DEVELOPMENT OF A SPECIALIST NURSING FRAMEWORK FOR NEW ZEALAND

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CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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A doctoral journey is never taken alone. My companions on this journey have ranged across all aspects of my professional and personal life and not all have made it to the finish line. To those that have assisted me please know that the gifts of time and space during these past five years are much appreciated.

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Preface

The development of a national framework for specialist nursing built on a consensus approach, is the nursing profession's business and is the focus of this dissertation. Through my many roles in nursing I have formed the view that the time is right for the development of a single specialist nursing framework for New Zealand. First, as a former nurse specialist who has practiced in New Zealand, Australia and Britain, I appreciate the research that supports the positive difference that specialist nursing services can make to patient outcomes. As an undergraduate then postgraduate nurse educator since 1994, I have observed with concern the proliferation of inconsistent expectations of specialist nursing roles and titles with subsequent limited transferability within New Zealand. Finally as a nurse leader of the national association, Nurse Education in the Tertiary Sector (NETS) and part of the National Nursing Organizations (NNO) group, discussing national nursing workforce planning has been part of my role. Working with various groups tasked with developing lengthy lists of nursing practice competencies for government prioritized health service areas e.g., before school health checks and cancer care, as a way of supporting specialist services is not sustainable in my view. The time is right for a different approach to the ongoing generation of multiple lists of competencies. This study provides an alternate option.

As is common in qualitative research, my interest and position in nursing in New Zealand has the potential to influence the outcome of the study. Whilst acknowledging that co-construction of meaning is a desired part of the process, the dialectic between the participants and the researcher requires surfacing to make more auditable the findings. This process is well understood as reflexivity (Finlay, 2002; Jootun, McGhee, & Marland, 2009) and defined as "the process by which researchers recognize that they are an integral part of the research and vice versa" (Munhall, 2007, p. 318). Cutcliffe (2003) cautions against excessive reflexivity diverting attention away from insightful analