competitive to the market' (Participant 8ML)

As noted in the preceding quote, there was a desire to develop an incentive to interest nurses to remain in clinical practice. Performance review and promotion linked to the clinical career track was viewed as one way to carry out this idea. The sense of hope for the future of nursing in Singapore pervaded all participants' perspectives, however, scepticism began to emerge as one academic commented:

'There was explicit encouragement for nurses to consider the APN role for career progression...but I am not clear that there was good knowledge about the programme and its requirements' [Participant 13NEd]

In summary, findings revealed that aspirations for improved nursing status, an enhanced professional image and a desire to maximise nursing potential combined to substantiate professional development as the main driver for the APN initiative in Singapore. Hope for this outcome was embodied in the development of these new nursing roles. Consistent with this objective all participants supported the construct of a competitive career ladder aligned with advanced education inclusive of advanced knowledge and skills. Nursing participants confidently asserted that striving for an improved nursing image was pivotal to driving the APN agenda. Although there was resistance and uncertainty at first pivotal governmental officials, university dignitaries, academics and nursing leaders ultimately provided

consistent support for the intent to retain nurses in clinical roles and promote professional development.

Most participants linked the development of advanced nursing knowledge and skills to Driver 2: the anticipation that APNs would fill gaps in healthcare. The next subsection describes how participants thought the APN role could contribute to disparities in healthcare provision in Singapore.

6.3.2 Driver 2: The anticipation that APNs would fill gaps in healthcare service delivery

Repeatedly participants voiced opinions that healthcare was all too often fragmented in providing services to the country's populations. All participants referred in some way to the anticipation that APNs could contribute to filling the gaps in healthcare. To better understand gaps in healthcare that could be eased with inclusion of APNs two dimensions were identified:

- A solution for disruption in healthcare service provision;
- Substituting for physician services.

All physician participants and most nursing leaders indicated that disruptions and interruptions in care were associated with continual changes in medical officers, medical students and medical residents. Gaps in care were associated with the constant turnover of health professionals among various services and healthcare settings. These professionals were all in training and needed to be oriented as they arrived in a different healthcare setting every few months. From the perspective of the healthcare settings the arrival of new trainees every four to six months who were unfamiliar with the setting presented a disruption to service provision. In addition, physicians were viewed as being heavily scheduled thus lacking time to meet all healthcare needs of patients and their families. Disparities in care were defined not only as patients' inability to receive necessary services but failure to understand those services when seeking optimum care. One physician, who had observed APNs in the USA, described a desire to provide continuity and consistency within a system staffed mainly by medical officers and residents. Based on exposure to the APN role the participant viewed this kind of nurse as a solution to disruptions in healthcare services. The following quote illustrates this perspective and represents the opinions of most study participants:

'I asked myself – I need stability. I need a group of people who are in the system. In Singapore the trainee [medical officer/resident] rotates every six months. These guys have some basics of training but they have to get used to the way things are done because every hospital is different. I thought the APN perhaps would be a good way to tie up all those in-betweens. The first thought was the consistency to tie over periods where staffs change. ... APNs will be a good link for this. We need them to power the gaps.' [Participant 9ML]

Gaps in communication among health professionals were also viewed as circumstances that could benefit by the presence of APNs. Improved communication with the introduction of this role was viewed as a potential asset in providing advice and support between institutions and within institutional departments. Most participants viewed the advanced knowledge of healthcare terminology and interventions acquired by an APN in addition to their understanding of patient populations was a solution for issues of fragmented healthcare service provision associated with unsatisfactory communication. Findings indicated that APNs could fill gaps in healthcare delivery as physician substitutes or physician assistants. Most participants offered the perspective that APNs could lighten the workload of physicians and ease their situations. One academic providing APN education illustrated this idea with the following comment:

'APNs would be able to do a lot of things that a doctor used to do but should pass to the APN. One of the key things is the diagnosing and basic treatment part that used to be in the domain of the doctors but now the nurses, if they are well trained, should take on this role and intervene at the time of need' [Participant 5NEd]

The potential for APNs to provide timely service for common concerns and ailments was viewed as legitimate by most participants in that it could allow physicians to manage more complicated cases and also permit them to better use their time for activities such as conduct of research. However, not all participants welcomed the idea of APNs acting in physician like capacities to free up time in physician schedules. One nurse academic expressed a degree of caution in the following quote:

'As much as I do not like it I believe we are going for APN because of the shortages of doctors. Playing like a bridge – they are doing things that we do not have enough doctors to do it. Wanting an APN is not good enough ... I do not like the idea of

[doctors] saying these are the things I do not want to do so I can farm it out to the APN' [Participant 5NEd]

This new nursing role was seen as similar to the physician role and thus was envisaged to soothe some of the problems in healthcare provision by substituting and relieving the doctor's workload. Findings, however, indicated there were conflicting views on how the APN's role in this capacity should be defined. The issues of role ambiguity and lack of role clarity are considered further in Chapter 7.

In summary, participants expressed the view that APNs could positively influence healthcare service provision by diminishing disruptions in the provision of healthcare services, relieving the doctors' workload and improving timeliness or accessibility to healthcare services. Where there is lack of constancy among health care providers, as in the context where medical officers and residents rotate constantly, participants suggested that APNs could provide continuity in care. When seen as physician substitutes APNs were perceived to offer the possibility to free up physicians to manage complex cases and conduct clinical research. However, a concern was voiced that if APNs were seen as physician substitutes that they might be relegated to a position that was not the original intent of the role or they might be taken advantage of simply to better the lot of physicians. Even though participants indicated this driver provided impetus for the APN role the benefits described in this subsection appeared to emerge following participant exposure to APNs. It was not clear how dominant this driver was in the initial exploratory discussions. Based on study findings, the potential for APNs to close some of the gaps in care was identified as a separate driver from the possibility of their just simply adding value to healthcare services. The next subsection examines how APNs were viewed as adding value to the healthcare system in terms of cost effectiveness and enhancing the quality of care.

6.3.3 Driver 3: An expectation that APNs would add value to the provision of healthcare

Whereas filling gaps in the provision of healthcare services was identified as a driver for APN roles findings revealed a notable discrete perspective that referred to APNs as a 'value add' to healthcare. Adding value to healthcare was identified as:

- Contributions to cost effective care or a cost savings (e.g. value for money spent)

- Enhancement of quality clinical care (e.g. better understanding of care options with improved education and communication for patients)

Key physician participants indicated that their perception of added value with inclusion of the APN role rested on a country-based platform benchmarked against a view of what was regarded as world-class care. This view suggested that APNs, as one option in the healthcare workforce, were perceived to have the potential to play a part in cost effective services while also contributing to improved quality with their comprehensive approach or holistic care. The benefit of the APN was seen as integrating increased knowledge and skills with their familiarity and sensitivity to patient populations. In describing a strategic approach for cost effective healthcare services key participants emphasised that these arrangements should include nursing. A nursing leader illustrated the implication of utilizing APNs in delivering cost effective care with the following quote:

‘Our current Minister of Health believed APNs would be able to do a lot of things that a doctor used to do but should pass on to the APN because as the Minister of Health his interest is in containing healthcare costs and providing care efficiently. If you talk about economics of healthcare this would definitely provide better value for money in terms of healthcare delivery at all levels...the ministry will support whatever it takes as long as it is in the interest of advancing healthcare and done in the most cost effective manner’ [Participant 3NL]

Findings indicated that contributing to cost effective healthcare was mentioned consistently as a driver for APN roles; however, there was no concrete evidence as to how the cost savings would actually occur. In addition, there was no clear evidence found in the literature that inclusion of APNs is a cost effective approach for provision of healthcare services. Enhancement of the quality of healthcare in Singapore with the inclusion of APNs was recognised by most participants as an incentive for developing this new nursing role. Attributes of fundamental nursing principles were thought to add value to comprehensive healthcare services. Findings suggested that APNs at the advanced level of nursing would add to quality of care with the combination of a nursing foundation plus advanced knowledge and skills. A nursing leader commented on expectations from the Minister of Health in reference to improved quality of care:

‘The Minister of Health expects to provide a world-class healthcare system. The minister himself sets the direction and tone. Nursing needs to position themselves to be a vital player in helping to transform Singapore as a world class health care

centre ... by looking at patients from a holistic perspective and incorporating the caring element to enhance the value of care that we have been imbued with'
[Participant 3NL]

The preceding quote implies that APNs could contribute to quality comprehensive healthcare due to characteristics attributed to the nursing profession such as attention paid to increased clarity of communication and education of healthcare issues. Most participants provided the perspective that the APN with strong fundamentals of nursing plus skills and knowledge that overlap with medicine could contribute significantly to improved healthcare services with this new concept of providing care. A high-ranking physician referred to this potential value in the following quote:

'It is a huge value added where I see that a well-trained, motivated advanced practice nurse can add so much value just because there are so many things that need to be done ... I think the nursing profession is one profession that can do so much more ... if we provide the profession with a framework followed by all the necessary regulatory and legislative policies to allow this maximum potential to be effective then I think everyone will benefit. Patients will benefit. The profession would benefit and the country would benefit. Healthcare in general will greatly benefit' [Participant 14ML]

Repeatedly the view emerged that nurses promote comprehensive care and approach patients as individuals thus participants provided the perspective that the APN would add this value to care. One participant with a nursing and medical background illustrated this perspective with the following quote:

'My view of the APN is that they are nurses who would be caring for patients more holistically ... you need to equip them with a lot more power and training so that they could think through the process and suggest things. You want someone who would be caring for the patient ... [and] actually knows what they are doing rather than just caring for the patient and following orders. The nurse has a very personal view of patients as individuals. So having the ... advanced knowledge would improve the care the nurse gives to the patient' [Participant 6NEd]

An academic for the APN programme reiterated the timeliness of the APN option for nursing with this quote:

‘This is an opportunity for nurses...they will carve a niche...they may be clinically competent doing what the doctors are doing but ultimately they are adding value to what the doctors are doing. Not replacing them.’[Participant 5NEd]

The topics of cost effective and quality healthcare were consistently mentioned as values APNs could add to the Singaporean healthcare system. Although aspects of this driver were agreed to by most participants, findings suggested that some of the ‘value add’ referred to could possibly be done in general by well positioned nurses. In addition, no participant clearly specified what ‘value add’ really meant in practical terms of integrating these nurses into the healthcare workforce.

Findings associated with Driver 3 demonstrated support and encouragement for APN roles as a cost effective option to enhance quality of healthcare. However, sentiments expressed by participants appeared somewhat vague and seemed to lead to speculation as to what an APN might do without specific definition as to the economic implications or value added to healthcare services. Key nursing and physician participants referred to a value add dimension when referring to the impetus for APN roles but Driver 3 was not mentioned universally by all participants.

In summary, this section of the chapter has provided an account of the main drivers that influenced APN development in Singapore. The primary driver for APN roles was the intent to retain proficient clinical nurses in the healthcare system along with a hope that this would also contribute to professional advancement and improved status for nursing. The introduction of APN roles to fill gaps in healthcare services and as an option for cost effective quality healthcare services added further impetus for APN development. There was no evidence that there was a clearly identified need for the APN role in Singapore; on the contrary, three participants provided the view that there was no acknowledged need for APN clinical services at the outset of the initiative. Nevertheless, once consensus was reached to move forward and key decision makers supported the scheme, momentum for the APN initiative proceeded to policy development. The next section examines the development of policy as it relates to the significance of pivotal decisions and decision makers, the utilisation of decision-making networks for information exchange and linkages among key stakeholders that led to the unveiling of the APN scheme.

6.4 Policy development: Networks of communication, processes of information exchange and linkages among decision makers

Aspects of policy development are presented in this section from the perspective of key stakeholders who were involved in various pivotal capacities when APN roles were being

considered. The significance of key individuals and critical decisions in the process of policy decision-making is emphasised along with the depiction of the complexity of policy processes as they evolved over time. What is relevant is how the key decision makers viewed policy development along the way. This section begins by describing the significance of pivotal people and decisive policymakers and is followed by a discussion of the importance of communication networks and leader linkages.

6.4.1 Pivotal people and decisive policymakers

Findings demonstrated that a limited number of high-ranking stakeholders were involved in the subsequent cascade of decisions made in the process of developing policy for the APN initiative in Singapore. The Minister of Health made a pivotal decision with the announcement in 2001 of a clinical career track for nursing. Influence by other stakeholders along with this formal directive started the momentum for decisions that followed. A nursing leader, instrumental to the promotion of the APN concept in Singapore, described the influence of pivotal policymakers in this quote:

'We went to the Minister [of Health] – it took 6 months to get the clinical career structure. The Minister at the time did not see the value of an academic degree for nursing; ... thus was not interested in the high level of APN. The Director of Medical Services was instrumental in promoting academic nursing education. In December 2001 the Minister ... said do whatever you like' [Participant 3NL]

The decision in 2001 to proceed with a clinical career path along with the agreement to establish an APN master's education programme required support at a high level. The same nursing leader provided further description of the importance of her role and the role of additional key decision-makers:

'The Minister of Health asked if this is a human resource. I wanted more than that. I wanted the role to be regulated, protected, sustainable, remunerated properly, standards set and to increase the nursing image. Once the Minister of Health approved the career structure everything moved forward. Once the Minister of Health settled down he was no longer a stumbling block. The Director of Medical Services was a big support and influenced these decisions' [Participant 3NL]

A key physician participant echoed the importance of pivotal persons in the decision making process:

'I think the information flow ... is dependent on individuals. You can create a framework as much as you want but whether it actually happens is very much dependent on the individuals in those positions. If individuals see the value of communication and the problems of communication they will communicate; if they don't then they won't until something goes wrong' [Participant 14ML]

A third high-ranking stakeholder concurred with the need for support from key policymakers as illustrated in the following quote:

'Frankly, a lot of these things are outside of the control of the nursing leadership. They are CEO decisions but I think the CEOs are very supportive and understanding. They are able to work with the nursing leadership ... there is a strong alignment of interest at the highest level ... the main thing is to get the structure and the approach right then have the leadership sign on because all of these things take time' [Participant 8ML]

Findings revealed that essential decisions were made by a select few who represented high levels of authority and that these individuals could as easily block the policy processes as facilitate decision making. Findings further demonstrated that high level decisions were made by key government officials and physicians in position of authority with nursing representatives at the table providing input but not necessarily in a position to make the critical decisions. Although in most cases the nursing leaders did not make key decisions there was an expectation that nursing would carry out the directives and mobilise the needed actions. A nursing leader with a wide sphere of influence and authority to guide the APN initiative illustrated the context with the following quote:

'I am the driver of the change; at every nursing leadership platform I give them the message and give them a dream and give them a vision to work together for a new nursing workforce and a new nursing culture' [Participant 3NL]

This perspective demonstrates the position of a nursing leader in activating a nursing response to instructions from a higher level. Findings indicated that nursing leadership did influence the development of the APN concept but in contributory roles of discussion for ensuring changes necessary to support the development of this new nursing role. All participants indicated respect for and deference to the Minister of Health as the highest level of authority for healthcare decisions in Singapore. As a result there were high expectations as to what the Minister of Health or the Ministry and its entities could

accomplish. Findings demonstrated that these included solving issues of conflict associated with healthcare as illustrated in this quote by one academic nurse participant:

'I think it [decisions] should come from the Ministry of Health. The Ministry of Health should actually meet everybody up because different institutions and different administrations could have different perceptions. There is confusion about the APN role] ... the Minister of Health has to step in and sort of tell everyone at one go what to do' [Participant 6NEd]

All participants acknowledged that APN development and implementation could not move forward without the stamp of approval of the Minister of Health. A top-level physician decision maker provided additional perspective on the necessity of key people in decision making with this quote:

'Like most things in the healthcare sector you have to have clarity of goals. You also have to phase the change in bite-sized pieces. In medicine in Singapore there are pivotal leadership roles and people. There are a number of people who, if you get them to sign on, would greatly accelerate the implementation' [Participant 8ML]

In the process of policy development decisions were made and communicated from a high level of authority that hinged on key individuals, their influence and their communication links. The next subsection describes decision-making networks and linkages among pivotal stakeholders who influenced policy decisions.

6.3.2 Communication networks and leader linkages

Findings demonstrated not only the importance of pivotal persons in key positions of authority but also their ability to network and communicate with other key decision makers. According to one physician leader, key people at the top require backup from additional key people who buy in to the concept and then assemble the necessary support to facilitate progress. This perspective is illustrated in the following quote:

'... having the Director of Medical Services as the champion was the biggest facilitator at the highest level. We just need more people along the way and not just depend on the person at the very top. The reason so much has happened is that several people bought into the same vision and worked among different agencies to make it happen. This could not happen with one person. You need people in several

key areas who can bring the constituencies to bear on the problem' [Participant 14ML]

Two participants echoed the significance of decision maker linkages in recounting a desire to present the Singapore Nursing Board as a personalised agency to the nursing constituencies. This quote from a representative of the Singapore Nursing Board illustrates that view:

'The Chief Nursing Officer and I started working on the regulations. We went to the Attorney General ... the person who was the legal advisor who was helping us to draft it [regulatory document] came to us and said it did not make sense. The flow was not good but once it was crafted all you need is the approval by the Minister of Health and then you can vet it. We then started briefing people. I suppose it is putting a face on the board. That is why we go out to talk to people' [Participant 11NReg]

Nursing leaders indicated that they appreciated decisions that were made at the top level supportive of the APN concept but implied that nursing abdicated pivotal decisions to the highest level of policy makers. A nursing leader illustrated nursing's role in the decision-making community with this quote:

'Policy makers created the infrastructure and provided them [nurses] with the necessary support and facilitation to make it happen. If you ask any nurse I am sure they would want to do it, the question is how. Policymakers have actually put in the structures and support at the highest level, which is at the ministry level, for this change to come. There is messaging from the policy makers to provide an opportunity for us [nurses] to make a breakthrough for nursing' [Participant 4NL]

Physician and nursing participants concurred that a fundamental role of nursing leadership was to embrace directives from high-level decision makers and facilitate the process. The authority attributed to the Ministry of Health by most participants implied that government agencies with the highest level of influence were viewed as an entity with almost a supernatural but unified network of communication. Three participants with positions further from the pivotal levels of decision making often preceded references to the Ministry of Health decisions with the phrase "they must have" when indicating what they thought top level decision makers might have done. This tendency seemed to imply acquisition of

knowledge that might not have been based in reality. The following response by one academic illustrates this view:

'I do not know how they decided. They [the ministry] must have a formula that they use. They must have talked to various people, talk to medical staff, talk to ... maybe it's because of that' [Participant 5NEd]

Findings further confirmed that there was a top down approach in communication among decisive decision makers. One physician participant supported this view with the following quote:

'Frankly it [decision making] is top down. So we started this journey that nursing administration says we want APNs. So the Ministry of Health says we want thousands of APNs. So top down was very good. They provided the resources. Scholarships' [Participant 9ML]

In general, participants presented a perspective of acceptance that this is the way things are done in policy development and that decisions are made this way in Singapore. The uniqueness of Singapore was thought by one participant to contribute to a specific style of decision-making. The following quote from a representative of the Singapore Nursing Board illustrates the nature of the Singaporean APN initiative:

'It is very unique the way things evolved. When I look back you would never dream that you start a master's programme before you start a bachelor's programme. [it is] extremely unique. It should be a role model. I have heard criticisms for how we have done things ... but to me it is what is available to you at the time and what the opportunity is. There is the need to carry things out. The Director of Medical Services at the time did not put a lot of obstacles in our way. He gave a lot of leeway for nursing to do things the way you want to do. His association with the university makes a lot of difference. As Chairman of the Board if there is anything I am not sure of I say ... Oh Chairman can you sign this? No questions asked. He said he was given a lot of leeway from the Ministry' [Participant 11NReg]

When describing priorities and communication channels in policy development the same participant offered this perspective:

'When you do a policy and when you come to implementation there are still things you may stumble on that you pick up and you say you may need to iron this out.

There are also a lot of things that have competing interests. Everyone is caught up in his or her own daily interests. Every organisation has its own focus ... and way of looking at things. We are all human beings. Everyone comes from different organisations so when you come to priorities it is always one organisation over another. A time might come when you say what is the right thing to do versus what my organisation wants' [Participant 11NReg]

In summary, most participants suggested that not only are communication networks among key stakeholders pivotal to policy development but that there is a balancing act when prioritizing decisions in order to make final decisions. Findings also indicated that part of the balancing act is the circumstances of newly appointed personnel placed in positions of authority and compelled to carry out decisions made by others. As policy makers utilised their links and spheres of influence these networks were also subject to changes in leadership, variances in respective viewpoints and influence from different levels of authority. Issues of timing, resources and opportunities in facilitating the decision-making processes impacted the complexities of policy development. The next section discusses these factors.

6.5 Timing, resources and opportunity

The advent of a new role for nurses and the associated changes did not happen in a vacuum. Findings demonstrated that the accumulative effect of timing, resources and opportunity contributed to APN development in Singapore. Topics that occupied time and attention in early discussions centred around debate over such things as the title of 'advanced practice nurse' versus other titles such as nurse specialist or nurse practitioner. Historical aspects of the use of titles and prior attempts to include advanced roles in the healthcare workforce were considered along with deliberation as to what the focus of this nursing role should be. The culmination of discussions supportive of a new nursing role and the Minister of Health's directive for a clinical career ladder coincided with a desire to proceed with a master's programme for nursing. With supportive key stakeholders in positions of authority there was an opportunity to progress. The timing for action seemed optimal. In addition, early on funding resources were made available for ongoing support of the scheme. A key physician stakeholder referred to opportunity and a worldview of the potential value of APN development in Singapore with the following quote:

'Nursing has a tremendous opportunity right now and I think that if [they] can rise to the occasion there is no reason why they can't develop a model of healthcare here

which would definitely benefit the community and the region. Perhaps it could even contribute models globally' [Participant 14ML]

Five participants agreed that opportunity and optimal timing were significant factors that led to progress of APN development. The following quote by a Chief Nursing Officer illustrated the situation:

'The timing must be right. We are at the right time. Even for a simple thing like an academic degree we had been struggling for years but it never took root. We now have a Minister of Health and Permanent Secretary who believe nursing should actually be given an opportunity to excel. With the right political climate the ball is in our court. Just let the policymakers know what we want and how they can support us to make it happen. So this is the kind of language. Messaging from the policy makers. With the timing right it is an opportunity to make a breakthrough for nursing' [Participant 3NL]

Most nursing participants referred to the practical aspects of moving ideas along through the processes in Singapore. The impact of change on nursing is depicted in a quote from the same Chief Nursing Officer:

'It is going to have a major impact on the nursing culture and disrupt healthcare in a positive way ... on the journey of change' [Participant 3NL]

It could be said that timing and opportunity are not enough without adequate resources. Only one key physician participant emphasised the need for resources and related decisions as a major consideration for planning:

'Without resources it is very hard to do things. The profession has to take responsibility for the effective deployment of the resources because it is one thing to ask for resources and even a greater responsibility once given the resources to make sure that it is deployed to maximum benefit. Making sure the goal is what is intended – are we as outcome focused on issues of effectiveness as we are in trying to get the resources. I think it is probably a challenge for everyone in the process to have that discipline to assess how confident are we that all of this is going to happen' [Participant 14ML]

Although not all participants referred to the alignment of timing and opportunity for nursing along with the necessary resources, most key stakeholders at the higher levels of decision

making mentioned aspects of these issues. Findings indicated that the opportunity for nursing to advance associated with optimal timing and favourable resources provided an environment for positive change supportive of the initiation of APN roles.

6.6 Conclusion

This chapter has provided the timeline over which policy decisions associated with the APN initiative in Singapore occurred. An in-depth description of the main drivers that contributed to the momentum for advanced practice nursing in Singapore and the extent to which these drivers caught the attention of decision makers has been presented. Although there was resistance to the APN concept in the initial stages of discussion, changes in key decision makers and wider spread buy in facilitated progress in the policy-making arena. An overarching theme that APN services could contribute to healthcare for the country's population was identified and explained as the roles were increasingly seen as a positive addition to the healthcare workforce. However, the main impetus for the APN role originated from a desire based in the nursing culture to improve professional development as well as to enhance the status and image of nursing in Singapore. There was no clear evidence of an identified need for this role in the initial stages of discussion. Following years of exploring the possibility of the advancement for nursing practice in Singapore key stakeholders and healthcare leaders collectively made decisions and developed strategies that influenced the introduction of advanced practice nursing with varied interest at multiple levels of decision-making.

This chapter has attempted to provide a description of the complexity of the decision-making processes as well as the sensitivity required of the decision-makers that were involved. Not only is the significance of pivotal individuals emphasised but also the importance of communication networks among decision-makers who were able to influence and move policy into action. A window of opportunity, optimal timing, and identification of resources added to the intricate nature of progressing with the APN scheme. Once the initiative was launched and policies begin to evolve practical aspects of introducing new nursing roles took place.

The next chapter presents the process of education, clinical internship and licensure for the APN in Singapore. Content for this chapter includes experiences of APNs as they advanced through this process and began to implement policy.

Chapter 7 Getting ready: education, role preparation and credentialing

7.1 Introduction

This chapter draws upon an analysis of interviews conducted during Phases Two and Three of the study. Participants included government officials, nursing managers, medical directors, academics and consultants associated with the development of the education programme, role preparation and credentialing of nurses for APN roles in Singapore. In addition, perspectives of APNs and APN Interns interviewed during Phase Four of the study are included to understand student and intern experiences. The chapter is divided into six sections. An overview of programme delivery including curriculum design and programme development follows the introduction. The third section presents student perspectives during their education and role preparation from the time of the first cohort of students to the completion of data collection in 2011. This is followed by a description of APN experiences during the clinical internship period including the significance of preceptors' contributions to role preparation. The procedures leading to licensure as an APN in Singapore are examined in section five including issues that arose as APN candidates proceeded through the qualifying process. The chapter concludes with key findings relevant to APN role preparation. Content in this chapter covers four overlapping time periods:

- Programme Development and Curriculum Design (2001- 2010)
- Education – the student perspective (2003 - 2010)
- Clinical Internship - developing clinical competence (2004 - 2010)
- Credentialing - qualifying for APN licensure (2006 - 2010)

7.2 Programme development and curriculum design (2001 – 2010)

A quality education program is essential in preparing the APN as a credible and accepted member of the healthcare workforce. Negotiations and decisions made by key stakeholders representing the Ministry of Health and National University of Singapore led to the establishment of the APN Master of Nursing programme. This course began under the auspices of the School of Medicine, National University of Singapore in 2003. Once the decision was made by the Minister of Health in 2001 to proceed with a clinical career ladder for nursing the Chief Nursing Officer was given authority to commence programme planning for APN role preparation. This section presents perspectives on programme development from the selection of the first programme manager to course implementation. It includes an account of transitional periods that involved changes in programme managers and other

persons in positions of authority that impacted programme delivery. It begins with a discussion of issues surrounding the management and organisation of the programme and is followed by topics relevant to the development of the curriculum and curriculum design. The third subsection identifies issues in selecting faculty and lecturers for the course followed by a subsection on recruitment and selection of students. The fifth subsection provides student data.

7.2.1 Programme management and organisation

Initial cohorts of APN students began the master's programme in 2003 under the supervision of the Division of Graduate Medical Studies at the National University of Singapore. The programme continued under the jurisdiction of the School of Medicine until the Department of Nursing was established. Although the nursing department became a reality in 2006, the APN course was not transferred to nursing until 2009. This situation presented confusion and some conflict in the initial processes of programme design and delivery, however, programme development proceeded from vision to reality in spite of these impediments.

Once the Chief Nursing Officer was in a position to move forward with organisation and planning for APN education the most urgent action was to appoint a programme manager. A local nurse with a PhD, who was considered to be well connected politically, working in the Ministry of Health and perceived to have advantageous connections to the nursing and medical communities in Singapore, was selected for this position. The first programme manager was responsible for the initial development and implementation of the academic programme including curriculum design, consultation with external experts, establishing faculty, determining criteria for enrolment and facilitating recruitment of students. Although an experienced nurse and well connected in Singapore, the first Programme Manager lacked firsthand experience of APN development and was heavily reliant on external international expertise and the local medical fraternity. The following quote exemplifies some experiences in the beginning stages of programme development:

"I was tasked to lead the whole [APN] initiative and was appointed as the programme manager. I just came back from the United States and was fresh with ideas. I said we can do it but I do not know if we are doing the right thing so I need support. My first response was that we don't have the resources and the expertise. I am not an APN by training. I am an administrator but I thank my American colleagues who actually helped me a lot to get the programme started. I then went

back to the United States to get materials and to get more people (consultants and faculty). The first year was tough.' [Participant 7NEd]

When asked to identify the biggest challenges for programme development this academic provided the following response:

'Biggest challenges: we do not have a role model and we do not have lecturers. This is a totally new role for nurses and the first cohort had no role models. That is why we developed electives for overseas attachment to get them (students) to see what the APNs in the United States do. The next challenge is to get lecturers because if you look at the modules the only one nursing can teach is nursing theory. The rest is not our domain at all. I had good rapport with good doctors so I went to knock on their doors...the doctors came full force to support this programme and they were the first lecturers' [Participant 7NEd]

In the beginning stages there was continual adaptation and moderation. Most participants indicated that everyone was learning about the APN role at the same time. The following comment illustrates the situation:

'The first cohort of doctors who taught had no clue so I had to moderate. A common question that came was 'at what level should I pitch it (the lectures)?' I told them similar to housemen because a houseman is similar to a medical student. Then for the OSCE [Objective Structured Clinical Examination] ... the skills cannot be paper work and I do not know how to do it either. That is where my good friend...came in because he teaches both the undergraduate and the postgraduate (students) so we sat down together and said this is the level we want for bringing it together' [Participant 7NEd]

Consultants from the USA with expertise in graduate level nursing education and APN or nurse practitioner roles provided comment and advice as the processes of programme development unfolded. Configuration of the programme was organized in response to meetings with a variety of nursing and medical stakeholders in Singapore. Following initiation of the programme and enrolment of the first cohort of students in 2003 the role of programme manager became a part time position. Eventually the initial Programme Manager adopted a 'hands off' approach to programme management delegating coordination to administrative staff. Although the Programme Manager was expected to function under the direction of the Division of Graduate Medical Studies issues of

accountability for actions and financing carried out on behalf of the programme arose as exemplified in this quote from Head of Department for nursing:

'The [management] model being used was disjointed to a high degree. The School of Medicine was cross subsidising the programme because it was not working within the budget from the amount of fees being attracted. Some faculty in the School of Medicine would contribute to the programme but their contributions were never fully costed. The cost of bringing in international experts was funded on an extravagant model. The Director, Division of Graduate Medical Studies should have been ultimately accountable for the budget ... but was not accountable in that there was no full reporting. ... [this] went on for quite a few years without closer scrutiny of a more economical model. On the one hand you have the Director, a medical consultant himself, wanting to foster the programme but having quite a hands off approach to it. I am convinced the Director did not have any ongoing role at all in relation to curriculum development, implementation of the programme, and the quality of the programme. He was highly reliant on the programme manager so there was a lot of trust even if there was not a lot of accountability' [Participant 13NEd]

Findings indicated that from a perspective of programme organisation there was a high level of discrepancy within the processes, levels of authority and coordination of the programme leading to challenges in programme delivery. One key physician participant provided comment on the evolving nature of programme delivery with this quote:

'The last few years have essentially been spent getting over teething problems; trying to make sure it [APN programme] is credible. It is a work in progress. A lot more work has to be done by the nursing profession as to where they want to take it by sitting down with the medical profession and saying how do we develop this [APN programme]? You should meet with all the key opinions and look prospectively at what the outcome is...it would be good to rethink where the programme wants to go and its future needs' [Participant 15ML]

Another key physician participant further revealed developmental uncertainty about the APN programme and the expected outcome with this quote:

'We should have started with what is the end product (for the programme). We did not. We started upfront. We decided we need APNs and they have been modifying it

and now towards the end I am asked to submit a role for the APN. It (the end product) should be defined from the very beginning. The danger ... now is that my definition of the APN could very well be different from the School of Nursing's or from the hospital or from the APN herself. We should really sit down and discuss the role of the APN... From the educational world you should start from the back end. You should start to say what I hope at the end of this course they should be able to achieve' [Participant 9ML]

Most participants concurred with these comments although not all were in a position to question the wisdom of decisions that had been made in the initial stages of programme development. One nurse academic divulged that there were decisions in place and agreed to that had to be followed as an obligation to the university. Challenges faced included fulfilling directives that appeared to be based on limited expertise of the original decision makers as illustrated in this quote:

'As Head of Department there were decisions made by my predecessor that I was required to implement. I was surprised that the master's programme had been established through the School of Medicine. I do not think the Director, Division Graduate Medical Studies would acknowledge it but he may have recognized that he did not have expertise or experience of the APN role so he did not necessarily know what the programme was supposed to be; it was left very much in the hands of the programme manager who was a registered nurse, a very experienced nurse bureaucrat ... who was very well networked in the country, was one of the few nurses with a PhD and had excellent links with the government. The programme manager provided academic credentials, clinical credentials and bureaucratic/governmental credentials' [Participant 13NEd]

Developmental uncertainty and issues of accountability became increasingly apparent when the Head of Department for nursing made the case to move the programme from the patronage of the medical school to the nursing department. The context is described in this quote:

'The Dean was particularly keen for it [the change] to occur, he thought it made a lot of sense for the APN programme to be under the jurisdiction of the Department of Nursing and he made it quite clear he wanted the programme to run differently in terms of being held more accountable for funding' [Participant 13NEd]

Findings indicated that lack of in-depth understanding of APN roles among key decision makers contributed initially to some of the flaws that emerged in programme development and delivery. Although decisions were being made based on publications and consultations from the USA, the Singaporean context lacked qualified academics and faculty with first hand experience of advanced level nursing roles. Some decision makers had observed APNs in countries with experience in developing the role but there were no role models in Singapore. This limited experience led to various interpretations of the literature and diverse views when trying to define the role or the expected outcome for the programme.

Pivotal decisions in the initial stages of programme development were made or facilitated by the first Programme Manager, with questions regarding curriculum design and programme delivery reviewed by a Graduate Nursing Academic Committee that was chaired by a Professor Emeritus physician and composed of the Director, Division of Graduate Medical Studies; the Chief Nursing Officer; the Programme Manager; appointed physicians and selected nurse leaders. This committee was intended to be a mechanism to advise the programme manager and elicit ongoing support of the medical fraternity. It did meet periodically and members were supportive of the APN concept, however, one academic participant provided a perspective of the committee's function in the following quote:

'The Graduate Nursing Academic Committee acted basically as a rubber stamp for decisions made by the Programme Manager without any true critical engagement in what was happening' [Participant 13NEd]

The initial Programme Manager was functioning in a part time capacity after the course was launched and ultimately moved on to another management position. Following this change in professional assignment for the first Programme Manager, a second Programme Manager was appointed in the academic year 2008/2009. The programme had now evolved to the point that required a fulltime manager. The next Programme Manager had a more hands on approach in management of the course, also had no firsthand experience of APN roles but did manage to initiate curriculum revisions and stabilize programme development and expansion. Functioning of the APN programme was transferred to the nursing department during the 2008/2009 academic year thus the second Programme Manager was held accountable to the Head of Department (HOD) for nursing and the title for this position was changed to Programme Coordinator. The Programme Coordinator now reported directly to the HOD for nursing and in turn the HOD provided direct channels of communication to the Dean of the School of Medicine regarding the programme.

Operational responsibilities were now lodged within the Department of Nursing. The Head of Department remarked on the functioning of the programme under the nursing department with the following quote:

'We were able to demonstrate the department's capacity to run a programme successfully. There were a lot of gray area issues. Even though the curriculum started to take shape ... we still had a paucity of APNs teaching in the programme. There was a lack of role models for students. So while I think the curriculum was beginning to take shape it was the implementation that was fundamentally flawed' [Participant 13NEd]

Under the jurisdiction of the nursing department the second Programme Manager created her own format and described practical aspects of programme delivery with the following quote:

'My challenge is the operational side. How do I maintain the quality of the course? We talked to the Directors of Nursing about their selection procedure. We need to make sure the person is competent and mature so that when they come in it is not too difficult. Other challenges are university facilities and manpower. We have to rely a lot on medical staff. I want the programme to succeed' [Participant 5NEd]

In summary, this subsection has provided perspectives on the challenges faced with various aspects of programme management and organisation. Programme managers, academics and members of an advisory committee had limited experience and knowledge of the APN role. This led to varied opinions as to the focus and administration of the programme. Teaching was mainly dependent on medical lecturers who were able to teach the students how to make clinical decisions from a medical perspective. There were no local APN models to provide insight on relevant clinical aspects for the role. Oversight of the function and funding for the programme was in question as was the process of accountability for programme development. Although the initial phases of planning were sometimes turbulent, programme delivery had begun to stabilise at the time of completion of data collection in 2011 with the appointment of experienced APNs as adjunct clinical staff. The next subsection describes factors influencing the creation and development of the APN curriculum.

7.2.2 Curriculum Development

Designing a curriculum supportive of advanced practice nursing along with providing core elements of the level of education required for role preparation is imperative in programme planning. The initial Programme Manager was responsible for developing the curriculum with the format for curriculum design informed by visits overseas to countries with a history of APN development and implementation. In addition, consultancies from experts with knowledge of graduate nursing education plus a review of APN and nurse practitioner literature facilitated curriculum development. Most visits, consultancy expertise and cited literature utilised for curriculum design were based on knowledge or documents originating from the USA. The curriculum was created and developed at a time when the programme was under the jurisdiction of the School of Medicine contributing to a level of uncertainty as to whom or what should guide the curriculum. The question as to who had control over curriculum development is expressed in this quote by Head of Department of Nursing:

‘There were some challenges with the development of the ... curriculum and as Head of Department it was essential that I work on several issues simultaneously related to ownership of the curriculum. The Director, Division of Graduate Medical Studies was not inclined to pass the programme to the Department of Nursing even though the department had been established in 2006’ [Participant 13NEd].

The establishment of the APN programme prior to the presence of a nursing department in the university led to misunderstandings and disagreement as to the focus for the course. There was ambiguity as to the basis and core principles that should be emphasised in the curriculum. Findings revealed differing viewpoints on the question of whether the APN role should be based on a medical model or a nursing model. A nursing leader who provided early direction for the APN initiative provided a perspective on the aim of the curriculum with this quote:

‘A medical model was followed for the curriculum with lectures by doctors and later senior nurses. [It is a] medical model in terms of curriculum but the role is nursing. The first batch of APN masters students was considered to be the cream of clinical nurses but nursing leaders felt they had deserted nursing. Directors of Nursing saw the role as medicine not nursing. When the Master of Nursing graduates returned to practice the Directors of Nursing wanted them to remain in the old role. They [nurses] go to the Master of Nursing programme and they [Directors of Nursing] still want them to do the same thing.’ [Participant 4NL]

The debate surrounding a medical focus versus a nursing focus for the APN role and associated education emerged consistently throughout the findings and contributed to uncertainty in programme development, planning the clinical internship period and organising the qualifying processes for licensure. Therefore, even though enthusiasm evolved for the APN concept there was no evidence of a clear idea or consensus on what a nurse in this capacity should do. Further discussion of issues related to lack of role clarity and role ambiguity can be found in Chapter 8 on role implementation.

The initial curriculum design (based on an 18 month timeline) was largely theory based with clinical attachments undertaken overseas but only as observation of clinical practice thus lacking hands on experience. There were no role models in place in Singapore so there was no opportunity for the students to gain first hand clinical practice experience with APNs. Following completion of the education programme and during a clinical internship period clinical skills of assessment and clinical management were developed with clinical tutors. By the time data collection ceased in 2011 there had been some evolution to provide clinical experience in Singapore during the course but there were still limited role models. Although graduates of the programme were required to progress on to a clinical internship in order to qualify for APN licensure there was no established connection between the university programme and their subsequent internship placement. A description of the internship period and internship experiences can be found in a later section of this chapter. In addition to the initial course, in 2007/2008 in response to demand from the medical community a curriculum was developed for a separate cohort of critical care APN students. The critical care curriculum was introduced for ten students independent of the mainstream cohorts of APN students and was under the direction of the nursing department. This was a one off cohort based on the original curriculum design but developed separately for the critical care specialty and designed for a 24-month educational period. Development for the critical care cohort occurred as championed by one Director of Nursing and one influential cardiologist. One institution in Singapore had the vision and funding to influence this change. Curriculum development for the critical care cohort influenced future revisions for the entire APN programme. A revision of the initial curriculum occurred in 2008 and followed the design of the critical care curriculum. Changes were integrated into the entire programme and it moved from an 18 month to a 24-month timeline to establish closer alignment with the university as well as international standards for APN education. Some new modules were added and some were eliminated. The rationale for revisions follows:

- Modules viewed as not relevant to the programme were removed (E.g. critical thinking taught in the English department re ecosystems);

- 18 months was viewed as too tightly scheduled for the students;
- Additional theoretical clinical modules were added;
- The curriculum was benchmarked against international standards, especially from those countries with well developed 24-month curricula for the masters prepared APN.

Once the revision for the 24-month curriculum was accepted core modules were established. At the time of completion of data collection new optional modules, e.g. primary care and palliative care had been added and new specialty streams, e.g. paediatrics, were being considered.

An unclear APN role definition continued to provide challenges for development of the curriculum. Issues related to the direction and emphasis for the curriculum arose as key decision makers changed. Participants depicted uncertainty as to whom or what entity should have ultimate and continued authority over programme and curriculum development. One academic participant portrayed a perspective of the wide-ranging authority associated with the Ministry of Health and the Singapore Nursing Board with the following quote:

'I think that the Ministry of Health has a great role in the development of the education, particularly the Singapore Nursing Board, because even though the university is sort of independent ... they [Singapore Nursing Board] will have a lot to say about what modules, how many clinical hours, things like that. I would think the influence of the people in the government and the healthcare sector and the ministry is actually very important in moulding the modules ... or subjects being taught'
(Participant 6NEd)

When participants were asked 'do you think university officials are aware of the standards and regulations that the Ministry of Health and Singapore Nursing Board have provided for APNs?' the same academic participant responded with the following quote:

'I think that the university people wouldn't actually know the details. Maybe they have a broad view but the nitty gritty details I do not think they actually know. We submit documents and the Head of Department ... approves them. People in the university think ... the Head of Department should know and has approved it but the whole purpose of the documents ... they [university decision makers] actually cannot be bothered with because they know they have trusted this person [Head of Department, nursing] who actually has dealings with the Ministry of Health or the Singapore Nursing Board people' [Participant 6NEd]

Most participants concurred with this perspective but were unsure about what people on the ground actually knew. The Singapore Nursing Board had a lot of influence over education for nursing but participants associated with the university nursing department implied that the university as a separate entity should have more influence over the APN programme. Findings revealed varied levels of trust in decision makers at governmental and regulatory levels to have sufficient knowledge and ability to make informed decisions influencing the educational process for APNs. Academic participants suggested that if key decision makers did not have expertise in educational preparation for APN roles they would not have been able to determine the flaws in the processes of curriculum design and programme development. In addition, concern emerged about the extensive control of the Singapore Nursing Board over programme development in terms of curriculum development and programme accreditation.

In summary, this subsection has demonstrated the complexities of curriculum development for APN preparation. In the beginning phases of curriculum design changes of personnel in positions of authority, differing opinions on the focus for the APN course and discontinuity in the operational model contributed to uncertainty. At the completion of data collection in 2011 revisions to the curriculum continued in response to feedback and comments from nursing, medical representatives and students. The next subsection describes the challenges in identifying and obtaining qualified teaching faculty and staff for the APN programme.

7.2.3 Teaching staff

The credibility and sustainability of APN practice is rooted in the type of education a student undergoes and the availability of qualified teaching staff. Findings indicated that identifying teaching staff qualified to provide instruction for the APN modules was challenging. Initially there was lack of local expertise to teach modules specific to APN practice. Medical staff were recruited to teach advanced theoretical clinical aspects of the APN role. Short-term consultants from countries where APN roles were developed taught and assessed some of the APN components. Local nursing staff taught general nursing topics. Most lecturers in the initial stages were consultants who were seen to focus on the theoretical medical components of the modules they were teaching. There was some disagreement over how to assess competencies in modules such as advanced health assessment that would lead to eventual APN clinical practice. A wide variety of external speakers, physician experts in their fields, provided lectures but had limited knowledge of the APN roles. The following

quote provided by the first Programme Manager illustrates the challenges of establishing qualified lecturers:

'When the first lecturers came in they had no idea what the APN is so they thought it is just nursing skills. I literally sat in on all lecturers, honestly, to make sure it is not nursing. I knew where the gaps were. The first group of doctors who taught had no clue so that is why I had to moderate and bring out the level of knowledge to the next level so they understand it is not nursing skills; it is medical skills' [Participant 7NEd]

Although cooperative and supportive, lecturers were unclear as to what nursing role they were educating for. Over time there was a gradual shift with reduction of short term overseas consultants and an increase in recruitment of expatriate staff along with the addition of local APNs teaching in adjunct staff positions. However, the majority of clinical theory continued to be provided by medical staff. The participation of medical staff and thus emphasis on medical skills provided clinical knowledge but contributed to dissension as to focus of the role: medical versus nursing principles. The Chief Nursing Officer argued for emphasis on the nursing components as well as for programme accreditation to remain under the Singapore Nursing Board. The following quote illustrates attempts to maintain official recognition of the programme under nursing authority:

'[National University of Singapore] resisted having the university programme reviewed by the Singapore Nursing Board but I replied that I'm not here to make your life easy. The job of the Chief Nursing Officer is to be the gatekeeper and set standards. I persisted in saying that the ... programme must be audited and fulfil Singapore Nursing Board standards' [Participant 4NL]

Findings further suggested that although physicians were supportive as lecturers they also were more likely to envisage the role to compliment or provide assistance for their medical duties. Nursing leaders and academic nursing staff indicated that they were aware of this tendency and continued to advocate for emphasis on a nursing focus in APN programme development rather than focusing on ideas such as a physician assistant or mini physician's role. Selection of qualified candidates for the master's programme was viewed as important for successful APN development and implementation. The next subsection describes the recruitment process for candidates eligible to apply for entrance into the APN programme.

7.2.4 Recruitment and selection of students

Representatives of the hospitals or institutions who employed the nurses nominated potential applicants for student openings in the APN programme. Candidates were selected from a pool of what all participants described as expert clinical nurses – the ‘cream of the crop’ as designated by their employers. Highly skilled nurses caught the attention of nursing managers, directors of medical services and consultants who were interested in supporting them for advanced education. Criteria for candidates for the APN programme included the following:

- Initial RN (registered nurse) diploma level education;
- Advanced diploma in a clinical specialty;
- ‘off shore’ bachelor’s degree;
- Minimum of three years clinical experience in an identified specialty.

All prospective students were reviewed by National University of Singapore regarding their eligibility for university admission. At the time of completion of data collection in 2011, APN student cohorts did not include self-selected students nor were there any options for part time study.

In order to fill the slots for the first cohort of students the Programme Manager utilised the authority associated with the manager’s position to convince Directors of Nursing, Assistant Directors Nursing, and Directors of Medical Services to select top clinical nurses with strong clinical practice backgrounds as appropriate candidates to enter the programme. Initially Directors of Nursing were uncertain about the course and reluctant to identify applicants for the programme. Findings indicated they did not really understand the role themselves even though they had to select students for the first cohort. All nursing managers interviewed indicated that they were unclear about the APN role and uncertain re expectations of the outcome of the academic programme. This led them to take on the role as trail blazers themselves in order to provide support for the APN students who were pioneers for role development. The following quote by an Assistant Director of Nursing exemplifies this challenge:

‘All of us [nursing managers] took it step by step. The first step was to nominate people for the programme so there were numbers representing each hospital. After that we needed to send about three [potential students] to get the class started so that the total number is sufficient to form a batch to start the programme. We looked at who were our best nurses ... at that point we didn’t know who was going to enter.

We saw the curriculum ... it described this thing [the APN]. In reality how is it going to be done? We still have no idea. We read a lot of literature on the APN role, on nurse practitioners but local context wise even the clinicians, actually most of us were lost as to how is it going to happen' [Participant 10NL]

The nurses recruited for entrance into the programme in the initial stages were unclear themselves as to the intent and focus of the course they had been selected for. A participant from the first student cohort provided these comments:

'Basically the first batch of nurses that went there [National University of Singapore] weren't told that they were to be an APN. We were informed ... that we were going to advanced education. We were nominated by the hospital. Halfway through the course we were told this course was going to be adult health as an APN. I was very trusting and to me I think there is no harm in learning more things' [Participant 20NL]

However, the same participant challenged the necessity of a formal academic programme for advanced nursing and suggested that the course was in reality simply legitimising functions nurses were already able to perform. This viewpoint is illustrated with this quote:

'[The role] is good in that nurses are given the expanded role, even higher education. In a sense they may not be fully utilised in this role because in the past we did a lot in the expanded role. Not because we were trained. We learned on the job. We were given autonomy by the physician to do the role. ... now everything is based on paper qualification and competency' [Participant 20NL]

At the completion of data collection in 2011 nursing managers and medical consultants were gaining confidence in the educational programme and were acquiring some clarity as to the position of the APN in the Singaporean healthcare workforce. Although awareness of the emphasis of the course was improving, students remained unclear as to their future role upon completion of the programme. All participants indicated that lack of role clarity and uncertainty regarding the programme outcome contributed to ongoing difficulty in student recruitment in the initial stages. In addition, there was concern about 'creaming off' the 'top' clinical nurses. Nursing management indicated that retrospectively nominating top clinical senior nurses from hospital settings may not be the best choice of candidates in terms of the calibre of nurses needed for an APN role. They also indicated that selecting their 'best' nurses negatively impacted the balance and priorities of the total nursing workforce for an institution.

Findings indicated that discussion and some disagreement arose as to who should participate in student selection. Representatives of healthcare institutions that employed the nurses indicated they were familiar with the candidates and their aptitude for academic education. They were reluctant to share responsibility with representatives of the university nursing department in interviewing and screening applicants for the programme. Key stakeholders and university representatives saw this as negatively impacting recruitment. There was little change in the recruitment process at the time of completion of data collection in 2011; however, the recruitment processes were under discussion by employers and academic nursing leaders. The next subsection presents student data from the time of enrolment in the programme to the point in time when they reached the position of a licensed APN.

7.2.5 Student data

Table 7.1 identifies students who were enrolled in the APN programme, their date of enrolment, students who completed the programme and students who proceeded to do their internship and subsequently successfully accomplished the qualifying process resulting in licensure. It is worth noting under dates of enrolment that students in initial cohorts participated in an 18-month programme. In the process of introducing the critical care specialty as an independent stream the programme was subsequently extended from 18 to 24 months in 2008. Also noteworthy in the student data (Table 7.1) is a 100% graduation rate. Dropping out or failing to complete the programme was not an option. If a student should choose to drop out they were required to repay all funding which was considerable and equivalent to tuition fees (funded by the Ministry of Health) and salary paid by their employer during the time they were enrolled as students. Student data in Table 7.1 extends to 2012 to fully represent numbers available at the time of writing of the thesis.

Table 7.1 Singapore APN student data

NUS Cohorts APN MN programme	Start date	Students enrolled	Completion Date	# of graduates	Certified APNs per designated cohort*
1	Jan 2003	15	June 2004	15	11
2	Jan 2005	12	June 2006	12	11
3	Jan 2007	25	June 2008	25	22
4 Critical Care	Aug 2008	10	June 2010	10	5
5	Jan 2009	29	June 2010	29	21
6	Aug 2010	47	Completing 2 nd year 2012	NA	NA
7	Aug 2011	24	Completing 1 st year 2012	NA	NA
Total		162		91	70

*Includes only APNs educated in the Singapore APN programme. (Source: personal communication 10 February 2012, Singapore Nursing Board)

The total of certified APNs in Table 7.1 does not reflect four additional APNs who were educated in the United States but licensed to practice in Singapore. Those educated in the course at the National University of Singapore but not currently certified were either unsuccessful in the exit interview, decided not to pursue the clinical internship or certification process, were currently in their internship period with provisional certification or were still students. The clinical internship is a required period of time (minimum of one year) following completion of the APN masters programme when the graduate is expected to develop clinical competence under the supervision of a preceptor. Upon completion of the clinical internship and successful completion of the certification process the individual is licensed to practice as an APN in Singapore. Findings indicated that students had a variety of experiences in the process of completing APN education. The next section depicts student perspectives of their experiences from the beginning to the end of the course.

7.3 Education: the student perspective (2003 – 2010)

Content for this section draws upon Phase Four interviews and participant observation with APNs and APN interns who provided perspectives on their student experiences. Additional details are extracted from interviews with academics, teaching staff and medical

consultants from Phases Two and Three who had knowledge of student experiences. This section begins with a brief overview of the students' profile followed by student experiences in their early days in the programme. Section three provides perceptions of student experiences during the course. Finally, student experiences at the end of the course are described.

7.3.1 Student Profile

The APN masters students admitted to the National University of Singapore programme were mature, experienced clinically and often had families. Age range was approximately 30-40 years old. The general profile of the student cohorts included:

- Education in registered nurse diploma courses at polytechnic level;
- Bachelor of nursing degrees (offshore Australian programmes);
- Advanced Diploma in an identified specialty from a local polytechnic institution;
- A minimum of three years clinical experience and on average six years clinical experience;
- Lack of recent formal education experiences.

Findings presented in subsequent subsections suggest that aspects of the student profile, such as lack of recent formal education, influenced the student experience. The next subsection describes students' perspectives of experiences associated with their early days in the programme.

7.3.2 Student experiences: Early days

Potential students were selected by employing institutions, usually by Directors of Nursing in consultation with the Director of Medical Services and on occasion an Assistant Director of Nursing. Findings indicated that the nursing managers and medical directors recruiting and selecting nurses to enter the APN programme did not fully understand the role but were tasked to select top clinical nurses for the programme. Early cohorts of students were convinced of the value of advanced education even though there was lack of understanding as to the purpose of academic preparation and the APN role. The following quote illustrates the situation:

'I was in the first cohort and was told we were going for advanced nursing education ... that it is going to be a master course. We were nominated by the hospital. We did not apply. The hospital had to nominate whomever they thought could make it

through the course. I was informed by my Director of Nursing to go for the course. A few months into the course they told us we are going towards the APN track. At that time [as students] we went overseas to explore the APN role. Being the pioneers we did not even know what an APN is. ' [Participant 20NL]

An additional study participant, who was a student in one of the early cohorts and continued on to practice as an APN, agreed that the programme was described as advanced education at the master level but not clearly identified as APN. The following quote illustrates this recollection:

'I knew it was going to be advanced education. I think the APN title ... hmmm... maybe they did mention about the APN title' [APN8]

There was recognition in the initial planning that the course would educate students in skills and competencies not usually associated with nursing. The following quote by an academic illustrates the challenge associated with the new domain of learning how to clerk cases:

'Another challenge for the [APN] nursing students was this – traditionally nursing students do not summarise cases for presentation so the first presentation was a disaster. The students too felt it. They did not know what to focus on. I felt it but I had to reassure them it is all right. We are all learning' [Participant 7NL]

Students in the early days of the programme at times thought to opt out of the programme. The initial Programme Manager provided comment on student concerns:

'After day seven (of the programme) one group of students came to me and wanted to leave the programme. The reason was they had never done health assessment and these were very senior people so they thought they could not go through this programme. With a lot of talking, encouragement and support ... and with extra tutorials they stayed on' [Participant 7NL]

In the early days students struggled with frustration and bewilderment as to what they were being prepared to do. The students were not always clear as to the focus of the course and when they did become aware they were being prepared for APN roles it was not clear what that meant in actual practice. The next subsection presents student experiences as they progressed through their course of study.

7.3.3 Student experiences: During the course

During the course students found academic study difficult. Findings revealed most students had not studied for some time, had not anticipated the time involved to meet module requirements and often had additional duties associated with their families. The emphasis of the APN programme required skills of critical thinking, critical analysis, clinical reasoning, assessment and evaluation. These academic skills had not been well developed in earlier education programmes thus the rigor of study at graduate level was challenging. Some students wanted to opt out but realized they would have to pay back funding if they left the programme thus they had a strong incentive to remain enrolled. Academic and APN participants concurred that in the early days students were excited about participating in advanced education and the option to proceed to a new role. However, when they faced the reality of curriculum requirements and a heavy workload they became overwhelmed. In addition, there was role confusion and lack of clarity as to what they were being educated to do. One nursing academic commented on student bewilderment with this quote:

'[there was] role confusion – they are still not clear what they are supposed to be doing. Misconception [occurred] sometimes: What are you? Are you a Medical Officer? Every student says the same thing, the reason it frustrates them is that 'nobody understands' their role. Healthcare staff has little knowledge of the role... the physicians, the patients, the families ... don't know. Nobody knows. If they know the role they still have misunderstanding that APN is equivalent to a Medical Officer. Even though they [physicians] are supportive I think they also misunderstood the APN role. If the preceptors are confused or do not understand the APN role very well they would not guide the student in the right direction and would pass the confusion along. If we don't fix it then we have more confusion ... a 'cycle of confusion' (Participant 2NEd)

Even though students were gaining knowledge and skills during the course they remained weighed down by the academic work and continued to face uncertainty as to the purpose of the advanced education. The following quote illustrates the views of one academic staff in observing learning experienced by the APN students:

'They [students] struggle, which is expected, but they reach a point of exhaustion so they complain. Our job is to provide a good quality programme for the students. Revision gives us the opportunity to look at the ... quality of the programme'
[Participant 2NEd]

The extension of the programme from 18 months to 24 months was partially a response to students indicating they felt too much was 'crammed' in 18 months of study. However, at the completion of data collection in 2011, the students continued to feel overwhelmed by the requirements of the programme. The next subsection discusses student experiences at the end of the course.

7.3.4 Student experiences: End of course

The APN programme was mainly a theoretical course with limited clinical exposure and a lack of APN role models. Upon completion of the APN programme graduates knew they had completed a master's programme in nursing. Findings indicated that students' critical thinking had improved but they lacked confidence regarding their future role and were not sure how they would perform as an APN in actual practice. One APN participant provided this quote:

'Many people find that it is hard to ... initiate the role after the masters. To me I also have a sense of uncertainty in the beginning' [APN 15]

Most APN participants indicated that they felt inadequately prepared mainly due to lack of strong clinical experiences during the course. Findings indicated that even if the students had some understanding of the APN role they were not in a position to diffuse the atmosphere of confusion. Lack of role clarity and lack of role models led to continued uncertainty for students as they approached their clinical internship period and their future role. A Head of Department for nursing offered this quote in describing the environment:

'Even if the student did have a clear view of the role I don't think they are sufficiently powerful enough within the clinical context to make a change or to scope out what they want from the role. It is still very much directed by a medical model and their scope is dictated by their employer' [Participant 13NEd]

All students, upon completion of the course, were required to complete a clinical internship in order to practice as an APN. The next section provides an overview of the APN clinical internship, issues faced in implementation of the intern period, the importance of an effective preceptor and the significance of this period for role preparation of the future APN.

7.4 Clinical internship: Developing clinical competence (2004 – 2010)

In order to qualify to practise as an APN in Singapore all candidates for certification and licensure were required to complete a clinical internship. The purpose of the internship was

to develop and refine clinical competencies of the programme graduate in a designated clinical specialty. The essential structure was initially envisaged as a 12-month minimum period. In practice the length of time in the internship was often extended and at times commencement of the internship delayed. The internship was conducted under the supervision of a physician preceptor who facilitated and supervised the experience. The internship/preceptor structure was under the domain of the employer thus infrastructure and preparation for the intern period varied from institution to institution. This section consists of three subsections. It begins with descriptions of intern experiences. It is followed by descriptions of challenges of the internship period. The final subsection examines the significance of the clinical preceptor including preceptor attributes that contribute to a positive or negative internship experience.

7.4.1 Intern experiences and challenges

The intent of the clinical internship was to refine and solidify the clinical competencies of future APNs. All APN participants indicated they knew they were required to progress to an internship period following graduation of the APN programme but at the time of the conduct of the study the internship was not well defined. Findings indicated that when the new graduate began the internship experience in a clinical setting they were often not well received. Personnel in clinical settings were unclear about the role and what to expect of the APN Intern. An exception to the struggles with execution of the internship was with the critical care specialty stream. The curriculum design included competency assessment guidelines that linked the education programme at the university to the clinical internship. Knowledge and skills gained through this approach were seen to have led to more true experiences in preparation for the internship and subsequently the APN role. However, at the time of completion of data collection this strategy had not yet been developed for other specialty streams.

There was an expectation by programme graduates that they would solidify clinical competencies during the internship period. Findings revealed anxiety on the part of all APNs during their internship but they were afraid to speak up about their concerns. It was unclear who they should report to, nursing or medicine, thus contributing to tension among healthcare professionals and interns. Some interns lacked confidence in clinical decision-making and found adjustment to the role as an APN intern difficult. The experienced intern gained confidence in the role and reported more positive adjustment towards the end of the intern experience. Most APN participants reported a somewhat turbulent experience in the internship to the point where individuals in the early cohorts either did not complete the

internship or had excessive delays in completing this experience. Assistant Directors of Nursing were most often responsible for the interns but had countless responsibilities and admitted to not keeping their 'eye on the ball' in supervising intern experiences from the perspective of nursing. In some cases Assistant Directors of Nursing were expecting the APN interns themselves to carve out the role but interns were not in a position to do this. At the completion of data collection in 2011 this situation was improving in some institutions with better management support for APN Interns and establishment of earlier links to physician preceptors.

The internship period was envisaged to provide clinical experiences leading toward clinical competence to prepare interns for the certification process and licensure. In some instances APNs noticed retrospectively that they had not had good supervision by their supervisors and the clinical experience was not what they imagined thus they either struggled with the certification process or did not pass the oral panel interview leading to licensure. In addition, findings indicated that lack of hands on clinical experiences in the academic programme contributed to inadequate preparation for the internship and added pressure to the expectations the interns thought they should have had. One academic described experiences of students when they proceeded to the internship:

'The student fresh from graduation then goes on to clinical [experience] as an APN Intern and is confused because they do not want to offend anyone during their internship. They would not want to offend the fellow nurses by acting as if they know more than them. They would not want to offend the doctors by actually taking on roles that they know the Medical Officers could actually do. It is not really the roles but the student's perception of what their real roles are ... there is a lot of confusion amongst people as to what extent they [interns] can actually do the APN role'
[Participant 6NEd]

Issues of role ambiguity and uncertainty as to the position of the APN in the workplace continued throughout the internship period. A more in-depth discussion regarding lack of role clarity can be found in Chapter 8: Implementation.

The structure for the internship fell under the domain of each employing institution with an expectation that management would negotiate the intern experience on behalf of the APN intern; however, findings indicated that it was not clear that anyone assumed overall responsibility and accountability for the interns and their experiences thus dimensions and construct of the internship varied extensively among institutions. Ambiguity of the APN role pervaded this period of role preparation with no formal preparation initially of the interns or

preceptors for this experience. There were emerging concerns by the Ministry of Health and the Chief Nursing Officer regarding delays in completion of the internship thus the Chief Nursing Officer exerted pressure on institutions to overcome these delays. A Head of Department for nursing illustrated the situation with this quote:

‘The Chief Nursing Officer is working closely with the Directors of Nursing to transport the students in their internship and ensure that they complete the requirements of the internship in a timely way. That includes a closer connection with potential preceptors but there is no monitoring of that. There is no single point of accountability in terms of the quality of the student’s internship; the preparation and support they receive from the consultant’ [Participant 13NEd].

The Head of Department of Nursing suggested two pathways to attempt to enhance the internship:

- Development of specific connection between the clinical setting the university programme;
- Establishment of a steering committee by the Chief Nursing Officer as a representative of the Ministry of Health to standardise the internship throughout the country.

At the time of completion of data collection in 2011 a closer liaison from the Chief Nursing Officer with the Directors of Nursing and Assistant Directors of Nursing was being established to begin to consider these suggestions and address the internship concerns. In addition, in the face of emerging difficulties some institutions were developing strategies to enhance the intern experiences once they identified that a good intern/preceptor match appeared to be critical to a positive intern experience. The next subsection identifies factors and preceptor attributes that impacted intern experiences.

7.4.2 The preceptor: the significance to the clinical internship

The preceptor or clinical tutor was identified as a physician with expertise in an area of clinical specialty similar to the chosen specialty of the APN Intern. Preceptors were intended to guide the programme graduate as they developed clinical competence. At the time of completion of data collection APNs had not been identified as preceptors but discussion was in place to include them in the future after they had gained experience in the role. Intern clinical experiences were dependent on the physician preceptor. However, findings indicated that in the initial stages of implementation physicians agreed to become

preceptors but were uncertain of the APN role and their role as preceptors. There was considerable variability in how the physician preceptor interpreted the role and therefore variability in clinical opportunities provided for the interns. Appraisal of the intern was comprised of two parts:

- An ongoing informal preceptor evaluation of the intern during the internship period to assess if the individual was performing to the expected level of competency;
- Development and formal presentation of two clinical cases to a three person panel usually consisting of physicians who examined the intern orally after receiving and reviewing written case studies.

The employing institution, in consultation with the APN candidate, selected the physician preceptors to fill this role. Initially there were no defined criteria for a preceptor. With the introduction of the critical care stream preceptor guidelines were developed and meetings occurred among representatives of the academic programme and one employing institution. At the completion of data collection this process had not extended to other specialty streams. Findings revealed that certain preceptor traits contributed to beneficial intern/preceptor experiences. These qualities included:

- A positive attitude to the APN role;
- Availability for consultation;
- Encouragement of critical thinking and clinical decision making;
- Previous experience working with APNs;
- Intrapersonal relationship with the intern of trying to 'get going together' and a willingness to be part of the process;
- Intern confidence in the clinical skills of preceptor.

One APN participant commented on positive experiences with a preceptor in the following quote:

'My preceptor was very supportive. He is the one who said he knows me better than the interviewer (for certification) and feels that he should know better whether I can perform this role rather than the exit interviewer' [APN3]

Most APN participants who experienced positive preceptor experiences concurred with this perspective and indicated that the certification process was not objective because physicians on the panel would not have the in depth knowledge of their capabilities that

their preceptor would have.

Preceptor characteristics reported by APNs to hinder the internship experience included:

- Preceptors who provided limited clinical opportunities for the intern;
- Lack of understanding of the intern/APN role;
- Interpersonal relations between the preceptor and intern that did not facilitate learning experiences.

Most APN participants indicated that a good quality preceptor/intern dyad was pivotal to a successful internship experience. Some employers were beginning to select potential APN candidates earlier in order to prepare them better for the academic programme and internship. In this way candidates were able to connect in advance with a preceptor and develop a rapport prior to beginning the internship. Findings indicated that less successful intern/preceptor relationships were a deterrent for completion of the certification process and exit interview. Clinical internships are a requirement for certification and licensure in Singapore. The next section examines the requirements and qualifying processes to become a licensed APN in Singapore.

7.5 Credentialing [qualifying processes] (2006 – 2010)

As a broad concept applied to professional regulation, credentialing is the process used to designate that an individual has met established standards for a role. The credentialing process leading to APN licensure in Singapore was defined by the Nurses and Midwives (Amendment) Act 2005, was implemented in 2006 and included provision for an APN Register under the auspices of the Singapore Nursing Board. The first APN was certified and licensed in 2007. The function of the Singapore Nursing Board as related to advanced practice nursing is to regulate the registration, qualifications, education, standards, scope of practice, professional conduct and ethics of Advanced Practice Nurses in Singapore.

Requirements to become a certified APN in Singapore include:

- Educational preparation in a masters degree programme;
- Support for the APN role by an employing institution;
- Completion of the certification process that includes: a) application for provisional certification; b) minimum of one year internship; c) successful exit panel interview.

An applicant for APN certification is required to:

- Define a specialty area of clinical practice;

- Describe the planned model and scope of practice;
- Obtain endorsement by the clinical Head of Department and Director of Nursing;
- Obtain the commitment of at least one clinical supervisor;
- Complete administrative requirements.

Following approval of the application by the Singapore Nursing Board a one-year provisional certificate was given in order for the graduate to complete the clinical internship and subsequently appear before an APN Review Panel. Scheduling of the certification interview required completion of the internship and submission of required documents to the Singapore Nursing Board. The documents consisted of two case studies, a competency checklist and recommendations from a clinical supervisor, Head of Department and Director of Nursing. An applicant could apply for an extension of the internship with an allowance for up to two 6 month extensions. Once the APN was officially certified and licensed, licensure renewal was on an annual basis. Findings indicated that the initial cohorts found the credentialing process to be daunting which contributed to anxiety and decisions by graduates to forego internship and certification. One participant who went through the certification process provided comment:

'I think during the certification phase they should actually tell us what their expectation is. We were not told what the expectation was. We were the first batch. We were the first to go through the interview. The interviewers themselves are not sure what to look out for or what questions to ask so there was a lot of uncertainty'
[Participant 20NL]

Enthusiasm in developing confidence and competence for future APN roles was tempered by apprehension about case study submissions and the final exit interview. Aspects of concern increased with time as interns observed that not all candidates passed the exit interview. Initially, a panel of three persons comprised mainly of medical specialists conducted the oral exam. Most participants expressed concern regarding the dominance of medicine on the certification panel. One academic's comments illustrates the situation:

'I think the nurses should be involved if not in charge [of the interview]. If you have a panel of interviewers it should be one doctor and one nurse or two doctors and one nurse. There should be at least one nurse on the panel. There should also be other ways to pass certification. The process of the exam is not supposed to rely on one single interview. His or her future relies on the three people who conduct the interview' [Participant 3NEd]

All APN participants, most university academics and most nurse managers concurred with this opinion. Those participants familiar with other APN assessment strategies suggested that the current process lacked objectivity. However, opinions among APN participants varied somewhat as to the difficulty of the exit interview. One APN commented:

'As to the certification interview it is mixed feelings because no doubt those who did not make it may feel it is unfair. Some of those who made it say it is not rigorous enough. The rigor is not standardised' [APN1]

From a regulatory perspective most participants acknowledged these limitations, indicated that everyone was learning and that the learning curve was steep. The process in development of credentialing was complex and participants from the regulation sector suggested students/interns may have been unaware or uninformed of the processes as illustrated in this quote from a member of the Singapore Nursing Board:

'Once the regulations were set we were telling people you need to apply. There were road shows telling ... the NUS graduates ... you have to do a, b, c, d... In reality you think they understand but they did not understand. There was quite a lot to bridge because the nurses think something else; then I call the hospital and they are not quite ready as the Director of Nursing thinks something else; then Human Resource thinks something else. Doctors totally do not know what this is all about. Being such a new development we don't want a failure to effect the whole development ... the whole process. The nursing board has a facilitative function for the whole of Singapore' [Participant 12Nreg]

Findings indicated that those developing and implementing regulations and standards were trying to strike a balance to support the professional APNs while at the same time protecting the public. Over time the credentialing processes were refined and communication to students and interns regarding certification processes improved, however, at the time of completion of data collection, APN participants indicated that the certification process still needed to be improved.

7.6 Conclusion

This chapter has described breakthrough development in Singapore as the country approached its capacity to offer an academic APN Master of Nursing programme. From selection of programme management to curriculum design to student selection and student/intern experiences the processes that are described in this chapter include

difficulties faced and strategies developed. Varying agendas of pivotal decision makers; lack of clarity in the role and confusion among teaching staff, students, preceptors, managers and clinical staff contributed to challenges and frustration in role preparation. Decision makers at the highest level had limited expertise to effectively influence decisions in the initial stages of APN programme planning and programme delivery. Even though a clinical internship was required in order to apply for APN certification and licensure, there was no formal connection between the academic programme and the management of the clinical experience. It was a quantum leap and mind shift for nursing and medicine to envisage this role. Multiple stakeholders struggled to make sense of role preparation and credentialing processes while at the same time trying to grasp factors influencing implementation of the role into the health care workforce. Examination of matters associated with role implementation can be found in the next chapter.

Chapter 8: Vision to Reality - Implementation of APN roles in Singapore

8.1 Introduction

Once key decision makers agreed to proceed with the advanced practice nursing initiative and after the APN Master of Nursing programme commenced at the National University of Singapore the next phase of development was actual implementation of the role. This chapter draws on analysis of interviews with government officials, academics, nursing managers, consultants and medical directors from Phases Two and Three who had knowledge of the implementation processes for APNs in Singapore. Additional content is extracted from analysis of Phase Four interviews and participant observation with APNs who implemented the role in diverse health care settings throughout the country. The chapter attempts to present a comprehensive overview of the factors and processes that influenced the implementation of advanced practice nursing in the Singapore healthcare system. It is divided into nine sections. Subsequent sections begin with a description of the multiple issues faced by managers and medical staff as they proceeded with integration of the role into the healthcare workforce. An account is given of their understanding of the policies that they were expected to follow when implementing APN roles. Attention is given to the responsibility of nurse managers and medical directors who supervised the integration of a new nursing role that they did not clearly understand. The chapter then moves on to consider the experiences of APNs as they implemented the role. The APN perspective begins in the third section by presenting their knowledge of why the role was created and is followed by a discussion of the understanding APN participants had of the policies intended to shape their practice. The fifth section presents APNs interpretation of the nature and responsibilities of the role as they attempted to put it into practice. This is followed by a discussion on how inter and intra relationships with other healthcare professionals influenced APN practice. Internal tensions between physicians and other nurses are explored highlighting factors that were beyond the APNs' control but that impeded implementation. Section seven examines the clinical career track by pointing out the disparity between the intent of the relevant policies for clinical progression and the inability of APNs to advance when they attempted to put it into practice. Ambiguity surrounding the envisaged role led to role strain as described by APNs themselves and misunderstandings among the healthcare professionals who worked with them. The eighth section examines the impact of lack of role clarity on implementation. Finally, the chapter concludes with an overview of the key findings from this analysis of study findings.

8.2 Implementation of APN roles: perspectives of managers and medical staff

Findings demonstrated that the actual implementation of APN roles in Singapore was multifaceted and intricate as nursing managers, medical directors and medical consultants began to follow policy directives on the ground. Introduction of APNs into the healthcare workforce was dependent on persons in positions of authority who could facilitate or support these roles within employing institutions. This section is divided into two subsections. It begins by presenting the understanding that nursing managers and medical staff had of policies governing the APN role. The second subsection provides managers' views of APN role implementation.

8.2.1 Understanding by managers and medical staff of APN policies

Nursing managers and medical directors were in positions of authority on the ground level to direct and supervise the implementation of APN roles. Medical consultants acted as preceptors, mentors and tutors for APNs and APN interns as they established clinical practice. Considering the significance of the individuals in these positions an understanding of policies relevant to the APN would seem imperative. However, findings revealed that the knowledge nursing managers and medical staff had of these policies and regulations was often vague and abstract. Most medical directors and medical consultants presented viewpoints that policies governing APNs were in process and yet to be established. They anticipated that there would be opportunities later on to contribute to policy decisions. The following quote by one medical consultant illustrates this perspective:

'Regulations have not been established yet. I have no idea ... what is going on. That may be because nobody has decided what the policy is. It is in evolution. There has not been a lot of consultation at least from my side. By the time these APNs finish their internship I need to know exactly what they can do. If I object to restrictions in their scope of practice I need to then establish ... how much authority I have to push the boundaries. I am not quite sure what the process is. It would be nice to be kept informed' [Participant 18MC]

The irony of this quote is that this consultant expressed the desire to know what an APN could do yet presented a view that there was no policy in place to regulate or define the role. Most nursing managers indicated that they had not received adequate direction and information related to implementation resulting in a struggle to make sense of the situation. One Director of Nursing described the context with the following quote:

'I think there were a lot of things going on. People were not quite familiar as to how to go about doing it [implementing the APN role]. The Singapore Nursing Board had to write up some guidelines for us. We felt we were in trouble. We said to the [APN] development committee 'How?' At that time they never issued any policy or any guidelines. They just say masters [degree] – right? There was confusion. This entire struggle is really a journey, an uphill journey. Learn and move on. Don't look back.'

[Participant 16NL]

According to most participants in positions as nursing managers or medical directors there appeared to be an aura of mystery surrounding policy decisions for the APN scheme. A nursing manager conveyed this feeling of secrecy in the following quote:

'I don't know exactly who made the decisions. I think maybe it was an initiative from the Ministry of Health to say that they want to train APNs. Whether the hospital actually buys in ... you know you wonder if they [hospital and Ministry of Health] are sharing the same vision' [Participant 20NL]

Consistently managers expressed the opinion that perhaps decisions on policy had been made at a higher level but that the information had not reached them. A Director of Medical Services expressed a vague sense of APN development in this quote:

'I do not know very much I confess. In the early days I think there was an APN development committee that I attended. We had quite a few meetings with the Chief Nursing Officer and some very senior physicians who were driving the initiative as well as Directors of Nursing in various organisations. That gave me interesting insight at least' [Participant 17MC]

All participants indicated that they expected instructions for role implementation to come from the Ministry of Health or the Singapore Nursing Board; however, managers also depicted a view that there was no coordinated effort. One medical consultant provided the following quote that represents the opinions of most nursing managers and medical staff:

'There has to be direction from the Ministry [Ministry of Health] ... [for] a nationwide programme. It should not be left for individual hospitals to do their own thing. There has to be a change of laws ... not just to protect the public from the APNs but also to protect the APNs. What I see is actually fragmented efforts. I have not much confidence in the Ministry coordinating it because they have not provided any direction as far as I know' [Participant 18MC]

There was a consensus by participants at the managerial level that their perception of lack of a coordinated plan led to uncertainty as to how they should proceed. As a result, findings revealed that nursing managers and medical staff proceeded to develop specific policies for their respective institutions. The following quote from a Director of Nursing illustrates the context in relation to prescribing authority for APNs:

‘The Singapore Nursing Board is hesitant. No one wants to take the responsibility. The institutions have to take the role but when different organisations take the role you have different regulations. We need to get things right from the beginning with a framework that includes policy, job descriptions, standards for training and education.’ [Participant 15NL]

With individual institutions developing their own guidelines and policies there was variation and inconsistencies throughout the country for role implementation. One Director of Medical Services illustrated the perspective of all nursing managers, medical directors and consultants in relation to policy development with the following quote:

‘Looking back I really wish that when policies for something like APNs are embarked on there was ... clarity at various levels about what exactly we are looking for. I feel that nurses have unique capabilities and potential that they would add to the ... healthcare team. We have to go in that direction and focus on that’ [Participant 19ML]

Even though there appeared to be a lack of awareness of policy and a sense that the APN scheme lacked synchronization there was no indication of urgency or a necessity to access a better understanding of any of the policies that were intended to support APN implementation. It seemed paradoxical that a great deal of trust was placed in the authority of the Ministry of Health even though most managers were unable to distinguish a coordinated effort from the Ministry of Health and its agencies. Ironically, even though medical staff indicated they were uninformed about policy decisions they also were not sure that increased knowledge of policy was essential to the implementation of APN roles. The next subsection examines practical issues of role implementation from the perspectives of nursing managers, medical directors and consultants as they proceeded to facilitate inclusion of APNs in the healthcare workforce in Singapore.

8.2.2 Meeting the Responsibility: Managers' perspectives of APN Implementation

Nursing managers, medical directors and consultants played a central role in enabling full utilisation of the APN. Even though those in positions of authority at the management level indicated they were poorly informed on the details of the APN scheme, findings indicated that they expected to take action to integrate the role. They met this prospect with various degrees of knowledge, interest and acceptance. There was an indication of enthusiasm mixed with caution about the potential for this new clinical nursing role. Nursing managers tasked with the primary responsibility for facilitating implementation faced this responsibility with limited knowledge about how an APN would fit into the healthcare settings or what a person in this role should do. In the initial steps of implementation nursing and medical managers welcomed the idea of enhancing collaborative relationships between APNs and other health professionals but were unsure what this should look like. The following quote from a Director of Medical Services illustrates a sense of caution by one institution when beginning role implementation:

'Because we were starting off from scratch we had to be realistic. In the first phase we decided to keep it safe for them [APNs], the patients and the organisation. Pretty stringent guidelines ... were put in place. I hope over time ... less and less of this will be needed ' [Participant 22ML]

Pivotal nursing leaders, in their efforts to introduce and support APNs, took on the role as trailblazers themselves as they provided support for the nurses who were pioneers in introducing the role. Even though there were varied interpretations of what APNs could do nursing management acknowledged that it was their responsibility to develop institutional plans for guidance and support. Findings demonstrated that they envisaged an inclusive working environment supportive of other nurses and healthcare professionals while taking into consideration that the APN was carving a new niche in provision of healthcare services. Differences in opinions as to the definition and purpose of the role (see section 8.7 on role clarity) plus resistance by other nurses to the presence of APNs (see subsection 8.5.3) presented problems for managers. Findings further revealed that in some environments with such levels of uncertainty the APN was assigned to practice in the same nursing roles that they held prior to completing their APN course. In situations where there was no difference in nursing assignments compared to what they had done prior to attending the master's programme there was discontent and disillusionment on the part of the APN. In identifying challenges to implementation one Director of Nursing felt compelled to take a

harsh stance to cope with discord among the nurses and describes the context in the following quote:

'When [the APN] came back ... nursing could not see the role. Nurses viewed the APN as taking something away from them. The APN was perceived as seeing herself better than the other nurses. So we took a very harsh view of staffing. We [management] said we [will] cut you [APN] out from nursing to develop your role then join the APN back into nursing later on. It was very painful for her as she [APN] thought she was being betrayed by the nursing world. We did not want to demoralize the rest of the staff but I wanted people to see what she is doing and for people to agree and have confidence in her' [Participant 1NL]

In an effort to alleviate tension among the nurses and provide a more supportive environment this Director of Nursing developed the structured approach described in this quote:

'Initially [the APN] had two tracks: 1) the nursing track standing by herself. I needed to prove that a nurse led ward works so I opened a ward of six patients; 2) I needed to demonstrate that the APN as a case manager is different. The APN is like playing the medical officer in the nurse capacity' [Participant 1NL]

This strategy separated the APN from the other nurses temporarily while at the same time demonstrating the capability and competency of a person in this role. Although other nurse managers did not describe such a clearly defined approach to role implementation, all nurse managers concurred with the challenges and negative attitudes encountered from other nurses when graduates returned to work following completion of the APN programme. The issue of conflict between APNs and other nurses is picked up again later in this chapter (see subsection 8.6.3 Intraprofessional Relations).

Nurse managers, medical directors and consultants in the initial phases of implementation coped with dual challenges of physician opposition (see subsection 8.6.2 Interprofessional Relations) while simultaneously facing an unfavourable nursing environment. Resistance by other healthcare professionals contributed to a lack of enthusiasm for the APN role and limited the inclination of managers to recruit nurses to work in this capacity as opposed to a more traditional nursing role. Consistently lack of understanding of the position and purpose of the APN in the healthcare workforce led to dissonance in initial stages of implementation. A discussion of lack of role clarity can be found in a subsequent section of this chapter (see section 8.8).

In summary, nursing managers, medical directors and consultants portrayed a vague understanding of policy development related to APN practice. Furthermore, they felt they would have benefitted by more information and clearer instructions as they proceeded to role implementation. Based on the perspective by management that they lacked solid guidelines from the Ministry of Health, nursing managers in individual institutions developed their own policies. Even though nursing and medical leadership at the management level were curious and even enthusiastic at times about this role they proceeded with caution to consider inclusion of APNs in providing care. Misunderstanding or misinterpretation of the role contributed to a wary approach. In addition to ambiguity in defining the role, conflict among other healthcare professionals arose and at times blocked acceptance of APNs. In spite of these difficulties, at the time of completion of data collection there was growing presence of APNs in Singapore. In addition, the increased visibility and discussions were contributing to increasing requests from physicians to add APNs to their service. Successful role implementation was dependent not only on management support but also the ability of APNs themselves to develop and implement the role. The next section discusses the understanding APN participants had as to why the role was created.

8.3 APN perceptions as to why the role was created

All APN participants were enthusiastic about the idea of being an APN but provided various perspectives of what they thought led to the introduction of this role in Singapore. Repeatedly participants provided imprecise views on the need for the APN role although most thought it was a positive opportunity for nursing. The following quote by one APN illustrates this perspective:

‘To have nursing reach this level as an APN is a big improvement. They can do a better job at a high level and they can provide better care. At the same time the quality is there because we have the nursing background. Better than a handmaiden’ [APN2]

Another APN participant concurred with the view that APN roles would contribute to an enhanced nursing image in Singapore but presented the perspective that there may have been varying agendas as to a need for the role:

‘This is my perception. The physicians feel there is a need so they were keen to have the APN. Nursing was also keen because it was a professional image upgrade. The problem is while the physicians think there is a need they had their

own agenda. The nurses had their own agenda. That is why we have the blended role (clinical specialist and APN). It is very heavy for us now. They need to establish what is the need and what is it for. If it is for clinical, then focus on the clinical component. If it is for upgrading nurses then focus on upgrading and professional growth' [APN2]

As was mentioned by medical and nursing leaders earlier in this chapter, most APN participants also assumed that the Ministry of Health had assessed the need for this new nursing role and as a result had developed a coordinated plan. However, one experienced APN suggested in the following quote that there was not a synchronized strategy:

'At the time I do not think they thought much about whether there is a need for this role. We just know this is an advanced level. We were told that you are equivalent to a medical officer. It was a mystery' [APN15]

APNs provided varied opinions as to the original impetus for the scheme but there was consensus that it was an opportunity for professional advancement. All APNs viewed an enhanced status for nursing as the key reason for creation of the role. The following quote illustrates this view:

'When I heard about the APN I thought it is something that is advanced, higher level than just a normal staff nurse's job. I was keen for the master of nursing so I put down I would like to pursue master of nursing' [APN1]

Even though findings demonstrated that all APNs were attracted to the option of professional development they also admitted there were uncertainties about the rationale for introducing such a role. The following quote suggests that this APN was still trying to understand the motivation:

'I was not involved in the actual coming out of the APN so I had little knowledge of what was happening. It was when I came back from the APN programme that I began to make sense of it. I think eventually there will be a need ... for nursing to grow as a profession as well as meeting the needs of the population. Sort of a combination' [APN7]

An APN Intern depicted a somewhat clearer perspective with this quote:

"It all started because the Ministry of Health... realised two things. 1) The nursing side ... most good nurses did not stay in the clinical level. So that is why this role

was created. 2) The Ministry of Health found there was a shortage of doctors at the primary care and geriatric level. It is part of their strategic planning for nurses to take on some of the patient management and doctors can concentrate on the complicated cases' [APN8]

Conversations with APN participants in their clinical sites revealed that once in practice they were able to gain a clearer rationale for the role. As I watched the demanding pace of a preoperative clinical setting I asked an APN with five years experience about the motivation for this role. The following quote was the response:

'Looking seven years ahead I can identify a need. Things are moving fast like Singaporeans do. We should have had this role long ago' [APN3, PO March 2011]

However, hope for the future was identified from the findings, an APN with less than two years experience expressed despair with the following quote:

' APNs will continue to grow but they will face attrition because some doctors oppose, nurses oppose, we feel alone and the challenges of certification defeat us. Sometimes I want to give up' [APN 1, PO Dec 2010]

All APN participants concurred that development of the role was an opportunity for the enhancement of nursing's status and the advancement of nursing. Even though APNs viewed the role as a positive development they were not certain there was a clearly identified country based need for the role. In any case they began to carve their niche in the healthcare system. Optimally development of policy, regulations and standards provide a foundation for professional qualifications. (see Chapter 6 for a discussion of policy and the policy processes relevant to APNs in Singapore). The next section describes the understanding APN participants' had of the policies that were intended to guide development of the role.

8.4 APNs understanding of policies and the policy process

A select number of APNs were involved periodically in working groups organised by the Ministry of Health to discuss policy and guidelines for role development. These discussion groups met on a limited but regular basis and were positioned to facilitate discussion among healthcare professionals in order to provide comment and recommendations to the Minister of Health. One APN who participated in these discussion groups provided this quote:

'We developed the career track and put in place an increment every month in APN salary to try to incentivise them. We also came up with fellowship programmes so they can further their clinical practice. We talked about professional liability and [recommended] all hospitals need to cover their APNs scope of practice' [APN4]

This APN demonstrated an in depth knowledge of policy and the policy process, however, another APN provided the following comment that more accurately represented the knowledge of policies provided by most APN participants:

'I did not know about the policies that are in place. We heard a little bit but personally I was not in need of this information but I heard about them [policies]. We really did not know so much about it. I heard more about the certification process once I was in the programme' [APN9]

Not only did most APNs demonstrate limited knowledge of policies that were in place to guide their practice, some indicated a lack of interest in knowing more about these policies or the policy process. When asked about knowledge of the policy process one APN responded with the following quote:

'I do not really care what happens out there. Just let me do what I need to do [clinical practice] and I am happy' [APN7]

APNs presented perspectives that ranged from views that policies originated from various institutional levels to acknowledgement that policy directives came from the Ministry of Health. All APN participants indicated awareness that discussion groups had been organised through the Ministry of Health even though they were unaware of the outcomes and processes of these discussions. The following quote illustrates this level of awareness:

'I was not in the Ministry of Health work group so I probably may not get much information initially. Through the APN work groups they would have some information to disseminate ... I am still very unclear [about the APN]. Probably it depends on us. How we want to charter our development. I do not know whether people should debate with us what to do or we are the ones to decide what we want and then the government or the hospital will support us' [APN15]

As exemplified in the previous quote findings suggested that most APNs were hesitant and confused when considering what their role should be in policy development. The same APN provided further description of this dilemma in the following quote:

'I am not very experienced in forming kind of a national level protocol. If you ask me about clinical protocol I know the issues. But when it comes to APN development maybe I have limited experience. I was not given the opportunity; if given the opportunity I must have an interest also. I have an interest in sharing new ideas but I may not be the right person on doing it' [APN15]

Dissimilar views emerged from the findings as to whom or what entity had the authority to define policies for the APN. Most participants defined a top down approach from the Ministry of Health; however, all APN participants specified that on a day-to-day basis they followed policies developed by their employing institutions. All APN participants agreed that ideas for policy could begin from their employing institutions but the final say would come from the Chief Nursing Officer and/or the Minister of Health. They did demonstrate procedural knowledge of policies directly relevant to the process of certification, licensure and clinical career path and indicated an appreciation of the necessity to have policies, regulations and standards. However, most APNs did not provide an understanding of policy beyond requirements for licensure.

In the initial stages of implementation APN participants re-entered the workforce prior to the introduction of national standards and guidelines. Once the regulations were in place findings indicated that access to this information was not simple. An APN described trying to obtain knowledge of national policies:

'When the national guidelines came out this was beneficial but sadly there was not enough information disseminated to us. There were criteria for the clinical track but it was not publicly known yet. Certain people knew about it so it depends on how resourceful you were in obtaining the information' [APN4]

A somewhat circuitous process of policy dissemination is described by another APN in the following quote:

'Someone from Singapore Nursing Board would send messages to the Director of Nursing. She would send messages to the Assistant Directors of Nursing and the Assistant Director of Nursing would disseminate things to us. We may not get it first-hand but there is a channel of communication' [APN2]

Some employers organised APN councils to distribute institution based as well as national policies. The following quote presents this approach:

'Information comes through the institution that we work with. We do have an APN council led by the nursing director and a couple of APNs who attend the meeting. If there are any changes or any new message they would be able to transmit it to us' [APN5]

Institution based councils were viewed as more directly related to the APN; however, the policies developed in various institutions differed at times from national policy. Findings indicated that policy news was periodically updated or distributed from the Ministry of Health, Chief Nursing Officer or Singapore Nursing Board. However, it was not clear how successful dissemination was therefore it was not obvious that the information reached the APNs and other professionals working with them on the ground level.

In summary, findings indicated that most APNs had an awareness of policy relevant to licensure; however, their understanding of policies in general was often imprecise. In addition, most APNs presented a perspective that they were either mystified by policy processes or lacked an interest in gaining more knowledge of policy. There was infrastructure in place at some institutions to disseminate policy updates even though it was unclear if the information reached professionals working on the ground. Findings indicated that word of mouth was a common forum for sharing updates and news. Irrespective of the extent of knowledge APNs had of policies governing their practice implementation of these new nursing roles progressed. The next section examines the realities and practicalities of implementation in Singapore from the perspective of the APNs themselves based on their interpretation of the nature of the role and its responsibilities.

8.5 View from the ground level: APN perspectives on the role

Successful role implementation relied on the ability of the APNs themselves to interpret theory provided from their education programme. This section is divided into two subsections. It begins with a portrayal of the nature of the role and its responsibilities derived from analysis of APN interviews and participant observation. The second section examines APN perspectives on obtaining a level of autonomy that is associated with the role.

8.5.1 Nature of the role and responsibilities: the APN point of view

When portraying the nature of their clinical role APN participants often began by referring to their ability to provide holistic and individualised care for patient populations. One APN commented on this characteristic:

'We actually take them [patients] as a whole person. [We ask] what is the reason the patient is having this. Sometimes the doctors do not see the social issue of the patient in the medical hospital. I want to speak for the patient's voice and the family. At the end of the day the final say is by the consultant but I think my suggestions can always be heard' [APN1]

During participant observation most APNs demonstrated that they spent the majority of their time providing clinical services and that they offered comprehensive care. However, findings demonstrated that the role overlapped with what has been traditionally viewed as medical practice therefore clinical practice often emulated basic principles of medicine in addition to nursing principles, especially in hospital settings. The following scenario from participant observation illustrates the ability of an APN to combine components of nursing and medicine in a mental health inpatient facility.

As soon as I arrived for participant observation the APN invited me to attend multidisciplinary morning rounds for the unit. I was interested in observing how much the APN contributed to the review of patient cases. During rounds there was animated discussion regarding case management between the consultant, registrar, medical officers and nursing personnel. The chief consultant clearly directed management decisions. During the case discussions the APN actively offered contributions to team management in addition to organising follow-up and referrals for other resources. Following completion of rounds the APN set aside time for an in-depth conversation with the nursing staff regarding a difficult patient situation that they thought could have been managed more effectively by the chief consultant. During tea break I asked her to define her role in these kinds of situations where there is disagreement regarding management decisions. The following comments illustrate the context (Field notes, 4 April 2011):

'The consultant may be the visible team leader but behind the scenes the APN fills the gaps and calms the crises that can occur with misguided recommendations by the consultants and registrars. I can provide an increased in-depth assessment on the ground to assist patient care, add value and increase quality of care' [APN 9, PO April 2011]

This quote contrasts the designated authority of the consultant and the behind the scenes practical facilitative presence of the APN in directing care. Most nursing managers presented a concern about the overlap between nursing and medical components of the APN role. However, participant observation demonstrated that the APNs themselves integrated these components, were able to describe what they incorporated from the two

disciplines and with experience they appeared confident in their respective clinical practices. In the novice stage of implementation such as with APN Interns clinical observation indicated they had not yet reached such levels of confidence.

In a fast paced preoperative clinic the diversity of the role was apparent as I observed an APN with five years experience converse easily with clinic assistants, nursing staff, medical officers and the Director of Medical Services. Even though she was constantly moving between patients and auxiliary healthcare staff she presented a friendly professional approach to patients and their families as the patient faced surgery. For each case she assessed the patient and gave personalised instructions plus made referrals for additional medical care as required by the situation. At the end of the clinic schedule I asked the APN to characterize the focus of her practice. She responded with the following quote (Field notes, 28 February 2011):

'I think the important thing is clinical case management. You need to have case management and map out the treatment plans. Advise the patient where to go for follow-up. Prepare them for discharge, something like that' [APN3, PO Feb 2011]

As we waited for patients to arrive in the clinic I had the opportunity to talk to the general nursing supervisor, other nurses and the appointment clerk. Although they were sceptical of the APN role at first they now realised how beneficial it was in shortening waiting time, providing more comprehensive care for patients, acting as back up for the medical officers and assisting nursing staff when they had an overwhelming workload. The nurse supervisor offered that she was so pleased that she wanted to add another APN and was compiling data to justify this request (Field notes, 28 February 2011).

With time and increasing numbers of APNs options became possible for experienced APNs to mentor APN Interns. In an outpatient clinical setting I observed an APN provide assistance to an APN intern. During the process of reviewing a patient's chart and checking patient data on a computer the APN described a perspective of the role to the APN Intern:

'Our role is to bridge care between the medical doctors and nursing. We have to interview patients, do a health assessment, audit laboratory investigations and work collaboratively with the multidisciplinary team so that we can refer patients. We sit in the doctors review management round and ... actually escalate complex cases for review ... present cases and discuss management with the doctor' [APN10, PO April 2011]

As I waited in a hospital lobby for another APN I wondered how the APNs managed to keep up with all the expectations of this new nursing role. The APN arrived out of breath dressed in the signature nursing uniform of the hospital plus a white lab jacket designating her position as an APN. She apologised for being late and guided me through the security gate to a small cramped office allotted for seven APNs and APN Interns in this hospital.

Referring to the limited space she commented (Field notes, 11 March 2011):

'We do not have enough space for all of us to work easily in here. In the beginning we did not even have a computer. When they (managers) thought about APNs they expected us to be on the move all the time and did not think about us needing space when we were not on the wards' [APN2, PO March 2011]

During clinical observation with this APN she indicated that the numbers of APNs were growing and acceptance of the role was increasing but managers had not anticipated the comprehensive nature of the role and appeared to equate scheduling similar to that of the general ward nurse. On this particular morning thirty new patients in the specialty inpatient wards required assessment by the multidisciplinary team that included the APN. She was literally running at times to participate in the assessments as well retrieve necessary information for case discussion and coordinate decisions of the team members (Field notes, 16 March 2011). I asked what contributed to the respectful and interactive collaboration with the healthcare team that I observed. She responded with these comments:

'I know the consultants and they knew me as a nurse on the ward before I became an APN. They see the APN as a stable factor in providing care because the medical officers change every six months and we are here all the time' [APN2, PO, March 2011]

This APN demonstrated contributions to case management decisions as she talked to the team members, obtained laboratory or test results from the computer system and double checked patient information with nursing staff. At the completion of rounds as we went to tea I asked her opinion about introducing the role (Field notes, 16 March 2011). She responded with these comments:

'In the beginning it was not easy. They were not ready for me. I did not even have an access code for the computer to view patient records. The medical officers shared their codes with me until the hospital thought they could give me my own' [APN 2, PO March 2011]

As one of the more experienced APN participants this individual remained enthusiastic about the role. However, she emphasised the challenges of gaining administrative support equal to the other professionals, acceptance by nurses and respect from physicians for a nurse in this advanced capacity. In her position as mentor to APN interns I observed hands on clinical support and mentoring advice to these novice APNs. They acknowledged how much she had paved the way so that they could take on advanced responsibilities sooner (Field notes, 11 March 2013). I was impressed with the complex nature of her role and commented to this effect. She responded with this quote:

'I am happy that you can see what we [APNs] do here. No one from management ever comes to see what we are really doing' (APN2, PO March 2011).

Acknowledgement that managers might not be fully aware of efforts of implementation on the ground was pointed out in this quote. All APNs participating in the study wondered if the nurse managers understood what they were actually doing in their daily practice.

At the beginning of a day of participant observation in a multi-specialty community clinic a receptionist instructed me where to find the APN. The designated office with the APN title and person's name on the door was visible to the patient waiting area. A nursing care manager announced my arrival and shared with me hesitant approval of the APN role. She revealed it wasn't clear how different it was from what she had been doing for years. During the appointment schedule I observed the APN perform assessments of patients' health concerns, facilitate care plans, offer health education and referral for specialized care. Much of what I observed could be seen as characteristics of medicine but in the definition of practice provided by the Singapore Nursing Board is defined as APN practice. Patients and families appeared positive and interacted easily with the APN; the APN appeared self-assured when delivering care. She explained that there was a consultant nearby if she needed assistance. Although the APN demonstrated self-confidence she advised me that she felt lost when she arrived as a new APN 18 months ago. Even though I did not observe conflict with other nurses or physicians in this clinic I detected tentative acceptance among the other nurses. Further discussion with them indicated there was jealousy in the beginning when this new nurse with higher authority and responsibility arrived but the situation was improving. The medical consultant was receptive and praised the presence of the APN, however, the APN indicated this view varied depending who was the doctor on duty. A clinical protocol developed by the Director of Medical Services guided practice. This APN was appreciative of the consultant's medical support but suggested this kind of support was not always the case with other APNs (APN 1, Field notes, PO 14 Dec 2010).

Although most APNs portrayed a clear idea of devoting most of their time to advanced clinical practice, the nurse managers and institutional administrators expected them to also engage in leadership, research, management and education activities. This expectation arose from the clinical career ladder specifications (see section 8.8) that required a decrease in clinical hours and increase in other role components over time for promotion. During participant observation APNs in various settings demonstrated clinical competence while also confirming their reluctance to decrease clinical time as recommended by the Singapore Nursing Board guidelines. Findings indicated that most APN participants were willing to sacrifice promotion along the clinical track in order to remain in clinical practice. Paradoxically the apprehension associated with this dilemma contrasts with the main driver of the APN initiative that was intended to keep nurses in clinical practice (see section 8.6 for an in-depth discussion of this issue).

Early one morning I was scheduled to spend time with an APN in an outpatient clinic. Patients arrived, usually with family members, for follow-up and assessment of chronic health concerns. As the APN proceeded through the day's schedule I was impressed with her enthusiasm and commitment to the clinical components of practice (Field notes 24 March 2011). At the completion of the clinic schedule I asked her opinion on the recommended guidelines to decrease clinical time and increase time for other duties in order to be promoted to a higher rank. She responded with the following quote:

'I became an APN because I wanted to provide advanced clinical care. I am passionate about being a clinician. I am willing to sacrifice promotion to Level III rather than increase time with management and other duties' [APN 7, PO March 2011]

All APNs concurred that the focus on clinical practice was their main interest in the role. The anticipation that clinical hours were expected to decrease over time was seen to impede their implementation of the role. Impediments to practice aligned with the view that clinical practice was also restricted by lack of prescriptive authority. Findings demonstrated that in actual practice strategies had been developed to facilitate provision of pharmacological interventions for patients. Participant observation in most clinical settings found that solutions to address lack of prescriptive authority included routinely going to the consultant on duty to ask for countersignatures for prescriptions, entering recommended medications in computerised systems and waiting for physician approval or contacting pharmacists directly but still waiting for physician approval of the pharmacological recommendations. Although the APNs appeared to conduct these strategies with ease

these practices contributed to interruption in service provision as well as additional time consumed per visit to accomplish the task of case management that included pharmacological interventions.

To most APNs advancement meant increased independence and autonomy not only in regards to prescribing but also clinical case management. However, the understanding of autonomy varied among APNs. The next subsection explores APN autonomy as interpreted by study participants.

8.5.2 APN autonomy

Most experienced APNs stated that they felt comfortable managing cases and making decisions on when to escalate or refer to a consultant or specialist. However, participants defined variations in independent decision-making. Levels of autonomy ranged from almost total autonomy with limited physician oversight to APN Interns who experienced direct supervision by their preceptors. I observed the ease in which an APN conducted case management, referral and follow-up in a hospital clinic. During lunch I asked her to describe her view of autonomy in the role. She responded with this quote:

'I developed this role. I carved my niche. I like to work independently but I do not want full autonomy' [APN3, PO March 2011]

All APN participants agreed that development of autonomy was challenging and not obvious at first in realisation of their role. The degree to which APNs viewed their autonomy varied with their interpretation of the role, the specialty setting they were in and support provided by the employing institution. As an APN Intern waited to consult with her supervising physician she expressed a view of developing autonomy with this quote:

'I work Monday to Friday. Certain days I do rounds on my own. I update my physician supervisor as to what is happening to all the patients under our care. In discussion with the consultants I learn more autonomy and independence for doing certain things' [APN5, PO March 2011]

APN development in Singapore and the challenge of a new and more autonomous nursing role were depicted in the following quote by an APN intern who had watched progress in Singapore:

'There were lots of struggles because they were new in the role ... just trying to find a niche for themselves. There was lots of resistance from everyone saying who is

this new breed of nurses coming in, trying to take over and having all that autonomy, trying to speak their mind out' [APN2)

This quote revealed that making self-directed decisions that were not usually associated with nursing was not viewed as accepted practice. In addition, APN participants agreed that even though they appreciated supportive medical staff excess oversight by doctors contributed to limitations in their autonomy and full utilisation of the role.

In a multidisciplinary community based clinic I observed an APN relentlessly making patient phone calls and conducting consultations with doctors to support her on management decisions (Field notes, 24 March 2011). In a conversation during a lapse in the clinic schedule I asked the APN to describe her opinion regarding physician supervision. She responded with the following quote:

'I want to do more. As an APN you have to have a physician to be a supervisor. It can be very frustrating because they do not have much experience in my specialty. Right now our partner physician affects our care. You may disagree about certain things. They do not usually see these cases for management but ultimately they [doctors] are the ones who sign. You have to listen to what they say' [APN7, PO March 2011]

Even though this APN had interest in her specialty and could describe her competence in the role she felt confined by the inability to receive the expert consultation she needed from the physicians. She discussed expanding her scope of practice over time but was frustrated with the limitations to autonomy in light of the fact that the practising physicians had less experience in her specialty than she had. She related that she had no choice but to defer to their decisions even if they were incorrect (Field notes 24 March 2011).

In summary, this section has attempted to portray fundamental characteristics of practice in Singapore from the perspective of APNs themselves. In the process of introducing the role they persisted in carving a clinical niche among varied settings. Experienced APNs gained confidence in the accountability and responsibility associated with the role and began to mentor APN interns. Autonomy in practice was sought to varied degrees but in some cases supervision by physicians was viewed as excessive to the point of hampering practice and contributing to disruptions in care. All APN participants indicated a passion for clinical practice and some were willing to sacrifice promotion in the clinical career track in order to maintain this focus.

Introducing nurses with a new scope of practice to healthcare settings affected relations

with other healthcare professionals. APN participants repeatedly indicated their awareness that this new nursing role challenged relations especially with other nurses and doctors. Examination of this dimension of implementation follows.

8.6 Relations of APNs with other healthcare professionals

Provision of quality healthcare is dependent on relations and communication among professionals providing the services. APN participants placed a high priority on contributing to quality care and also recognised that this could best be provided in developing positive relations with other healthcare professionals. This section is divided into three subsections and begins by presenting APN perspectives on working as part of a healthcare team. The second subsection examines APN relations with physicians. Perspectives of APNs on re-entry into the nursing workforce and working again with other nurses complete this section.

8.6.1 Collaborative Teamwork

APN participants indicated they perceived that their role was most valued when working as part of a team in collaboration with physicians. However, there were varied interpretations of teamwork. Two institutions specifically spelled out 'collaborative relationship' by developing a formal written 'Collaborative Practice Agreement' between an APN and a medical consultant signed by both parties. The document included name, license number and area of specialisation for both professionals. Guidelines defined collaboration between the APN and the collaborating physician including a stipulation that if there was a disagreement in case management the physician had the final decision. APNs and managers from institutions utilizing the 'Collaborative Practice Agreement' model indicated that the intent of this document was to support the APN professionally while also protecting the public.

Additional interpretations of collaborative teamwork inclusive of APNs were more informal and flexible. Observed practices of multidisciplinary rounding in one hospital presented dynamic, interactive communication among the APN, consultant, registrar, clinical pharmacists, medical officers and other nurses. Constant dialogue was observed among all team members contributing to case management for patients. The APN appeared to be viewed as a respected member of the team and conversely in this role was respectful of other team members. In addition, this experienced APN worked closely with medical officers and demonstrated leadership qualities in coordinating care. Even though collaborative practices varied within certain specialties and among professionals there was evidence based on clinical observation that most APNs actively worked to engage

collaboration with other professionals. However, findings indicated that collaboration and teamwork were dependent on a match of personalities and medical expertise to support the APN. One APN attempting to develop practice in a specialty was responsible to and under the supervision of GPs in a community clinical setting. The GPs had expertise in comprehensive acute and chronic illnesses but lacked the knowledge to provide full support for her specialty thus limiting collaborative efforts. A sense of tension and frustration were portrayed, however, I did not observe conflictual interaction during the clinic schedule. In one outpatient clinical setting an APN had carved out her specialty role by developing a close collaborative association with the medical director while also communicating collaboratively with the nursing supervisor, other nurses in the unit and medical officers who rotated frequently (Field notes, 28 February 2011). As we waited for the clinic day to begin I asked the APN to describe collaboration and implementation of the role:

'I did not plan to work in this setting. I was the first and I am the only APN so I had to start from the beginning. I was sensitive regarding working with other staff but I knew I had to create a totally new role. In the beginning it was difficult. Now nurses and consultants like the role and they want to add another APN' [APN 3, PO Feb 2011]

In this clinical setting the APN demonstrated skill in developing triaging and advanced clinical practice aligned with skills of the medical officers in order to facilitate optimal collaborative care in a demanding clinic. It would seem that having healthcare professionals working collaboratively would be ideal but findings revealed that other professionals did not always support this premise. Subsequent subsections 8.6.2 Interprofessional Relations with Physicians and 8.6.3 Intraprofessional Relations with Nurses explore this issue further.

8.6.2 Interprofessional relations with physicians

In the initial stages of implementation there was physician resistance to the APN role. Findings demonstrated that when physicians were exposed to APNs and became more familiar with their scope of practice resistance decreased and support for the role increased. Respectful relationships, good communication and a willingness to deal with conflict as it arose contributed to mutually beneficial APN/physician relations. During participant observation advantageous APN/physician relations appeared evident in the ease in which the APNs moved through the patient schedule and the relevant decision-making. Appreciation and understanding of nursing as well as the APN role contributed to

positive physician/nurse relations in general. The following quote by a medical consultant illustrates this attitude:

'I think there has been a great change [with the introduction of APNs]. I have seen senior doctors who previously did not even talk to nurses. It is too low for them you know. But now I think there is a lot more communication between nurses and doctors. I see junior doctors after they have rounds ... seek out the nurses with what we are planning for this patient ' [Participant 17MC]

Physician participants described their desire to work with APNs but acknowledged that limited knowledge of the role acted as an impediment to trouble-free implementation. One Director of Medical Services portrayed this challenge:

'They [doctors] do not get what the APN is doing. A lot of colleagues within my department are not that clear. Unless you work shoulder to shoulder with an APN or you have actually worked in a clinic team with the APN you might not quite get what she is doing. I keep telling them just think of her as a physician partner but she needs certain help so it is like maybe a junior doctor. I think there is a lot of misconception. How do I refer to the APN... as a doctor? That was the question that we had to deal with. They were frustrated' [Participant 19ML]

One APN described the multiplicity of support needed while emphasising the influence of physicians in the process of implementation:

'The importance is the nursing director, the policy maker and ... our doctors. The collaborative physicians ... can be our champions. One collaborative physician would be very supportive another may not. They can bring you acceptance' [APN15]

The importance of a physician champion is stressed again in the following quote by another APN:

'The Deputy Medical Director of Clinical Services is ... a champion. She takes care of the doctors actually. It is easier for her to get the doctors to do things for us. It comes down by a hierarchy level. She is paving the way for us' [APN8]

In addition, gaining physician trust is described as an additional component in the following quote by an APN:

‘[A facilitator] is working with doctors and gaining their trust. Looking at our outcomes we have proven that so far. That ... helps us to expand and ... establish our role. They know we are good nurses and we can deliver what we are supposed to deliver. It has come to a point now if there are no medical officers they (doctors) say that it is OK for the APNs to take over’ [APN2]

As gatekeepers to the healthcare system acceptance and support by the medical community was viewed as essential to successful implementation of the APN roles. The critical nature of buy in from physicians is described in this quote:

‘The buy-in of physicians is important for the APN ... to convince the team that she is credible, to allow her to make a mistake when she is still being watched over during the internship and to boost the confidence’ [APN4]

There was appreciation by all participants of the complex processes and factors that had to be considered to implement the APN role. Findings confirmed that acceptance by medical staff provided the impetus to force change. One consultant commented on being a physician champion:

‘I was an APN champion. I felt that there is a role for this level [of nurse]. I think it is important [to have a physician champion]. To enforce change you have to have somebody who actually enforces the change that is coming. Otherwise things just never move’ [Participant 23MC]

Throughout all phases of the study most participants agreed that familiarity of key physicians with the APN role and the presence of physician champions positively influenced others in the medical fraternity. One consultant described initial contact and becoming acquainted with advanced practice nursing that led to active support:

‘I remember she emailed me saying that she was coming back and would I mind being her supervisor. I agreed. At that time the first batch of masters students were coming out and they were sitting for their exams so they needed somebody to write some questions for the exams ... so I was asked to write those questions. Those experiences actually formed my interest and opinions about the APN services’ [Participant 17MC]

A Director of Medical Services portrays evolving support for APNs in the following quote:

'My first involvement with the APNs started when I was the first preceptor, ... working with our first APN trainee. At the same time when I started precepting I started my work here ... in administration. I can see a variance, a very wide variance, in how the APN is received, valued and trained. With the teams that immediately value them and train them they get such a better response and a better outcome' [Participant 19ML]

Another Director of Medical Services concurred that familiarity with APNs aided in providing encouragement for the role. The following quote illustrates the context:

'My experience with APNs ... [was] when the first APN came to me. At that time I was a family physician ... posted to the clinic during her internship ... [I was] instrumental in helping them [first batch of APNs] develop a niche in service provision as well as to explore ways for capitalizing on their knowledge and expertise' [Participant 22ML]

As gatekeepers to the healthcare system physicians were in a position to facilitate or block acceptance of APNs in the healthcare workforce. Findings revealed that physician 'buy in' was diverse and multidimensional. Physicians indicated that exposure, experience and involvement in role preparation contributed to their support. As they became knowledgeable about the role they felt more confident with the services APNs could provide.

Upon re-entry into the healthcare workforce APNs worked most often with other nurses when implementing the role. It was surprising to the APNs that often nursing was not receptive to them in this new position. Intraprofessional relations with nurses are discussed in the next subsection.

8.6.3 Intraprofessional relations with other nurses

Findings revealed that within the nursing ranks jealousy of the APN and what the role represented added an awkward dimension to implementation. All APN participants reported that they were most bewildered when their nursing colleagues did not accept them. Role ambiguity emerged as a main contributor to intraprofessional conflict. An Assistant Director of Nursing provided this comment that illustrates the situation:

'The ward nurses are not sure about their [APN] role because during their internship all the ward nurses see they are working with the doctors; they are talking to the

doctors. They are not working [as nurses], they are not producing, they are not taking care of patients so they wonder what these people are doing' [Participant 20NL]

Comments such as this suggested that upon encountering the new nursing role other staff nurses did not see the APN as one of them anymore resulting in a level of resentment. Most physician and nursing management participants acknowledged that they had observed some degree of disagreement among nurses. Findings revealed recognition of the new nursing role among other nurses ranged from cautious cooperation to scepticism. Brief conversations with other nursing staff with positions of care manager or nurse clinician during participant observation provided the perspective that the APN role looked interesting but it was unclear if this role provided anything new to what was already available. Analysis of interviews with APNs found conflict and lack of acceptance by staff nurses as a common concern; however, I did not observe actual situations of intraprofessional conflict during participant observation. The following scenario describes a view by one staff nurse. In a hospital mental health clinic a nurse care manager sat beside me as I observed the APN assess and manage the caseload for the afternoon. The care manager took notes for follow-up as directed by the APN. I asked the care manager her opinion of this new role. The care manager whispered her response to me:

'We were doing most of this before without the extra degree. It seems like adding extra work to the clinic. In the beginning it was confusing. I suppose I could do it but I am too close to retirement to think about it. I'm not sure we need this additional person anyway' (PO March 2011)

Findings further suggested that the perspective that what the APN does is really not different from what an experienced nurse has been doing presented a threat contributing to a barrier in role implementation. A comment from one consultant illustrates the atmosphere:

'[an] obstacle is the other senior nurses who would not have gone through the APN programme. This kind of "I have been practising for 20 years who are you to come along and tell me how to do nursing". I suspect this is going to cause major problems. They [APN Interns] are already seeing the angst of going up to nursing colleagues 15 – 20 years older and trying to push something new through. That is an obstacle on the ground' [Participant 20MC]

There was a consensus among most nursing managers and all APN participants that there were circumstances of tension among the nurses although strategies to resolve the discord varied. The revelation that nursing was not as supportive as anticipated contributed to increased dependence by the APNs on support from medical staff. Lack of role clarity and inability to differentiate the various nursing roles was a contributor to the controversy (see section 8.8 on lack of role clarity). At the time of completion of the study strategies to dissuade intraprofessional tension were beginning to emerge.

APN participants demonstrated not only a passion for developing a clinical role based on advanced knowledge and skills but they envisaged advancement in the clinical career track. The disparity between the intent of this policy directive and actual implementation emerged as a major disappointment for all APNs. The reality of APNs trying to implement the clinical career path is discussed next.

8.7 The Clinical Career Track: vision versus reality

Findings from this research demonstrated that the main driver for the APN initiative was a desire by key decision makers to raise the professional status and image of nursing in Singapore (see Chapter 6). A clinical career path was created to support this and to retain nurses in clinical practice. The intent was that APNs seeking clinical progression would progress along the clinical track, similar to the management and education career tracks already in place, to an advanced rank that included higher remuneration. However, findings indicated that realisation of the clinical career track resulted in an unanticipated outcome that cast a cloud over APN development.

Guidelines for APN practice provided by the Singapore Nursing Board specified the number of hours and percentage of time that an APN should allocate to role components from Novice (APN intern) to Expert (four years experience). Designated percentages were assigned to the role components of clinical practice, research, management and teaching with the time allocated to clinical practice expected to decrease over time and responsibilities to the other components anticipated to increase. Fulfilment of these guidelines was intended to facilitate promotion. However, in practical terms of implementation there continued to be a push toward management that led to consternation from most APNs who preferred to focus on clinical time with patients and families. In addition, nursing and medical managers were familiar with nurses advancing with administrative duties while they were unfamiliar with advancement by way of advanced clinical expertise. As a result findings indicated managers who were in positions of authority and had a divergent view of what an APN should do blocked promotion.

During participant observation an APN showed me papers defining the process for certification and licensure (Field notes, 14 March 2011). As we waited for the next patient to arrive she described her feelings about the process and its alignment to the clinical career track:

'The principles and concept are all wrong. It is difficult to follow the guidelines. In order to be promoted I have to increase administrative time and decrease clinical time. Thus I have to sacrifice going up the ladder' [APN2, PO March 2011]

The anticipated benefit of the clinical career ladder was blocked at the ground level when APNs recognised that they were unable to be promoted unless they increased management time. All APN participants acknowledged this was a problem but most were so fervent about remaining in clinical practice at an advanced level that they were willing to make the sacrifice and remain at the same rank. The irony of these circumstances meant they faced the possibility of not receiving a promotion with increased remuneration. The paradox of this impediment appeared to be at odds with the key stakeholders' intent to retain nurses in clinical practice. There was consensus by most APNs that this dilemma led to frustration and contributed to attrition.

During participant observation in a hospital based clinic I observed an APN facilitate a specialty referral for a patient. She personally walked between clinical departments advocating for urgent attention for medical care and calmly described a chronic condition to the patient and family. During a tea break in the midst of the clinic schedule she described the career path while depicting disappointment with the process:

'It is a pity when you are supposed to be educated and prepared for clinical practice and then you go into the management track. I love the clinical area. That is the reason we carved out the clinical path for nurses. It is the reason I became an APN. It is not to be a Director of Nursing or Assistant Director in administration. There are APNs who are certified and now act as an Assistant Director of Nursing. I am not sure that is what they want' [APN5, PO March 2011]

Another APN shared similar disillusionment as we discussed clinical supervision for APNs:

We [APNs] prefer more of the clinical role, not administration. We did not know when we came in as APN Intern at Level I that after certification we go to Level II. Then we are stopped from going to Level III unless we go to administration. This is a

misconception and it is unfair for the level of [clinical] accountability and responsibility' [APN1]

During participant observation all APN participants demonstrated dedication to clinical practice acknowledging they were pioneers implementing a new concept. They all indicated that this blockage in progression along the clinical career path was a deterrent in keeping up interest in the APN role. A third APN concurred with the previous two quotes and called the obstruction that evolved as 'false advertising' [APN4]. A sense of the dynamics of this dissatisfaction is portrayed by an APN who described a sense of fear if she was unable to demonstrate fulfilment of nonclinical components associated with the career track. This apprehension is expressed in the following quote:

'I think people are beginning to make sense of it [clinical career ladder] but I still hope we will not be blacklisted for not wanting to do more [administration, research, teaching] for the organisation. I think that would be so sad' [APN7]

In summary, the intent of the initial decision makers to retain nurses in clinical practice was beginning to be realised with the creation of a clinical career path, however, as attempts to implement the clinical track evolved findings demonstrated that this strategy was flawed. Rather than being rewarded for choosing advanced clinical practice it appeared APNs were being penalized. The APNs themselves were attracted and committed to clinical practice but were disappointed in this state of affairs. At the time of completion of data collection in 2011 key stakeholders were discussing possible alternatives to the model of clinical promotion for APNs.

Lack of role clarity emerged as a dominant theme in all phases of the study. Uncertainty about the role as it influenced policy decision-making and programme development is discussed in Chapters 6 and 7. The next section discusses lack of role clarity as it affected the processes of APN implementation.

8.8 Role definition: Issues of ambiguity and doubt

Introducing a new healthcare professional into healthcare service provision would seem to be a daunting task. Precision and clarity in defining the role could be seen as ideal. Unfortunately, lack of role clarity marked development and implementation of the APN role in Singapore. This section consists of two subsections and begins by examining the ambiguity and confusion associated with APNs when attempting to introduce the role into

healthcare settings at the ground level. The second subsection examines specific issues of role overlap with other professionals that accentuated the predicament of role ambiguity.

8.8.1 Role ambiguity and confusion

In an environment of uncertainty surrounding the APN, nurse managers and medical directors faced managerial responsibilities relevant to implementation as they endeavoured to understand and define the role. In spite of the extent of the unknowns all nursing managers acknowledged their responsibility to integrate APNs into the healthcare workforce. One Assistant Director of Nursing described the context in this quote:

‘All of us, we took it step by step. In reality how is it going to be done, we still have no idea. We read a lot of literature on the APN role, on nurse practitioners but local context wise even the clinicians, actually most of us were lost as to how is it going to happen’ [ADN2]

Findings demonstrated that nursing and medical managers viewed the challenge of defining the APN role as linked to successfully operationalising the role. The significance of who should describe APN roles often fell to nurse managers in their roles of supervision and performance review. An Assistant Director of Nursing explained management’s responsibility to the public in defining the role while at the same time revealing issues of ambiguity in this quote:

‘Their [APN] role is still unclear. I think acceptance level is not there – the public as well as the organisation. This APN seems to be an initiative by the Minister [of Health] and by the Ministry. Whether the hospital actually buys in is unclear ... are they sharing the same vision? ... Do they see that there is a role? [ADN3]

Commentary from a Director of Medical Services further illustrates the issue of lack of role clarity:

‘I think the [other] nurses recognize the APN is a notch higher in terms of the qualification and probably among the whole population of nurses more motivated and more advanced in thinking and pursuit of learning. It’s on a practical level when it comes to defining a service where she [APN] can contribute that the confusion starts coming when you create a new role that is entirely outside of what has been delivered so far’ [Participant 22ML]

All nursing managers acknowledged the APN as a clinical expert but opinions varied as to how this concept should be realised within institutional settings. Nursing management consistently shared the view that they were all facing a 'steep learning curve' in attempting to understand the role. The following quote from an Assistant Director of Nursing illustrates the context:

'We were in a blur. We did not know. At that time things like the internship were not well spelled out. No point going up a steep wall and then they [APNs] get very stressed out. For us who manage the APNs as a whole we have a global picture; whereas, the APNs contribute from their own perspective. It is all very confusing' [Participant 10NL]

A Director of Nursing concurred with this perspective and presented the following quote:

'We were not clear on the role and also the nurses on the ground were not familiar with why they are going in the programme. We were not clear on the National University of Singapore plan. If we could have had more information it helps us plan better' [Participant 12NL]

Repeatedly nursing managers revealed a concern that the APNs would leave their nursing background and the origins of nursing principles. In this respect nursing management indicated a desire to develop role clarity in support of the APNs coming back into the system while also encouraging them to maintain links with their nursing colleagues. An Assistant Director of Nursing described the situation with this quote:

'They [APNs] need to socialise and integrate with the other nurses. They cannot put themselves over it. Most important in the moulding part we have to keep pulling them back down to earth so they do not feel that I'm no longer a nurse' [Participant 10NL]

All nurse managers commented that lack of information or the vague nature of the information provided limited their ability to plan for programme candidate selection as well as implementation of the APN into the workforce. Perceived lack of direction from a higher level added to the lack of role clarity as to what the responsibilities of the APN should be. One Director of Nursing described the situation:

‘Our concept was the nurses we sent for this clinical advanced nurse programme are our high-end nurses. They are nurses who did not want the leadership role. We are working very hard on those areas and had many sessions with different heads across the clusters (healthcare institutions) ...our APNs were not very clear of their roles. They were caught between nursing leaders and the doctors. The doctors want them to do their role but for us they are very much in this APN role to help us [nursing]’ [Participant 12NL]

Findings indicated that differentiation of the APN role from what other healthcare professionals do required significant consideration in fully utilising APN services. In addition to the ambiguity associated with the purpose of the APN, role overlap between components of nursing and medicine added to the confusion. The next subsection examines how role overlap contributed to lack of role clarity and associated misunderstanding.

8.8.2 Role overlap: the case for differentiation in a skill mix scenario

Role overlap with medicine in the process of APNs carving out practice specific to advanced nursing was identified as an issue of consternation for both managers and APNs. One Director of Nursing provided this comment:

“You should never make them [APNs] think they are the doctor. They are not ... they are the nurse with advanced additional knowledge. They will look at the patient holistically, not like the doctor. Once a nurse, always a nurse’ [Participant 16NL]

However, most nursing managers voiced concern that the APN was leaving their original identity in nursing and embracing the medical role. An Assistant Director of Nursing presented this uncertainty:

‘Another fear we are seeing is a change in nursing. Their thinking has changed. They are playing doctors...they create a two tiered system so that the generalist nurse is not as powerful as we [APN] are – we are the doctors. We are the “nurse” doctors and they feel superior’ [Participant 20NL]

As they acknowledged the overlap of APN practice with medical practice most physicians indicated concern about the differences in role preparation. One consultant provided this quote:

‘The thing that really comes across is that nursing training and medical training are so different. But at the APN level we expect the APNs to think and behave and work

like the doctors but it cannot be so because we come from different roots. So the challenge for me is how I turn my APN intern into more like a medical person without having the benefit of the training. It's not easy. [Participant 18MC]

The overlap of roles contributed to difficulty in trying to differentiate the APN role not only from the medical role but also from other nursing roles. One Director of Medical Services illustrates this concern in the following quote:

'... there should be a significant difference between the APNs and the [nursing] care managers. The care managers looked in tandem to the doctors and they never made any decisions without the rubber stamping of the doctors. The APNs were expected to do more than that. You would actually have things like an APN led clinic where the APN actually owns the care of the patient and the doctor functions in a secondary role' [Participant 19ML]

In referring to overlapping roles the same Director of Medical Services provided this quote:

'There is more specialisation [in health care] and there is significant overlap in some of the areas. To introduce another person into the entire equation is like another specialisation. In the very beginning we had a bit of a problem. When the APN intern came in she had to first train under the [nursing] care managers. So her role started to get confused with the [nursing] care manager ... we were rather afraid by the time she is up and running on her own she will be so much like a [nursing] care manager she won't be doing much more' [Participant 19ML]

Findings indicated that role overlap and lack of role differentiation among physicians and other nursing roles made it difficult for physicians to provide support for the APN but was also problematic when trying to activate support for the APN. In the case of medicine, apprehension emerged over entry of APN roles into a realm that has been historically positioned under the medical sphere of influence. A Director of Medical Services described this concern:

'I have heard of doctors who were very happy. I for one was very happy with it [APN role]. Then there were those who were sceptical of the ability of the nurses to actually maintain things. I think the scepticism is not unfounded. Our education and training background is very different. It is not fair of us to expect the APN to be able to deal with non-routine situations and conditions or handle surprises as well as the

doctor would. By and large the doctor with a depth of his clinical knowledge will probably be able to handle such a situation better. What is going to happen is that she is going to have to either spend a long time discussing the issues with the doctor or she's going to have to turn the patient over. How flexible they are and how closely they can bridge the gap between medicine and nursing moving beyond their nursing background will take time. It is really quite new so we really do not know how far it goes' [Participant 19ML]

Another Director of Medical Services illustrates the sensitivity of issues associated with role overlap between physicians and APNs in this quote:

'Physicians are a bit tricky. We have been very careful to scope it (APN role) so it is win-win and I think that is critical. If it comes to the stage where it is turf protected. That is very awkward ... politically the landscape is such that we are expanding on all fronts and non-physician growth is tremendous and is vital. ... we realise that the system has been so skewed toward the physicians and total overdependence but our population needs are growing exponentially' [Participant 22ML]

Findings demonstrated that role overlap and related boundary issues among healthcare professionals were awkward. However, all physician participants expressed the view that introduction of the APN role would contribute to change in the way services would be delivered but that this required a mind shift. One consultant described this concern in the following quote:

'It is not easy to change people's mindset when you have never seen something like this before. So that was difficult ... here comes the nurse telling the doctors maybe adding just a little bit of information and then they [doctors] feel jealous. That kind of attitude' [Participant 17MC]

Uncertainty related to the focus of APN practice was exhibited in terms of lack of role clarity, role ambiguity and role overlap with other healthcare professionals. This contributed to confusion and tension especially in the beginning stages of the initiative. Misunderstanding of the role and different interpretations as to what the APN should do led to variations in implementation between employing institutions. At the completion of data collection in 2011, these issues continued to pose problems and were being discussed among key decision makers, management and APNs.

8.9 Conclusion

As an innovation evolves it reaches a point when there are enough informed people and experiences to reflect on progress made and provide views on its evolution. This chapter has attempted to portray the multifaceted and at times turbulent dimensions of the initial phases of APN implementation in Singapore. An account has been provided of the challenges that were encountered and overcome as well as forces that were strong enough to forestall development. Key findings identified which impeded implementation were: lack of a coordinated plan to include APNs in the healthcare workforce; lack of role clarity; and the inability to carry out the clinical career path as intended by the Ministry of Health policy directive.

Managers and consultants presented the perspective that APN development lacked a coordinated plan and resulted in a fragmented approach throughout the multifaceted phases of implementation. Nursing managers and medical directors were in positions of authority and felt obligated to follow the directives from the Ministry of Health but had limited knowledge as to how to proceed. Implementation of advanced practice nursing in Singapore was comprised of a mixture of enthusiasm for the role along with uncertainty and confusion in attempts to define the place that this new nurse should have in the country's healthcare workforce. There was variability in terms of receptivity of institutions; APNs functioned with various levels of autonomy while some returned to roles similar to those they held prior to completion of the master's programme. Without a synchronized plan for inclusion of APNs in the provision of healthcare services individual institutions developed self-governing definitions of the APN role and policies germane to their own institutions. This led to variation between the intent of the national policies and the policies developed at the institutional level. Managers and APNs revealed a limited understanding of policies intended to guide role implementation. APNs demonstrated theoretical knowledge of their role that translated into various levels of confidence and autonomy in clinical practice. Despite continued progress with implementation managers and APNs were of the opinion that role development would have been better served if there had been a coordinated effort that addressed population healthcare needs in the country.

Lack of role clarity and role ambiguity led to tense relations between APNs and other healthcare professionals leading to role strain for APNs as they implemented the role. Uncertainty about this professional and what they should do hindered integration into the healthcare workforce on the ground. Physicians were interested in this new nursing role but had no experience with APNs. There were no role models to provide understanding of the APN scope of practice; however, once physicians became familiar with the idea opposition

decreased. Resistance from staff nurses arose as they tried to differentiate the APN role from other nursing roles already in place. Lack of role clarity led to frustration and confusion among nurse managers as they took responsibility for introducing the APN with limited knowledge themselves of the role. They were unsure initially as to what this professional should do and what the role should look like when included in the nursing workforce. As a result nursing managers failed to offer the support the APNs expected. Even though it was unclear what the APN should do as a member of the healthcare workforce supportive managers and consultants worked to sustain the vision of the original planners.

The clinical career track that was intended to promote professional development for nurses and retain them in clinical practice was blocked early on. As APNs faced the option of progression and promotion clinically their efforts were not realised unless they moved into capacities of management or education. Nursing managers who lacked an understanding of the role had the authority to block an upgrade along the clinical career path. APNs who felt passionate about their advanced clinical role sacrificed promotion to remain focused on advanced clinical care. In spite of these obstacles the commitment and passion of APNs to develop advanced clinical practice provided a foundation for progress. Failure to implement the clinical career track as envisaged by the initial policymakers demonstrated the most striking disparity between the intent of policy and implementation into actual practice.

At the time of completion of data collection in 2011, advanced practice nursing in Singapore had become more established, roles had begun to stabilise and there was increased visibility of APNs. Recognition of the problems with the clinical career track had reached the attention of key decision makers. While there is much more that remains to be done to sustain APN roles in Singapore a receptive and dynamic milieu for future development exists.

The next chapter presents a discussion of the study findings.

Chapter 9: Discussion of findings

9.1 Introduction

The integration of advanced practice nurses (APNs) into the healthcare workforce is a dynamic change in healthcare provision requiring a mind shift by policymakers and healthcare professionals. The development of policy to support the full potential of this new nursing role as well as to set practice standards is essential. This prerequisite raises questions about the complexities of the policy process and policy development as it relates to APNs and the extent to which nurses achieve the aims of policy in the course of role implementation. The research reported in this thesis sought to gain an understanding of these factors as they influenced the development and implementation of APN roles in Singapore. The aims of the research were:

- To analyse drivers that provided momentum for the initiation of APN roles in Singapore;
- To investigate the processes associated with the development of policy intended to support APN roles;
- To explore the experiences of a sample of key decision makers, managers and APNs in order to ascertain how intentions of policy were subsequently realised in practice.

Ethnography with an instrumental case study approach was chosen as the most appropriate methodology to provide an understanding of the complex course of action undertaken by a range of decision makers, the interface of individuals and their interpretation of related events that took place in Singapore (see Chapter 3: Methodology). As a country in the early stages of an APN initiative, Singapore was selected as the case study in order to gain a knowledge and understanding of relevant policy development as it evolved in one country. The case selection also provided an opportunity to do rigorous research in a culture and setting where research on APN policy development had not been done before. In turn it was thought indepth comprehension of one case would contribute to broader insight into the phenomenon of policy processes relevant to development of APN roles elsewhere.

To inform the study a comprehensive review of the international literature addressing the concept of advanced practice nursing was conducted (see Chapter 2). The complex nature of the issues identified in the literature and associated with the research topic led to a multifaceted four phase study. The four phases of the study were conducted sequentially with preliminary analyses of the findings from each phase completed prior to progression to

the next phase. In addition, analyses of findings following from each phase were subsequently compared and contrasted to consider evolving themes and interrelationships between phases. Phase One consisted of a review and analysis of Singapore documents related to the country's APN initiative to inform subsequent study phases and to assist in the identification of individuals suitable for potential recruitment as study participants for succeeding phases. In Phase Two, following the document review, government officials, university dignitaries and academics were interviewed to gain their perspectives on the drivers for the APN initiative, the development of relevant policies and the policy process. In Phase Three, in order to obtain an understanding of how policies were realised in the implementation of the APN role from the perspective of healthcare institutions that employed the APNs nursing managers, medical directors and medical consultants were interviewed. Phase Four consisted of interviews and observation with a sample of APNs in their clinical settings to obtain their perspective of drivers for the APN initiative, policy development and subsequent achievement of policy in actual practice. The focus of this phase was to gain a rich understanding of the lived experience and realities of APN practice as well as to observe the realisation of the intent of policy into actual practice.

The quantity and range of issues arising from this study is extensive and has been presented in some detail in preceding chapters. The intention of this chapter is to present the most significant findings of the research and to consider the contribution to knowledge. In making associations between the literature and findings of the ethnography the research has clarified concepts associated with policy processes and its complexities through a critical examination of policy development and its subsequent implementation as it relates to advanced practice nursing. The study revealed that even though well intended the policy process in Singapore was turbulent, dependent on influential decision makers and lacked strategic coordination for role implementation that resulted in fragmented efforts when approaching APN development. However, in spite of numerous challenges APNs established a presence in varied healthcare settings throughout the country.

Findings from the research have verified some of the difficulties encountered in launching an APN initiative. Even though key decision makers established policy and standards for this new nursing role the study revealed oversights that contributed to tension and hostility in actual implementation. Crucial issues such as not clearly defining an APN for the Singapore context and the position of this role in healthcare were not fully taken into account by policymakers. A strategic approach to guide implementation of the APN role in Singapore was not identified.

Knowledge gained from the research has led to the development of a Conceptual Policy

Framework to guide a coordinated effort when considering the integration of APNs into the healthcare workforce in order to promote fewer miscalculations in the development and implementation processes (see Figure 9.1). Significant components of the framework are critical points, much like a checklist, that should be taken into account in the comprehensive planning of policy and APN development. The levels of autonomy and scope of practice that define APN roles unlock a profound extension of nursing practice. Without supportive policies and legislation authorising the full potential of these advanced roles APNs can essentially be seen to be practicing illegally and could pose a problem not only for nursing but for populations who seek healthcare. The research contributes not only to an understanding of the Singapore context but it is hoped that the knowledge gained will encourage others to pursue a synchronised and enlightened approach to APN development.

The development of a conceptual framework was based on research findings along with consideration of principles from theoretical frameworks proposed by Hall et al (1975) in regards to policy development and Walt (1994) as it relates to policy implementation. The consideration of these two frameworks has contributed to knowledge by providing fresh insights into existing health policy and social policy frameworks. The frameworks have been examined in a new policy arena of APN development. Each was found to be lacking as a single framework to explain the development and implementation of APN policy. However, when considered together with others such as Lindblom's (1959) view of 'disjointed incrementalism' as it relates to the policy process they can be useful in understanding the complexity of APN development.

9.2 Discussion of key findings

This section of the chapter discusses sequentially the significant findings from each phase of the study. A discussion of relevant theoretical perspectives is provided to offer further insight of the findings from each phase of the research.

9.2.1 Summary of the literature review

Prior to Phase One a comprehensive literature review was conducted exploring international literature relevant to APN development and comparing how Singapore is situated in relationship to the global milieu (see Chapter Two: literature review and Chapter Five: Singapore the context). A number of key factors viewed as essential to the successful integration of APNs into the healthcare workforce emerged from the literature. These are 1) the need to establish mechanisms and policies to support the full authority and scope of practice for an APN; 2) the criterion to develop strategies to increase awareness of the

function of APNs; 3) a mandate to clearly differentiate the APN role from other healthcare professionals; and 4) the necessity for strong managerial leadership to facilitate effective implementation of the roles. The literature consistently corroborated that legislation and standards relevant to the profession are essential in order to authorise nurses to perform to the full capacity of an advanced scope of practice. Evidence was found that without specific policies to address the inclusion of new nursing roles in the healthcare workforce APNs and healthcare systems all too often face a turbulent and chaotic process contributing to stress, tension and conflict. However, findings from the literature revealed the absence of knowledge on policy decision making, policy development and subsequent realisation in practice. Although the presence of constructive policy was viewed as critical to APN development no literature was found that demonstrated the elements of policy development and relevant policy processes.

9.2.2 Phase One: Review and analysis of Singapore documents

This study phase provided an in-depth examination of Singaporean documents to inform the study. Key findings from the document analysis identified the main driver for APN roles in Singapore, began to substantiate the events that took place in order for the APN concept to reach the policymaking agenda and identified key stakeholders who were influential in policy decisions. In addition, documents consistently recorded diverse attempts to define the APN role and its position in the healthcare workforce. Confusion and lack of role clarity surrounding the function and responsibilities of an APN emerged as a persistent theme in Singapore publications.

Reaching the Policy Agenda

Findings demonstrated that APN development in Singapore was set in motion by individual views and opinions of key government decision makers along with pivotal leaders from nursing and medicine. Informal and formal discussions from 1997 to 2001 among these strategic groups led to momentum significant enough to catch the attention of key policymakers. The consensus of these initial discussions supported a key motivator for the APN role: professional development and an enhanced status of nursing. Observation of and experience with the success of these nursing roles in other countries further convinced decision makers that this concept could be transferred to Singapore. The amount of interest and support ultimately at the highest levels of authority as evidenced in the Singapore documents was impressive. This is consistent with one principle in the conceptual policy framework developed by Hall, Land, Parker and Webb (1975) that looks at a system to help explain why governments might act on any particular issue or give precedence to a specific

topic. Using the concepts of legitimacy, feasibility and support Hall et al propose that only when an issue is high in relation to all three concepts does it appear on the agenda for decision making and policy development. This systems perspective considers issues in terms of the needs of a system that is seeking to address or permit change looking at the policy process through the eyes of the policymaker. Hall et al propose that issues reach the attention of decision makers when the issue is seen as a legitimate area of policy concern where policymakers have the right or the authority to intervene. The healthcare of its citizens, the provision of quality healthcare services and the allocation of competent healthcare providers were verified as legitimate concerns for the Singapore government. Hall et al (1975) propose that the identification of a legitimate concern places the topic within the jurisdiction of policymakers for healthcare decisions such as standards and regulations. Most Singapore documents suggested that the issues associated with the promotion of APN roles had reached the attention of key policymakers, especially within the Ministry of Health, and the topic was considered to fall under their authority. Further discussion of the principles of the Hall et al framework as it relates to study findings can be found in subsection 9.2.2.

Role Definition and Change

Singapore documents consistently demonstrated that the strong vision for a new advanced nursing role was aligned with aspirations for an enhanced status for nursing in the country. Rhetoric noted in the Singapore documents repeatedly referred to a desire for a 'new level of nurse' and the introduction of APNs was frequently labelled as an 'exciting milestone for nursing that would elevate nursing standards to new professional heights' (Ang, 2002; Arthur, 2007; Kannusamy, 2005; Kannusamy, 2007; Noey, 2009). The support displayed in these documents was commendable while at the same time portrayed confusion in attempts by key decision makers and healthcare professionals to reach clarity on the APN role and its nature of practice. The review of documents found one longitudinal study conducted of the first cohort of Singapore APNs (N=15) identified lack of role clarity and issues of role conflict as a significant problem when proceeding to implement the role (Kannusamy, 2006). Findings from this study and published narratives of APNs in practice settings in Singapore (Kong, 2007; Lee, 2009) collectively presented ambiguous role expectations, confusion regarding scopes of practice and tension with other healthcare professionals as obstacles to implementation. In a survey done in Singapore (MOH, 2009) of 483 physicians with experience or exposure to APNs one of the key findings was a need to clarify APN roles and identify the niche for this role in healthcare. A key theme in the international literature (see Chapter 2) also found that role confusion and alterations in

healthcare provision associated with the introduction of this nursing role was a common issue when integrating APNs into the healthcare workforce. An indepth discussion of the issues and impact related to lack of role clarity and associated change can be found in subsequent subsections of this chapter.

Published documents demonstrated that pivotal stakeholders in Singapore from the start saw the APN role as a radical change and mind shift from the status quo of what was viewed as familiar in healthcare provision and expected of nursing (Ang, 2002; O'Brien & Arthur, 2007). Even though various levels of decision makers appeared to embrace the APN concept documents indicate they did not fully understand the role for which they were developing policy. Documents repeatedly suggested that the Ministry of Health must provide directives for such an innovation while also recognising that someone on the ground has to undertake a gatekeeper role in practice regulation, curricula development and quality control. Although findings from the document analysis acknowledge the impending changes in healthcare provision with the addition of APNs there was no clear indication as to what that might mean in actual practice.

Elements of change dominate any initiative that includes a variation as significant as the launch of advanced practice nursing. Consideration of change theory as it relates to system changes warrants discussion given that change was a predominant theme that arose in the document analysis. Models for change developed by Lewin (1947) and Schein (1999) note the necessity for those involved in the change to become motivated to make a change and then move past associated anxieties for change to progress. The proposal is that planned change could reduce social conflict. In the first step of the 3-Step Model for Change Lewin and Schein propose that stability and balance (what is familiar) need to be destabilised (unfrozen so to speak) before old behaviour can be discarded and new behaviours successfully adopted. Evidence of unease and anxiety with the new concept of APNs emerged persistently in Singapore documents as policymakers, nursing leaders and medical staff focused on the introduction of APNs. A new concept of nursing was being proposed and traditional views of a nurse as well as interaction with this healthcare professional faced a dramatic change in behaviour. Departure from prior held views of nursing would be required at multiple levels for the concept of APN to progress. Discussion of change and the 3-Step Model for Change is discussed further in subsequent subsections of this chapter.

Findings from the Phase One document analysis provided background information on events and decisions associated with policy and APN development in Singapore.

Information from Phase One was also drawn upon to validate events and relevant dates. In

addition, documents identified some of the key decision makers and managers that were recruited for interviews in Phases Two and Three as well as possible APN participants for recruitment in Phase Four. Findings from Phase Two are discussed next.

9.2.3 Phase Two: Interviews of government officials, university dignitaries and academic staff

The aims of this phase were to gain the perspectives of key decision makers on the processes, facilitators and challenges of policy development associated with APNs and to collect contextual information regarding the networks of communication, processes of information exchange and linkages among decision makers crafting policy. Findings from Phase One informed this phase by providing information on the Singapore healthcare environment and on potential candidates for interviews. The twelve participants for this phase included a diverse range of key stakeholders from government, nursing, medicine and the academic community who had direct involvement and knowledge of factors influencing APN policy and development (see Chapter 6 – section 6.2 for the policy development timeline). Findings from this phase emphasised the importance of key decision makers in critical decisions and subsequent actions that occurred in policy development. In addition and key to the policy process were the networks of communication, processes of information exchange and key linkages among the pivotal policymakers. Findings further revealed that pessimistic key stakeholders at the top level blocked policy discussion initially but that a change in appointments of key people facilitated debate leading to transformed momentum and inspiration for the APN initiative. The significance of influential individuals in positions of authority and their spheres of influence were found to be unequivocal in driving the policy process forward. However, in spite of positive momentum to develop APN policy lack of role clarity continued to plague the decision making processes with a resultant disconnect as evidenced in the findings from Phases Three and Four.

Influential decision makers

The legitimacy and feasibility of taking up a policy issue are not independent of **who** is deciding on an issues likelihood of succeeding (Hall et al, 1975). The notion of decision makers as influential 'actors' is similar to the identification of 'partisan participants' by Lindblom (1959) and 'policy entrepreneurs' by Kingdon (1984). Beliefs, personal interests or agendas, biases and differences in positions of authority affect the assumptions that are inferred regarding the viability of an initiative. Policy makers are likely to assess issues and events depending on the sets of restrictions or freedoms that they personally face (Hall et al, 1975). Hall et al propose that not only must policymakers view an issue as legitimate it

must also be seen as feasible or achievable for implementation. The potential for implementation or feasibility can be defined by prevailing technical and theoretical knowledge, finances, skilled personnel, capability of organisational structures and necessary infrastructure (Hall et al, 1975).

In the process of policy development in Singapore decisions were made that hinged on the level of authority of key decision makers and their perspectives. Of significance in the findings from Phase Two is the attention by a small number of key people in positions of authority who influenced all critical decisions and sustained the impetus for policy decisions supportive of the scheme. Once key stakeholders and healthcare leaders envisaged the APN concept as appropriate for them to consider and concurred that the idea was achievable policy decisions proceeded at the highest level to support the development of this new level of nurse. Timing and catching the attention of key individuals was pivotal to making progress. This is consistent with the principles of legitimacy and feasibility as proposed by the Hall et al (1975) framework.

The Ministry of Health and its respective agencies were viewed with respect and deference was paid to the Minister of Health as the highest level of authority for healthcare decisions in the country. As a result there were high expectations as to what the 'Ministry' could accomplish in the arena of policy. Following years of discouraging news within the Ministry of Health new appointments spearheaded change. A new Minister of Health announced the formation of a clinical career ladder for nursing. The new Director of Medical Services pressured the Minister of Health take up the APN concept and negotiated with the National University of Singapore dignitaries to launch a graduate level APN programme. The new Chief Nursing Officer championed the advanced potential for nursing. Pivotal individuals moved into action when the timing was optimal to make use of their influence.

Hall et al (1975) propose that the criterion of support for an idea represents a permanent and initial challenge and can be accomplished by means of a technique of gathering support for a concept by promoting a belief in the existence of a common interest. This third principle of the Hall et al framework was evident in Singapore. Findings indicated that the intent of all participants in this phase of the study was to provide the needed decisions and processes to lay the foundation for the introduction, development and implementation of an enhanced nursing role in Singapore. Key policymakers made various decisions introducing the launching of the APN initiative, however, individuals held authority in dissimilar ways to effect decisions and action. The dominance of government officials and medical leaders was evident in their capacity to facilitate or block key decisions while nursing leaders participated in visionary discussions and were instrumental in deployment of information for

role implementation. Even though nursing leaders welcomed the opportunity to enhance professional nursing in Singapore findings revealed that they were mainly viewed as in auxiliary roles in the policy process.

Walt (1994) suggests that this type of policy development represents an elitist view of policy process, however, review of Singapore documents and findings from this research demonstrate that this was the essential and initial process of decision making for APN policy development. Study findings demonstrated the approach to policy decisions and implementation in Singapore was consistent with the top down approach described by Walt (1994) in an examination of process and power. In addition, with this approach there is an assumption that once policy is made at the national level implementation is largely a technical process conducted by sub governmental entities or institutions with little to no interaction with those on the ground. Consistent with this description, there was no evidence of interaction with personnel on the ground who would actually implement policy in Singapore. It could be said that looking at policy development with an elitist view of how things happen overstates the capacity of key policymakers to yield power; however, findings consistently demonstrated that this was the situation in Singapore.

The Hall et al (1975) framework suggests a compromise theory to this elitist view of power. This framework proposes that decisions are indeed made by key decision makers within an elitist framework while also suggesting that most domestic policies on issues such as healthcare might be influenced by different groups at different stages of the policy process and that this could be possible if the government policymakers perceive the sources of influence as legitimate. Based on study findings and theory as proposed by Hall et al it could be argued that some of the dissension that occurred with implementation of APN policy in Singapore could have been decreased if interest groups on the ground had provided input or were able to influence the policy decision making processes. The Hall et al (1975) framework is viewed as a straight forward approach to policy development, however, it is limited in that it mainly addresses agenda setting and mentions but does not extend discussion to subsequent policy implementation. Issues arising outside of the realm of key decision makers in the implementation processes are discussed further in subsequent subsections of this chapter.

Policy process: networks and spheres of influence

Findings demonstrated not only the importance of pivotal persons in positions of authority but also their ability to network and communicate with other decision makers. Key decision makers at the top required additional key people to assemble the necessary support and facilitate continued progress. In the top down hierarchical structure representative of

Singapore once the concept of APNs caught the attention at the top it was brought to the attention of additional policymakers and ensured their cooperation. According to Walt (1994) top-down approaches of policymaking are perceived as managerial and administrative with implementation of policy that is made at the national level as largely a technical process conducted by sub governmental entities with limited interaction from those in less authoritative positions. Findings demonstrated that in Singapore people in pivotal positions of power with influential links to other key decision makers were essential in providing the necessary stimulus to propel the APN initiative to the launching point. These linkages or spheres of influence formed the basis of policy development. Even though the APN concept was greeted with enthusiasm among multiple levels of authority it was also revealed that the processes were complex, required patience and perseverance by key leadership and their communication networks. This phase of interviews provided a rich and indepth description of the policy making processes that occurred in Singapore. In the previous subsection pivotal decision makers were identified and included not only the Minister of Health, Director of Medical Services and Chief Nursing Officer but also the Dean of the Medical School. Findings indicated that the spheres of influence linked to these key individuals were essential, for example, in launching the APN graduate level programme at the National University of Singapore and in negotiating regulations and negotiating standards through the Singapore Nursing Board.

In addressing policy processes Hall et al (1975) point out that policy arises neither from the building of consensus nor representation of conflict and proposed that we must look for both to try to determine the affect each has in the way policy is developed. There are a variety of approaches to viewing policy networks, spheres of influence and influential lines of communication in policy development. A policy network could include the idea of a policy community that shares values and collective goals (Marsh & Rhodes, 1992; Putnam, 1995). It could be argued that this view excludes those with alternative perspectives or different policy agendas. In contrast, a view proposed by Coleman and Skogstad (1990) is that a policy network as a concept describes characteristics of relationships among a particular set of individuals that form around an issue of importance to policy development. This view focuses on the relationships among the actors involved in the policy making process rather than the values or beliefs of the decision makers. The Coleman and Skogstad view is consistent with the findings of this research in demonstrating the spheres of influence that pivotal players had in developing policy. Policymakers from diverse settings and their communication networks were focused on issues associated with the APN role. In reflecting on the Hall et al systems approach as introduced in subsection 9.2.1 key

decision makers concurred that the topic of an APN presence in the provision of healthcare was a legitimate concern and came under their jurisdiction even though there was dissension in defining the role. Findings from Phase Two established that all participants at this level of decision making agreed that APN roles were seen as a feasible component of the healthcare system in Singapore. Once the policy process was set in motion there was no evidence found that APN policies were unpopular within the ranks of key decision makers. Based on the premises of legitimacy, feasibility and support proposed by the Hall et al (1975) the likelihood of achieving success for the APN initiative in Singapore was high and based on this assessment a positive outcome seemed likely.

In selecting the Hall et al framework to understand the policy processes in Singapore and as a foundation for the Conceptual Policy Framework that was developed as a result of this study it is understood that no single approach is entirely satisfactory in its own right and are the subject of much debate. Walt (1994) suggests that *'society-centred approaches grant little initiative to government policy makers, while, in contrast, state centred approaches tend to reduce policy making to government-controlled interaction, in which external forces play little part* (p. 4). It is recognised that one could question if the development of policy is a rational process and if any one framework encompasses the reality of policy decisions. In comparing the policy frameworks of Kingdon's (1984) agenda setting through a three-stream approach, Lindbloom's (1979) incrementalist model describing how policy is made through incremental steps against the Hall et al (1975) principles of determining legitimacy, feasibility and support it was thought that the Hall et al framework provided a straight forward model for analysing policy development and decision making as it was taken up in Singapore. The Hall et al principles emphasise the significance of gaining the attention of government authorities. In countries or contexts where the decision making process is less reliant on government control and more responsive to public influence a model such as Kingdon's (1984) three stream model of problems, solutions and participants could be more applicable. The Kingdon model proposes three elements that coalesce toward a window of opportunity in the policy process; however, it does not describe the policy process beyond the 'window of opportunity'. In addition, study findings reveal that some issues demand bold decisions, a premise consistent with the Hall et al (1975) framework.

Lack of role clarity and change

Consistent with themes extracted from the international literature, findings from the document analysis and key findings from this phase of the study role ambiguity and lack of role clarity cast a shadow over the policy development processes. Findings demonstrated that leaders from the beginning of policy development and at the highest level did not have

a clear definition and idea of the scope of practice for APNs even though in principle they supported the concept. Some participants felt that the policy approach was a 'bit too casual' and tensions emerged early on within the ranks of key decision makers between the medical model of care versus the nursing model of care as it related to the APN role. In spite of this apprehension nursing and medical leaders speculated that APNs could fill gaps in care, enhance quality of care and free up doctors to manage complex cases and do research.

In a comprehensive study conducted throughout Canada (Donald et al, 2010) where APN roles have been in place since the 1960s lack of role clarity continued to pose barriers to the integration of APN roles. In a systematic review identifying barriers to APN role development Lloyd Jones (2005) identified role ambiguity as the most important factor influencing role implementation. The ambiguity was thought to be related to confusion among stakeholders about the objectives, scope of practice, responsibilities and anticipated outcomes of the role. Bryant-Lukosius et al (2004) found that when there was variable stakeholder awareness and competing stakeholder expectations this contributed to lack of role clarity. Findings from Phase Two when linked to findings from Phase Three demonstrated this variability of perspectives at the policy level versus managers on the ground where actual implementation takes place. Similarly findings were evidenced in Phase Four when APNs were implementing policy into practice. The discussion regarding role ambiguity and lack of role clarity continues in subsequent subsections with the presentation of key findings from Phases Three and Four. The topic of change has been mentioned as it emerged initially in the document analysis and will be taken up again in the subsequent discussion of key findings relevant to role implementation, role ambiguity and lack of role clarity.

In summary, a thought-provoking picture of the APN initiative in Singapore emerged when comparing key findings from Phases One and Two. Champions of advanced nursing roles were persistent in their views that APNs could contribute positively to healthcare in Singapore. This collective perspective formed the foundation of support for launching the APN initiative. Key stakeholders voiced minimal opposition to a scheme that was based on the betterment of the nursing profession. However, no evidence was found that an assessment of healthcare needs in Singapore had actually been done and it was not clear that there was a need for an additional tier of healthcare professionals. This finding is in contrast to the international literature that identified the main drivers for APNs as a pressing need for healthcare service provision commonly associated with a shortage of medical staff (see Chapter 2).

Regardless of lack of a well-defined need for APN services policy development proceeded at the highest level to create standards, regulations and a clinical career track for APNs. The concept had achieved a view of legitimacy and feasibility by key policymakers albeit with limited initial identification of support for financial and human resources. Findings demonstrated that the confluence of events was a result of decisive decision makers and their decision making networks as well as an increasingly receptive environment that considered the proposal for APN roles as achievable. The principles of legitimacy, feasibility and support proposed by Hall et al (1975) form the theoretical basis for the analysis of APN policy development in Singapore and are used as a cornerstone for the conceptual policy framework that resulted from this research (see Figure 9.1).

9.2.4 Phase Three: Interviews of nursing managers, medical directors and medical staff

The aims of this phase of the study were to capture the understanding of managers, medical directors and medical consultants on policies associated with APN development and to understand their perspective on factors influencing role implementation. Of the eleven participants all had direct knowledge and experience with APNs and/or APN Interns. Knowledge of the Singapore setting gained in Phases One and Two aided in focusing on issues that arose in policy development that ultimately affected implementation issues for managers and other healthcare professionals. Findings from Phases One and Two also provided identification of potential participants for Phase Three. Now that key findings relevant to policy decisions have been discussed in subsection 9.2.2 this subsection begins to address key findings associated with role implementation including the links between intent of policy and realisation in practice. This phase of the research revealed that the key issues that impacted implementation were limited knowledge of policy directives, lack of a coordinated plan to integrate APNs into the healthcare workforce, lack of role clarity and the inability to carry out the clinical career path as intended by the policy directive from the Minister of Health.

Findings from this phase continued to demonstrate diverse attempts to define the APN role and its position in the healthcare workforce as managers and consultants faced responsibilities for implementation of the role. Confusion and lack of role clarity surrounding the function and responsibilities of an APN emerged immediately as new programme graduates returned to work settings to practice in a different nursing role based on the theory learned in their graduate level programme. Policies regulating APNs were announced following establishment of the APN programme thus new APNs, managers and

medical directors were in a state of uncertainty and lacked guidance for implementation. Although policies, when announced in 2006, defined standards and regulations for APNs the implementation processes lacked coordination and uniformity. Findings indicated managers did not understand how to differentiate this new nurse from other nursing staff and at times the APN returned to the same duties and responsibilities held prior to completing the master's programme. In the initial stages medical consultants reported a curiosity about the APN and voiced little understanding of the role other than as a higher level assistant to their medical duties. However, managers and consultants were mandated to integrate the APN role thus in the process pragmatically developed their own interpretations of what this person should do.

Policy Directives

Most participants in Phase Three portrayed an aura of mystery surrounding policy decisions and associated directives intended to sanction APN roles. Findings from this phase of the study indicated that managers of the healthcare systems who were expected to develop APNs and add them to the cadre of healthcare professionals had little or no knowledge of policies that were intended to guide and standardise role implementation. Medical consultants voiced the opinion that policies could be developed or revised quite easily after APNs entered their practice settings. Directives and policies came from government authorities and the offices of the Ministry of Health, therefore, management felt obligated to carry out policies even when they were faced with lack of knowledge regarding APNs and the position they were intended to fill in various healthcare settings in Singapore. Although a select few were involved in early discussions of some version of a new nursing role in Singapore no evidence was found that any of the participants from Phase Three were active in the policymaking process.

In the theoretical construct of the Participatory Evidence-informed Patient-centred Process (PEPPA) framework for APN roles Bryant-Lukosius and DiCenso (2004) outline a nine-step process that utilises research methods to determine the need for, define the role of, promote implementation for and evaluate the outcomes of the APN role. Steps one to four focus on defining the population needs and determining unmet population needs while at the same time identifying key stakeholders to promote the concept. Steps five to six include defining the APN role and this new model of care, defining implementation strategies and initiating role implementation. Steps eight and nine stipulate evaluation of the role and long term monitoring. A proposed benefit of this framework is the extent of decision maker and stakeholder involvement at multiple levels to facilitate policy directives and implementation with a focus on role development versus policy development. This process has been shown

in Canada to facilitate the development of well-defined roles and to promote understanding, acceptance and support for the APN (Bakker et al, 2010; McAiney et al, 2008; McNamara et al, 2009), however, it does not define or provide details of policymaking processes. In relating this framework to study findings a few components of the PEPPA framework were evidenced in Singapore. Although key stakeholders were identified early on and the motivation for APNs was identified as an aspiration professional nursing development there was no evidence that there were unmet needs for healthcare or an identified population that required a new model of care in the country. Findings suggested that attempts were made to define an APN based on international literature; however, it was unclear how the APN would participate in the healthcare workforce and findings did not reveal a strategic plan for implementation. At the time of completion of the study there was discussion of a formal process to evaluate the role and the new model of care but it was not yet in place and there was no evidence of long-term monitoring of the APN role.

Key to discussion in this thesis and the development of a Conceptual Policy Framework is a view that enhanced involvement of stakeholders on the ground could enhance development of policy and strategies that might ease APN implementation. Work done in development of the PEPPA framework and additional research by DiCenso and Bryant-Lukosius (2010) substantiate this view. Most glaring in the Singapore context is a key finding that the clinical career track that was intended to retain clinical nurses and promote APNs was blocked from the beginning by nursing managers who were not involved in planning of this policy, did not understand the APN role but had the responsibility for implementation and therefore adapted the clinical career path to require a management component. As a result APNs were not promoted as expected contributing to disappointment and conflict in role implementation. In addition, due a limited understanding of APN national policy institutions developed their own policies leading to inconsistencies across the country. Further discussion of this issue is taken up in subsection 9.2.5 with discussion of key findings from Phase Four.

Lack of Role Clarity

Even though nursing leaders and some medical staff were enthusiastic about the enhanced and expanded nursing role at the same time participants from Phase Three admitted that they were 'clueless' and inexperienced as to how best support the incoming APNs along with the other nursing staff under their supervision. All participants in this phase of the study phase indicated they had no clear idea of what an APN was, what role the APN should play and what an APN should do in providing healthcare services. As a result there was negotiation and adaptation on the ground of the APN position in care provision based on

multiple interpretations by managers and other healthcare professionals. Medical consultants presented perspectives that the new nursing roles could be of value especially if their presence lightened their load or provided assistance to physician duties. In addition, findings indicated medical leaders and medical consultants were unsure of the division of roles between medicine and APNs as well as between APNs and other nurses. The role ambiguity and lack of differentiation of duties between APNs and other nurses as well as APNs and consultants led to uncertainty and resistance by other healthcare professionals who were expected to collaborate with these new nurses.

The significance of role ambiguity has been introduced in subsection 9.2.1 and was discussed further in 9.2.2. This finding gained significance as evidenced in Phase Three when managers were faced with role implementation. Lacking a clear view of what to do with an APN in actual practice the implementation processes were found to be disjointed and variable. Donald et al (2010) found that when the APN role means different things to different people and there is a lack of consensus about role expectations role conflict and role overload can occur. This study conducted in Canada made an association between lack of role clarity with lack of planning for the role. DiCenso et al (2003) proposed that purposeful matching of the skill and expertise of an APN with the practice setting expectations for the role contributes to role clarity. The necessity to clearly define APN practice was a key theme in the international literature and evidenced as an impediment to efficient implementation in Phases Three and Four of the research. Role clarity or in contrast role ambiguity was a key study finding demonstrated to be essential for APN development and fundamental to policy development. Therefore, clearly defining the role and its position in healthcare forms another cornerstone of the Conceptual Policy Framework.

In summary, findings from Phase Three highlighted the complexities of APN implementation and identified a disconnect between the intent of policy and realisation in actual practice. From the discussion so far, it is clear that policy processes are dynamic and unpredictable with various individuals, groups and networks influencing the crafting of policy. Walt (1994) suggests that theories and frameworks provide insight in policymaking with little mention of the actual implementation of policy and asks the question 'Can we assume that once a policy decision has been made, it will be implemented as intended?' (p.153). The intent of policy may never be put into practice or may be carried out in ways that misrepresent the original intent of the policymakers. Policymakers often face difficulties in clearly defining or understanding the topic and associated issues and may not have the time, imagination or information to promote the comprehensive assessment of the drawbacks and benefits of a

plan (Walt, 1994). The complexity of undertaking the policy process is immense and unintended consequences in implementation cannot always be anticipated (Sabatier, 2007, Walt, 1994). Findings confirm that this was the situation in Singapore as various decision makers influenced policy with limited knowledge of this new nursing. Moreover, findings illustrated that the complex nature of the issues surrounding the APN initiative resulted in various role interpretations as managers developed policies to best suit the culture and environment of their own institutions. In light of the state of confusion revealed in this phase it appears that this gave rise to issues that were perhaps never envisioned by those who desired to give strength to the APN initiative through legislation and policy. In discussing policy implementation Walt (1994) proposed that policy is most often focused on the creation of policy and suggests that chance or wise managers carry out policy changes when there is a lack of a specific strategy for implementation. As managers and medical consultants presented a view that there was no perceived coordinated plan for APN implementation this resulted in some deviations from the national regulations. In one hospital the nursing manager choose to use the title 'nurse practitioner' rather than the protected and regulated title of 'advanced practice nurse' because it was thought other healthcare professionals would be more familiar with this title as used in the USA. Another hospital nursing manager and medical director facilitated crafting of a 'collaborative practice' agreement between APNs and doctors to clarify the ambiguity between these two roles and to ease implementation. A recommendation by Walt (1994) and consistent with findings from this study is that policymakers should ideally be involved in investigation of policy processes that include a strategy for implementation. This issue is discussed later in this chapter and is considered as an important component in the Conceptual Policy Framework based on findings of this research.

9.2.5 Phase Four: Interviews and participant observation of APNs and APN Interns

The aims of this phase of interviews and participant observation were conducted with the intent to capture a perspective from APNs and APN Interns of the lived experience and realities of role development in Singapore. The aim was to gain an understanding of the issues they faced in the realisation of the intent of policy to implementation in practice. The fifteen participants for this phase of the study represented a diverse spectrum of specialties, practice settings and experience in the role (see Chapter 4: Fieldwork). A compilation of findings from Phases One, Two, and Three informed this phase by presenting a contextual background for the Singapore APN initiative, identified the intent of policymakers as they developed policy envisaged to support the role and presented key issues in role

implementation from the point of view of managers and medical consultants. Findings presented in subsection 9.2.3 highlighted the complex nature of policy and role implementation from the perspective of healthcare managers and consultant. This subsection continues to link implementation processes to the actual views and experiences of the APNs themselves as they began to carve out a new nursing role in Singapore.

Knowledge of APN policy and implementation processes

Policy decisions by policymakers were intended to guide the launching of the APN initiative and support APN practice yet findings revealed that most APNs had limited knowledge of these policies and were not necessarily interested in gaining increased information on the details. There was an increased awareness of policy that determined educational requirements, role preparation and licensure to practice, however, APN participants did not indicate a need to be involved in decision making processes. Although enthusiastic about the idea of being an APN study participants provided imprecise views on the need for such a role. All APNs concurred that the concept would contribute to an enhanced image for nursing. There was an assumption that the Ministry of Health had assessed the situation and had developed a coordinated plan but evidence from Phases Two and Three revealed that there was no strategic or synchronised plan for policy or APN implementation.

Findings indicate that most APNs were hesitant and confused when considering what their role should have been or should be in the policy process. Dissimilar views emerged during interviews as to who had the final authority to define APN policies while during participant observation it was clear that on a day-to-day basis all APNs followed the policies developed by their employing institution in addition to following personal interpretations for the role. Even when the institution policy deviated from national policy findings indicated the APNs felt obligated to follow employer guidelines.

Findings demonstrated that APNs viewed the process of role implementation as complex, complicated and fraught with challenges. The inability of APNs to progress as anticipated along the clinical career track was cited by all participants as a major disappointment in realisation of the role and the intent of policy to motivate clinical nurses. What appears to be pivotal in realising this new nursing role is the passion and motivation of a select group of nurses who wanted to remain in clinical practice at an advanced level above all obstacles. Not only were they able to clearly define barriers and challenges to policy and role implementation but they described approaches to obstacles with a strategic intensity.

Role Clarity and Role Ambiguity

Findings indicated that physicians for the most part played a supportive role, often as medical champions and preceptors for the APNs while other nurses and at times physicians

on the ground contributed to role strain as APNs proceeded to execute their roles in settings throughout Singapore. Graduates of the APN programme had gained theoretical knowledge of their expected role with no actual clinical experience. All in all, however, this familiarity surpassed the understanding nursing managers, medical directors and other healthcare professionals had of the role especially in the initial stages of development. Role ambiguity and confusion contributed to tension in the workforce as APNs and managers debated whether this new nursing role was based on a medical model or nursing model of care. Lack of differentiation among nursing roles added to the uncertainty and APNs voiced a feeling of isolation. All APN participants concurred that other health professionals were not aware of their competencies and scope of practice. Inadequate awareness of the scope of an APN role can influence their acceptance and ultimately the success of role integration (Lloyd Jones, 2005; McNamara et al, 2009). In addition, Lloyd Jones (2005) noted that role ambiguity may trigger negative attitudes toward advanced nursing roles resulting in stress and unproductive behaviour such as communication failure. Donald et al (2010) provide a contrast to the role clarity debate and highlight that role overlap with other professionals such as physicians is not new to healthcare nor is the need for clear communication and role delineation. However, insufficient understanding of the scope of an APN role and how it differentiates from the practice of other healthcare professionals impeded role integration. In addition, resultant negative attitudes toward APNs not only impacted ease of role implementation but also resulted in various conflictual interactions with nurses as well as physicians. APNs reported that they felt cut off from other healthcare professionals as they proceeded to implement the role and appealed for a coordinated and strategic plan to facilitate implementation.

While researchers and academics debate the significance of role ambiguity and lack of role clarity study findings demonstrated that even when successfully working to carry out the APN role all Phase Four participants identified role strain in transiting to the new nursing role. In describing a theoretical perspective to APN role development Joel (2013) describes two diametrically opposed perspectives in the behavioural sciences that provide context relevant to APN role development. The structure-functionalist theory subjugates individual roles to the social order and social order in a given society validates the roles and associated behaviours. In consideration of the APN role as it relates to this theory one must wonder if APNs can ultimately establish personally preferred values, attitudes and a new role or employment situation. In investigating this theory that there are limits on defining role behaviours noting that policies and documentation hamper clarity in role definition. Joel also describes the symbolic-interactionist view that in contrast to the structure-functionalist

theory sees role identity as inductive and complex. This view sees a role as an adaptation to a social environment based on the interaction of individuals. Both theories contribute components to APN role development in establishing new behaviour but not necessarily to establishing role clarity for the individual APN on the ground. Socialisation or transiting into an advanced practice role is a major responsibility. Given the significance of the changes stress and strain may be considered a natural component within an environment of such significant role change. This observation underpins the obligation for systems integrating APNs to provide socialisation experiences to support adaptive processes of role change. It is envisaged that an ideal policy framework would contribute to this by defining the role, the scope of practice for an APN and its expected position in the healthcare workforce.

Elements of Change

In contemporary clinical environments change is a constant and efforts are commonly focused in the areas of diffusion of innovation, clinical behaviour change and patient behaviour change (Spross & Hanson, 2009). The reality is that change is disconcerting and not always welcome. In Singapore changes were multifaceted and multi-layered in the development of policy for an innovative and new nursing role. In addition, behaviour change was required of healthcare professionals collaborating with APNs and patients were presented with new choices in provision of healthcare services. It could be argued that given the dynamics and significance integrating APNs into the healthcare workforce dimensions of change should have been anticipated.

Earlier discussion referred to one step in the 3-Step Model for Change proposed by first Lewin (1947) and then Schein (1999). Although the 3-Step Model for Change is not new it has relevance to the events that took place in Singapore. It has already been mentioned that old behaviours need to be discarded before new behaviours can be successfully adopted. Findings demonstrated the possibility of shedding old behaviours and taking on a new attitude toward APNs was illustrated by physicians in Singapore who when first hearing of the role rejected it. However, after lecturing, becoming preceptors and working with them in clinical settings key physicians became champions and advocates for the role. In addition, physicians became promoters for recruiting increasing numbers of APNs to the healthcare workforce. This is consistent with what Lewin and Schein identify as moving to a new state or changing what needs to be changed and is part of the process of change that facilitates progress to the next step. Step 3 in this model requires stabilisation to ensure the behaviours and changes do not regress. Involvement and acceptance of this level of change by organisational structure is essential for the change to stabilise. At the completion of the study in 2011 there was growing evidence that changes associated with inclusion of

APNs were becoming sustainable, recognised components of healthcare delivery in Singapore. Standards and regulations for APN practice were in place and being implemented. The education programme had stabilised, intakes of students had grown and graduates were proceeding to clinical internships. Employing institutions were less resistant to inclusion of the APN.

There have been criticisms of the Lewin 3-Step Model that it is too simple and unidimensional; only pertinent to incremental and small change projects; ignores power and politics as an influence and advocates for a top-down management approach (Burns, 2004). Burns refutes these criticisms concluding that even though newer theories on change have emerged over the years, the Lewin model is still very relevant to analysing change. Based on the research findings in Singapore it is my view that the concepts identified in the 3-Step Model are relevant to the changes that occurred in the country with the APN initiative. Step One in the 3-Step Model (unfreezing or becoming motivated to change) is consistent with the significance of the changes that took place with the launching of APN roles following years of discussion considering such a change in nursing. The 'profound psychological dynamic process' described by Schein (1996) was evidenced at multiple levels in the initial stages of APN development but was most poignantly described in Phases Three (managers and medical consultants) and Four (APNs) of the study. Step Two in the 3-Step Model (moving to a new state or changing what needs to be changed) substantiates the complexity of the influences in place linked to viable choices for including APNs in the Singaporean healthcare workforce. Managers and medical consultants, although sceptical at the start, eventually identified what needed to be changed to utilise APNs to their full potential. Tailored strategies through trial and error learning (Schein, 1996) took place throughout the various settings in the Singapore healthcare system. Early indications of Step 3 in the 3-Step Model (refreezing or making the change permanent) were evidenced in Singapore but the initiative was in early stages of development thus it could not be said at the time of completion of the study that the changes would be considered permanent. Findings did reveal that there were emerging changes in organisational culture, positive attitudes of other professionals toward APNs and early acceptance by the public of this new nursing role. Further research would be needed to determine if the new behaviours and practices become habitual.

9.3 Study limitations

It should be noted that the insights gained through this research are the result of a specific period of time in the early stages of APN development in Singapore. There was a limited

opportunity to observe and learn about the experiences of a recognised role in action. Interviews and participant observation with APNs focused a great deal on the struggles of implementing a new nursing role with limited certainty of the establishment and sustainability of the role in practice settings. As a result, the findings need to be considered within the context of the changes taking place at the time that the research was carried out. In addition, experiences of the APNs and perceptions of the policymakers may change over time. Reference has been made to Singapore as a country in the early stages of APN development as a consequence of directives from the Minister of Health. Features of these initial directives were evident in the findings of the ethnography and reflect the contextually and time sensitive nature of a great deal of the policy in this study. Nevertheless, it is possible to draw conclusions that are not restricted to a particular setting or time period but which raise issues of concern to current knowledge, policy and advanced practice nursing. Conduct of the study relied primarily on in-depth interviews with limited participant observation. Interviews alone were conducted in Phase Two (key government officials, policymakers and university dignitaries) and Phase Three (nursing managers, medical directors and medical consultants) in order to gain knowledge and perspective of policy decisions and actions that influenced APN development. Information obtained from a review of documents informed the study and was compared to key findings from these interviews. Phase Four consisted of both in-depth interviews and participant observation with APNs and APN Interns to gain their perspective of role development and implementation. The use of interviews and observation of APNs in clinical practice provided me the opportunity to compare what I observed in practice with what they related to me in conversation. The reliance on in-depth interviews in the earlier phases of the study led to a dependence not only on my interpretation of the interviews but also on participants' ability to accurately portray circumstances they were acquainted with. Where interviews were the only source of information the events as described might have been inconsistent with reality. Assumptions based on analysis of interviews could be challenged by additional sources of data. Participant observation throughout all phases of the study could have strengthened the connection between what the participants recounted and what actually occurred. Although this is considered a limitation of the study as carried out, the sensitive nature of the positions of participants in Phases Two and Three did not lend itself to participant observation. In addition, I would not have been able to replay the historical decisions and actions that took place in the beginning stages of the APN initiative. A limitation to any qualitative and ethnographic research is the issue of establishing the degree to which the findings are determined by the participants along with their context and

not the biases or perspectives of the researcher. In my attempt to ensure that the findings are accurate and provide clear evidence in support of the research aims Lincoln and Guba's (1985) model of trustworthiness was used to establish rigour (see Chapter 4 – Fieldwork for a more in-depth description of this model). Using the criteria of credibility, transferability, dependability and confirmability I employed techniques of participant checks of transcripts, triangulation of data sources, a self-critical reflexive analysis of methodology, an audit trail of the research process and discussion of findings with my supervisors. The criteria of the Lincoln and Guba model can be compared to the quantitative criteria of internal validity, external validity, reliability and objectivity (Krefting, 1991). As a qualitative researcher I was aware that a research account does no more than represent what is considered to be true at a particular point in time. Hammersley (1998) emphasised that the account ethnographers produce is simply one version of the world that is no more valid than any other. I was very cognisant of this view and that my orientation was shaped by my residency in Singapore. Hammersley & Atkinson (2007) refer to this influence as the values and interests that a country and its culture confer on the researcher.

As a five year resident of Singapore I was aware of my ability to assimilate lifestyle habits and attitudes of the country that were not grounded in my background as an American. In addition, the lens through which I viewed the study findings were influenced by an overlap of Asian and American experiences. From an American perspective the ground-breaking nature of the APN concept is appealing to me from the point of view of a culture that values innovation. Based on years of experience as a nurse practitioner in the USA, I had a perspective that the role had established value in provision of healthcare services. In contrast, my residence in Singapore and exposure to additional countries in Asia that were introducing APN roles offered me a different picture of the potential of this new nursing role. Innovative ideas within the Asian context are not necessarily valued and the kind of change associated with APNs could be overwhelming enough to immobilise progress. Core characteristics of the APN role that are embraced by the American interpretation of the role are substantial levels of autonomy and critical decision making. As noted by my experiences with APN students and APNs in practice in Singapore these behaviours were often avoided. Nursing in Singapore was very different from my American perspective and in many ways seemed extremely basic with nurses completely subject to physician directions. Education was mainly at the diploma level, usually in tertiary settings with little exposure to primary care. In addition, nursing education was based on the British system whereas the APN curriculum at the National University of Singapore was based on USA experiences and documents of advanced practice nursing. Bachelor's and graduate level

education was only accessible out of the country and mainly as an option for few nurses. As a researcher I constantly wondered how the nurses in Singapore were going to make sense of all this and make the leap from working in an Asian culture of healthcare to the APN role I had internalised as an American. The challenge that confronts other researchers is to provide other perspectives that may confirm, refute or redefine the insights and perceptions arising from this study.

9.4 A conceptual policy framework for Advanced Practice Nursing

In this thesis, through studying the development and implementation of APN roles in Singapore, I demonstrate that the policy process is the product of a system, influenced by and influencing the setting in which it operates. Optimally, the system receives information and responds with actions. Key decision makers in a system react to various issues, pressures or topics that reach the policy agenda. Actions are decisions to do or not to do something. Reactions and opinions influence the system and the nature of the discourse that continues the cycle of policy decisions (Birkland, 2005). In the case of the Singapore context the topic is advanced practice nursing and its associated issues.

A Conceptual Policy Framework for advanced practice nursing has been developed based on the findings from the study and informed by the concepts proposed by Hall et al (1975) on the policy process and principles by Walt (1994) that address policy implementation (see Figure 9.1). A key finding from Phase Two analysis is consistent with Hall et al principles that suggest that when a topic is identified as legitimate, feasible and has support the topic could reach the policymakers agenda and the policy process commences. Patience and optimal timing were required in Singapore with key blockages along the way that had to be overcome but the processes described in the thesis are consistent with key Hall et al principles. The identification of a key driver for APN roles together with the Hall et al principles provide one cornerstone for the framework. A second key finding throughout all phases of the study was lack of role clarity and role ambiguity for the APN thus the recommendation to define an APN and the anticipated scope of practice is recommended as a second cornerstone in the framework. The importance of this cornerstone and how it transpired in the Singapore context is discussed in a subsequent subsection. Theory from the Walt (1994) implementation framework describing principles of interaction and information dissemination associated with a bottom up approach by government and delegated agencies are represented as an ideal approach in the framework.

Visually when looking at the Conceptual Policy Framework the cornerstones form the basis for key stakeholders and their networks to begin to utilise collective data for jurisdictional

decisions in the policy process. Generated discussions and decisions including recognition of stakeholders' spheres of influence lead to action affecting the healthcare system. The keyhole image rests with policy implementation in the healthcare system facilitated by managers along with medical staff enabling the integration of APN healthcare services for the populations needing the care. In this ideal model bidirectional arrows represent optimal discussion, interaction and feedback among key stakeholders and those on the ground implementing the role.

The Conceptual Policy Framework (see Figure 9.1) is intended to assist those influencing APN initiatives as well as those implementing the role. It is recognised that the framework is an ideal comprehensive approach to considering policy and role development. A discussion of the conceptual policy framework and proposed critical points to take into consideration follows in subsection 9.4.2. A description illuminating how the Singapore case study fitted and where it did not fit in the ideal framework can be found in subsection 9.4.3 and is depicted in Figure 9.2.

9.4.1 Intended use

Advanced practice nursing roles have become a worldwide phenomenon. Effective implementation of these nursing roles requires a role transition from generalist nursing practice to advanced practice that includes advanced knowledge, skills and accountability in providing healthcare services. To enable a general nurse to progress to an advanced level of practice requires policy development to support the full potential of the role and legitimatise it to the public and other healthcare professionals. Inclusion of the APN as another healthcare professional offers complex challenges as healthcare systems address issues related to this dynamic change. Findings from findings from this research substantiated by a comprehensive Canadian study (DiCenso & Bryant – Lukosius, 2010), research by Gardner et al (2004) in Australia and analysis by Hamric (2009) in the USA suggest that a policy framework would facilitate the processes and decision making associated with policy development and APN implementation. The proposed conceptual policy framework is recommended for policymakers, academics, nurse leaders, medical directors and interested others in a position to inform, direct, and facilitate policy development to implementation for advanced practice nurses. With this focus in mind the framework demonstrates how multiple factors interact and influence APN development. The scope of the framework is intended to encourage the development of strategic thinking in order to promote a synchronised approach from intent of policy to implementation by identifying critical points to consider in the process. It is also envisaged that a

comprehensive and thought out plan could ease some of the angst and apprehension evidenced in the findings from this ethnography.

9.4.2 Critical points of the conceptual policy framework

The ideal conceptual policy framework (see Figure 9.1) is based on this research which included an international literature review. Key principles from the Hall et al (1975) policy framework, Walt's (1994) policy implementation framework and Lindblom's (1959) policy processes theories are included to provide a theoretical reference for framework development. Critical and pragmatic issues to take into account when considering or launching an APN initiative emerged from the creation of the framework and are listed below. International literature is cited where relevant to strengthen the premises of the framework. It is understood that the ideal processes may be impossible to follow as presented yet the framework provides a checklist of critical points to think through when determining the legitimacy and feasibility of the APN option for healthcare provision. More extensive discussion of each issue is provided in subsection 9.4.3.

A checklist of critical points to contemplate when considering APN development:

Policy development and the policy process

- Establish legitimacy of the APN concept;
- Determine the feasibility of an APN initiative. Is it achievable?
- Verify broad based support from both those in positions of authority as well as managers and healthcare professionals on the ground level;
- Has a need for APN services been assessed? What are the motivators and drivers for the APN role?
- Establish title protection;
- Define the role and anticipated scope of practice clearly;
- Identify pivotal decision makers and their spheres of influence;
- Identify measures needed to accomplish action for policy and implementation.

Service discussions for role implementation

- Include managers, medical directors, other nurses and ancillary staff in anticipatory and informative discussions;
- Develop clear role/job descriptions and scope of practice prior to implementation. Define reporting mechanisms and performance review;
- Identify reporting lines for the APN: nursing, medicine or both;

Establish infrastructure for collegial communication: APN councils, journal club, professional and interprofessional continuing education.

Define a plan for dissemination of information to healthcare professionals and the public.

Provide extensive and thorough distribution of information at the ground level;

Offer multiple and continuous opportunities for questions and discussion.

Evaluation and follow up is not just about performance review.

Promote and establish processes for managers to observe and evaluate the APN in actual practice in their clinic setting;

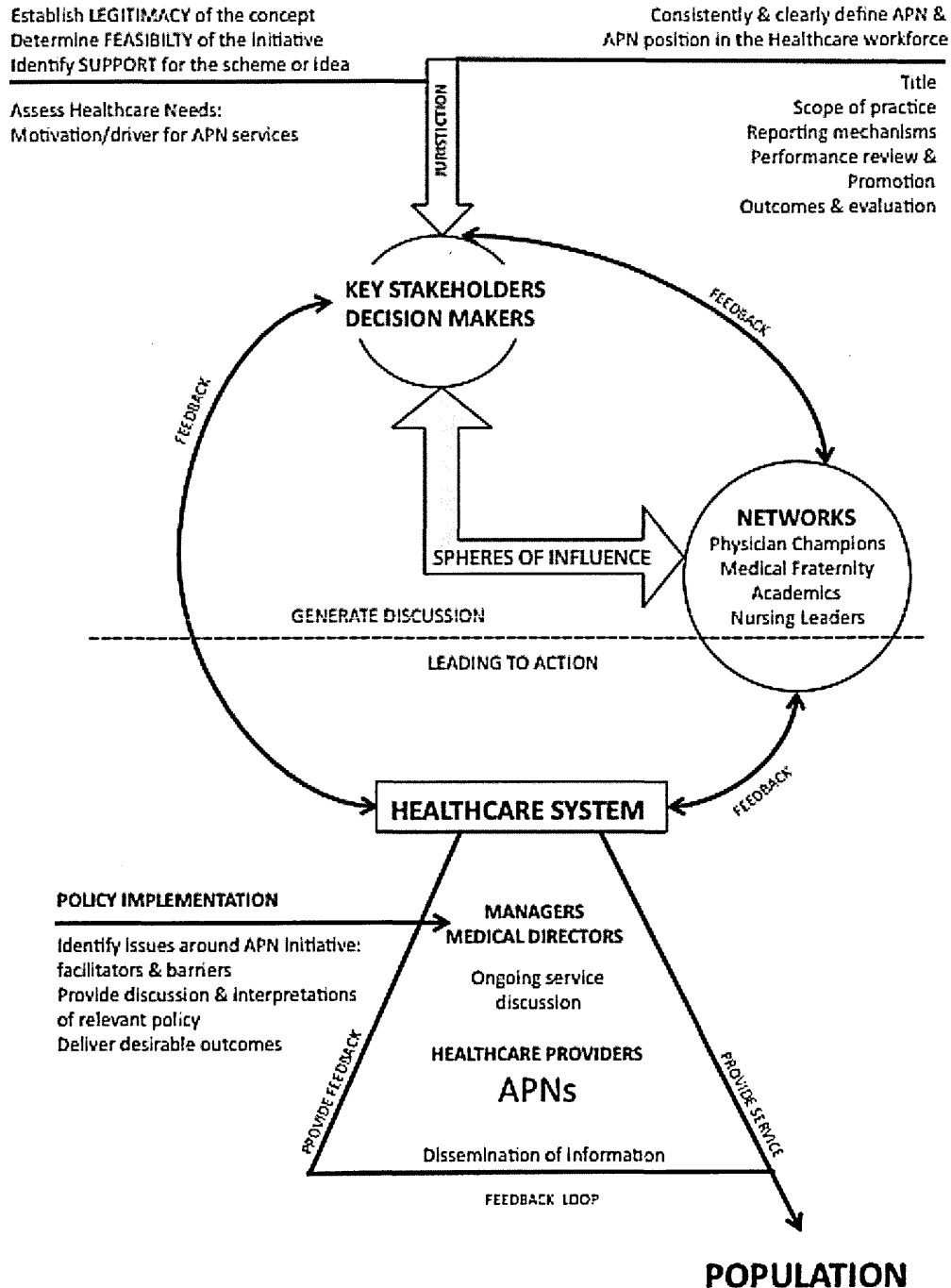
In the event of problems, concerns or adverse events establish an interactive responsive process;

Identify a reporting mechanism to report responses beneficial to composite development;

Distribute ideas for adaptation and interpretation of the role.

Figure 9.1

CONCEPTUAL POLICY FRAMEWORK FOR ADVANCED PRACTICE NURSING



9.4.3 Discussion of critical points of the conceptual policy framework

The following section elaborates on contextual issues of the conceptual policy framework from policy development to implementation based on study findings. The concepts of legitimacy, feasibility and support proposed by Hall, Land and Parker (1975) and Lindblom's (1959) thoughts on policy development are taken into consideration as they relate to policy processes. Principles of Walt's framework (1994) provided insights to consider for policy implementation. Based on findings from this ethnography the proposed policy framework provides a consistent stream of pragmatic guidance and recommendations linking pivotal issues of policy development to critical points for role implementation.

The ability to assess the needs of the system looking to address, produce or permit change in the process of policy development are viewed in this discussion through the eyes of policymakers. According to Hall et al (1975) issues or topics reach the attention of decision makers when they are seen as legitimate, feasible and have support. These concepts are adapted from Hall et al and provide a cornerstone for the conceptual policy framework.

Establish legitimacy of the initiative.

The research demonstrated that identifying a motivator along with a perceived demand for APNs is critical to reaching the agenda of key stakeholders who will carry policymaking forward once the concept is considered legitimate. It is important to seek the attention of key decision makers in the initial stages of APN policy development to clarify what aspects of the APN initiative are under their jurisdiction and spheres of influence. Identifying those in the highest level of authority, their instrumental communication networks and their personal or professional interest in healthcare was found to be essential in the Singapore case.

Policy makers' attitudes toward nurses in general may play a role in facilitating or blocking the policy process. A key question to consider therefore is: How will the concept catch policymakers attention and is it a legitimate concern for their intervention? (Hall et al, 1975).

Determine the feasibility of an APN initiative

Evidence from the study revealed that those considering the APN scheme will likely assess the potential for implementation or the achievability of this new nursing role and its policy directives. Key questions to consider therefore are: Is the concept of APNs achievable? Is the healthcare environment receptive and in a position to educate qualified APNs? Are there candidates for role preparation? What is the attitude of the medical fraternity and nursing culture toward the role? Are there adequate human and financial resources? Has opinion from the ground level been taken into consideration? (Hall et al, 1975; Walt, 1994).

Verify support

Study findings confirmed the necessity of broad based support from those at high levels of

authority who are making policy to those implementing policy and the APN role. Questions to consider therefore are: Is there broad based support from both those in positions of authority and managers as well as other professionals on the ground level? Have stakeholders in positions of authority and interested parties or interest groups who could block or facilitate the initiative and related policies been identified? (Hall et al, 1975; Walt, 1994; DiCenso & Bryant-Lukosius, 2010).

The research suggests that a formal assessment of the need for APN services that includes identification of the motivation for APN roles is beneficial. Thoughts and questions to consider include: Is there an identified population need and under what circumstances will the APN provide care? What are the defined benefits? If a population need is identified need what is the specific need for services (e.g. mental health, aging population, substance abuse). An actual assessment or survey would be most advantageous. Is the envisaged need in the community, hospital units, or rural and remote areas? If the impetus for the role is professional development for nursing what are the criteria for development and what are the expected role components? Is there support in the healthcare community to establish APNs as service providers? If there is no assessed need why is the APN role being considered? Clarify if APNs will be in a position to provide the services intended and in what capacity. Issues of level of autonomy, prescribing, and collaborative practice/teams can be discussed in relation to this issue (DiCenso & Bryant-Lukosius, 2010; Hamric, 2009).

Identify pivotal decision makers and their spheres of influence.

Evidence from the research emphasises the significance of key decision makers and their networks thus this finding is highlighted as a key component of the conceptual policy framework. In addition, physician champions and their connections to the medical fraternity were found to be essential in most healthcare environments. Perspectives and attitudes toward nurses and the nursing culture were found to be aligned with this issue. Thoughts and questions to consider therefore are: What are the prevailing attitudes regarding nurses? What are the attitudes of high level decision makers in relation to nursing and their expectation for nurses to achieve academic qualifications? What is the perspective of other nurses and nurse leaders to an advanced clinical nurse? (Hall et al, 1975; DiCenso & Bryant-Lukosius, 2010).

Identify measures needed to accomplish action for policy and implementation.

The ethnography implies that promoting debate and discussion of the above issues at multiple levels of healthcare service provision could enhance gaining attention of policymakers. As evidenced in Singapore discussions leading to making policy took place

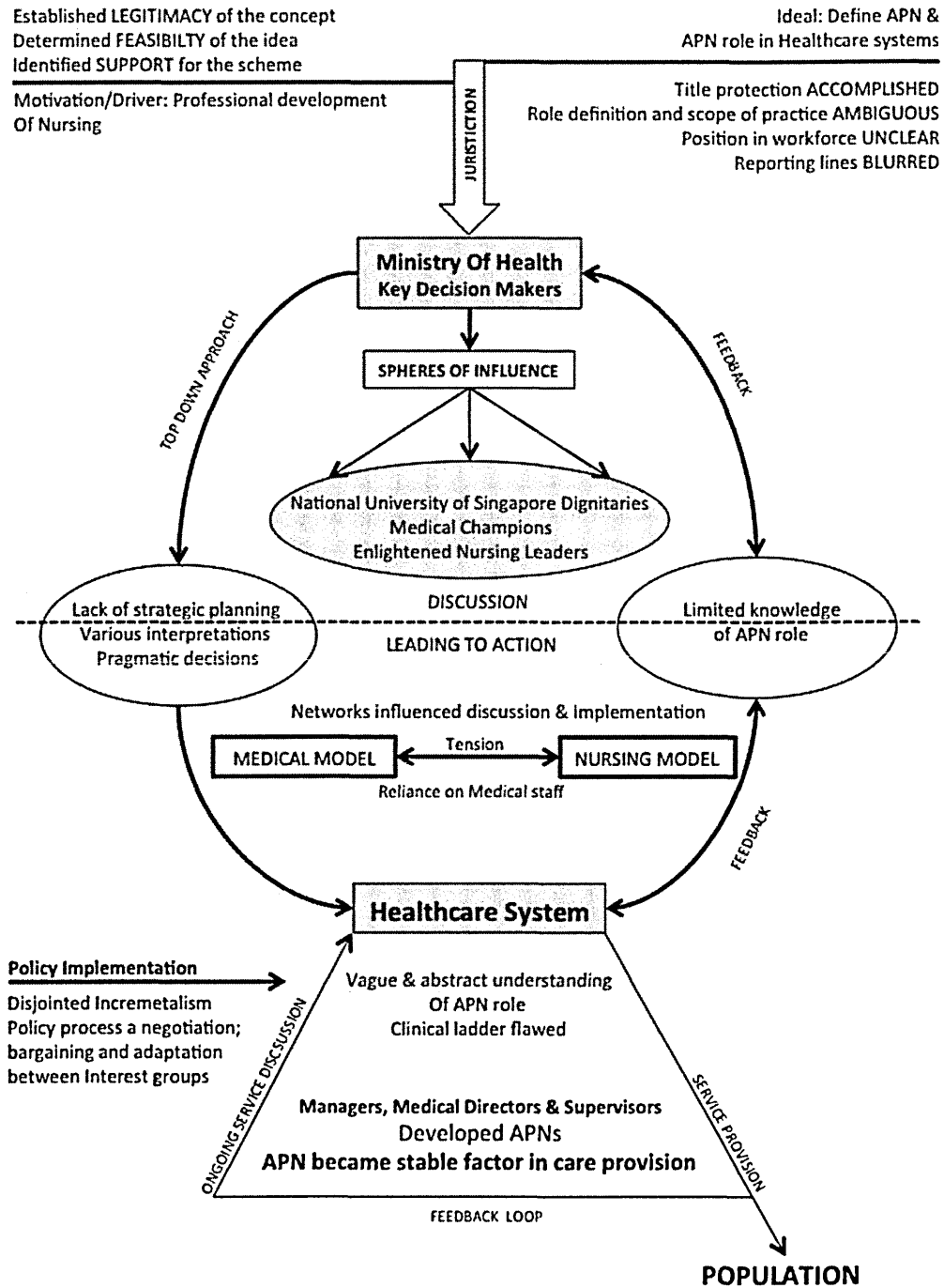
over a number of years until key decision makers supportive of the concept were in place to take the issue from discussion only to action. A question to consider at this point as policy development proceeds: Are the regulations, standards and policy development relevant to actual APN practice? (Hall et al, 1975; Walt, 1994; DiCenso & Bryant-Lukosius, 2010).

9.4.4 Policy Framework: Singapore Context

The development of the conceptual policy framework was based on findings from this research and theoretical perspectives from Hall et al (1975), Lindblom (1959) and Walt (1994), however, Singapore did not smoothly and completely accomplish the tenets proposed in the ideal framework (see Figure 9.1). Figure 9.2 provides a diagrammatic representation of the Singapore context based on the ethnography. The following discussion will consider the situation in Singapore and how it compares and contrasts with the proposed framework.

Figure 9.2

POLICY FRAMEWORK: SINGAPORE CONTEXT



Cornerstone One - Singapore Context: Legitimacy, Feasibility and Support for APNs Driver/Motivator

As the APN initiative in Singapore began to take hold decisions began to proliferate among individuals in positions of authority. Singapore documents and findings from Phase Two confirmed that discussions among key stakeholders took place over a number of years and in the early discussions key individuals in positions of authority blocked progress. The APN concept seemed to have reached an impasse but with the appointment of new and pivotal decision makers the concept took hold. Legitimacy of the APN concept was established, feasibility of the idea was determined and support for the scheme was identified. The driver for the APN role focused on professional development for nursing in Singapore. In retrospect it can be said that within the Singapore context one cornerstone of the framework was established, however this was not a straight forward path. Findings from all study phases confirmed that reaching this point required key people to negotiate and persuade other key decision makers to move standard setting, regulations and related policies forward. The significance of this cornerstone of the framework was confirmed as study findings revealed turbulence in other areas of development, however, with policies in place participants in Phases Three and Four voiced confidence that the initiative was likely to be sustainable. It can be argued that successfully achieving this cornerstone stabilised the one aspect of the APN initiative.

Cornerstone Two – Singapore context: Define APN Role and position in healthcare

This cornerstone begins with the recommendation to define the APN and the role of the APN in the healthcare systems. Under this key point is a mandate for title protection, role definition and a distinct scope of practice. It is recommended that the APN position in the healthcare workforce should be distinct and reporting lines for performance review should be made clear. In Figure 9.2 each of these points are labelled as to how they were achieved in Singapore. Thus it is noted, based on the research, that within the Singapore context title protection was accomplished, role definition and scope of practice as executed in practice were ambiguous, the position of APNs in the healthcare workforce was unclear and reporting lines (medicine versus nursing) were blurred.

In the early stages of development and with the announcement of standards for APNs in 2006 the title 'advanced practice nurse' was protected and accomplished in Singapore. In other words, it was clearly illegal, based on regulatory documents, to assume the title 'advanced practice nurse' if an individual did not fulfil the licensure criteria to use the title. A generic scope of practice and description of role characteristics was provided by the

Singapore Nursing Board based on USA documents defining the role. However, findings revealed that in reality role definition and scope of practice were ambiguous and subject to multiple and divergent interpretations among managers and healthcare professionals. The position of the APN in the Singapore healthcare workforce was unclear and distinct reporting lines for performance review and evaluation were blurred. Lack of role clarity adversely impacted curriculum development for the APN programme, contributed to stress and strain between other nurses and physicians and led to frustration as new APNs tried to introduce a new role based on the theory they had learned in their graduate programme. Key findings indicated that the uncertainty was associated with the tension and indecision as to whether the APN role was based on a medical model, a nursing model or both. This tension is key and depicted in Figure 9.2. The research revealed that nursing perceived that the APN had deserted nursing and other healthcare professionals perceived the APNs as 'minidoctors' or doctor assistants. Even with the prevalence of these attitudes, the APNs themselves, for the most part, exhibited varying degrees of autonomy, presented a passion for clinical practice and carved a niche to begin to rise above this tension.

Strategic Planning and Coordination

The development of the conceptual policy framework suggests that in an ideal world strategic planning for the introduction of APN roles would facilitate the implementation process. Relevant to a key study finding that noted lack of role clarity at every level from policymaking to role implementation there was no evidence of a coordinated plan or strategies for implementation on the ground in Singapore. Participants repeatedly voiced a belief that the Ministry of Health must have devised a plan but there was no substantiation of this. Instead managers did not have a clear idea of what to do with this new level of nurse. Even though the Ministry of Health had announced a clinical career ladder for clinical advancement, managers were unwilling to promote APNs unless they took on managerial and/or research tasks. There was no evidence that key decision makers had resourced healthcare professionals on the ground level to assess the ease of success of integrating a new role. Lacking a national strategic plan study findings revealed that individual institutions devised their own policies. As a result there were various interpretations and adaptive approaches to implementation. A researcher's perspective of the ensuing environment was aligned with Lindbloom's concept of 'disjointed incrementalism'. Lacking a national plan miscalculations and oversights occurred; managers and medical directors in collaboration with the APNs on the ground responded to these situations with disparate solutions to ease the missteps and incrementally continued to move forward.

Dissemination of information and communication

Relevant discussions and dissemination of information contributing to strategies for role implementation were envisaged as crucial in the ideal framework and are noted in Figures 9.1 and 9.2 at the bottom of the diagram as the base for implementation under the section labelled Healthcare System. However, findings demonstrated even though directives and guidelines were handed down from the highest authorities that a bottle neck occurred at the managerial level. Findings consistently found that managers, medical directors, medical consultants and other nurses working at the ground level with APNs reported a vague notion or no idea at all about the APN role. Having noted this as a stumbling block in Singapore and thought to be key to easing role implementation the ideal framework recommends accurate information dissemination, feedback processes and communication within organisational structures and infrastructures. At the completion of the study nursing and medical leaders in Singapore were beginning to recognise this deficiency and were developing improved methods of collaboration and communication on a somewhat trial and error basis. Persons in positions of authority with channels of communication had begun facilitating discussion of concerns and challenges with the implementation processes. Findings further revealed that those in positions of authority were not always cognisant of significant issues on the ground that could have been resolved if there had been some level of awareness of the unanticipated outcomes that occurred. Study findings demonstrated that the processes relevant to intent of policy and realisation in practice as evidenced with APN development in Singapore were more complex and turbulent than anticipated. It is envisaged that a comprehensive conceptual policy framework would provide guidance and assist implementation.

9.5 Conclusion

The research reported in this thesis has sought to gain insight and provide an understanding of the complexities of policy development and the implementation of APN roles. The development of a conceptual policy framework provides a new way of thinking about APN development and implementation. Other frameworks delineate core competencies for role development (Hamric, 2009) or provide proposals for the introduction and evaluation of APN roles (Bryant-Lukosius & DiCenso, 2004). No framework was found that comprehensively considers the complex issues of policy development to implementation for the roles. Building on this research it is envisaged that the conceptual policy framework will fill this gap in knowledge. It is recognised that policy implications

arising from the study need to be addressed at the highest levels of authority as well as on the ground level where intent of policy is carried out. The implications arising from the research need to be discussed and developed with a willingness to identify and confront what are undoubtedly difficult issues. This would likely involve the matters of power, control and authority that have been demonstrated to orchestrate decision making processes. The findings have concluded and recommended a conceptual policy framework to address concerns raised by the study with the expectation that identifying critical points in launching an APN initiative a strategic approach could be taken.

Reference is made to the frameworks of Hall et al (1975) and Walt (1994) as guides for policy development and policy implementation. The first introduces three conditions of legitimacy, feasibility and support utilised in analysing the environment for policy development. The significance of identifying such principles in the policy processes are thought to ensure that nurses intended to function in APN roles do so to their full potential and are responsive to the needs of the populations who seek care. The second framework addresses the need to not only develop and set policy but to ensure that policy is implemented in actual practice. Strategies to accomplish this are thought to be important considerations for the success and sustainability of APNs in healthcare provision. The consideration of these two frameworks has contributed to knowledge by providing fresh insights into existing health policy and social policy frameworks (Hall et al, 1975; Walt, 1994). These frameworks have been examined in a new policy arena of APN development and found to be lacking as a single framework to explain the development and implementation of APN policy. However, when considered together with others such as Lindblom's (1959) view of 'disjointed incrementalism' they can be useful in understanding the complexity of APN development.

The research reported in this thesis has highlighted how policymakers, enlightened nursing leaders and medical champions focused their attention primarily on addressing policy such as regulations and standards for APNs while lacking clear direction on implementation of policy and thus of the comprehensive nature of the APN role. Although individual APNs were able to establish commendable clinical practices they were not always able to achieve the professional development that they aspired for. Unclear expectations by those in positions of authority led to tension between the medical and nursing models of care and among the healthcare professionals attempting to work with APNs. Despite the rhetoric of national policy emphasising an interest in APN roles and retaining nurses in clinical practice there was little evidence of a strategic and coordinated approach to overcome the obstacles and barriers identified in this research. Moreover, the APNs themselves revealed dissimilar

levels of knowledge of the implications arising from a failure to address barriers to practice. The approach to introducing APNs in Singapore served to place a spotlight on these new nursing roles with the effect of isolating them from other nurses as well as facing medical staff who at times doubted the need for their presence.

This study has served to draw attention to the complex and complicated nature of factors influencing APN development. Although issues of initial policy development were accomplished there was a failure to address issues surrounding role implementation. The research draws attention to not only the importance of implementation of policy but also of consequences arising from the failure to address implementation adequately. If nurses are to practice to their full capacity as APNs it is imperative that policymakers, nursing leaders, medical champions and nurses themselves redress the issues associated with policy and role implementation. Findings from the study conclude that a conceptual policy framework could be instrumental in facilitating the integration of APNs into the healthcare workforce. Even though the research depicts APN development in Singapore the knowledge gained from this research contributes more generally to an understanding of the complexities essential to support the full potential for advanced practice nurses worldwide. Hopefully lessons learned in Singapore will assist others when considering and developing APN initiatives.

Although I have studied development in one context it is thought that the issues brought forth in this ethnography contribute to a wider understanding of APN role development and has led to an innovative framework to guide APN policy development and implementation in other countries. This framework, although grounded in research findings, will require further refinement through testing in other contexts where APN development is taking place.

Chapter 10: Conclusion and Implications

10.1 Introduction

There is extensive rhetoric and enthusiasm internationally surrounding the development of advanced practice nursing (APN) roles. Literature on this topic demonstrated that undertaking an APN initiative is multifaceted and complex, however, the literature did not provide evidence on policy and the policy processes relevant to APN development. An ethnographic study with an instrumental case study approach was designed to provide insight in to the processes of policy decision-making and the policy process as it relates to the implementation of APN roles.

10.2 Findings and contribution to knowledge

It is recognized that policy development proceeds through multiple and complex stages with various interpretations and adaptations of the original intent. The research reported in this thesis highlights that even though initial decision makers were well intended they were primarily focused on setting policy and regulations for APNs with limited knowledge of actual APN practice. Subsequent to policy development managers, supervisors and medical consultants, also with limited knowledge of the role, were expected to implement policies and integrate APNs into the healthcare workforce. At this juncture various obstacles occurred as individuals in levels of authority at the managerial level and those in supervisory capacities on the ground tried to make sense of this new nursing role as they proceeded to implementation. Lack of role clarity and role overlap with other healthcare professionals led to tension and confusion in provision of healthcare services in the initial stages. Evidence suggests that anticipatory and strategic planning could reduce some of the potential problems associated with carrying out an APN initiative.

This research has clarified the complexities of launching a scheme such as advanced practice nursing through a critical examination of the processes from policy development to implementation and has analysed factors that may facilitate or impede full realisation of the role. The complicated nature of such a proposal may not be fully recognized and findings indicated there is likely to be an overreliance on a limited body of evidence. The ethnography provides a composite picture of the multifaceted factors that must coalesce to gain the attention of policymakers in order to develop policy. The topic or phenomenon of interest must catch the attention of the policymakers. Key decision makers must see the issue as legitimate and under their jurisdiction to become involved. Not only must policymakers see the idea as legitimate but they must also have some level of belief that

the scheme is feasible or likely to progress to actual implementation. Broad based support of the idea enhances the likelihood that the concept being proposed will be placed on the policy agenda. Pivotal persons in positions of authority and their spheres of influence were found to be key to policy development.

Findings from this research also revealed that establishing policy alone is not sufficient. Equally important is consideration of a coordinated plan for implementation of APNs at the management level and on the ground. Strategic planning along with the recognition that unanticipated events will occur as an initiative progresses may well contribute to a coordinated approach. A framework has been developed identifying critical points to consider to facilitate the transition from intent of policy to actual implementation in practice (see section 9.5). It is hoped the study findings and the resulting framework would be useful not only for Singapore but to other countries in the process of initiating or refining policy for APN development. In addition, an understanding of the policy processes revealed in this research could be helpful in the consideration of other types of health policy and social policy development.

10.3 Implications for further research, practice and policy

Despite the considerable insights gained from the study of the issues associated with policy development to realisation in actual practice, questions are raised relevant to areas for further research and development. Several concerns have been addressed in earlier chapters; however, it is proposed that the following topics are of particular interest.

In addressing the research aims there was an opportunity to focus on factors influencing APN development in Singapore. The limitations of studying a single country have been acknowledged and it is recognized that an understanding of the extent to which the findings from Singapore could be extrapolated to other countries needs to be taken into account. While looking at multi-country variations was beyond the scope of this study it is an area that merits investigation. In addition, the study was undertaken during the early stages of APN development in Singapore and represented only a partial view of events and actions at one point in time.

The issue of role ambiguity and role confusion as nurses moved from positions of generalist nurses to taking on the APN role pervaded all phases of the study. The thesis began to address this topic but an investigation specifically focused on the dynamics of role acquisition, role change and change management would be useful to the international community as interest in these new nursing roles grows. Despite the identification of lack of role clarity relevant to the APN in this research, the full extent of how change in the nursing

scope of practice contributes to discord or collaboration in the provision of healthcare was unclear. In addition, a better understanding of how the dynamic of integrating APNs into delivery healthcare services impacts the entire healthcare system would be of interest to healthcare planners.

The research has demonstrated that physicians are gatekeepers to the healthcare system and as such medical champions are needed to support and facilitate an APN initiative. Findings also indicated that as members of the medical fraternity become familiar with APNs they often became strong supporters of the role. A study investigating how medical champions emerge would be of interest to APN development. Do individuals self select as strong proponents of such an idea or does familiarity with APNs and their function in providing healthcare encourage visible medical champions?

The worldwide trend toward advanced nursing roles is heartening for many in the nursing profession. However, the lack of consensus about the role and the inconsistencies in which the concept is referred to in the literature is disheartening. There is a call for outcome studies with improved rigour; however, research requires that descriptions of an APN must be used consistently to provide accurate comparative analyses when reviewing the evidence. While there is tentative evidence to suggest that APNs are a beneficial addition to healthcare, the available evidence does not clearly substantiate the comprehensive benefits to integration of the role in the healthcare workforce and its financial implications. Without use of consistent terminology investigations of outcomes and the impact of APNs on healthcare delivery is limited.

It is my view that the key to the future of healthcare lies in successfully integrating healthcare professionals into cohesive teams and collaborative settings. This vision requires an understanding of the skills of all professional groups in order to develop innovative models of care that can address current and emerging healthcare needs and disparities. Increased research to provide insights into advanced practice nursing and its potential are crucial to realising the full contribution of these roles to sustainable and quality healthcare.

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Appendices

Appendix 1

Country specific impetus for APN roles

Country	Impetus for Advanced Practice Nursing
Australia	Shortage of doctors, especially in rural and remote areas Nursing's desire for a clinical ladder
Bahrain	Demand for specialised nursing care
Botswana	Urgent need for Primary Health Care (PHC) services
Canada	Need for access to PHC services Increased emphasis on health promotion & disease prevention Emphasis on team care delivery Public Demand
France	Anticipated physician shortage Healthcare system restructuring
Hong Kong	Education programme development Change in nursing grade to improve clinical focus
Iceland	Exposure to education in the USA Rising need for specialist nursing services
Ireland	Access to PHC services Clinical career path Career path tied to pay scale
Japan	Need for highly skilled specialty nurses
Macau	Consumer demand for quality services Inspiration of nursing professionals Privatisation of services
Netherlands	Physician shortage/Workforce planning Need for hospital based services Demand for PHC/chronic illnesses Career advancement for nursing
New Zealand	Standardisation of current and new nursing roles Realisation of full potential of nursing
Oman	Interest in community nursing & home visiting Upgrade nursing education Access to PHC
Pakistan	Graduate education programme development
Philippines	Progression of specialisation in nursing
Singapore	Professional development/enhance status of nursing Progression of specialty and subspecialty nursing Clinical career ladder
Sweden	Identified population with need: elderly Education programme development
Switzerland	Graduate education programme development Knowledge advancement for nurses Anticipated physician shortage
Taiwan	Physician shortage Increasing inpatient acuity
Thailand	PHC needs/Workforce planning Increased medical specialisation
United Kingdom (England, Northern Ireland, Scotland, Wales)	Exposure to models from USA PHC needs Nursing specialisation Populations needing care Decrease in Junior Doctor hours
United States of America	Populations with unmet needs Physician shortage Enhancement of hospital services
Western Pacific Region	Shortage of health professionals, especially physicians Urgent needs for PHC services

(Source: Adapted from Schober & Affara, 2006, p.59)

Country or Region	Title(s) Used
Australia	Nurse Practitioner**
Bahrain	Specialist Nurse*
Botswana	Family Nurse Practitioner*
Canada	Clinical Nurse Specialist Advanced Practice Nurse, Nurse Practitioner, Acute Care Nurse Practitioner, Specialty Nurse Practitioner, Primary Healthcare Nurse Practitioner, Clinical Nurse Specialist/Nurse Practitioner * & **
France	Nursing approach to a specialty e.g. anaesthesia*
Hong Kong	Advanced Practice Nurse, Nurse Practitioner, Nurse Specialist *
Iceland	Nurse Specialist
Ireland	Advanced Nurse Practitioner (Area of Practice in brackets) Advanced Midwife Practitioner
Japan	Certified Nurse Specialist
Jordan	Nurse Specialist
Macao	Specialist Nurse*
Netherlands	Nurse Practitioner Nursing Specialist (Dutch: Verpleegkundig specialist)
New Zealand	Nurse Practitioner
Philippines	Clinical Nurse Specialist *
Thailand	Clinical Nurse Specialist, Nurse Practitioner Community Health Nurse Practitioner
Taiwan	Advanced Practice Nurse* (Official title used in Chinese only)
Singapore	Advanced Practice Nurse
Sweden	Advanced Nurse Practitioner in Primary Health Care, Advanced Specialist Nurse*
Switzerland	Advanced Practice Nurse, Clinical Nurse Specialist, Nurse Specialist
Republic of South Africa	Advanced Practice Nurse*
UK	Advanced Nurse Practitioner, Advanced Nurse, Specialist, Nurse Consultant, Community Matron*
USA	Nurse Practitioner, Clinical Nurse Specialist, Nurse Midwife, Nurse Anaesthetist
Western Pacific	Nurse Practitioner or Mid-level Practitioner* & **

*Official Title Recognition pending

** Varies among the states, provinces or island

(Adapted from Schober & Affara, 2006, p. 27)

Appendix 2

Titles used to denote Advanced Practice Nursing

Appendix 3

Illustrations of APN Scopes of Practice

Australia and New Zealand recommend a dual country scope of practice under the TransTasman Mutual Recognition Agreement:

A nurse practitioner is a registered nurse educated to function autonomously and collaboratively in an advanced and extended role. The NP role includes assessment and management of the clients using nursing knowledge and skills and may include but is not limited to the direct referral of patients to other health professionals, prescribing medication and offering diagnostic investigations. The nurse practitioner role is grounded in the nursing professional's values, knowledge theories and practice and provides innovative and flexible health care delivery that complements other health care providers. The scope of practice of the nurse practitioner is determined by the context in which the nurse practitioner is authorized to practice.

Source: Gardner et al (2004) Nurse Practitioner Standards Project.
Report to the Australian Nursing Council.

Canada

An RN(EC)[RN(Extended Class)] has advanced knowledge and decision-making skills in health assessment, diagnosis, therapeutics (including pharmacological, complementary and counseling interventions), health management and community development and planning. Their scope of practice includes:

- *Assessing and providing services to clients of all developmental stages, and to families and communities: and*
- *Providing comprehensive health services encompassing:*
 - *treatment of episodic illness and injuries;*
 - *identification and management of chronic stable conditions;*
 - *prevention of disease and injuries;*
 - *health promotion and education;*
 - *rehabilitation;*

- continuity of care; and
- support services.

Source: College of Nursing of Ontario. (2005)

Singapore

APNs practice in collaboration and partnership with medical practitioners and other health care professionals to:

- i. diagnose, treat and manage acute and/or chronic illnesses. They will order and interpret appropriate diagnostic and laboratory tests, and furnish pharmacologic agents, treatments, and non-pharmacologic therapies. Educating and counselling individuals and their families, conducting comprehensive health assessments aimed at health promotion and disease prevention will form part of their work.*
- ii. initiate and implement changes in the health care service in response to patient needs and service demands.*
- iii. participate in education of nursing staff and health care professionals through role modelling, mentoring and sharing of knowledge and expertise.*
- iv. initiate and coordinate nursing research. They should identify and incorporate into practice the best available research evidence in order to meet patient and service needs.*

(Retrieved from <http://www.hpp.moh.gov.sg> 27/01/2009)

Country	Programme Length	Qualification
Australia	24-72 months depending on full or part time status (additional 2 months for medication module)	Diploma MSN
Bahrain	9-18 months dependent on entry criteria	Diploma (post-basic in specialised area)
Botswana	18 months	Diploma
Canada	Variable (post-diploma, undergraduate or graduate levels)	Diploma, Certificate BSN, MSN
Finland	2 ½ years part time	Clinical Expert Nurse
Hong Kong	3 years part-time	MSN
Iceland	24 months	MSN
Ireland	24 months	MN – ANP/AMP
Japan	24 months	MSN, Certification
Macau	24 months	Specialised Nurse
Netherlands	2 years	MSN
New Zealand	24 months	MSN
Pakistan	2 years full-time	MN
Republic of South Africa	12 months post-basic	Specialist
Singapore	8 months 18-24 months	Advanced Diploma MN
Sweden	18-24 months	MSN after full 24 months; ANP after 18 months
Switzerland	2 year 36 months	MSN
Taiwan	4 months 24 months	Certification MSN
Thailand	4 months 24 Months	Certificate General NP MN, CHNP
United Kingdom	2-3 years usually part time	BSc NP MSc NP MSc ANP
United States	18 – 24 months depending on entry level – progressing to clinical doctorate	MSN post-masters certificate DNP
Western Pacific	At least one year (varies among the islands)	Nurse Practitioner Nurse Specialist

(Adapted from Schober & Affara, 2006, p.119)

Appendix 5

International list of APN Practice Settings and Domains of Practice

Country	Setting	Practice
Australia	PHC	Comprehensive Services Community Rural and Remote
Bahrain	Hospitals PHC	Specialty: Cardiac, Mental Health, Emergency, Maternity Community Health Home Care
Botswana	PHC	Comprehensive Services
Canada	Hospitals PHC	Specialty: specific age-based patient populations, specific clinical areas, specific disease processes, specific communities Comprehensive Services in Rural and Remote areas
Hong Kong	Hospital	Specialty: Diabetes, Wound/Ostomy, Cardiac , HIV/AIDS, Urology
Iceland	Hospital	Specialty: Paediatrics, Adult, Obstetric, Critical Care, Pain Management
Ireland	PHC	Comprehensive Services
Japan	Hospital	Specialty: PHC, Paediatrics, Adult Care, Mental Health, Elder Care
Macau	Hospital	Specialty: Critical Care Hospice/Palliative Care, Hemodialysis, Cardiovascular, Genecology/Obstetrics,
Netherlands	Hospital PHC	Specialty: Thoracic, Critical Care, Oncology, Paediatrics, Immunology Chronic Illness; Elderly
New Zealand	Hospital PHC General Practitioner Offices	Speciality: school, home, occupational, neonatal, Maori health, , Ambulatory care Comprehensive Services
Singapore	Hospital Polyclinics	Specialty: Adult Health, Mental Health, Critical Care
Switzerland	Hospital	Specialty HIV/AIDS Services, Renal Transplant, Oncology, Pain Management, Families of Children with Cleft Lip/Palate
Taiwan	Hospital	Specialty: Adult Care, Elderly Care
United Kingdom	Hospital Primary Care GP Offices	Specialised across all specialties Comprehensive Services
United States of America	Hospitals PHC	Specialized across all specialties Comprehensive Services
Western Pacific Islands: Vanuatu, Kiribati, Samoa, Fiji, Cook	PHC	Comprehensive Services

(Adapted from Schober & Affara, 2006, p. 44)

Appendix 6

Version 1 – 03/11/2009

Letter of invitation for government officials, university dignitaries and faculty



SHARPENS YOUR THINKING



Research project: Factors Influencing the Development of Advanced Practice Nursing Roles in Singapore

Dear (name)

My name is Madrean Schober and I am writing to invite you to participate in a research study investigating the factors influencing the development of advanced practice nursing roles in Singapore. In addition to my position as Visiting Fellow at the Alice Lee Centre for Nursing Studies, National University of Singapore I am also undertaking doctoral study at Sheffield Hallam University, United Kingdom. As an international consultant I have had a longstanding interest in the development and implementation of APN roles.

I am approaching you as someone who has knowledge about APN development in Singapore and may be interested in participating in the study. I am most interested in gaining the perspective of members from the university and it is my understanding that you have been associated with some aspect of the decision making and have been influential in developing this initiative. Your experience and insight would be most valuable to this study.

You are under no obligation to participate in the study but I would very much appreciate your contribution. A copy of an information sheet which provides details of the study and what your participation would entail is enclosed. Please read this in order to help you decide whether you wish to take part.

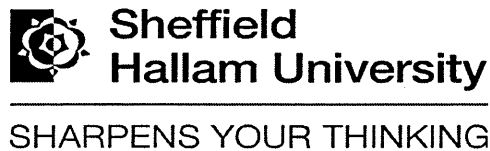
I will contact you shortly to discuss what your participation would involve and answer any questions you may have. In the meantime, if you have any immediate questions regarding the study please contact me by phone at 6516 7454 or email me at nurms@nus.edu.sg

Yours sincerely,
Madrean Schober
Doctoral Student
Sheffield Hallam University, United Kingdom

Appendix 7

Version 2 – 13/11/2009

Participant Information Sheet for Interviews of Government Officials; University Dignitaries and Faculty; Managers and Physicians



Participant Information Sheet for Interviews - Government Officials; University Dignitaries and Faculty; Managers and Physicians

Factors Influencing Advanced Practice Nursing Development in Singapore

I am inviting you to take part in a research study. Before you decide if you are going to participate it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Contact me if there is anything that is not clear or if you would like more information - contact details can be found at the end of this sheet. Please take time to decide whether or not you wish to take part.

Thank you for reading this.

What is the purpose of the study?

I am a doctoral student at Sheffield Hallam University, United Kingdom seeking to investigate the factors that have influenced APN development in Singapore. The research aims are to:

- To analyse policy drivers that provided momentum for introducing APN roles in Singapore.
- To investigate how policy directives have influenced the development of APN roles in Singapore. This will be examined from the perspective of a range of decision makers*. Areas to be considered include: role definition, scope of practice, education, standards, regulations, interaction with other health professionals and professional leadership.
- To explore the experiences of a sample of key decision makers and APNs in Singapore in order to identify how policy intentions were implemented in practice.

Note: * decision makers as used here denotes a range of stakeholders that will include but not be confined to government officials, chief nurses, nurse administrators/managers, nurse educators, university officials/administrators and physician educators/administrators.

Why have I been approached?

You have been approached as someone who has knowledge of APN development in Singapore.

Do I have to take part in the study?

No, participation is voluntary. It is up to you to decide whether or not to take part in the study. If you decide to participate you will be given this information sheet and be asked to sign a consent form. One copy of the consent form will be provided to you and an additional copy will remain with the researcher. If you decide to take part in this study you are still free to withdraw at any time without giving a reason.

Will I be reimbursed for my participation in the study?

No, your participation in the study is voluntary. You will not be reimbursed for participating in the research.

What will be involved if I agree to take part?

You will be invited to be interviewed by me. The interviews will last approximately 1 hour and will be arranged for a mutually convenient time and venue. The interview will be tape-recorded with your agreement. It will then be transcribed and analysed by me. If you choose not to have the interview tape-recorded this does not exclude you from taking part in the study. I would still like to interview you and will take notes during the interview. The interview will explore topics related to the research aims. Topics to be covered will include the nature of your role and your association with APN development in Singapore, your perspective on factors contributing to APN development, your understanding of the APN roles in the healthcare systems of Singapore and your understanding of how decisions related to APN roles were made and disseminated.

What other information will be collected in the study?

Additional interviews of key decision makers and observation of APNs or APN interns during every day practice will be conducted. Up to 20 interviews will be conducted with decision makers who have knowledge of the development of APNs in Singapore. Observation periods and interviews will be scheduled with eight APNs or APN interns in various advanced practice roles who work in a range of clinical settings in Singapore.

Will the information obtained in the study be confidential?

Yes. All information obtained will be treated as confidential and not disclosed to anyone other than the researcher and her university supervisors. The interview transcripts will not contain any information which could identify you, your colleagues or the organisation in which you work. Pseudonyms will be used where appropriate. The supervisors will review anonymised transcripts. Some short extracts from the transcripts may be used in the thesis and publications but these will remain anonymous.

What if examples of unsafe practice are observed or raised during the interview?

It may be that cases of unsafe practice or disclosure of sensitive issues which have not been resolved may be reported to the researcher during the interview. In these situations the researcher will act in accordance with the requirements of the Code of Professional Conduct.

Core principles of the Code of Professional Conduct are based on respect for confidentiality while at the same time acting in the best interest of the situation revealed or persons involved. Any information discussed that could be considered harmful to another person or person (s) will be carefully considered and concerns raised to the appropriate person (s).

Will anyone else be told about my participation in the study?

No, I will not disclose your involvement to anyone else. The report and publications arising from the study will not identify any individuals who have participated in the study. No identifiers as to personal details, designation or organization to which you belong or position in which you work will be disclosed in analysis of the data, use of the quotes or possible publications. Transcripts will be coded for each participant and all details utilised for the recruitment of participants will be detached and contained in a separate document to be stored in a locked file in my office.

What will happen to the results of the study?

I plan to publish the findings in journals so that other people can learn from the work. If you would like to receive a short summary of the research findings please inform me at the end of interview or notify me at the address provided below.

Who is undertaking the research?

The study is undertaken by Madrean Schober, a doctoral student at Sheffield Hallam University in Sheffield, England. The lead supervisor for the study is Professor Kate Gerrish at Sheffield Hallam University. The second supervisor is Dr. Ann McDonnell at Sheffield Hallam University. Professor Debra Creedy, National University of Singapore, is the local supervisor in Singapore.

What if I wish to complain about the way in which this study has been conducted?

If you have any cause to complain about any aspect of the way in which you have been approached or treated during the course of this study please contact Professor Kate Gerrish, Director of Studies, or Professor Debra Creedy, local supervisor in Singapore.

How do I find out more about the study?

Madrean Schober
Senior Visiting Fellow
Alice Lee Centre for Nursing
Studies
National University of Singapore
Block E3A, Level 3
7 Engineering Drive 1
Singapore 117574
Tel: (65) 6516 7454
Email: nurms@nus.edu.sg

Professor Kate Gerrish, Director of Studies
Email: k.gerrish@shu.ac.uk

Professor Desley Hegney, on site
supervisor Singapore
Email: nurdgh@nus.edu.sg
Tel: (65) 6516 3109

If you would like to find out more about the study please contact:

For an independent opinion regarding the research and the rights of research participants, you may contact a staff member of the National University of Singapore Institutional Review Board (Attn: Mr Chan Tuck Wai, at telephone 6516 1234 or email at irb@nus.edu.sg).

Appendix 8

Consent form for participant interviews

VERSION 2 – 13/11/2009



CONSENT FORM Participants for Interviews

Title of Research Project: Factors Influencing the Development of Advanced Practice Nursing Roles in Singapore

Name of Researcher: Madrean Schober

Please initial box

1. I confirm that I have read and understand the information sheet dated 13/11/2009 (Version 2) for the above study. I have had the opportunity to consider the information, ask questions and these have been answered satisfactorily.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my legal rights being affected.
3. I agree to take part in the above study.
4. I agree/do not agree to the audiotaping of the interview.

☐
☐
☐
☐

Name of Participant Date Signature

Researcher Date Signature

For an independent opinion regarding the research and the rights of research participants, you may contact a staff member of the National University of Singapore Institutional Review Board (Attn: Mr Chan Tuck Wai, at telephone 6516 1234 or email at irb@nus.edu.sg).

When completed 1 for participant; 1 for researcher

Appendix 9

Interview Guide for government officials and university dignitaries and faculty Version 1 – 01/09/2009

Study: Factors Influencing the Development of Advanced Practice Nursing Roles in Singapore

Welcome and Introduction to the Interview

All interviews began by introducing me as a Sheffield Hallam University, UK doctoral student. I will continue with an introduction to the nature of the study along with conversation to build rapport with the participant.

Phase Two Interview Guide – Representatives of governmental agencies and university departments

Objectives

Capture the participants' perspectives on drivers for APN development in Singapore.

Obtain viewpoints on the processes, facilitators and challenges of role development.

Collect contextual information relating to the networks of communication, processes of information exchange and linkages among decision makers.

Topic Agenda

Nature of their role and how they have been associated with APN development in Singapore.

Their perspective on factors contributing to APN development in Singapore.

Depiction of types of decisions they are aware of that were made related to APN development.

Individuals they know of who made decisions regarding policies influencing APN development.

Networks of communication known to them among decision makers.

Their understanding of how decisions related to policy and APN development were disseminated.

Their perspective on facilitators and challenges faced in development of APN roles in Singapore.

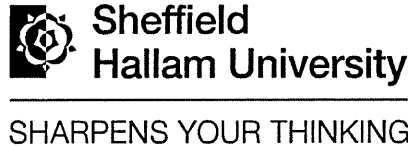
Close

Thank you.

Appendix 10

Letter of invitation for nursing managers, medical directors and medical consultants

Version 1 – 03/11/20009



Dear (name)

Research project: Factors Influencing the Development of Advanced Practice Nursing Roles in Singapore

My name is Madrean Schober and I am writing to invite you to participate in a research study investigating the factors influencing the development of advanced practice nursing roles in Singapore. In addition to my position as Visiting Fellow at the Alice Lee Centre for Nursing Studies, National University of Singapore I am also undertaking doctoral study at Sheffield Hallam University, United Kingdom. As an international consultant I have had a longstanding interest in the development and implementation of APN roles.

I am approaching you as someone who has knowledge about APN development in Singapore and may be interested in participating in the study. I am most interested in gaining the perspective of health system managers and physicians who have experience in the implementation of APN roles. It is my understanding that you have been involved in this process.

You are under no obligation to participate in the study but I would very much appreciate your contribution. A copy of an information sheet which provides details of the study and what your participation would entail is enclosed. Please read this in order to help you decide whether you wish to take part.

I will contact you shortly to discuss what your participation would involve and answer any questions you may have. In the meantime, if you have any immediate questions regarding the study please contact me by phone at 6516 7454 or email me at nurms@nus.edu.sg

Yours sincerely,
Madrean Schober
Doctoral Student
Sheffield Hallam University, United Kingdom

Appendix 11

Interview guide for managers and medical staff

Version 1 – 01/09/2009

Study: Factors Influencing the Development of Advanced Practice Nursing Roles in Singapore

Welcome and Introduction to the Interview

All interviews will begin introducing by myself as a Sheffield Hallam University, UK doctoral student. I will continue with an introduction to the nature of the study along with conversation to build rapport with the participant.

Phase Three Interview Guide - Managers and medical staff

Objectives

To capture the perspectives of healthcare managers and medical staff on the facilitators and barriers to APN role implementation in Singapore.

To capture the understanding of managers and medical staff on policy as it relates to APN development in Singapore.

Topic Agenda

Nature of their role and how they have been associated with APN development in Singapore.

Their understanding of the policies related to APN practice in Singapore and how they came to know about them.

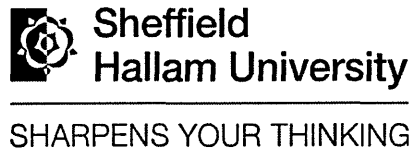
Facilitators and barriers as they understand them to APN development in Singapore.

Lessons learned that they feel might be helpful to others developing and implementing APN roles.

Close

Thank you

Appendix 12
Letter of invitation for APNs & APN Interns
Version 1 - 01/09/2009



Dear (name)

**Research project: Factors Influencing the Development of Advanced Practice
Nursing Roles in Singapore**

My name is Madrean Schober and I am writing to invite you to participate in a research study investigating the factors influencing the development of advanced practice nursing roles in Singapore. In addition to my position as Visiting Fellow at the Alice Lee Centre for Nursing Studies, National University of Singapore I am also undertaking doctoral study at Sheffield Hallam University, United Kingdom. As an international consultant I have had a longstanding interest in the development and implementation of APN roles.

I am approaching you as an APN or APN intern with knowledge about APN development in Singapore who may be interested in participating in the study. Your perspective on implementing the APN role in your clinical setting is of interest to me in order to gain an understanding of the realities of what you face on the ground as you work to introduce a new nursing role in Singapore.

You are under no obligation to participate in the study but I would very much appreciate your contribution. A copy of an information sheet which provides details of the study and what your participation would entail is enclosed. Please read this in order to help you decide whether you wish to take part.

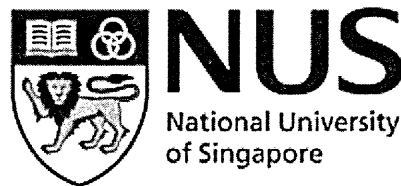
I will contact you shortly to discuss what your participation would involve and answer any questions you may have. In the meantime, if you have any immediate questions regarding the study please contact me by phone at 6516 7454 or email me at nurms@nus.edu.sg

Yours sincerely,
Madrean Schober
Doctoral Student
Sheffield Hallam University, United Kingdom

Appendix 13

Participant Information Sheet for APN and APN Intern Observation and Interviews

Version 2- 13/11/2009



Information Sheet for APN and APN Intern Participant Observation and Interviews

Factors Influencing Advanced Practice Nursing Development in Singapore

I am inviting you to take part in a research study. Before you decide if you are going to participate it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Contact me if there is anything that is not clear or if you would like more information - my contact details can be found at the end of this sheet. Please take time to decide whether or not you wish to take part.

Thank you for reading this.

What is the purpose of the study?

I am a doctoral student at Sheffield Hallam University, United Kingdom. I am seeking to investigate the factors that have influenced APN development in Singapore. The research aims are to:

- To analyse policy drivers that provided momentum for introducing APN roles in Singapore.
- To investigate how policy directives have influenced the development of APN roles in Singapore. This will be examined from the perspective of a range of decision makers*. Areas to be considered include: role definition, scope of practice, education, standards, regulations, interaction with other health professionals and professional leadership.
- To explore the experiences of a sample of key decision makers and APNs in Singapore in order to identify how policy intentions were implemented in practice.

Note: * decision makers as used here denotes a range of stakeholders that will include but not be confined to government officials, chief nurses, nurse administrators/managers, nurse educators, university officials/administrators and physician educators/administrators.

Why have I been approached?

You have been approached as an APN or APN intern working to implement an advanced practice nursing role in Singapore.

Do I have to take part in the study?

No, participation is voluntary. It is up to you to decide whether or not to take part in the study. If you decide to participate you will be given this information sheet and be asked to sign a consent form. One copy of the consent form will be given to you and an additional copy will remain with the researcher. If you decide to take part in this study you are still free to withdraw at any time without giving a reason.

What will be involved if I agree to take part?

I would like to invite you to be shadowed by me for three days at your convenience. This will involve observing your everyday practice in order to gain an understanding of different aspects of your role in your clinical setting. When observing, I will be sensitive to the clinical setting and will withdraw from any situations in which you, or any of the people with whom you are interacting, prefer me not to be present.

Before undertaking a period of observation I would like you to raise awareness of the study among individuals and groups with whom you may have contact and provide the opportunity for them to decline to be observed. I will provide information about the study for you to share with them. In order that people with whom you have contact do not feel pressured, I would ask that whenever possible, you obtain agreement in advance from anyone who you anticipate you might encounter during the period of observation. If this is not possible, then I would ask you to obtain agreement on an on-going basis during the period of observation. I will withdraw from any situations where you or the person you are interacting with prefer me not to be present. During the period of observation I will not be seeking any information from anyone with whom you have contact.

Prior to the observation periods I would like to schedule an interview with you to become familiar with you and your clinical site. Following the periods of observation I would like to undertake a follow-up interview to discuss issues raised during the observation periods. The interviews will last approximately 1 hour and will be arranged for a mutually time and venue separate from the periods of observation. The interviews will be tape-recorded with your agreement. It will then be transcribed and analysed by me. The interview will explore topics related to the research aims.

What other information will be collected in the study?

I plan to interview approximately 20 key decision makers who have been involved in APN developments in Singapore. I will also be interviewing and observing up to eight APN or APN interns in various roles and who work in a range of clinical settings in Singapore.

Will the information obtained in the study be confidential?

Yes. All information obtained will be treated as confidential and not disclosed to anyone other than myself. The interview transcripts will not contain any information which could identify you, your colleagues or the organisation in which you work. Pseudonyms will be used where appropriate. Some short extracts from the transcripts may be used in the thesis and publications but these will remain anonymous. During the observation periods I will be recording field notes based on my experiences in the clinical setting but these will not contain any information which identifies individuals or organisations.

What if examples of unsafe practice are observed or raised during the interview?

It may be that cases of unsafe practice or disclosure of sensitive issues which have not been resolved may be reported to the researcher during the interview. In these situations the researcher will act in accordance with the requirements of the Code of Professional Conduct.

Will anyone else be told about my participation in the study?

No, I will not disclose your involvement to anyone else. The report and publications arising from the study will not identify any individuals who have participated in the study.

What will happen to the results of the study?

I plan to publish the findings in journals so that other people can learn from the work. If you would like to receive a short summary of the research findings please inform me at the end of interview or notify me at the address provided below.

Who is undertaking the research?

The study is undertaken by Madrean Schober, a doctoral student at Sheffield Hallam University in Sheffield, England. The lead supervisor for the study is Professor Kate Gerrish at Sheffield Hallam University. The second supervisor is Dr. Ann McDonnell at Sheffield Hallam University. Professor Debra Creedy, National University of Singapore, is the local supervisor in Singapore.

What if I wish to complain about the way in which this study has been conducted?

If you have any cause to complain about any aspect of the way in which you have been approached or treated during the course of this study please contact Professor Kate Gerrish, Director of Studies, or Professor Debra Creedy, local supervisor in Singapore.

How do I find out more about the study?

Madrean Schober
Senior Visiting Fellow
Alice Lee Centre for Nursing Studies
National University of Singapore
Block E3A, Level 3
7 Engineering Drive 1
Singapore 117574
Tel: (65) 6516 7454
Email: nurms@nus.edu.sg

Professor Kate Gerrish, Director of
Studies
Email: k.gerrish@shu.ac.uk

Professor Desley Hegney, on site
supervisor Singapore
Email: nurdgh@nus.edu.sg
Tel: (65) 6516 3109

If
you
woul
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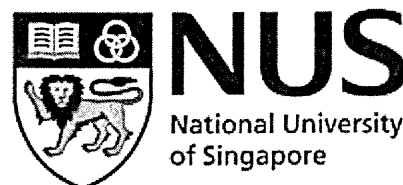
please contact:

For an independent opinion regarding the research and the rights of research participants, you may contact a staff member of the National University of Singapore Institutional Review Board (Attn: Mr Chan Tuck Wai, at telephone 6516 1234 or email at jrb@nus.edu.sg).

Appendix 14

Consent form for APNs and APN interns for participant observation and interviews

VERSION 2 – 13/11/2009



CONSENT FORM

APNs and APN Interns for Participant Observation and Interviews

Title of Research Project: Factors Influencing the Development of Advanced Practice Nursing Roles in Singapore

Name of Researcher: Madrean Schober

Please initial box

1. I confirm that I have read and understand the information sheet dated
(Version) for the above study. I have had the opportunity to consider the
information, ask questions and these have been answered satisfactorily.

☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time,
without giving any reason, without my legal rights being affected.

☐

3. I agree to take part in the above study.

☐

Name of Participant

Date

Signature

Researcher

Date

Signature

For an independent opinion regarding the research and the rights of research participants, you may contact a staff member of the National University of Singapore Institutional Review Board (Attn: Mr Chan Tuck Wai, at telephone 6516 1234 or email at irb@nus.edu.sg).

Appendix 15
Interview Guide for APNs and APN interns

Version 1 – 01/09/2009

Study: Factors Influencing the Development of Advanced Practice Nursing Roles in Singapore

Welcome and Introduction to the Interview

All interviews will begin introducing by myself as a Sheffield Hallam University, UK doctoral student. I will continue with an introduction to the nature of the study along with conversation to build rapport with the participant.

Phase Four Interview Guide – APNs and APN interns

Objectives

To capture a perspective from APNs and APN interns of the realities of role implementation.

To gain an understanding from the perspective of APNs and APN interns of issues faced in the realisation of policy to implementation into practice in Singapore.

Topic Agenda

Their knowledge of why the APN role was created in Singapore.

Nature of their role and responsibilities as an APN or APN intern and how long they have been in the role.

Their understanding of policies in Singapore that affect their practice as an APN.

Details on how were they were informed of any policies affecting their role.

Identify facilitators experienced in Singapore in attempting to implement the APN role.

Identify barriers experienced in attempting to implement the APN role.

Identify other members of the health care team that they work with including relationship with other professionals and their view of their own autonomy.

Their vision for development of APNs in Singapore in the future.

Anything else you would like to mention related to APN development in Singapore.

Close

Thank You

Appendix 16

Review of Singapore documents

Categories and Subcategories

Doctoral Study Phase One

Factors Influencing the Development of Advanced Practice Nursing in Singapore

1. Vision
 - 1.1 Status of Profession
 - 1.2 Contribution to Nursing
 - 1.3 Value to Healthcare System
2. Impetus
 - 2.1 Why change is needed
 - 2.2 What led to change
3. Benchmarking
 - 3.1 Nursing
 - 3.1.1 International (Outside Singapore & Asia)
 - 3.1.2 Regional (Singapore and Asia)
 - 3.2 Medicine
 - 3.2.1 International (Outside Singapore & Asia)
 - 3.2.1 Regional (Singapore & Asia)
4. Regulations and Standards
 - 4.1 Role Criteria
 - 4.1.1 Title
 - 4.1.2 Definition
 - 4.1.3 Scope of Practice
 - 4.1.4 Competencies
 - 4.2 Education
 - 4.2.1 Academic
 - 4.2.2 Preparation for Role
 - 4.2.3 Funding
 - 4.3 Internship
 - 4.4 Certification
 - 4.4.1 Renewal
 - 4.5 Registry
 - 4.6 Career Structure
5. Nature of Practice
 - 5.1 Settings/Specialties
 - 5.2 Behaviours/Responsibilities
 - 5.3 Liability/Indemnity
6. Key Decision Makers
 - 6.1 Government
 - 6.1.1 Ministry of Health (MOH)
 - 6.1.1.1 Chief Nursing Officer (MOH)
 - 6.2 Agencies specific to nursing
 - 6.2.1 Singapore Nursing Board (SNB)

- 6.2.2 Singapore Nursing Association
- 6.3 Institutions
 - 6.3.1 Education
 - 6.3.2 Employers of APNs
- 6.4 Other professionals
- 7. Support
 - 7.1 Anticipated
 - 7.2 Actual
- 8. Barriers/Obstacles
 - 8.1 Anticipated
 - 8.2 Actual
- 9. Gatekeeper Effect
- 10. Workforce Planning
- 11. Impact/Outcomes
 - 11.1 Anticipated
 - 11.2 Actual
- 12. Growth/Future Implications

Appendix 17

Phase One Review of Documents Thematic Matrix

Themes & subthemes	Theme Summary	Quotes	Comment
1. Vision (A goal toward which one aspires - looking forward or imagining).	The review of documents reveals a vision by government, institutions, professional bodies, employers and nurses themselves of a new and dynamic healthcare environment associated with APN development.	<p>"advanced practice nursing is on the move"[doc30,p2,para2]</p> <p>"groundbreaking"[doc31]</p>	
1.1 Nursing			
1. Status of Profession (position or rank within a society).	Consistently there is a subtheme that the introduction of APN roles & related 'upgrading' of education to the MN level will develop and elevate the nursing profession in Singapore to greater heights thus 'raising the status' of nurses. The success of nurse practitioners in the United States where APNs are viewed to be confident in their roles and highly regarded and respected by nursing and medicine appears to have contributed to this vision.	<p>"new level of nurses" [doc 1, p. 1, para 1]</p> <p>"pave the way for advanced practice nursing in Singapore" [doc 1, p. 1, para 1; doc9, p1; doc10,p36]</p> <p>"expand nurses' role" [doc5,p.3, top of page]</p> <p>"autonomy & empowerment in patient care" [doc5, p13,top of page]</p> <p>"recognition and respect from other healthcare professionals" [doc5,p.14, top of page;doc9,p4]; doc 36]]</p> <p>"nurses have never been fully recognized by society and policy makers"[doc12,p43]</p> <p>"ardent wish" [doc13,p27]</p> <p>"elevate the standard of nursing to newer heights" [doc13,p27]</p> <p>"quest for nursing excellence"[doc8,p1]</p> <p>"expert or advanced practice nurses"[doc8,p1]</p> <p>"new ways of knowing" [doc9. p5]</p> <p>"APNs themselves need to proactively demonstrate their contributions to outcomes so as to attain role recognition" [doc10,p38]</p> <p>"changing the status quo" [doc17, p. 878]</p> <p>"nursing is not identified for many school leavers in Singapore as a first preference career choice. Perhaps, this is partly because</p>	<p>Is the old level nurse of different status than the new nurse level?</p> <p>Pioneers of a new era c nursing in Singapore.</p> <p>Is general nursing of les value than advanced practice nursing?</p>

		<p>nursing is undervalued when studied at the diploma." [doc17, p. 876]</p> <p>"changing of attitudes towards the acceptance of nursing as a profession of equal standing to its health care contemporaries." [doc17, p. 878]</p> <p>"nursing is taking on a new role" [doc17, p. 878]</p> <p>"to further advance the standing of nurses in Singapore" [doc18, p2,para 6, yellow highlight]</p> <p>"the Ministry of Health (MOH) has announced various initiatives to enhance and develop nursing as a profession." [doc18, p2,para 6, yellow highlight]</p> <p>"train nurses to take on higher value-added roles including that of junior doctors" [doc21, p. 2]</p> <p>The trend to seek APN training "raises the status of the nursing profession" [doc22, p.1]</p> <p>"internalization of...lowly status by the nurses themselves" [doc27, p. 38]</p> <p>"relegated to the role of the physician's handmaiden" [doc27,p. 38]</p> <p>"nursing is considered as subservient to medical care" [doc27,p. 38]</p> <p>"An NUS study (2004) shows that nurses in recent years still feel trapped in their roles as the doctor's handmaiden." "75.9% of nurses polled perceived nurses as incapable of independent decision making (Tan, 2004)[cited in doc27]</p> <p>"recognition of the dedication and nursing leadership" [doc28,p. 1]</p> <p>"transforms nursing practice" [doc28,p. 3]</p> <p>"An APN is at the highest level in the clinical track for nursing and is viewed and respected as an</p>	<p>Implies nursing has not been viewed as a profession.</p>
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		<p>authority in nursing" [doc29,p. 2]</p> <p>"establishment of an APN Register raises the status of nurses. It recognizes and maximizes the potential for some nurses to take on added responsibilities" [doc47,p. 23]</p> <p>"drive to elevate the profession" [doc16, p. 6]</p> <p>"further advance the standing of nurses in Singapore" [doc18, p. 2]</p> <p>"This prestigious programme will... raise the professional image of Singaporean nurses worldwide." [doc31,P. 1]</p>	
2. Contribution to Nursing	<p>Development of advanced practice nursing in Singapore is expected to provide new opportunities and challenges for nurses to demonstrate the value of nursing and thus contribute to the professional culture. The expansion of nurses' roles and establishment of a clinical career path presents possibilities beyond traditional hospital nursing presenting a new role in healthcare delivery. Advanced education resulting in APN roles for a variety of practice settings and specialties is seen as shaping nursing's future in Singapore. Nurses of the future are envisioned to have a higher level of theoretical knowledge supporting their ability to make critical decisions and manage complex patients. The development of clinical skills is viewed as occurring at a sophisticated level in order to respond to future challenges in healthcare for the benefit of Singaporeans.</p>	<p>"pave the way for APN in Singapore" [doc1,p1,para1]</p> <p>"marks a milestone [re APN regulations]... The APN initiative... good step for many more important milestones" [doc3, p5, para1]</p> <p>"good step...for the profession" [doc 3,p.5,para 3]</p> <p>"Education of other nursing staff and health professionals through role modeling, mentoring and sharing of knowledge and expertise" [doc2, p1, para 2]</p> <p>"opportunity to develop ... clinical role" [doc8,p1]</p> <p>"capitalise on nursing strengths"[doc8, p2]</p> <p>" opportunity [for nurses] to obtain higher qualifications locally"[doc8,p2]</p> <p>"The absence of a clear commitment to nursing and a nursing philosophy may result in APNs sacrificing their nursing roots and adopting the world views of others."[doc9,p5]</p> <p>"opportune time to pioneer and define advanced practice nursing for the future"[doc9,p6]</p>	<p>Historically registered nurses in SG have had leave the country to see higher education beyond the diploma level.</p> <p>Seems contradictory: on the one hand that there view to establish APN to keep nurses at the beds contrasted with a view to expand nursing beyond traditional hospital nursing role.</p>

		<p>"building on professional nursing socialization is essential." [doc 9,p.5]</p> <p>"retention of clinically competent nurses at the bedside in SG" doc10,p36]</p> <p>"new opportunities and challenges for nurses to demonstrate the value of nursing" [doc12, p. 48]</p> <p>"allowed for RNs to be developed into APNs" [doc 14, p.1]</p> <p>"the value of nursing" [doc12, p. 43]</p> <p>"The challenge now is for the nursing profession to prepare itself to take on a leadership role to improve the health of the populations" [doc12,p. 43]</p> <p>"nurse centre for healthy ageing is a concept that integrates the principles and practice of community nursing, nurse practitioners, nurse-led clinics, advanced nurse practice and community care management" [doc12, p. 43]</p> <p>"golden opportunities for nursing" [doc12,p. 45]</p> <p>"new exciting milestone for nursing in Singapore" [doc13,p. 25]</p> <p>"nurses on the clinical track will be able to venture into new territories like never before". [doc15, P. 2, para 2]</p> <p>"nurses have increased options and flexibility" [doc15,p2]</p> <p>"career enhancing setting for the professional nurse who desire to <u>develop in bedside nursing</u>" [doc15, p. 2]</p> <p>ALCNS (re education) "is tasked with envisioning different futures and outcomes for nursing in Singapore and in the region as it leads the way in the development of graduate and</p>	Change
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		<p>postgraduate education, research and clinical innovation" [doc17, p. 875]</p> <p>"need nurses who can critically and efficiently translate clinical evidence into practice" [doc17, p. 878]</p> <p>"for these students and future prospective nurses, NUS has provided a higher education pathway" [doc17, p. 876]</p> <p>MOH has announced various initiatives to enhance and develop nursing as a profession." [doc18, p. 2]</p> <p>"new initiatives come on top of a review of nurse's salaries structure last year" [doc18, p. 2]</p> <p>MOH "recognizes the potential for some registered nurses to take on added responsibilities" [doc22, p. 1; doc23, p. 1]</p> <p>"future models will place a huge value on nurses in the management and prevention of chronic diseases: a fact that cannot be ignored when considering the future of nursing in Singapore. Undeniably Advanced Practice Nurses will be key players" [doc26, p. 2]</p> <p>"improve quality of nursing care in SG" [doc26, p. 1]</p> <p>"nursing must be empowered through a redefinition of scope of nursing" [doc27, p. 38]</p> <p>Redefinition of 'Nursing': More Than a Calling" [doc27, p. 38]</p> <p>"pioneer" [doc28, p. 2]</p> <p>"transforms nursing practice to one where nurses engage critical inquiry and analytical clinical decision-making and assessment in the patient care management process" [doc28, p. 3]</p> <p>'modernising nursing' [doc36]</p> <p>"Moving nursing forward with Advanced Practice" [doc38, p. 1]</p>	
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		<p>"we as healthcare professionals are challenged to re-examine our practice and plan new efficient models of healthcare delivery" [doc38,p. 3]</p> <p>"Equip nurses with the pedagogical skills to teach and guide the student...to deliver high quality and effective care" [doc38,p. 6]</p> <p>"through effective teaching and mentoring you will foster the development of your profession" [doc38,p. 7]</p> <p>(APN) Awardees " are role models who motivate and inspire their peers and younger nurses" [doc16,p. 8]</p> <p>"nursing has come a long way...since 1885" [doc26,p.1]</p> <p>"tribute to the nurses who tirelessly and compassionately give of themselves" [doc28, p. 1]</p>	Nursing as part of the bigger picture
2. Healthcare System	<p>Numerous leaders and key decision makers envision a healthcare transformation in Singapore that includes APNs. Institutional plans for new hospitals include patient-centric concepts that are associated with APN roles. The data suggests that APN development of specialisation and related skills is valuable to healthcare institutions in the delivery of healthcare services and in the development of 'excellent healthcare systems'.</p>	<p>"ability to influence clinical care" [doc5, p13,midpage]</p> <p>"modern health care systems"[doc10,p36]</p> <p>"achieve 'Successful Ageing for Singapore'(national agenda)[doc12, p44]</p> <p>"nurses must strike while the iron is hot, be ready to lead the community to better health." [doc12,p.48]</p> <p>"The challenge now is for the nursing profession to prepare itself to take on a leadership role to improve the health of the populations"</p> <p>"nurse centre for healthy ageing is a concept that integrates the principles and practice of community nursing, nurse practitioners, nurse-led clinics, advanced nurse practice and community care management"[doc12,p43]</p>	

		<p>"wish that in Singapore the APN becomes an integral part of the healthcare team:"</p> <p>"adding sophistication to Singapore's healthcare system" [doc18, p. 1]</p> <p>" a robust healthcare system... no longer merely about doctors, nurses and their patients...now a complex system comprising many players with a diverse range of skills" [doc18, p. 1]</p> <p>"we must be open-minded" [doc18, p.1]</p> <p>" momentum in hiring more healthcare professionals and enhancing the infrastructure" [doc18, p. 2]</p> <p>"dynamic environment offering significant opportunities" [doc18, p. 2]</p> <p>"redefine healthcare practice" [doc18, p. 3]</p> <p>accept change "constant changes predicted in healthcare for the foreseeable future" [doc26,p. 1]</p> <p>"let us seize this <u>opportunity</u> to restructure aspects of our healthcare delivery systems" [doc38,p. 7]</p> <p>"potential to be key players in the provision of...healthcare services in Singapore"[doc10,p38]</p>	<p>Implies we are all on a or journey together.</p>
2. Impetus (a driving force)			
2.1 Why change is needed	The need to establish a clinical career path for nurses emerges as a prime	"improve patient outcomes"doc5,p13,bottom page	Needs based on speculation?

	<p>aim for launching APN roles and the APN education programme. Good clinical nurses, historically, have only been promoted to managers or educators and thus were lost to the system as clinical nurses. Data from the documents reveals nurses' desire to expand their scope of practice and remain within the clinical arena rather than move to teaching or administrative positions thus identifying this desire as pivotal to the push for change.</p> <p>Additionally, the data suggests a need for nurses such as APNs to fill in various gaps in healthcare service provision that includes management & coordination of care in various settings in order to provide better healthcare services in Singapore.</p>	<p>"good clinical nurses moved further away from direct patient care when they were promoted." [doc8,p.1, para 4]</p> <p>"There was no opportunity to develop their clinical role and expand or extend their scope of practice." [doc8,p.1, para 4]</p> <p>"to obtain higher qualifications locally, [so] good clinical nurses would not be faced with the problem of having to leave their family in Singapore and going overseas for further studies"[doc8,p2,para4]</p> <p>"challenges facing Singapore's healthcare system...rising chronic disease conditions, an aging population, higher levels of patient acuity and shortened hospital stays"[doc9,p?]</p> <p>"desire to improve the retention of clinically competent nurses at the bedside" in SG</p> <p>"stabilize the clinical environment during change of Housemen and Medical Officers' postings"</p> <p>"shift of focus in healthcare from illness to prevention, from acute care to primary care, coupled with the advancement of nursing education"</p> <p>"to meet service shortfall and Singapore's healthcare needs" [doc14,p.1]</p> <p>"changing needs, rising costs and rising patient expectations" [doc18, p. 1]</p> <p>"need to increasingly train and recruit healthcare workers" [doc18,p. 1]</p> <p>"benefits patients through better nursing care and cost control as the extended scope of practice of the APN can allow them to take on some of the duties of the junior doctors. This will free up the doctors to spend more time on patients who require a higher level of medical care." [doc22, P. 1;doc23,p1]</p>	<p>Practical reasons for introducing the MN programme.</p> <p>APNs are part of the changes the HM suggests</p> <p>Filling a gap or contribu</p>
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		<p>"Provide cost effective coordinated services" [doc26, p. 2]</p> <p>critical that SG has an adequate pool of 'appropriately prepared nurses' [doc27,p. 35]</p> <p>"provide 'right site' care; expand nurse's role, establish clinical career path for nurses" [doc36.p. 3]</p> <p>"holistic and comprehensive care approach" [doc 47, p. 23]</p>	<p>to the aim for seamless care. Is APN care lower level if they free up the doctors to provide high level care?</p> <p>Filling in the gaps[doc36] that an ideal goal?</p>
2.2 What led to change	<p>The MOH recommended a new clinical career track for registered nurses to progress in their career & remain in clinical practice thus establishing a clinical career pathway for nurses that led the way for or solidified actual changes that followed (education, registry, amendment to Nurses & Midwives Bill, internship, certification).</p> <p>In addition, interest in APN roles to meet needs in both acute and primary care settings in order to improve patient outcomes with the least cost, shift in focus of healthcare from illness to prevention, from acute care to primary care provided momentum for the changes. CAI recommended that the govt. explore new models of primary care delivery that included APNs as an option in the healthcare workforce. Nursing was in a position to identify how to fill the gaps & to collaborate on a scheme for education and role development.</p>	<p>"Driven by these factors [see list of 3 factors under impetus], Singapore's Ministry of Health, in conjunction with the National University of Singapore" ... introduced an education programme.[doc9,p1]</p> <p>"rapidly ageing population" [doc12,p. 43]</p> <p>"shift of focus in healthcare from illness to prevention, from acute care to primary care, coupled with the advancement of nursing education" [doc12,p. 43]</p> <p>"Govt policy wants to encourage all chronic diseases be managed in the community by family physicians to shift the focus from episodic care to continuing care. Nurse consultant at the nurse centre is well placed to take on this role" [doc12,p. 46]</p> <p>"In some cases develop new services...e.g. pain management where there are not enough doctors available to provide such a service" [doc23, p.2]</p> <p>"resurgence of interest" [doc30,p. 1]</p> <p>"seizing the opportunity" [doc30, p. 1]</p> <p>"need for greater investment in human resources for health" [doc34, p. 4]</p>	<p>It is not explicit that there are gaps in care or unmet service needs that APN will provide. The need for change in general repetition of interests articulated at the international level and there may be a case that multiple SG settings could benefit by APN roles.</p> <p>One article used the title 'nurse consultant' when referring to the APN role</p> <p>Policy influence in that nursing "was in a position" to develop the role as well as the education.</p> <p>Note the overall comment on the need for a change in the <u>skills</u> of the workforce</p>
3. Benchmarking			

(process of comparing performance to another that is widely considered to be a standard or best practice).			
3.1 Nursing			
3.1.1 International (Outside of Asia and Singapore)	<p>The definition, scope of practice & competencies referred to in the Singapore documents are adapted from the International Council of Nurses (ICN) guidelines for APNs. APN MN curriculum development is aligned with the American Association for Colleges of Nursing (AACN) MN guidelines in the USA & other USA documents.</p> <p>Role development is benchmarked against APN/NP models in the USA, UK, Australia, NZ and driven by factors cited in the international literature e.g. link between APNs & decreased mortality & morbidity, decreased length of stay in hospitals, cost of healthcare & decreased readmissions to hospital supporting a view that APNs offer a beneficial service & fill a gap in health care provision.</p> <p>Consultation and visiting lecturers from the USA were utilised for curriculum development & introduction of MN modules. APN students do an overseas attachment as part of the MN programme (usually in USA) suggesting that international experiences will demonstrate the effectiveness of APNs.</p>	<p>"aligned to international practice" "nursing practice to remain relevant" [doc3, p.5,para 3]</p> <p>"merging of U.S. based Clinical Nurse Specialist & Nurse Practitioners roles" [doc 5, p. 6, top of page]</p> <p>"In an effort to develop a role for expert or advanced practice nurses, we are looking at the practice in US, UK, Australia and New Zealand." [doc8,p1]</p> <p>The question is posed as to what is ... "the appropriate model for advanced practice nurses in Singapore?" [doc8,p2]</p> <p>"Internationally advanced practice nursing has evolved over 25 years to become an important component of modern health care systems"[doc9,p1] "A study in the US concluded that nurse practitioners, the equivalent of nurse clinicians, render care that is equivalent to the quality of care offered by the physician" [doc27, p.39]</p> <p>Curriculum based on "Essentials of Master's Education for Advanced Practice Nursing" by AACN in USA.[doc9, P. 1]</p> <p>"requested assistance from USA: UCSF, UPenn and U Washington"[doc11,p 6]</p> <p>Referring to overseas USA attachment "NPs there had their own practice case load and practiced independently with available consultation from the attending physician" [doc 13, p. 26]</p> <p>"Benchmarking against other programmes also provides a</p>	

		<p>platform from which programme success and any potential need for reforms in relation to the progress of leading regional institutes can be measured" [doc17, p. 878]</p> <p>Singapore striving to develop as a health hub with "nursing as a regional leader with an international reputation", [doc35,p. 591]</p> <p>"Although international experience will tend to dictate the role for APNs here in Singapore we must review our own needs and wants and position APNs so that their potential will be optimized within the framework of healthcare delivery in Singapore " [doc38, p. 6]</p>	
3.1.2 Regional (Refer to Singapore or Asia).	No data was found that revealed benchmarking to other APN roles or education in the region.		
3.2 Medicine			
3.2.1 International (Outside of Asia/ Singapore)	No data revealed comparison to medical care outside of Singapore as a benchmark for APN development.		02.04.2010: On the pos side the international benchmarking is against international nursing practice.
3.2.2 Regional (Refer to Singapore or Asia).	Reference is made to the medical profession in SG suggesting that institutions like the Academy of Medicine & College of General Practitioners could be good models for nursing professional development. There is consistent comparison of APN roles to medical care & provision of care similar to junior doctors but at the local (SG) level.	<p>"there is much nursing can learn from the medical model of professional development"[doc8,p1]</p> <p>"top-notch nurses who take on the role of junior doctors"[doc 21, p1]</p> <p>"complement the care provided by doctors" [doc22, p. 1]</p>	<p>Should nursing emulate medicine & if so what is lacking in SG professional nursing that should be developed? Professional institutions?</p> <p>Benchmarking against medical model.</p>
4. Regulation & Standards	The SG healthcare regulatory framework consists of the regulator (MOH plus its statutory boards) & the regulated (public & private providers). Healthcare professionals are self-regulated by their relevant professional bodies – SNB for nursing with the establishment of committees to oversee legal/regulatory criteria.	Nurses and Midwives Act (1999) amended in 2005 to make provisions for the registration & regulation of APNs. [doc10, p36; doc14]	<p>Legitimacy - Regulations lead to legitimization Punitive action for misrepresentation or poor performance.</p> <p>? of quality & public protection?</p>

	<p>SNB is in the position to regulate standards for training & education of nurses & midwives including APNs. The establishment of an APN Register of qualified APNs further solidifies standards for APN practice.</p>	<p>“extend the functions of the Board to regulating the registration, qualifications, training, education, standards and scope of practice, professional conduct and ethics of Advanced Practice Nurses” [doc 25b, clause 4, p. 11]</p> <p>An APN whose practicing certificate has been cancelled may be issued a practicing certificate as an RN instead. [25b, P. 14]</p>	<p>Nice clarification if the A certificate is cancelled.</p>
4.1 Role Criteria	<p>To practice as an APN in SG an RN must complete a SNB accredited MN programme. The application for APN certification follows completion of the internship and defines what the applicant is required to do: defines the area of clinical practice; describes the planned model & scope of practice. A candidate must obtain endorsement by Clinical HOD & DN; obtain the commitment of at least one named clinical supervisor; and complete administrative requirements. Following approval of application a 1 yr provisional certification is given in order to complete the internship & appear before an APN Review Panel. It is possible to obtain up to two 6 months extensions to proceed to be certified as an APN. No nurse or APN may practice without official SNB certification.</p>	<p>“Do I become an APN automatically after completing a master’s degree?” [doc 2, p2, para1]</p> <p>“ to be recognised as an APN, the nurse must fulfil a set of stipulation including a recognised master’s degree in nursing, completion of internship and verification of core APN competencies in the relevant specialty, completion of 12 case studies and recommendations from the Clinical Head of Department and Nursing Director of the employing institutions” [doc10, p. 36]</p>	
4.1.1 Title	<p>Singapore, through its regulations & standards, provides protection for the title ‘Advanced Practice Nurse’. Penalties for false assumption of title of nurse and false assumption of title of Advanced Practice Nurse are well defined. The ‘Nurse Specialist Register’ (terminology) has been deleted & replaced with the “Advanced Practice Nurse Register’.</p>	<p>“called Advanced Practice Nurses (APNs)” [doc 1, p 1, para 1]</p> <p>“‘Advanced Practice Nurse’ means a registered nurse who is certified as an Advanced Practice Nurse under section 32” [doc4, p. 1, para 2 top of page &12, para 3]</p> <p>The title ‘Advanced Practice Nurse’ is restricted to Registered Nurses who are authorised by the Singapore Nursing board (SNB) to practice as APNs. The</p>	

		<p>use of the title without authorization by the SNB is an offence.”[doc10.p.36]</p> <p><i>“For the purpose of this paper we will call the Advanced Practice Nurse (APN) a Nurse Consultant.”</i>[doc12, p45]</p> <p>“deleting the words ‘he is a nurse specialist’ ...”and substituting the words ‘an Advanced Practice Nurse or is qualified to practise a specialized branch of nursing” [doc 25b,p. 8]</p> <p>“With the amendment of the Nurses & Midwives Act, the title of ‘Advanced Practice Nurse’ will be protected, that is the title would be used by only those persons who are registered as APNs with SNB” [47, p. 23]</p>	<p>Confusing move depicts here given title protection so imbedded in regulation in SG. Interchanges title throughout the article [doc only that does this].</p> <p>In doing the interviews clarify the change in title from nurse specialists to advanced practice nurse.</p>
4.1.2 Definition	Official & regulatory definitions adopted by the SNB exist for APNs in Singapore. Refer to quotes for definitions & some variation.	<p>“What is an Advanced Practice Nurse (APN)? An APN is an umbrella terms given to a Registered Nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for extended practice”. [doc 2, p1, para 1]</p> <p>“‘Advanced Practice Nurse’ means a registered nurse who is certified as an Advanced Practice Nurse under section 32” [doc4, p. 1, para 2 top of page &12, para 3]</p> <p>“An Advanced Practice Nurse (APN) is an umbrella term given to a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice”. [doc5,p1-2;doc11,p.3]</p> <p>“unique combination of a nurse practitioner & clinical nurse specialist” [doc9,p1]</p> <p>“are registered nurses who are prepared with Master degree in</p>	<p>Legitimacy</p> <p>No obvious title confusion as seen internationally. Agreed definition adapted from ICN.</p> <p>The ICN definition for APN was adapted for SG.</p>

		<p>clinical nursing to provide preventive and acute health care services to individuals. They work independently and collaboratively with the healthcare team".[doc 15, P. 2]</p> <p>As defined by the MOH "registered nurses who have the necessary qualifications, competence and experience to practise as an APN" [doc22, p. 1;doc23,p1]</p> <p>"an Advanced Practice Nurse (APN) is independent in clinical decision-making. She evaluates, assess and conducts therapy to individuals, families and the community" [doc29,p. 2]</p> <p>SNB definition to "What is an APN?" A registered nurse who- a) holds such qualification or has gained such special knowledge in a specialised branch of nursing as may be approved by the Board; b) has such experience in that branch of nursing as may be required by the Board; and c) has fulfilled such further conditions as may be specified by the Board... shall be eligible to apply to the Board to be certified as an Advanced Practice Nurse. " [doc43,p. 2]The next slide continues with the official definition of APN that has been used throughout the other documents.</p>	<p>Somewhat different than the definition provided in other docs & by the SNB</p> <p>Official vs. various independent definitions in some docs</p>
4.1.2 Scope of Practice	<p>Scopes of practice for the APN are provided in detail. Scope of practice covers the various APN activities in clinical practice: conducting comprehensive health assessments; ordering & interpreting diagnostic tests, planning & managing pts. With complex health problems, initiating treatment according to an approved protocol; education & counseling of patients; consultation/collaboration with other professionals, clinical leadership & inclusion of EBP with the clinical component of the role becoming the major</p>	<p>"diagnose, treat and manage...initiate and implement changes in the healthcare service...education of nursing staff and health care professional... initiate and coordinate nursing research" [doc 2, p 1, para 2]</p> <p>Opportunity to "expand or extend ... scope of practice"[doc8,p1]</p> <p>"appropriate role" [doc8, p.2]</p> <p>"ideal would be for APNs to merge their newly acquired medical skills with the distinctive components of the nursing profession"[doc9,pp5-6]</p> <p>"Nurse Consultants in the nurse centres are Masters prepared</p>	Adapted from ICN

	<p>focus. Patient management & treatment is based on critical enquiry & analytical decision-making skills.</p>	<p>clinical experts with strong knowledge base and specialisation in gerontology."[doc12,p45]</p> <p>"hybrid" [doc11,p 19-20]</p> <p>"Greater depth and breadth of knowledge; synthesis of data, complexity of skills and interventions" p. 1"</p> <p>"Prescriptive privileges... work in progress" [doc14, p. 16]</p> <p>"Support for APN prescribing reduces: patient consult episodes & patient dissatisfaction; work duplication & public doubting of APN capabilities" [doc14,p. 16]</p> <p>"the scope of care extends beyond that of a traditional nursing and encroaching on medical practice."[doc15, P.2, para2]</p> <p>"qualified to take over some duties traditionally carried out by doctors"[doc 19, p1,para2]</p> <p>" provide consultation, order and interpret diagnostic tests, diagnose minor ailment, and furnish medications" [doc21, p. 1]</p>	
4.1.3 Competencies	<p>Detailed lists of core clinical & professional competencies are provided in several documents with slight revisions on what % of time should be spent on the clinical role vs. the professional role [conduct research, EB approach; mentors & teaches nurses; health advice; advocate; member of a healthcare team]. A candidate for certification must submit a competency checklist.</p>	<p>APN competency roadmap [doc43,p5]</p>	<p>Adapted from ICN</p> <p>See Doc 43 for numero diagrams, definition of internship, APN certificate interview</p>
4.2 Education	<p>The concept and support for an academic APN programme was initiated by MOH and provided by NUS with influence & active participation of physicians in the education process and as lecturers. The SNB was positioned to accredit the programme that commenced in 2003 under the auspices of Yong</p>	<p>"bridging"[doc5, p4, midpage]</p> <p>"the importance of nursing education and training cannot be overstated"[doc8,p2]</p> <p>"Advanced practice nursing began in Singapore in 2003 with the commencement of the Master of Nursing programme at the National University of Singapore".[doc10,35]</p>	<p>Those who influence AP education potentially sh the role as it is develop implemented.</p> <p>Equating the introduction the APN with the commencing of the education programme.</p>

	Loo Lin School of Medicine, Division of Graduate Medical Studies (DGMS).	<p>Due to budgetary constraints "decided to develop our own curriculum" [doc11,p6]</p> <p>"Use the recommendations from AACN" [doc11,p6]</p> <p>"Conceptual framework was based on Benner's model" [doc11,p6]</p> <p>"Developed curriculum and offered the program since 2003" [doc11,p7]</p> <p>"Knowledge and the ability to accept change has been and will remain key factors for nurses to succeed in the increasingly developing healthcare environment" [doc26,p. 1]</p> <p>"stay relevant within the evolving healthcare system" [doc26, p. 1]</p> <p>"it is imperative that nursing education programmes themselves act as agents of change. In my opinion, nursing education in close collaboration with practice settings will shape the present and future of nursing in Singapore" [doc26, p. 1]</p> <p>Move from apprenticeship scheme[doc27]</p> <p>Nursing education at the university helps prepare nursing to deal with political issues.[doc27]</p>	
4.2.1 Academic (higher education & the accrual of scholarly knowledge)	The APN MN programme began in 2003 as an – 18 month offering emphasising a change from hospital- based training to tertiary level academic education. The curriculum followed guidelines recommended by ICN & AACN [USA] for MN & APN education.	<p>"master's degree in nursing which is clinically focused" doc2,p1,para3]</p> <p>"students will undergo a rigorous programme that aims to provide an academic and clinical foundation for Advanced Practice Nursing" [doc6, p4]</p> <p>"Nurse graduates from overseas master of nursing programmes should complete the following...[doc 2, p 2, para 2 & 3]</p> <p>"National University of Singapore, in conjunction with</p>	<p>Legitimacy</p> <p>Move from polytechnic education to university programmes.</p>

		<p>the Ministry of Health" [doc1, p1, para 1]</p> <p>"objectives of the MN programme are to equip APNs with advanced knowledge, skills and competencies to perform health and physical assessments, including ordering and interpreting diagnostic tests, to manage patients in collaboration and consultation with other healthcare professionals, to perform as a clinical leader and to conduct nursing research and utilize evidence based nursing. " [doc13, p. 25]</p> <p>"approved academic requirements by SNB for advanced education" [doc14, p. 5]</p> <p>"future of nursing in a university environment" [doc17, p.875]</p> <p>"the primary focus of any nursing programme must be to produce the first level RN who can work safely in any number of clinical environments" [doc17, p. 878]</p> <p>"need nurses who can critically and efficiently translate clinical evidence into practice" [doc 17, p. 878]</p> <p>"gives nurses better clinical and academic knowledge"[doc27, p.43]</p> <p>"the pressure on their clinical seniors to re-train increases"[doc27,p. 43]</p> <p>"cycle for advancing professional nursing" [doc27, p. 43]</p> <p>"academic and clinical foundation for advanced practice nursing" [doc29,p. 2]</p> <p>"landmark achievement in nursing education in Singapore" [doc38,p. 4]</p>	<p>An assumption that university education will help nurses deal with political issues.</p>
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12.2.1 Preparation for Role (practical activities or training leading to skilled behaviour)	The review of documents describes preparation with a clinical focus as emphasising the core values of nursing in order to provide knowledge & confidence for the APN to be directly involved in planning care of pts.	<p>"prepares Registered Nurses to acquire specialised advanced education and clinical competencies" [doc 1, p 1, para 1]</p> <p>"programme equips APNs with advanced knowledge, skills and competencies" [doc6, p5][similar in doc11,p.8]</p> <p>"a training programme that would prepare good clinical nurses to become advanced practice nurses"[doc8,p2]</p> <p>"acquire specialised advanced education and clinical competencies to provide health care in various acute care settings, including intensive care units" [doc9,p1]</p> <p>"In order to function effectively in their role, APNs are prepared at a master's degree level"[doc10,p37]</p> <p>"objectives of the MN programme are to equip APNs with advanced knowledge, skills and competencies to perform health and physical assessments, including ordering and interpreting diagnostic tests, to manage patients in collaboration and consultation with other healthcare professionals, to perform as a clinical leader and to conduct nursing research and utilize evidence based nursing."</p> <p>"MN course prepared them to be clinical leaders"[doc13,p25]</p> <p>"course work and clinical practice aimed at preparing a select group of fully-funded RNs as APNs in adult care and mental health. " [doc17, p. 877]</p> <p>"formal training"[doc22]</p> <p>"preparing registered nurses to assume a clinical role and to use research to improve patient outcomes" [doc29,p. 2]</p>	
4.2.3 Funding	The MOH provides S\$24,000/per student for academic fee (full tuition	MOH "sponsorship" [doc	Feasibility 09/04/2010 – Funding v

	<p>paid for FT student) and the sponsoring employer pays fulltime salary while the nurse is in the programme.</p> <p>Philanthropic funding of 10 million dollars was established to start the Nursing Department at NUS that currently oversees the APN programme.</p>	5,p4,bottom page]	<p>continue but fees have increased to S\$30,000/ FT student.</p> <p>09/04/2010 At many le there is strong financial support for nursing education in general in as well as APN. Acces funding continues & shc no sign of stopping.</p>
<p>1.4 Internship (practical experience in a chosen field following completion of an academic education programme in order to use the knowledge learned and put it into practice).</p>	<p>During the internship the graduate of the APN programme begins the process to become a clinical care expert under the preceptorship of a senior physician learning skills that were not taught during the MN programme. The internship is under the supervision of physician preceptors and includes stipulation of clinical hours, + completion of case studies and recommendations from DN & Head of Clinical Department. The internship must be completed prior to application for final completion of the certification process.</p>	<p>"the beginning of a role transition from MN graduate to APN – a journey from novice to expert"</p> <p>"one year (1040 hours) of supervised clinical practice and verification of core APN competencies in the relevant specialty under the supervision of physician preceptors...completion of 12 case studies" [doc2, p2, para 1]</p> <p>" feature of the programme is a 1- year internship undertaken at the end of the 18 month formal study to allow the nurse to further develop his/her role and acquire the required competencies" [doc9,p1;doc10,p37]</p> <p>Re study of 1st cohort of APN interns the internship "81% of participants reported using practice protocols & 69% helped develop them. 10% reported not having to consult with attending physicians before instituting orders for treatment"</p> <p>" 1 year, named physician preceptor, min 65% clinical care, remaining 35% to perform professional role, present & write up one case study per month, after 1 year internship can apply for APN title with SNB; need recommendations from DN & HOD" [doc11,p.12]</p> <p>"the beginning of a role transition from MN graduate to APN – a journey from novice to expert" [doc13, p. 25]</p> <p>"APN internship program...Preparation for Nurse-Led Clinics"[doc20]</p>	<p>well defined process; fa under the jurisdiction of SNB</p> <p>The internship is not pa the education programn but required by SNB pri to certification & is coordinated under the auspices of the future APN's employer.</p>
<p>1.5 Certification</p>	<p>Upon successful completion</p>	<p>"endorsement by the APN Certification panel" [doc2, p2,</p>	

<p>(a person is assessed & confirmed as being competent in a profession)</p>	<p>of the internship the APN candidate applies to the SNB to appear before a certification panel. The certification panel approves/passes or rejects the APN candidate. A table of required clinical hours is provided that details criteria for provisional certification & post certification status. If found to be negligent in the role an APN is required to surrender his certificate & must do so within 14 days of the cancellation or suspension of registration as an RN or certification as an APN.</p> <p>There is intent to implement mandatory CNE for the renewal of the APN Practising Certificate but data did not reveal guidelines for this requirement.</p>	<p>para2]</p> <p>"APN Training Committee accredits courses leading to APN certification" "APN accreditation committee oversees the certification of APNs and matters relating to APN practice" [doc3, p5,para2]</p> <p>"practising certificate" [doc4,p6, bottom of page #18]</p> <p>"accredited" [doc4,p1,para2]</p> <p>"certificate of enrolment" certificate of registration" [doc4, p1]</p> <p>"where an Advanced Practice Nurse has had his registration as a registered nurse cancelled or suspended...his certification as an Advanced Practice Nurse shall be correspondingly cancelled or suspended for the same period" [doc25b, p. 6]</p> <p>"the Board may refuse to certify any person...who in the opinion of the Board = (a) is not of good reputation and character" [doc25b,p. 9]</p> <p>"provides for an Advanced Practice Nurse Register to be kept & maintained by the Registrar to disclose information in it to prescribed persons" [doc25b, p. 15]</p> <p>"grueling series of tests & an evaluation to qualify as APN" [doc32,p. 2]</p>	<p>A helpful detail that can easily be overlooked.</p> <p>Hard to define & could have broad interpretations.</p> <p>Any protection for the APN?</p> <p>All processes highly regulated.</p>
<p>4.4.1 Renewal</p>	<p>Stipulated clinical practice hours are required to renew the practicing certificate. Reference is made to a table of <i>minimal duration of clinical practice required for renewal of Practising Certificate</i> based on Benner's Stages of Clinical Competence. The table is divided into 4 levels of clinical practice:</p>	<p>"Only clinical practice that utilizes the competencies of the APN can be included for the clinical practice requirement. The clinical practice can include but is not limited to: managing the health care of a target group of patients at an advanced level, providing care to a target group of patients who are physiologically unstable, providing comprehensive advanced nursing services to a target group of patients in the</p>	

	<p>Year 1 – Internship (supervised practice- (Novice/Advanced Beginner_ – equivalent to 40hr week also defined as 1040 hours (26 weeks); Year 2 (competent) 800 hours (20 weeks); Year 3 (Proficient) – 560 hours (14 weeks); Year 4 (Expert) 320 hours (8 weeks)</p>	<p>areas of health promotion, health maintenance, and health restoration, using a collaborative model of practice to provide direct services to target group of patients in a variety of settings” [doc2, p. 3, para 2]</p>	
<p>1.6 Registry (The compilation & maintenance of a list of names of people who have met specified professional standards)</p>	<p>SNB maintains the APN Registry of who may or may not be registered as an APN. Additional details associated with the APN Registry define the appeals procedure; regulation of practice & conduct; what the APN register means and how SNB regulates certification. The Registry provides the names of RNs who have the necessary qualifications, competence and experience to practice as APNs.</p>		<p>Result of amendment to Nurses & Midwives Act</p>
<p>4.6 Career Structure</p>	<p>The MOH established a clinical career structure for RNs in 2001 with related remunerations in order to retain nurses in clinical roles and open up an alternative promotion track. In the clinical career track the APN is placed at Level 2 & can progress to Level 3 – at Level 3 APNs must maintain at least 20% clinical hours of direct patient care to maintain APN certification & a place in the clinical path..</p>	<p>“upon certification as an APN by the SNB you may apply to be an Associate APN with your employing hospital/institution. You will be given the opportunity to be promoted to APN after a minimum of one year of clinical experience following registration as an APN, on demonstration of good clinical leadership and competencies, and upon recommendation from your Director of Nursing and Clinical Head of Department” [doc2, p3, para 4]</p> <p>Re progress to Level 3 “superior leadership performance & professional maturity; ready to accept increased leadership responsibilities in areas of clinical practice, education, research or administration and mentor younger nurses”[doc14,p12]</p> <p>“Opportunities exist in these nursing specialties and subspecialties.”[doc15, P. 2]</p> <p>“allow experienced and skilled nurses who have the necessary</p>	<p>Legitimacy & sustainability</p> <p>Benner’s Novice to Expert thesis is used by the SNB as measured progress for APN internship to expect 4 years post graduation</p> <p>Previously trapped in history.</p> <p>Career enhancing setting</p> <p>The modern woman with other career opportunities finds that nursing no longer is appealing but the fierce servitude prevails. The ‘Report’ recommends the nurse clinician role for career mobility as against educators & managers [doc27].</p>

		<p>advanced qualifications to remain in the clinical setting without compromising their career development." [doc23, P.2]</p> <p>"Nurses have traditionally progressed in their career by moving up either the management or the education track. ...clinical experience and expertise are unfortunately lost when experienced and competent nurses are promoted out of the clinical areas to become managers or educators." [doc23,P.2]</p> <p>In reference to the APN Register "help systemically develop a category of clinical nurses to become key players in Singapore" [doc 35,p. 592]</p> <p>Highest level in the clinical track[doc29]</p> <p>Past career structure [without a clinical path] has contributed to brain drain as nurses went overseas [doc35,p. 591]</p>	
5. Nature of Practice	<p>The nature of practice for APNs is associated with their ability to manage chronic stable conditions, high acuity situations and provide coordination for aging care. At times this is equated to the role of the junior doctor. The APN can potentially be a resource for triage nurses, provide referral to specialist doctors, initiate discharge instructions, present staff & pt education, participate in journal club and provide conference papers. Improved patient outcomes are linked to the ability of APNs to be involved in research projects. APNs are described as full partners in healthcare delivery & in the shaping of healthcare policies.</p>	<p>"At least 65% of the APNs' time is allocated to the delivery of clinical care, with the remaining 35% spent on staff education, research, quality improvement initiatives and projects"</p> <p>"health assessments, monitoring of health condition and symptoms, working out with clients' family physicians in the neighborhood, to monitor the health status and condition of the clients"[doc12,p45]</p> <p>"within the framework of collaboration the nurse consultant and family physician will see their clients independently and interdependently, supporting one another to fully use their separate and shared skills"[doc12, p. 46-47]</p> <p>"are authorized to take health histories and provided complete physical examinations; diagnose and treat many common acute and chronic problems; interpret</p>	<p>Impetus to keep nurses clinical practice or at the bedside yet dictates numerous other duties. Later on the clinical time qualify as an APN was increased to 80 or 85%.</p> <p>Individual APNs are pioneers & champions of quality care.</p>

		<p>laboratory and diagnostic results; furnish and manage medications and other therapies; provide health teaching and counseling to support healthy lifestyle behaviors and prevent illness; and refer patients to other health professionals as needed" [doc15, p. 2,para2]</p> <p>"qualified to carry out some tasks done by doctors". " first APN in Palliative Care" [doc16, p. 7]</p> <p>"nurse experts must become experts in nursing and not tasks that doctors no longer want to do for themselves and yet do not wish to fully relinquish" [doc27,p. 38-39]</p> <p>"Certified APNs may be allowed to change specialty practice on a case-by-case basis, subject to approval by APN Accreditation Committee; Applicant has to request in writing stating: reasons for change; intended practice role; defined scope of practice; stated competencies; 1 year supervision in new specialty under named clinical supervisor and endorsement of Head of Department/Director of Nursing is required" [doc43, p. 8]</p>	<p>An assumption that the doctor needs to see the 1st to judge who is appropriate for the APN see.</p>
5.1 Settings/Specialties	<p>15 identified specialties/subspecialties likely to be options in SG for an APN are listed. These include: Acute (ICU, ER), medical/surgical (oncology, gerontology, cardiology, neurology) care, community care (polyclinics) MH (inpatient & outpatient) and palliative care. APN services are not meant to replace community based services that are already available but the data are not specific to definition of what this means.</p>	<p>"provide health care in a wide variety of acute care settings" [doc 1, p 1, para 1]</p> <p>"currently being developed for four adult-based specialties...minor acute conditions and stable chronic conditions" [doc2, p1, para 4]</p> <p>"Provide 'right site' care" "stabilize the clinical environment during change of Housemen and Medical Officers postings" [doc 5, p3, top of page; doc 11, p4].</p> <p>" all areas of clinical practice – hospitals and the community"[doc8,p2]</p> <p>"specialty-based; unit-based</p>	<p>Speculation: implied vs. reality of what specialties are being offered.</p> <p>10/03/2010 Pediatrics is offered as a specialty at any level-adult only.</p> <p>Is the intention primary care?</p> <p>Ambitious</p>

		<p>roles"[doc9,p2]</p> <p>"most APNs worldwide are practicing in acute care settings"[doc10,p. 37]</p> <p>"development in other specialties as the APN role matures". [doc10, P. 37]</p> <p>"the goal of the centre is to provide a community-focused, client-centred, holistic and cost-effective healthcare service emphasizing disease prevention and health promotion"[doc12,p45]</p> <p>"respective specialties of health care environment" [doc13, p.25]</p> <p>"wide selection of patient care units and medical specialties"[doc15,p.2]</p> <p>"Role of the Advanced Practice Nurse in Polyclinic Chronic Disease Management: From Concept to Practice"[doc20]</p> <p>"Role of APN in Chronic Disease Management in community Setting"[doc20]</p> <p>"with increasing specialisation and diversification of roles the nurse today is no longer a generic profession" [doc27,p. 40]</p> <p>"one of the 1st Advanced Practice Nurse in mental health" p. 2</p> <p>"leading nurses spearheading efforts to contain problem gambling in Singapore" [doc28, p. 2]</p>	<p>Multifaceted role – all specialties.</p> <p>Almost all the four major chronic diseases named expected to rise are preventable.</p>
5.2 Behaviors Responsibilities	SNB regulates behaviour through reference to professional conduct & ethics suitable for an APN. Working in collaboration & partnership with physicians	<p>"professional conduct and ethics"[doc4,p3(f)]</p> <p>"collaboration and partnership with medical practitioners and other health care professionals"</p>	

	<p>& other health care professionals is reiterated throughout the document analysis with emphasis on collaborative multidisciplinary management & treatment provided by RNs who now have added responsibilities.</p>	<p>[doc 2, p1, para2]</p> <p>"role modeling, mentoring, and sharing of knowledge and expertise"</p> <p>"our preferred model [for SG] would be a role that is complementary to the physician"</p> <p>"we shall capitalize on nursing strengths, for example, our holistic approach to care" [?doc9]</p> <p>"The scope of practice will continue to evolve as the healthcare system, society's values and perceptions change"[doc8.p2]</p> <p>"renders care according to best practice evidence agreed upon by both collaborating physician and the APN. (Please attach relevant protocols/guidelines)" [doc7, p2]</p> <p>"the APN is authorized to prescribe specific medications as agreed upon with the collaborating physician" [doc7, p.3]</p> <p>"Accepts accountability & responsibility for his/her own advanced professional judgement, actions & continued competence"[doc7, p2]</p> <p>"work collaboratively with doctors"[doc10,p. 36]</p> <p>"within the framework of collaboration the nurse consultant and family physician will see their clients independently and interdependently, supporting one another to fully use their separate and shared skills"</p> <p>"the intern was granted the same privileges as a clinical associate"</p> <p>"championed quality care for dying patients and implemented the 'Integrated Care Pathway' at Dover Care Hospice [doc16, p. 7]</p> <p>"take on the role of junior doctors" [doc21, p. 1]</p> <p>"assist in caring for chronic</p>	<p>Before role prep as APN followed doctors directly now participate in the management[doc32]</p>
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		patients" [doc21,p. 2] "work with doctors to make key clinical decisions" [doc28,p. 3]	
5.3 Liability/Indemnity	Liability/Indemnity coverage is provided by an APN's employer and is also available through SNA. The continuous advancement & expansion of the APN role is seen to correspond with an increase in medical-legal liabilities as APNs assume higher levels of responsibility. Employing institutions include APNs in existing insurance coverage; the APN remains protected by the current legal doctrine of vicarious liability.	"Who is liable for my practice as an APN?... covered by employing hospital/institution" or "Professional Liability Insurance coverage through the Singapore Nurses Association" [doc 2, p 3, para 6] "It is agreed that neither the collaborating physician nor, in his absence, his designee shall be liable for the actions or omissions of the APN with respect to his/her scope of work unless the APN is acting in accordance with the instructions or directions of the collaborating physician" [doc7,p.3] "sensitive approach should be taken toward determining liability" [doc27,p. 40] nurses who bear greater duties should also be prepared for a correspondingly enlarged sphere of liability" [doc27,p. 40]	
6. Key decision makers		"as policies trickle down the various hospitals and nursing schools, feedback and fresh proposals should be fed back up for consideration. This will create a virtuous cycle of good governance" [doc27, p. 41]	Policy >> "cycle of good governance".
6.1 Government	The amendment to the Nurses & Midwives Act required a pass by the Parliament and President of SG. MOH (April 2005) presented a bill to Parliament to establish a Register for APNs.		
6.1.1 Ministry of Health (MOH) 6.1.2 Chief Nursing Officer (CNO)	Multiple activities & initiatives are linked to the MOH including: Setting up a Nursing Task Force in 1997 & President's Awards to APNs. In addition the MOH is seen to be working with healthcare institutions, organisations, professional associations, private GPs & other partners such as the Committee on Ageing Issues.	"In July 2001 the Ministry of Health recommended a new career structure for registered nurses" [doc8,p1] developed "a training programme that would prepare good clinical nurses to become advanced practice nurses"[doc8,p2] "MOH decided to offer a Master of Nursing"[doc11] "nursing has many supporters, including the Ministry of Health" [doc17, p. 875]	Top down launching of educational programme authority & interest contribute to both feasibility & sustainability. High levels of authority orchestrating change; unanticipated outcomes 30/03/2010 In an effort support the bedside nurse/clinical nursing w. APN rally what was envisioned? [reflection & discussion]

		<p>"the MOH will also more than double the funds for nursing scholarship...in order to provide more opportunities for career development for nurses. These scholarships will be for nurses working towards an advanced diploma or a basic or masters degree in specialised areas of nursing" [doc18, p. 2]</p> <p>"The Board may with the approval of the Minister, make regulations to prescribe the offences which may be compounded: [doc25b,p, 9]</p> <p>Re ageing population "recommends that the government adopts a holistic, family physician centred approach... Other recommendations include developing the range of community-based nursing services and enhancing the role of community case management" [doc12, p. 43]</p>	<p>old comment from Ang, PhD diary]</p> <p>Success & sustainability linked to institutional support.</p>
6.2 Agencies (professional & regulatory bodies specific to nursing)	<p>SNB became a statutory board in 2000 under the Nurses and Midwives Act. It develops & maintains standards for nursing practice that reflect the minimum requirements necessary to assure that the public is provided with safe and competent health care. As a regulatory board SNB credentials APN programmes, the individual in the APN role along with regulation of their practice & continuing education for APN.</p> <p>SNB oversees the internship process, regulates certification & registration.</p> <p>SNA is the professional nursing association and also provides liability insurance for the APN.</p> <p>SNA & SNB represent the Singaporean nursing community.</p>	<p>"Functions of Board [SNB]...to approve or reject applications for certification of Advanced Practice Nurse; to issue practicing certificates; to accredit-courses ...for certification of Advanced Practice Nurses; to regulate standards for the training & education of ...Advanced Practice Nurses; and generally to do all such acts, matters and things as are necessary or authorised to be carried out under this ACT [doc 4, p2-3 #8]</p> <p>"having met necessary stipulations, APN interns are eligible to apply for registration as an APN from the Singapore Nursing Board".</p> <p>"recommends that the government adopts a holistic, family physician centred approach..." Other recommendations include developing the range of community-based nursing services and enhancing the role of community case management services"</p>	<p>Providers of services to APN as well as develop of rules, regulations, educational programme</p> <p>Regulatory committees be related to support & sustainability as well as feasibility for role development.</p>

		<p>Re SNB authority "APNs are authorized" [doc15, p. 2]</p> <p>"the board's role appears to be to accredit nursing courses in Singapore for the purposes of registration and to support courses in Singapore that provide qualifications in nursing or midwifery, in addition to those required for registration and enrolment, and to accredit the institutions in Singapore offering these courses. The board also seeks to undertake the regulation of standards for the training and education of RNs, ENs, registered midwives and advanced practice nurses (APNs). However, there is no direction, at least on the SNB web site as to how one is accredited as a continuing education provider of nursing courses." [doc 17, p. 876]</p> <p>'Unfortunately, this new entity carried a relic of the past: a doctor was Chairman again' [doc27,p. 41]</p> <p>"not a trite observation" [doc27, p41]</p> <p>"iconic significance in the office of the Chairman"[doc27,p41]</p> <p>SNB "is the body regulating nursing practices and to a large extent, nursing policy, since 'SNB is conjoined to its sister Nursing Policy Unit at MOH at their heads with the Chief Nursing Officer holding the post of the Registrar in SNB and DMS as its Chairman.' This is more than a simple choice of hairdos. If nursing is to break free of the manacles of physician servitude, it must happen at the top. Nurse must not only be given the opportunity to steer the course of their profession, they must be manifestly seen to do so. [doc27,P. 41]</p>	<p>Appears to be a system credentialing courses but some ambiguity or a gap to what this process is.</p> <p>Argument was presented against having the Director of Medical Services as Chairman of SNB, however the Minister approved but failed to give us any rationale to substantiate this. [doc27, P. 41]</p>
3.3 Institutional – Education	NUS, School of Medicine (Dean of Medical School & Director, DGMS) initially had authority over the APN education programme until	"National University of Singapore, in conjunction with the Ministry of Health, started an 18-month Master of Nursing programme" [doc1, p1, para 1]	Up till establishment of ALCNS top up or transition from RN to BSc were offered in offshore main distance learning courses

	its move to ALCNS in 2009. HOD ALCNS now has departmental authority but still functions under the Dean of the Medical School, NUS. NUS provides an academic education option for nurses in Singapore at the BSc, MN, MSc & PhD levels.		
3.4 Employers of APNs (institutions employing APNs)	The review of documents suggests the supportive role was expected of employers. The related quotes best describe this expectation.	<p>"the organization [employer] has a responsibility to play in creating a culture and working environment that values the professional growth of APNs and in promoting role clarity"[doc9,p6]</p> <p>"institutions must recognise and reward...differences in nursing roles...by utilizing and compensating nurses according to their different education levels and competencies" [doc27,p. 36]</p> <p>"IMH spearheaded a number of initiatives as part of the Ministry of Health's National Mental Health blueprint"[doc28, p.3]</p>	<p>"the organisation" possibly referring to the employers APNs inferring the importance of institution decision makers.</p> <p>Polyclinics are outpatient healthcare facilities in S 09/04/2010 What is not mentioned in the documents obtained that the DNs & clinical staff decide what nurses may apply for the education programme, who will precept them during internship & where they work following certification. There is currently no APN students who are self selected – mostly due to funding issues & requirement for FT students</p>
6.5 Other professionals	Physicians have total responsibility over patient care management. In a CPA (collaborative practice agreement) between APN & MD the physician delineates what the APN can do as in is "allowed to treat".	<p>"The DGMS reserves the right to reject any application without assigning reason"</p> <p>Re diagnosis/treatment disagreements "In the event where no consensus is possible, the decision of the collaborating physician shall prevail" [doc,7 p. 2]</p> <p>"Both the APN and Collaborating Physician will review the agreement [CPA] annually or as deemed necessary".[doc7]</p>	Depending on the citation document other professionals, usually doctors, are cited as support but also as lack of support.
7. Support			
7.1 Anticipated	As part of the healthcare team APNs require the support of peers & colleagues plus other healthcare professionals to be successful. A survey done of APN interns	<p>"invaluable assistance of the enlightened leaders in the medical profession"[doc8,p2]</p> <p>"understanding the APN role and its relationship to other roles within nursing and other health</p>	What impact does this have on nursing & nursing education with the presence of physician lecturers? Will they precept the medical model only what happens with the

	<p>expected support by peers & other professionals.</p> <p>Physician lecturers are expected to lecture in the proposed MN programme & thus are viewed as supportive.</p>	<p>professions is important to ensure growth and maturation of the role in Singapore".[doc9,p.1; doc10,p35]</p> <p>"continued success of the APN role will only be achieved by the development of a positive partnership and collaboration with the medical, nursing and other key professionals" [doc10,p38]</p> <p>"Clear definition of roles and responsibilities are integral to success"[doc12,p.46]</p> <p>"most of the retired nurses will also belong to the 'baby boomers' group...better educated and financially more secure"[doc12, p. 46]</p> <p>"the university programmes need the support of regulatory boards, the government and the healthcare system, especially where innovation or curricula reform is required" [doc17, p. 878]</p>	<p>model of physicians shaping the education c nurses?</p> <p>feasibility</p>
7.2 Actual	<p>Physician provides medical direction for the APN as needed, available by phone or interactive consultation prn a collaborative backup physician provides backup consultation when 1st consultant is unavailable. Collaborative relationships with health care professionals, esp. physicians, are reported in a survey done on APN interns in the form of knowledge of APN role; support from nursing leadership; level of preparation for APN role</p> <p>The APN programme includes physician lecturers based on a history of experience with physicians lecturing in other nursing programmes in SG.</p> <p>MOH is philosophically supportive of nursing in SG & APNs specifically as manifested in the funding of education tuition fees & passage of regulatory documents.</p>	<p>SNB "has made several changes over time to support nursing practice."[doc3,p5,para 3]</p> <p>"Regulation 2006 was approved by the Minister of Health and came into operation on 1st July 2006. These dates were significant as it provides for the implementation of the Advanced Practice Nurse Register". [doc3,p.6,para1]</p> <p>"support from physicians/surgeons; knowledge of the role of the APN; support from nursing leadership; level of preparation of the APN"[from APN intern survey][doc5,p.14]</p> <p>"results suggest that the APN interns, as they mature in their role, are working in close partnership with physicians and are assuming responsibility for tasks that had been performed by traditionally by doctors."[doc9,p.5]</p> <p>"development of the APN role was done in collaboration with the HOD through frequent,</p>	<p>Cited as support but als as lack of support in AP intern survey</p> <p>Taking over MD tasks c also be seen as role conflict. Dissociating the APN fr nursing.</p> <p>Philosophical & funding support by MOH.</p>

	<p>From a funding perspective the employer (hospital) pays full salary while a student is in the programme adding to the support for the APN student.</p> <p>Merit Award –a badge (gold plated pin, design of honour) to be worn as part of the nursing uniform and S\$200 -provide visible support to individual APNs.</p>	<p>regular meetings” A collaborative agreement was made on the type of patients and conditions...was allowed to treat, those she should not treat and those which needed immediate attention of a physician.” [doc 13,p26]</p> <p>Re nurses with advanced training “This is a trend which MOH encourages.” [doc22, P. 1]</p>	
8. Barriers Obstacles			
8.1 Anticipated	<p>The document review suggested a continuing tug-of-war between the medical vs. nursing model and that the development of APN roles may lead to a “collision course “with physicians. Further the data suggest that confusion & disagreement as to scope of practice for the APN will provide barriers to role implementation & possibly a potential for not only role conflict but also underuse & misinterpretation of the APN role.</p>	<p>“The family physician has total responsibility for decisions about patient management. Hence, the development of nurse consultants in primary care is a challenge to the traditional medical model of care delivery and must be treated with caution to minimize misunderstanding of the different professional role”</p> <p>“are they [APNs] dissociating themselves from their nursing role...without conscious realization”? P. 5 “It is crucial for APNs to remember that they are first & foremost nurses, and advanced practice nursing arises from the nursing profession. Arguably, understanding and respecting the medical world view is important, and can help the APN incorporate new ways of knowing, making decisions and practicing. However, if the APN completely assumes the medical worldview the result is immeasurable loss of an enriched nursing role.” [doc9, P. 5]</p> <p>“The family physician has total responsibility for decisions about patient management. Hence, the development of nurse consultants in primary care is a challenge to the traditional medical model of care delivery and must be treated with caution to minimize misunderstanding of the different professional role” [doc12, p. 46]</p> <p>“Clarity of APN roles is important</p>	<p>Higher levels of authority physicians & DNs who precept, recommend, endorse dictate the process.</p>

		<p>to APN development"[doc14]</p> <p>"encroaching on medical practice." [doc15,P. 2]</p> <p>"Innovation in programme development must be justified by effective content delivery. Apart from this overriding concern, there may also be other constraints that limit innovation in curriculum planning. Regulatory board approval, adherence to university policies and the need to match market expectation with performance delivery are some of the considerations that may be taken into account when changing the status quo. Societal regulation and the culture of decision making in the government also influence issues regarding innovation and the MOH provides clear direction" [doc17, p. 878]</p> <p>"With an increasing number of medical specialists in Singapore many patients are being treated symptomatically. Specialised nurse clinicians may aggravate the situation" ...also "leading to care being fragmented amongst various specialties" "case management provides a solution to this" [doc27,p. 40]</p>	<p>Lack of clarity of the AP roles is therefore a barr</p> <p>Contrast or shifting in vi review [doc27,p. 40] un balancing specialisatio with holistic care</p>
8.2 Actual	<p>SNB has the authority to approve or reject APN applications, issue practicing certificates, accredit educational courses; accredit teaching institutions offering courses, regulate nursing standards/scope of practice. Emphasis on misconduct</p>	<p>[SNB] "generally to do all such acts, matters and things as are necessary or authorised to be carried out under this ACT":</p> <p>"The Registrar may disclose, in accordance with any prescribed conditions, any information in the Advanced Practice Register to any prescribed person."</p>	<p>Significant power & authority over nursing.</p> <p>The Registrar is the CN MOH</p>

	<p>including false assumption of titles & fraudulent registration.</p> <p>Repeatedly data suggests that to deliver a nursing programme in SG there are system constraints of 1) university rules & regulations for approval in the context of onsite delivery & quality expected; 2) faculty must meet the parameters of the regulatory authority for programme accreditation.</p>	<p>"lack of knowledge of role of APN; lack of support from physicians/surgeons; inadequate level of preparation of the APN" [from APN intern survey][doc5, pp 14-15]</p> <p>"Lack of role clarity, lack of support and inability to focus solely on clinical care were cited as barriers" [doc9,p.6] [survey]</p> <p><u>Barrier to full extent of practice re prescribing</u> – The Medicines Act Chap 176 Clause 29 on Medicinal products on prescription. "states only 'doctors, dentists and veterinary surgeons' are allowed to prescribe" [doc14, p. 16]</p> <p>"Nurses have traditionally progressed in their career by moving up either the management or the education track. ...clinical experience and expertise are unfortunately lost when experienced and competent nurses are promoted out of the clinical areas to become managers or educators." [doc23, P.2]</p> <p>"the development of nursing professionalism is hindered by nurses themselves, the organisations they work for and broader social and healthcare policies leading to harsh working conditions: [doc27,p. 37]</p> <p>"As the scope of nursing practice expanded to include tasks that were previously exclusive to the medical profession the restrictions placed on nursing by the combined effects of section 26(2) and section 17 of the MRA [Medical Registration Act] becomes increasingly untenable. .. the scope of nursing duties found in section 26(2) of the NMA (Nurses and Midwives Act) should be expanded to include the core duties covered by the case managers and clinicians" [doc27,p. 39] "may include the competencies to give diagnosis and prescriptions". [doc27,P. 39]</p>	<p>Noted is a change in perceived support, barriers & working relationships over time [survey].</p> <p>Extensive regulation & regulatory authority by SNB.</p>
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		<p>APN needs to address differences so that" parents & teachers understand the diagnosis and agree with the treatment....reinforce therapeutic goals at home and in the classroom" [doc29,p. 2]</p> <p>The NUS study (Tan et al 2002) reveals that the limited ability of nurses to influence policies that affect them stands as a key barrier to professional development.[doc27]</p>	
<p>9. Gatekeeper effect (A gatekeeper controls access to something – e.g. monitors or oversees actions of others).</p>	<p>Physician preceptors, Head of Clinical Department & DN recommendations required at several levels for the APN candidate to proceed through education & qualifications. In practice the physician periodically reviews charts managed by the APN & the physician decision is final in the event of disagreement over case management.</p> <p>SNB has the authority to approve or reject APN applications, issue practicing certificates, accredit educational courses; accredit teaching institutions offering courses; regulate nursing standards & scope of practice. Documents under the jurisdiction of SNB provide details on misconduct including false assumption of titles, fraudulent registration.</p> <p>Employer approval is required all along the way from choosing the MN candidate to supporting through the internship to employing as independent APN. Multiple steps in the certification process must be approved or endorsed by HOD & DN of the institution employing the APN.</p>	<p>SNB "generally to do all such acts, matters and things as are necessary or authorised to be carried out under this ACT": [doc4,p. 3]</p> <p>"The Registrar may disclose, in accordance with any prescribed conditions, any information in the Advanced Practice Register to any prescribed person." [doc4, P. 13]</p> <p>"The DGMS reserves the right to reject any application without assigning reason" [doc6, p. 7]</p> <p>Re diagnosis/rx disagreement" In the event where no consensus is possible, the decision of the collaborating physician shall prevail" [doc 7, p. 2, bottom of page]</p> <p>"Both the APN and collaborating physician will review the agreement annually or as deemed necessary" doc 7. p. 3, para3]</p> <p>"having met necessary stipulations, APN interns are eligible to apply for registration as an APN from the Singapore Nursing Board".[doc9, P. 1]</p> <p>APN is "allowed to treat" [doc 13, p26]</p> <p>"someone has to undertake the 'gatekeeper role' in practice regulation, curricula development and quality control, especially in a country where nursing is taking on a new role in healthcare delivery." Doc17, p. 878]</p>	<p>These gate keeper roles are a passage for the A student>intern>certified and could also be seen as a facilitative gatekeeper effect in progress as we guard/limiting progress</p> <p>Note: the Registrar of S is the CNO for the MOH- Lacking protection or support for nursing? Director of Medical Services sits on the SNB has been the director of SNB.</p>

		<p>"the Board may exercise any of the powers in subsection (2) if the Board is satisfied that an ...APN" has obtained registration fraudulently, failed to comply with condition; convicted of an offense; misconduct; unable to perform, not renewed practicing certificate; is deceased. [doc25b, P. 1-2]</p> <p>"the powers mentioned in subsection" [doc25b,p.4]</p> <p>"to increase the range of disciplinary action that the Singapore Nursing Board (the Board) may take" [doc25b,p. 10]</p> <p>"empower the Board to disclose information to prescribed persons" [doc25b, p. 10]</p> <p>"vital that both co-exist in a dynamic relationship." "key roles in representing nursing" [doc27,p. 41]</p> <p>SNB "is the body regulating nursing practices and to a large extent, nursing policy, since SNB is conjoined to its sister Nursing Policy Unit at MOH at their heads with the Chief Nursing Officer holding the post of the Registrar in SNB and DMS as its Chairman.[doc27, P. 41]</p>	<p>All development for the programme & modules passed through or beca "stuck" in DGMS either the Director of DGMS o programme manager w was a fulltime employee MOH & part time programme manager employed by NUS.</p> <p>Details for offenses are punitive. ? of more clari than needed for the role SNB with absolute authority. Is it enforced how.</p> <p>Seems a bit primitive fo misbehavior – protectio whom? Public?</p> <p>Medicine present on the SNB – what is the rationale?</p>
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			<p>01/04/2010 There is no evidence of self selectic enter the education programme &/or to becom an APN. All (selection, funding, employment) is dictated by the SG syst</p>
10. Workforce Planning	<p>National action plan is strategized to maintain a proper understanding of labour statistics including a reexamination of the nursing workforce & how it relates to the healthcare system and a change of the skills in the healthcare workforce. The Health Minister has reiterated three key strategies progressing to jobs requiring higher skills in the public sector: 1) investing in clinical research; 2) integration of services in the long-term sector for patients to move hassle free from one sector to another; 3) add sophistication in line with changing needs, rising costs & rising patient's expectation – looking to rapidly expand pool of pharmacists, advanced practice nurses, biostatisticians, bioinformatics experts, healthcare administrators & allied health workers.</p>	<p>"Promoting the concept [APN] must be carefully strategised to get buy-in from the medical fraternity, policy makers and the community at large"[doc12,p46]</p> <p>No shortcut to "growing" APNs; space & time are needed to build clinical competencies; extreme challenges for broad clinical coverage; APN may niche a pt. subgroup; needs must be clearly identified for the APN to ID practice niche.[doc14,p. 23]</p> <p>"increase nurse to population ratio from 1:249 to 1:220 by 2015. ' increasingly the nurse-to-population ration is part of the strategy to enhance working conditions for our nurses, so...they will have more time to look after patients and have a better work-life balance' [doc18,p. 2]</p>	<p>In referring to APNs developing a niche or if needs to establish a niche is it possible needs were not clearly identified earlier?</p> <p>? of more hospital base advanced nursing roles with workforce planning</p> <p>APNs are one option in healthcare workforce planning.</p> <p>Value added to the healthcare workforce.</p>

		<p>"APN becomes more effective partner in the healthcare team...higher standard of nursing, counseling, education and health advocacy ...comprehensive care" [doc23, p. 2]</p> <p>Without a proper understanding of "these deeply entrenched barriers, current short term solutions will only serve to sabotage future efforts: [doc27,P. 34]</p> <p>"financial incentives must be explicitly linked to varied education and practice competencies nurses bring to patient care" [doc27,p. 36]</p> <p>"lack of Palliative Care trained nurses to meet the demands of increased Palliative Care services: [doc33, p. 15]</p> <p>"besides increasing numbers, the skills of the workforce must also change as chronic diseases become more prevalent with the aging population" [doc34,p. 4]</p> <p>"hospital environments will require nurses and doctors taking on different roles" [doc35, p593]</p> <p>"how can APNs position themselves and make a visible difference in healthcare" [doc38,p. 4]</p>	<p>Policy efforts continue to be geared toward adequate health care manpower to meet health care demands [doc34].</p> <p>Building a case toward APN?</p> <p>Note the overall comment on the need for a change in the <u>"skills"</u> of the workforce</p>
11. Impact/Outcomes			
11.1 Anticipated	The document review expected an increase in numbers of expert nurses in all areas of clinical practice in hospital & community in Singapore to improve health care outcomes & fill in the gaps.	"Improved quality indicators: greater patient independence; promotion of health; adjust to illness; compliance with treatment; patient satisfaction, reduced ED visits and rehospitalisations" "positive patient outcomes" "reduced	11/04/2010 No mention of how this will be achieved, funded or evaluated.

	<p>The impact of APNS on pt. outcomes is demonstrated in many studies done outside SG and thus a similar impact on healthcare delivery is anticipated in SG.</p>	<p>healthcare costs" [doc 5, p.3, midpage]</p> <p>"autonomy & empowerment in patient care" "ability influence clinical care" "improve patient outcomes" doc 5, p.13, midpage]</p> <p>"wish that in Singapore the APN becomes an integral part of the healthcare team:" [doc13, p. 27]</p> <p>"services provided by the APN will complement the care by doctors making them even more valuable partners in the healthcare team" [doc22.p.1; doc23,p.1]</p> <p>" APNs have the professional accountability to the profession as well as to patients to evaluate the impact of their care as to whether it makes a difference by improving, maintaining or promoting patient health" [doc 44, p. 31] in reference to a proposed APN evaluation framework.</p>	<p>Establishing credibility? Legitimacy?</p>
11.2 Actual	<p>A growth in nursing numbers in general is happening in Singapore including numbers of APNs. Data suggests that the growth in numbers of APNs will be dependent on the demand for their services. Narrative descriptions indicate that physicians become APN supporters & preceptors when they better understand the role and that patients are satisfied when they understand services provided by the APN.</p>	<p>"nursing sensitive outcome are those that ' are relevant, based on nurses' scope and domain of practice and for which there is empirical evidence linking nursing inputs and interventions to the outcome" [doc 44,p. 32]</p> <p>"hence to demonstrate the impact of APNs it is important to choose indicators that are relevant and based on the scope and domain of the APN practice and that there is evidence linking the interventions to the outcome. Failure to do so may result in missing impacts attributable to the APN role." [doc44, P. 32]</p>	
12. Growth Future Implications	<p>Documents reveal that APN roles in Singapore are increasing; innovative roles are developing, practicing in a wide variety of settings but</p>	<p>"APN initiative...good step...to safeguard public safety and interest" [doc3,p.5, para3]</p> <p>"APN role still evolving; continue to develop innovative roles;</p>	<p>Currently (2010) the MN programme functions u ALCNS with the programme manager employed by NUS &</p>

	<p>there continue to be a need to monitor development & outcomes in order to demonstrate effectiveness. The career enhancing settings with increased options and flexibility are appealing to young nurses looking to professional advancement. The trend for more RNs to seek advanced training recognizes the nursing potential in SG as Advanced Practice Nurses continue to be viewed as key players in the nation's healthcare efforts for the future.</p>	<p>APNs are practicing in a wide variety of settings; continue to monitor development; monitor outcomes of practice; demonstrate the effectiveness of the APN role"[doc5, p. 15;doc36,p16]]</p> <p>"the quest for nursing excellence will only end when we have sufficient numbers of expert nurses in all areas of clinical practice – hospitals and the community"[doc8,p2]</p> <p>"Further research is needed to ensure that the benefits of having APNs are attained"[doc9,p6]</p> <p>"The journey will never end...for the novice till she becomes an expert" [doc 13, p. 27]</p> <p>"need to continue to refine roles to reduce role overloads and role confusion; the continuing tug-of-war...medical vs. nursing model" [doc14, p. 24]</p> <p>"speed of change is definitely not going to slow down" [doc16, p.10]</p> <p>"'sharpen our saw' through partnerships within our own nursing community" [doc16, p10]</p> <p>"remain vibrant, renewed, focused and visionary" [doc16, p. 10]</p> <p>"appears to be considerable room for growth and development of career structures, pay rates...and nursing research development. It is really an exciting time for nursing education in Singapore. " [doc 17, p. 876]</p> <p>"increasingly train and recruit healthcare workers" [doc18, p. 1]</p> <p>"benefits patients through better nursing care & cost control" [doc22, p. 1]</p> <p>"increasingly challenging roles required of the nursing profession: [doc26, p. 1]</p>	<p>situated within the nursing department. The 18 mo course is now two years. There is currently no P1 online study options. In Feb. 2010 the curriculum being revised with more specialties. The MSc research will shortly commence.</p>
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		<p>"clear that advanced practice nursing is on the move in this area of Asia from the development of advanced practice programs, to legislation and regulation" [doc30, p. 2]</p>	<p>Speculation but lit. supp for this inconsistent & n evidence yet for SG [24/03/2010]</p> <p>Indicating there might b more school based API MH.</p>
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Appendix 18

Phase One Review of Documents Summary Review of Document: January – April 2010

Introduction

Prior to the review of documents a comprehensive literature review was conducted exploring APN development internationally. The review of document provided a more in-depth examination of Singaporean documents to inform this study. See the Chapter 4 - Fieldwork in the thesis for a detailed account of conduct of the review of documents. A final thematic matrix was developed and used to inform Phases Two to Four of the study. Of the documents analysed only one journal article claimed to be a research study and questions of rigour arose in the analysis of this study. Government and institution reports were useful in gaining insight into the regulatory environment. Editorials, conference presentations and journal articles provided an understanding of APN development. Press releases and web portal announcements presented a focused effort as to what the public or media found significant about this new development in nursing. Even though enthusiasm for APN roles was conveyed consistently throughout the review of documents no documents were found that revealed intent of policy as it relates to the actual implementation of APN roles. Narrative articles focused on the satisfaction or dissatisfaction of the nurses as they saw themselves in the APN role but there was little data demonstrating satisfaction or dissatisfaction of the public or other professionals. A limitation of the document review was that five documents (journal articles and conference presentations) were developed or authored by the same person suggesting a possible bias in the data extraction process.

Documents Listed by Type

Type	Number
Governmental Document	6
Agency Report	1
University Document e.g. curriculum	1
Institution/Employer Document e.g. collaborative practice agreement	2
Journal Article	8
Journal Editorial	4
Conference Presentation	6
Media Release	13
Web Portal Information	6

N = 47

Summary of Themes and Subthemes

Theme: Vision (looking forward toward a goal)

The review of documents revealed a vision by government, institutions, professional bodies, employers and nurses themselves of a new and dynamic healthcare environment associated with APN development.

Subtheme: Status of Nursing (position or rank within society)

Consistently throughout many of the documents there was a theme that the introduction of APN roles and the related 'upgrading' of education to the master's level will develop and elevate the nursing profession in Singapore to greater heights thus 'raising the status' of nurses. Documents repeatedly made reference to the success of nurse practitioners in the United States where they are confident in their roles and highly regarded and respected by nursing and medicine.

Subtheme: Contribution to Nursing

The development of APN roles in Singapore was envisioned as contributing to the professional culture of nursing as distinguished from the status of nursing that requires a certain level of respect. Documents revealed that the development of advanced practice nursing provided a view that with the APN there would be new opportunities and challenges for nurses to demonstrate the value of nursing. There was a hope that the expansion of nurses' roles and a clinical career path for nursing would present opportunities beyond the traditional hospital nursing roles thus including a new role in healthcare delivery for nurses. Advanced education based on various specialties was viewed as shaping nursing's future in Singapore. As a result the nurses of the future would have a higher level of theoretical knowledge in order to make critical decisions and manage complex patients. The development of clinical skills would occur at a sophisticated level in order to respond to future challenges in healthcare for the benefit of Singaporeans.

Subtheme: Value to the Healthcare System

The review of documents portrays a clear picture of numerous leaders and key decision makers who envisioned a healthcare transformation in Singapore that included APNs. Institutional plans for new hospitals included patient-centric concepts that were becoming associated with APN roles. Documents further suggested that APN development in clinical specialisation and related skills would make a valuable contribution in the delivery of healthcare services.

Theme: Impetus (driving force)

Subtheme: Need for Change

The need to establish a clinical career path for nurses was commonly cited in documents as a reason why APN roles were needed in Singapore. Good clinical nurses, historically, were only promoted to managers or educators and thus were lost to the system as clinical nurses. Documents revealed that nurses' desire to expand their scope of practice and remain within the clinical arena rather than move to teaching or administrative positions. Documents further suggested a place for nurses, such as APNs, to fill in various gaps in the Singaporean healthcare system. These include filling in the gaps when medical students transitioned through their medical education, gaps in primary care (GP

clinics/Polyclinics); and the need to incorporate various specialties such as palliative care alongside chronic disease management.

Subtheme: What led to change?

Fundamental to promotion of APN development in Singapore were decisions, mandates and collaboration at the highest level of authority. A recommendation from the National Task Force on Nursing in 1999 advocated for nurse clinicians (terminology was changed to advanced practice nurse) as an alternative path for nursing career advancement alongside the career path for nurse educators and nurse administrators. At the parliament level an amendment to the Nurses and Midwives Bill was achieved that included regulations for advanced practice nurses. The Minister of Health (MOH) in 2001 recommended a new clinical career track so that registered nurses could progress in their career and remain in clinical practice. The development of this career structure required advanced educational preparation and led to collaborative decision-making between the MOH and National University of Singapore (NUS) that was pivotal to launching the academic programme. Nursing was in a position to collaborate in planning a scheme for APN education. Representation for nursing at the MOH level was the Chief Nursing Officer (CNO), also Registrar for the Singapore Nursing Board, who facilitated the change. There was a shift in focus of healthcare by the MOH from illness to disease prevention and from acute care to primary care with recommendations that the Singapore government explore new models of primary care delivery. In addition, the increase in building of hospitals, more spending on healthcare and an anticipated shortage of doctors, esp. in psychiatry and geriatrics, led to new ways in thinking of healthcare service provision.

Theme: Benchmarking (process of comparing performance to another that is widely considered to be a standard or best practice).

Subtheme: Nursing

International

Supported by the MOH, a team consisting of the CNO, Directors of Nursing and other nursing leaders visited USA hospitals and medical campuses with university based schools of nursing. Their aim was to study APN roles to better understand how APNs are identified, developed, tracked and eventually deployed in the hospital, community and primary care settings. The visiting team talked to nursing leaders in the USA who manage the services (APN personnel). The exposure was envisioned to be helpful in strengthening a view of the curriculum, regulations, credentialing, privileging and licensing for APNs.

The APN definition, scope of practice & competencies referred to in the Singapore Nursing Board documents are adapted from International Council of Nurses (ICN) guidelines. APN master's curriculum development was aligned with the American Association for Colleges of Nursing (AACN) MN guidelines in the United States and other USA documents. Consultation and visiting lecturers from the USA were utilised for curriculum development and introduction of modules. APN students did an overseas attachment as part of the MN programme (usually in USA) suggesting that international experiences would demonstrate the effectiveness of APNs. Roles were benchmarked against APN/NP models in the USA, UK, Australia, New Zealand and driven by factors cited in the international literature that provided a link between APNs and decreased mortality and morbidity, decreased length of stay in hospitals, cost of healthcare and decreased readmissions to hospitals.

Regional

There were no documents found that indicated benchmarking against other nursing practice or APN roles in Asia.

Subtheme: Medicine

International

No documents were found that compared medical care outside of Singapore as a benchmark for APN development.

Regional

Data provides extensive benchmarking against the medical model of care in Singapore as a benchmark for APN role development. Reference is also made to the medical profession in Singapore suggesting that institutions like the Academy of Medicine & College of General Practitioners could be good models for nursing professional development.

Theme: Regulations and Standards

The Singapore healthcare regulatory framework consists of the regulator (MOH plus its statutory boards) and the regulated (public & private providers). Healthcare professionals are self-regulated by their relevant professional bodies – Singapore Nursing Board (SNB) for nursing with the establishment of committees to oversee legal/regulatory criteria. SNB is in the position to regulate standards for training and education of nurses and midwives including APNs. The establishment of an APN Register of qualified APNs solidified standards for APN practice.

Subtheme: Role Criteria

To practice as an APN in Singapore a RN (registered nurse) must complete a SNB accredited Master of Nursing programme. The application for APN certification follows completion of a minimum one year clinical internship. The application process defines what the applicant is required to do: define the area of clinical practice (specialty) and describe the planned model & scope of practice. A candidate must obtain endorsement by the Clinical Head of Department (HOD) & Director of Nursing (DN) from the sponsoring institution; obtain the commitment of at least one clinical supervisor and complete administrative requirements. Following approval of application for internship a 1 year provisional certification is given in order to complete the internship. Following completion of the internship the candidate appears before an APN Review Panel. It is possible to obtain up to two 6 months extensions to proceed to be certified as an APN if a candidate does not receive a pass on the first attempt. No nurse or APN may practice without official SNB certification and an APN license.

Title

Singapore, through its regulations & standards, provides legal protection for the title 'Advanced Practice Nurse'. Penalties for false assumption of the title of 'Advanced Practice Nurse' are well defined. The 'Nurse Specialist Register' (prior terminology) has been deleted and replaced with the "Advanced Practice Nurse Register".

Definition

Official and regulatory definitions adopted by the SNB exist for APNs in Singapore. The definition used in official documentation is an adaptation of the ICN (International Council of Nurses) recommended APN definition.

Scope of Practice

Scopes of practice for the APN were provided in detail in the regulatory documents and adapted from ICN guidelines. Scope of practice covers the various APN activities in clinical practice: conducting comprehensive

health assessments; ordering & interpreting diagnostic tests, planning & managing pts. with complex health problems, initiating treatment according to an approved protocol; education & counseling of patients; consultation/collaboration with other professionals, clinical leadership and inclusion of EBP(Evidence Based Practice) with the clinical component of the role becoming the major focus.

Competencies

A defined list of competencies (see subsequent section labelled Appendix A in this summary) is provided by SNB. The SNB defined core clinical & professional competencies with slight revisions over time on what % of time should be spent on the clinical role vs. the professional role [conduct research, mentor and teach nurses; health advice; advocate; member of a healthcare team]. A candidate who applied for certification with SNB was required to submit a competency checklist.

Subtheme: Education

Academic (higher education & the accrual of scholarly knowledge)

The concept and support for an academic APN programme was initiated by MOH and the programme was developed provided under the auspices of National University of Singapore (NUS). Influence and active participation of physicians appeared in the form of curriculum development and as lecturers in education modules. The SNB was positioned to accredit the APN programme that commenced in 2003 under the auspices of the Yong Loo Lin School of Medicine, Division of Graduate Medical Studies (DGMS). The APN MN programme began as an 18 month offering emphasising a change from hospital-based training to tertiary level academic education. The curriculum followed guidelines recommended by ICN and the American Association of Colleges of Nursing (AACN) for MN and APN education.

Preparation for role (practical activities or training leading to skilled behaviour).

Data from the review of documents described role preparation with a clinical focus emphasising the core values of nursing in order to provide knowledge and confidence for the APN to be directly involved in planning care for patients. This was defined as clinical practicum as part of the APN MN programme.

Funding

Philanthropic funding of 10 million dollars was provided by the Lee Foundation to establish the Nursing Department at NUS. The Alice Lee Centre for Nursing Studies currently oversees the APN MN programme. The Ministry of Health (MOH) provides S\$24,000/per student for academic fees (full tuition paid per FT student) and the sponsoring employer pays a fulltime salary while the nurse is in the programme.

Subtheme: Internship (practical experience in a chosen field following completion of an academic education programme in order to use the knowledge learned and put it into practice).

A minimum of a one-year internship is required following successful completion of the academic programme and prior to applying for the final certification required to practice as an APN. During the internship the graduate of the APN programme begins the process to become a clinical care practitioner under the preceptorship of a senior physician building on knowledge gained from the academic programme. The internship is under the supervision of physician

preceptors and includes stipulation of clinical hours, plus completion of case studies and requires recommendations from Director of Nursing and the Head of Clinical Department. The APN Intern receives provisional certification contingent on a pass from the certification review panel. An individual is eligible to apply for registration as an APN after successfully completing the internship and passing the certification process.

Subtheme: Certification

Upon successful completion of the internship the APN candidate can apply to the SNB to appear before a certification panel. The certification panel approves/passes or rejects the APN candidate. Required clinical hours are provided that detail criteria for provisional certification & post certification status. If found to be negligent in the role the APN is required to surrender the APN certificate and must do so within 14 days of the cancellation or suspension of certification as an APN.

Renewal

Stipulated clinical practice hours are required to renew the APN license. Reference is made to a table of minimal clinical practice required for renewal of the APN license based on Benner's Stages of Clinical Competence. The table is divided into 4 levels of clinical practice: Year 1 – Internship (supervised practice- (Novice/Advanced Beginner – equivalent to 40hr week also defined as 1040 hours (26 weeks); Year 2 (competent) 800 hours (20 weeks); Year 3 (Proficient) – 560 hours (14 weeks); Year 4 (Expert) 320 hours (8 weeks).

Subtheme: Registry (compilation & maintenance of a list of names of people who have met specified professional standards)

The SNB maintains the APN Registry of who may or may not be registered as an APN. Additional details associated with the APN Registry define the appeals procedure; regulation of practice & conduct; what the APN register means and how SNB regulates certification. The Registry provides the names of RNs who have the necessary qualifications, competence and experience to practice as APNs.

Subtheme: Career Structure

The MOH established a clinical career structure for RNs in 2001 with related remunerations and a promotion track in order to retain nurses in clinical roles. In the clinical career track the APN is placed at Level II with possible progression to Level Three. At Level Three APNs must maintain at least 20% clinical hours of direct patient care to maintain APN certification with the remainder % of hours in nonclinical role components.

Theme: Nature of Practice

The nature of practice for APNs was associated with their ability to manage chronic stable conditions, high acuity situations and provide coordination for aging care. At times in the documents this was equated to the role of the junior doctor. The APN was seen as potentially providing a resource for triage nurses, able to provide referrals to specialist doctors, initiate discharge instructions, provide staff and patient education, participate in journal club and provide conference papers. Improved patient outcomes were linked to the ability of APNs to be involved in research projects. APNs were described as full partners in healthcare delivery and in the shaping of healthcare policies.

Subtheme: Settings and Specialties

In order to apply for the APN MN programme the nurse must designate a clinical specialty. Fifteen specialties and subspecialties are identified in the documents as likely to be options in Singapore for APN practice. These include: Acute

(Intensive Care Units, Emergency Room) care, medical/surgical (oncology, gerontology, cardiology, neurology) care, community care/primary care (polyclinics), mental health (inpatient and outpatient) and palliative care. APN services were not meant to replace community based services that were already available but the documents did not specifically define what this means.

Subtheme: Behaviours and Responsibilities

The ability to work in collaboration & partnership with physicians and other health care professionals is reiterated throughout the review of documents with emphasis on collaborative multidisciplinary management and treatment provided by RNs who now have added responsibilities as an APN. The SNB regulates behaviour through reference to professional conduct & ethics suitable for an APN as described in the regulatory documents.

Subtheme: Liability/Indemnity

Liability/Indemnity coverage is provided by an APN's employer and is also available through the Singapore Nursing Association (SNA). The continuous advancement & expansion of the APN role is seen to correspond with an increase in medical-legal liabilities as APNs assume higher levels of responsibility. Employing institutions include APNs in existing insurance coverage; the APN remains protected by the current legal doctrine of vicarious liability.

Theme: Key Decision Makers

Subtheme: Government

The amendment to the Nurses & Midwives Act defining regulations for the APN required a pass by the Parliament and President of SG. MOH (April 2005) presented a bill to Parliament to establish a Register for APNs.

Ministry of Health (MOH)

Multiple activities and initiatives were linked to the MOH with activities ranging from setting up a Nursing Task Force in 1997 to establishing the President's Awards to include APNs. The MOH was seen to be working with healthcare institutions, organisations, professional associations, private GPs & other partners. The Committee on Ageing Issues was an example of a specialty committee that functioned under the MOH with a focus on the aging population and supported of APN roles.

Representatives of the MOH & NUS collaborated to initiate the master's programme under the auspices of Yoo Loo Lin School of Medicine, Division of Graduate Medical Studies. The MOH supported the move to university nursing education both in principle and by funding the education fees for each APN student. The directive for a new clinical career structure came from MOH. In addition, the MOH continued to add stimulus for the APN role by mandating a need to recruit more nurses including 200 APNs by 2015. This was associated with advocacy for change and the enhancement of healthcare research & services.

Chief Nursing Officer (CNO)

The CNO is the official representation for nursing in the department of the MOH and also functions as Registrar for SNB. Review for legislative requirements falls also under the direction of the CNO e.g. current review for legislative requirements for APN prescribing.

Subtheme: Agencies specific to nursing

Singapore Nursing Board (SNB)

SNB became a statutory board in 2000 under the Nurses and Midwives Act. It develops & maintains standards for nursing practice that reflect the

minimum requirements necessary to assure that the public is provided with safe and competent healthcare. As a regulatory board SNB credentials APN programmes, the individual in the APN role along with regulation of their practice & continuing education for APN. SNB oversees the internship process, regulates certification & registration. The SNB APN Training Committee accredits courses leading to APN certification; The APN Accreditation Committee oversees the certification of APNs & matters relating to APN practice.

Singapore Nursing Association

SNA is the professional nursing association for nurses in Singapore and also provides liability insurance for the APN.

SNA & SNB represent the Singaporean nursing community.

Subtheme: Institutions

Education

The National University of Singapore (NUS), Yoo Loo Lin School of Medicine (Dean of the Medical School and the Director, Division of Graduate Medical Studies) initially had authority over the development and implementation of the APN education programme until its move to ALCNS (Alice Lee Centre for Nursing Studies) in 2009. The Head of Department for ALCNS assumed departmental authority but the programme continued to function under the oversight of the Dean for the Medical School.

Employers of APNs

The employing institution selects all candidates for the APN MN programme. Key stakeholders in the institutions agree on the candidate, select a preceptor for the APN Intern and screen documentation when the APN intern applies for certification. The employers pay a salary to the fulltime student and the nurse is bonded to return to the sponsoring institution. Documents suggested that the institution was also expected to provide a supportive environment for the professional growth of the APN as well as determining role clarity among APNs, other nurses and other healthcare professionals. Institutional support was expected to be in the form of appropriate remuneration and promotion.

Subtheme: Other Professionals

Documents indicated that physicians in Singapore have total responsibility over patient care management. In a CPA (collaborative practice agreement) between an APN and a physician the physician delineates what the APN can do as in is "allowed to treat". The APN Intern is assigned a preceptor and in his absence another senior physician takes over the preceptor responsibilities. Physicians and the Medical School Director (a physician) can reject an application to a person applying to the APN programme.

Theme: Support

Subtheme: Anticipated

Documents suggested that as part of the healthcare team APNs required the support of peers and colleagues plus other healthcare professionals to be successful. In the beginning of the APN MN programme physician lecturers were expected to lecture in the proposed programme and thus are viewed as supportive.

Subtheme: Actual

Physicians provided medical direction for the APN as needed, were available by phone or interactive consultation and acted as a collaborative physician to provides backup consultation. Collaborative relationships with health care professionals, esp. physicians, were reported in one survey done on APN Interns. Support from other health professionals is reported in the form of knowledge of the APN role; support from nursing leadership; and understanding of the level of preparation for the APN role. Additionally, the APN programme included physician lecturers based on a history of experience with physicians lecturing in other nursing programmes in Singapore. MOH philosophically is supportive of nursing in Singapore and APNs specifically as manifested in the funding of education tuition fees and passage of regulatory documents. From a funding perspective the employer provides actual support by paying full salary while a student is in the programme. Recognition occurred with a Merit Award for an APN. A badge (gold plated pin, design of honour) to be worn as part of the nursing uniform and S\$200 provided visible support to individual APNs.

Theme: Barriers/Obstacles

Subtheme: Anticipated

The review of documents suggested an expected continuing tug-of-war between the medical vs. nursing model and the development of APN roles leading to a "collision course" with physicians. Documents further suggested that confusion & disagreement as to scope of practice for the APN provided barriers to early role implementation and a potential for not only role conflict but underuse & misinterpretation of the APN role. Documents reveal recommended the need to clearly define, integrate & articulate the roles, boundaries and objectives of APN practice to "relevant stakeholders" to avoid conflict.

Subtheme: Actual

The SNB has the authority to approve or reject APN applications, issue practicing certificates, accredit educational courses; accredit teaching institutions offering courses, regulate nursing standards/scope of practice. Documents revealed an emphasis on misconduct including false assumption of titles & fraudulent registration. Data from the documents repeatedly suggested that to deliver a nursing programme in Singapore there are system constraints of 1) university rules and regulations for approval in the context of onsite delivery and quality expected; 2) faculty must meet the parameters of the regulatory authority for programme accreditation. One survey of APN interns found that conflictual working relations with other nurses decreased with time.

Theme: Gatekeeper Effect (A gatekeeper controls access to something – e.g. monitors or oversees actions of others)

Physician preceptor comments, Head of Clinical Departments and Director of Nursing recommendations are required at several levels for the APN candidate to proceed through education and qualification processes. In clinical practice the physician periodically reviews charts managed by the APN. The physician's decision is final in the event of disagreement over case management.

SNB has the authority to approve or reject APN applications, issue practicing certificates, accredit educational courses; accredit teaching institutions offering courses; regulate nursing standards & scope of practice. Documents under the jurisdiction of SNB provided details on misconduct including false assumption of titles, fraudulent registration. Some areas are not specific to APN but to nursing in Singapore.

Institution approval is required all along the way from choosing the master's candidate to support through the internship to employing the APN.

Theme: Workforce Planning

A national action plan was strategized to maintain a proper understanding of labour statistics including a reexamination of the nursing workforce and how it relates to the healthcare system and a change of the skills in the healthcare workforce. The Minister of Health reiterated three key strategies progressing to jobs requiring higher skills in the public sector: 1) investing in clinical research; 2) integration of services in the long-term sector for patients to move hassle free from one sector to another; 3) added sophistication in line with changing needs, rising costs and rising patient's expectations – looked to rapidly expand the pool of pharmacists, advanced practice nurses, biostatisticians, bioinformatics experts, healthcare administrators and allied health workers. In this context the APN was viewed as a member of the healthcare team - complementing doctors and taking on duties of junior doctors to free up doctors to manage more complex medical problems.

Workforce planning in Singapore carried with it the expectation of an increased APN presence. The goal was 200 APNs by 2015 to reach 1.4% of nursing population in Singapore with an aim to retain nurses in clinical practice.

Theme: Impact/Outcomes**Subtheme: Anticipated**

Data suggests an increase in numbers of expert nurses in all areas of clinical practice in hospital and the community in Singapore intended to improve health care outcomes and to fill in the gaps in healthcare services. The impact of APNS on patient outcomes was demonstrated in many studies done outside Singapore and thus a similar impact on healthcare delivery was anticipated in SG.

Subtheme: Actual

A growth in nursing numbers in general is happening in Singapore including numbers of APNs. Documents suggested that the growth in numbers of APNs will be dependent on the demand for their services. Narrative descriptions indicate that physicians become APN supporters and preceptors when they better understand the role and that patients are satisfied when they understand services provided by the APN.

Theme: Growth/Future Implications

The review of documents revealed that APN roles in Singapore were increasing; innovative roles are developing, APNs were practicing in a wide variety of settings but there continued to be a need to monitor development and outcomes in order to demonstrate effectiveness. The career enhancing settings with increased options and flexibility were appealing to young nurses looking for professional advancement. The trend for more RNs to seek advanced training recognized the nursing potential in Singapore as APNs continued to be viewed as key players in the nation's healthcare efforts for the future.

Summary

The review of documents suggested that APN development in Singapore was set in motion by individual views and opinions followed by policy rather than an initiative that was driven by policy. No needs assessment or analysis of the healthcare environment supportive of the introduction of APN roles in Singapore was found. Observation of and experiences with the success of NP/APN roles in other countries, especially the United States, appears to have inspired decision makers to imagine that this success could be transferred to Singapore. No evidence was found to suggest a strategic or policy framework is in place for implementation of APN roles.

Documents demonstrated a strong vision at multiple levels for the integration of APN roles into the healthcare workforce. There is a view that APNs will contribute to the quality of healthcare services for all Singaporeans but the central visionary subthemes

are the hope for an increase in status for nurses in Singapore and a contribution for professional development. Documents indicate that introduction of a clinical career ladder provided support for the APN initiative. Decisions that led to subsequent changes in regulations and standards supported APN development and the clinical career pathway for nursing.

The amount of support occurring at the highest levels of authority was impressive. The Ministry of Health from a philosophical and funding perspective consistently and generously supported education and implementation of policies supportive of APN roles. The National University of Singapore provided education and expertise accommodating academic rigor for the APN programme. Institutions employing the APN grasped the concept enthusiastically even though documents indicated medical directors and directors of nursing were not clear as to what role the APN should have in their institutions. This support is commendable but contributed to confusion in attempts to reach clarity on the role and the nature of practice. Documents suggested various levels of decision makers embraced a concept that they did not thoroughly understand.

Advanced practice nursing development in Singapore is in its infancy; however, the review of documents revealed there were detailed regulations and standards defining who is an APN (see subsequent section labelled Annex A) along with punitive actions if an individual falsely assumes the title of 'Advanced Practice Nurse'. The Singapore Nursing Board is the authoritative body that credentials education programmes and the APN. Processes for education, qualifications and maintenance of standards were clearly defined in the documents reviewed.

Descriptive journal articles, narratives and editorials indicated that APNs were expected to provide care in numerous specialties and a variety of settings suggesting that these nurses will be full partners in healthcare delivery in Singapore. This contrasts with documents that indicated that physicians have total responsibility and control over patient care management. Documents revealed a philosophy that the APN will work as part of a collaborative healthcare team to complement the doctor suggesting this as an elevated level of the 'handmaiden' role traditionally associated with nursing. Furthermore documents suggested that the overlap between nursing and medical models could lead to conflict and a "collision course" for APN development implying that this could be obstructive rather than facilitative in delivery of healthcare services.

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Appendix 19

Excerpts from NVIVO9 interview transcripts used for theme & subtheme coding

Reference 1 - 3.18% Coverage

Original Intention for APN role and strongest motivator according to this interview was desire & perceived need for a Clinical Career Structure for nurses in Singapore (see "Quest for Excellence" doc).

BC:

The original intent has been "hijacked to now fill gaps". It is not clear if there were identified gaps in care for APN to fill but there are not enough MDs in 1) MH 2) Polyclinics 3) chronic diseases. "nurses will do a better job thus fill a gap" "not just to fill shortage"

Reference 2 - 4.16% Coverage

DMS & CNO pivotal to APN development & launching the initiative. Wanted to keep clinical nursing at the bedside.

They went to the minister [Minister of Health] – took 6 months to get the clinical career structure. However, the minister at the time did not see the value of an academic degree for nursing – didn't believe in academics for nursing thus not interested in high level of the APN. DMS at time [now President of NUS] was instrumental in promoting BScN & MN academic nursing education. He badgered minister until minister gave in on MN but still not for BScN at first. December 2001 minister gave up & said do whatever you like.

Reference 3 - 3.25% Coverage

Now development has a "life of its own" [**unanticipated change**]. Instead of staying at the bedside they are trying to fill the gaps. **Original goal** was to have "mature expert clinical nurses" maturity is not there now. Now it is a #s game – that was never the intent. The **intent** was to grow more & expand the nursing role > career structure. "Didn't want to lose good clinical nurses" – thought they should move from bedside up to clinical leadership. "vision for clinical nursing & clinical leadership"

Reference 4 - 0.64% Coverage

Concept: expert hand picked nurses would move to new role [after programme]. That was the concept.

Reference 5 - 1.44% Coverage

It was determined that a new role was needed plus an internship esp. with background training based on the feeling that **SG nurses not prepared to go straight into role** so decided on internship after completion of programme.

Reference 6 - 0.62% Coverage

Common goals – DMS wanted nursing to move forward & wanted the career structure.

Reference 7 - 0.37% Coverage

CNO felt must maintain clinical role & do right by nurses.

<Internals\\Phase 2 Interviews\\CYL\\Transcript CYL> - § 5 references coded [14.63% Coverage]

Reference 1 - 3.92% Coverage

Because at that time I was not in that sort of position where I make decisions so I was manager then from what I see the **vision** was because we want our **staff to be able to teach academically as well as to be clinically competent**. So in other words if they go overseas when they come back they can be more up to date & more **clinically competent but at the higher level**. Because our courses are diploma maybe it's not the right moment- I don't know. To me now on reflection it's a waste of time. We do not have APN here - we didn't have the APN course here - that was 2001 but our 1st batch was 2003. So that means all the **'things' were not in place** so that is why there are **'casualties'** of our 1st programme here. No role for them when they go back so step back to the management roles or step back into the education role.

Reference 2 - 4.65% Coverage

OK – at that time its my director of nursing & obviously they are at a higher level; attend SNB meetings & all that it must be revolving around that also I think she is quite a strategist with advanced thinking so there was a vision & discussion of the APN because the primary aim is we must – since it is a teaching institution – our staff actually go out to supervise students so she wants to make sure – yes if you want to supervise students you must be competent – you must be up to date. That is one main reason.

MMS

So do you think she had the vision of the APN in a teaching capacity that they would have had that increased competence?

YL

Because at the time we do send staff overseas for various courses – some of them are in education & you know clinical attachments & things like that. But in [institution name deleted] it is very strong that the staff must go out & supervise students so that is the way they build up their skills you see.

Reference 3 - 1.60% Coverage

As much as I don't like it I believe we are going for APN because of the shortages of doctors. **Playing like a bridge** – they are doing things that we don't have enough doctors to do it. Polyclinic is a good example that we do not have enough doctors – if a nurse can do it even if it is a bit cheaper – cost is another factor you see.

Reference 4 - 3.33% Coverage

MMS

Does one have to establish a need? Is wanting an APN good enough?

YL:

Wanting an APN is not good enough because they must know why they want this APN. Not just because I want the APN to do my job so you can free me to do something else. You must have the intention that I want an APN which is going to value add to my job – for example if I am a doctor with stroke patient I don't have much time but if I have an APN who can bridge can spend some time with the patient but I am trusting her to be able to do the differential diagnosis to be able to report if any changes then I'm OK. But I don't like the idea of saying yeh you know these are the things I don't want to do I can farm it out.

Reference 5 - 1.12% Coverage

When you say we need more than that how is that need determined?

YL:

I don't know how – they have a formula that they use. They must have talked to various people; talk to the medical staff; talk to ... maybe it's because of that.

<Internals\\Phase 2 Interviews\\DC\\DBC> - § 2 references coded [2.82% Coverage]

Reference 1 - 2.33% Coverage

So when I arrived at NUS I was somewhat surprised that the masters programme (MScNursing) had been implemented through the School of Medicine through the Division of Graduate Medical Study. I found that perplexing because nurses were not in a position to lead their own professional development. But I suppose it did also signal that there was explicit support from the medical fraternity for this role development. Certainly my discussion with professionals within the school of medicine indicated that they did concede the role positively & they did want to support it. Inevitably those doctors (the Singaporean doctors) concerned had lived & worked in another country, particularly the USA & so they had first hand experience of the APN role. And they believed Singaporean nurses could offer so much more in the advanced role.

Reference 2 - 0.49% Coverage

There was explicit encouragement for the nurses to consider the APN role for career progression. However, I am not so clear that there is good knowledge about the programme.

<Internals\\Phase 2 Interviews\\FGC\\FGC interview> - § 6 references coded [9.83% Coverage]

Reference 1 - 1.53% Coverage

My first encounter with APN was in 2003 when I spent a month in UCLA. So when I was in UCLA my interest was actually in liver transplant acute care. So there were two groups of people: you had the residents & you had the APNs. That particular APN was responsible to the attending transplant surgeon. So what happened was that these particular APNs would do the rounds together with the resident. She seems to know what is going on, perhaps because she has been at it much longer than the resident. She goes back to tell the consultant what happened, she writes on the notes, the consultant just listens to what she has to say and just signed it.

So then I asked myself can this system be applied in Singapore.

Reference 2 - 1.28% Coverage

So I asked myself – I need stability. I need a group of people who are in the system. So the next thing will be the residents. Can the trainee compensate? So unfortunately in SG once again the trainee (resident) rotates every 6 months – they rotate in different hospitals every 6 months so it means that in May & November it makes it worse. So these guys have some basics of training but they have to get used to the computers, they need to get used to the way we prescribe drugs because every hospital is different. So I thought the APN perhaps would be a good way to tie up all these in between.

Reference 3 - 2.24% Coverage

Yes consistency. So the first thought was the consistency to tie over periods where staff change. The second thing – In medicine 80% of the work that we do really is quite routine; probably about 20% needs a little bit of thinking – we have discussion, have to do some internet search do what they say. Repetitive work. I have found out, a lot of research to be sure; doctors do badly at repetitive work. Nursing is much better at doing repetitive work because they are used to following protocol. Doctors are not. So I think part of the problem that we have is with JCI it is repetitive work. You just have to sign your name. If it just tells you to sign your name 20 times you just sign your name.

There's nothing to discuss about evidence based. So that's why I felt for the healthcare system having APNs is actually added value for the system. 80% of the work which the nurses are much better trained for and allow the doctors to spend their efforts on the 20% of the work which requires a lot of reasoning & perhaps discussions & research.

Reference 4 - 0.59% Coverage

So to summarise so far:

1. The first one was the very fact that we need them to power the gaps.
2. They can do 80% of the work.

3. The third thing actually: when you do repetitive work you start to ask questions. Can I do it better?

Reference 5 - 2.38% Coverage

I see the same problem with the nurses. They get burned out when they do, for example, one year of ICU & nothing else. That is the reason why many of us prefer to maintain our primary specialty - for a change. So because of this system of changing you will find that we need a group of people who are willing to stay continuously in ICU. Who now start to think why are we doing it this way? What can we improve? So these APNs are basically, in my opinion, are hardened veterans of critical care. They have decided it is their job & so they are willing to spend time there. They ask questions, we ask questions and all this. They are actually a very good resource for research. To collect data for example. To streamline the care, for example, for one of the studies I was talking about. So they are day in and day out. Many research, it is not just medical research – so if I talk about research on delirium: delirium is affected by, of course, the patient, by the drug that you give, affected by the care that you give. I can't standardise the nursing care. So this group of APNs will be a **good link** for this.

Appendix 20

Example of coding and nodes used in the development of categories and subcategories

Schober
June 2011

Nodes

Name
Advanced Practice Nursing
attrition/casualties
autonomy
Opportunities
Peer support
Practice Settings
Process
Professional status
Role clarity
Roles & responsibilities
New nursing role
Role model
prescribing
scope of practice
Roles description
Time in practice
Titling
View of why role was created
Working with other professions
Barriers/obstacles
Benchmarking
adaptation
knowledgeable expertise
misinterpretation
International Influence
literature
overseas
site visits
within Singapore
Career Path
Change
Change theory
Desire for Change
Health System
Nursing
Other professions
Unanticipated change
Conflict
Nursing role vs. medicine
Personal
System

Nodes

Name
Confusion
Credentialing/certification
Disillusionment
Dissemination of information
Education
Academic programme
Challenges
Cohort completion
Curriculum
Internship
NUS programme
Overseas programme
Support for MN
Facilitators support
Framework
Funding
Gender Issues
Impetus driver for role
Institutions
CEO
Consultants
Director of Medical Services
Employers
Gatekeepers
Nursing
Physicians
Nursing administration/supervisors
Lessons learned
Medicine
APN as physician helper/assistant
Medical model
Physician as gatekeeper
Case management
Guardians of healthcare system
Prescriptions
Supportive buy in
Nursing
Behaviors
Buy-in, hostility
Buy in
Supportive
Culture

Nodes

Name
History in Singapore
Leadership
Professional Development
Status in Singapore
Penetrating the network
Policy & policy process
Decision maker links
Pivotal decision makers
Pivotal decisions
Process
Knowledge of Process
Nursing presence
Presence in Healthcare system
Change in service delivery
Educate other professionals
Fill in the gaps
Value add
Regulations
SNB
Role Clarity
Vision
APN conceptual development
Future development
Pioneers
Reality
Workplace skills mix

Appendix 21

Code Jottings for Phase Two – 1st Interview Phase

Column 1 Raw Data	Column 2 Preliminary Codes	Column 3 Final Code
Original Intention for APN role and strongest motivator according to this participant was desire & perceived need for a Clinical Career Structure for nurses in Singapore	Nursing potential Professional advancement Career structure	Professional Development
Wanted to keep clinical nursing at the bedside but in advanced role	Status quo vs change	Conventional view with change
went to the minister – took 6 months to get the clinical career structure. minister at the time did not see the value of an academic degree for nursing – didn't believe in academics for nursing thus not interested in high level of the APN. DMS was instrumental in promoting BScN & MN academic nursing education. He badgered minister until minister gave in on MN but still not for BScN at first. December 2001 minister gave up & said do whatever you like.	value of academic degree for nursing Challenges/overcoming challenges	Pivotal decision makers
Now development has a “ life of its own ” Instead of staying at the bedside they are trying to fill the gaps. Original goal was to have “mature expert clinical nurses” maturity is not there now. Now it is a #s game – that was never the intent. The intent was to grow more & expand the nursing role > career structure. “Didn't want to lose good clinical nurses” – thought they should move from bedside up to clinical leadership. “vision for clinical nursing & clinical leadership”	Unanticipated change Original goal Intent Clinical leadership	Mindshift Dynamic change Professional development
Concept: expert hand picked nurses would move to new role [after programme]. That was the concept	New role Elite nurses concept	Enhanced status
Common goals – DMS [now Pres. NUS] wanted nursing to move forward & wanted the career structure.	Professional advancement Career structure	Professional development
must maintain clinical role & do right by nurses.	Maintain Nursing	Enhance status
It was determined that a new role was needed plus an internship esp. with background training based on the feeling that SG nurses not prepared to go straight into role so decided on internship after completion of programme.	New role Insecure with nursing competence	Professional development

more clinically competent but at the higher level.	Increase competence	Enhance status
the ' things ' were not in place so that is why there are ' casualties ' of our 1st programme here. No role for them when they go back so step back to the management roles or step back into the education role.	Casualties/attrition Things not in place	
Playing like a bridge – they are doing things that we don't have enough doctors to do it	Mini doctor	Bridging the gaps
Wanting an APN is not good enough because they must know why they want this APN. Not just because I want the APN to do my job so you can free me to do something else. You must have the intention that I want an APN which is going to value add to my job – for example if I am a doctor with stroke patient I don't have much time but if I have an APN who can bridge can spend some time with the patient but I am trusting her to be able to do the differential diagnosis to be able to report if any changes then I'm OK. But I don't like the idea of saying yeh you know these are the things I don't want to do I can farm it out.	Identify purpose/intent Add value Mini doc	Bridging the gaps Adding value and enhancing quality of care
When you say we need more how is that need determined? I don't know how – they have a formula that they use. They must have talked to various people; talk to the medical staff; talk to ... maybe it's because of that.	Assumption of knowledge Personification of the collective 'they'	Assumed authority
So then I asked myself can this system be applied in Singapore.	Adapting role	Implied need
I was somewhat surprised that the masters programme had been implemented through the School of Medicine through the Division of Graduate Medical Study. I found that perplexing because nurses were not in a position to lead their own professional development. But I suppose it did also signal that there was explicit support from the medical fraternity for this role development. Certainly my discussion with professionals within the school of medicine indicated that they did concede the role positively & they did want to support it. Inevitably those doctors (the Singaporean doctors) concerned had lived & worked in another country, particularly the USA & so they had first hand experience of the APN role. And they believed Singaporean nurses could offer so much more in the advanced role.	Lack of nursing voice Physician buy in Nursing potential	Physician gatekeeper & authority

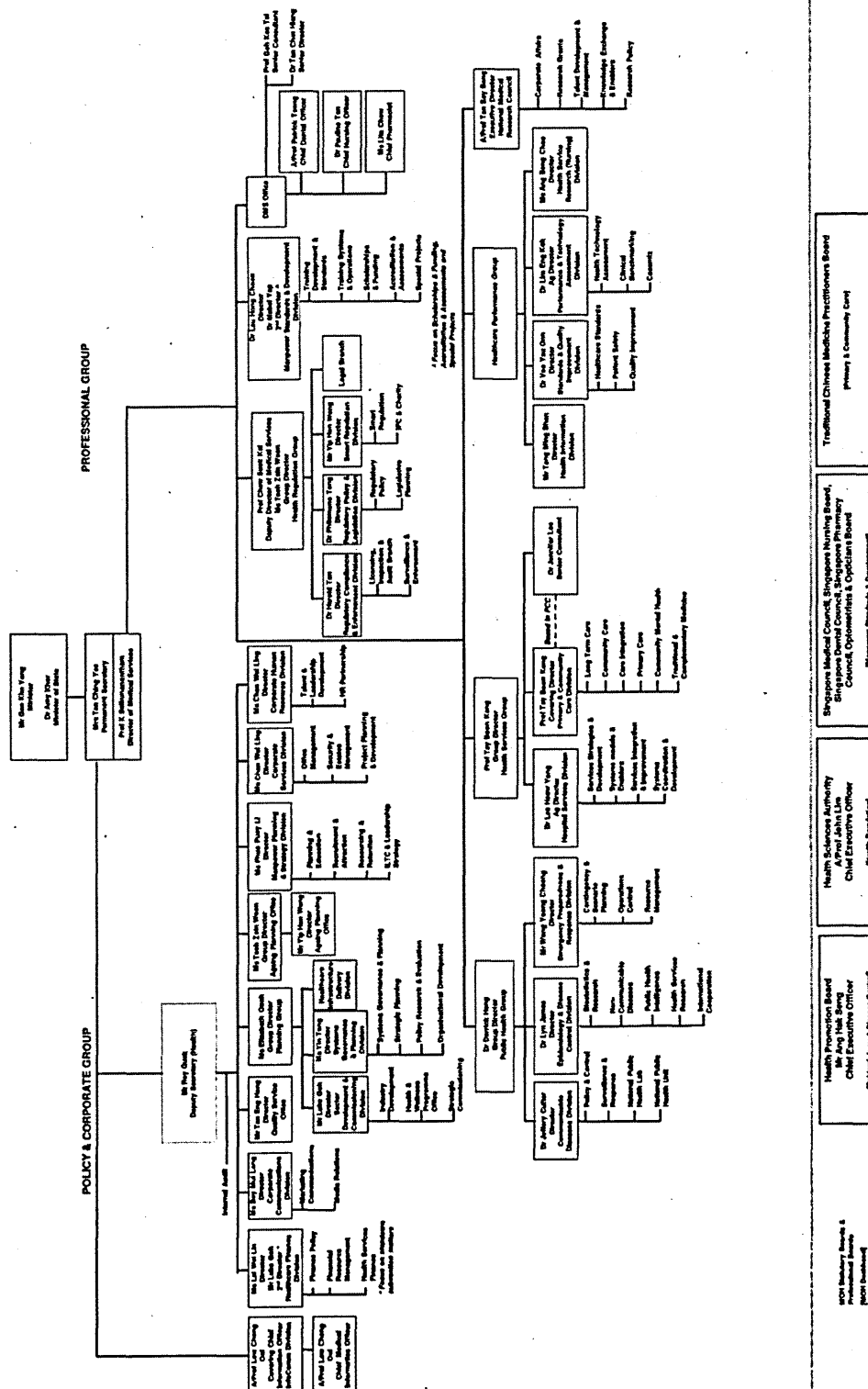
There was explicit encouragement for the nurses to consider the APN role for career progression. However, I am not so clear that there is good knowledge about the programme.	Lack of role clarity Professional advancement	Role ambiguity
So I asked myself – I need stability. So I thought the APN perhaps would be a good way to tie up all these in between.	Bridging the gaps Power the gaps	Implied Need
So the first thought was the consistency to tie over periods where staff change. So that's why I felt for the healthcare system having APNs is actually added value for the system.	Consistency Value add	Added value for quality of care
The third thing actually: when you do repetitive work you start to ask questions. Can I do it better? So this group of APNs will be a good link for this.	Link Bridging the gaps	Filling the gaps for care continuity
It is going to be a dynamic change in SG but it is it going to enhance nursing in general? yeh yeh yeh. It's a career track	Career track Professional advance	Enhance nursing status & professional development
so that's a huge value added where I see a well trained, motivated advanced practice nurse can add so much value just because there are so many things that need to be done and the medical profession in SG cannot cope with the need & spectrum of care that we need to provide.	Value add	Added value for quality of care
it is a need. Especially because our population is aging with chronic disease. At the polyclinic the chronic diseases are seen by the APNs, you don't need a doctor. It's also good for the profession. Look around the world there are APNs – we don't have; look around the world there are degree nurses – we don't have. This is an improvement for the profession & I am glad. It is a proud moment to see our degree and masters prepared nurses graduating	Clinical Need Professional Advance	Implied need Professional development
really "want to provide a world class healthcare system" We see a need to position ourselves " to be a vital player in helping to transform SG as a world class healthcare centre	Value add System	Add value for quality of care
Professionally "I think nursing has always been struggling to achieve greater recognition".	Status Professional advance	Enhance nursing status
We must "create public trust" because nurses by being in the frontline taking care of patients around the clock we are really at the point of care where we can really make a change and a difference.	Add value Change	Add value to care quality Dynamic change and mindshift
Nurses "aspire to change". They inherently aspire	Change	Change

to make a difference in the way they deliver care but unfortunately “a lot of them I guess are actually helpless partly because systems constrain them and secondly the educational preparation has not been adequate	Aspirations blocked	Professional Development
Policymakers have actually put in the structures & support at the highest level, that is the ministry level, for this change to come – I am saying this in the context of the APN. If APN strategy doesn't develop we will always limit the potential for nurses in areas where they can excel.	Policy structure Opportunity Nursing potential	Key policymakers Professional Development
The timing must be right. the so called messaging from the policy makers. With the timing right we think it is an opportunity for us to make a breakthrough for nursing – if we don't do it now, once the opportunity goes we have lost our chance altogether.	Timing Opportunity	Change Timing
now the nurses if they are well trained should take on this role & intervene at the time of need & save the patient a lot of money.	Assumed benefit	Filling the gaps
It's a collective voice of nursing. It has always been our desire to see nursing take on a more active role & be an active decision maker in some of the policies. Ministry wants nursing to be there. It's for us to make it happen. That means you do not have to ask for permission for anything. Just tell them what you think your vision for nursing is & what do you think are the resources & capabilities you need to make that happen & then you just put that forward & that's it. They will support whatever it takes as long it is in the interest of advancing health care & done in the most cost effective manner.	Vision for nursing Collective voice Support	Professional development Pivotal stakeholders
them a dream; telling them a dream & get them to dream & vision to work together for a new nursing workforce & a “new nursing culture”. When I am invited to every platform	New nursing culture Dream Vision/voice	Vision Professional Development
It is going to have a major impact on the nursing culture if you ask me. I think there will be a more informed nursing workforce that will definitely change the status quo. It is going to have a major impact on the nursing culture if you ask me. I think there will be a more informed nursing workforce that will definitely change the status quo.	Nursing culture Voice Change Status quo gone	Change Professional Development
We will definitely “disrupt healthcare in a positive way”. I'm talking about a positive disruption of healthcare. We've got to make healthcare faster, cheaper & better. Not conventional – grateful for the help on the journey of change.	Change Journey	Change Value add – cost savings
Partly it is because they are short of the medical	Bridge the gaps	Mini doc

doctor so they have to increase the people who can provide sufficient & quality care to the patient; the other part is they would like to upgrade the nurse roles so the nurse can provide quality care	Upgrade nursing	Professional development
I think that as nursing progress every nursing leader wants to aspire & move on to something that is better. It is actually nursing driven but you do have to find a doctor's champion. Nursing driven means the nursing career track? Yes	Professional advance Career track	Professional development Physician gatekeeper
For quite a long time there had been a drive particularly amongst the nurses in a sense to enhance the professionalization of nursing in Singapore. we were not realising the full value potential of the nursing community.	Professional advance Opportunity	Professional development
Because, frankly, a lot of these things are outside of the control of the nursing leadership. They are CEO level decisions but I think the CEOs are very supportive & understanding & they were able to work with the nursing leadership. Because I think the nurses, my sense is that they were thrilled that they were now being recognised & now concrete steps were being taken to enhance professionalism of the nursing group. So that there was a strong alignment of interest at the highest level.	Status Professional advancement Recognition	Enhance nursing status Pivotal stakeholders

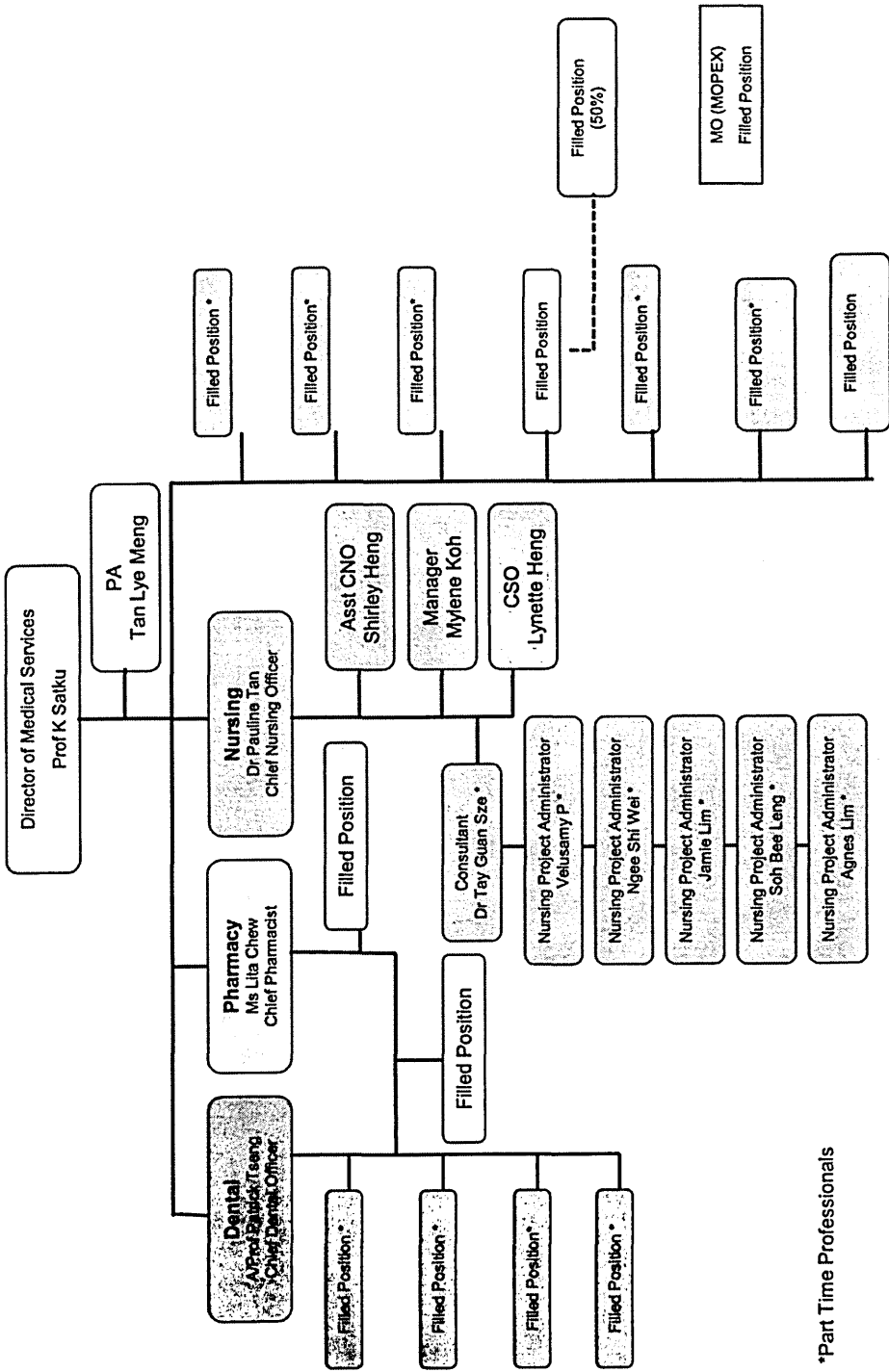
Appendix 22
Singapore Ministry of Health Organisational Chart

MINISTRY OF HEALTH HQ ORGANISATION CHART
With effect from 1 July 2012



Appendix 23
Organisational Chart – Singapore Office of the Director of Medical Services

OFFICE OF THE DIRECTOR OF MEDICAL SERVICES



*Part Time Professionals

Wef 1 Sep 2011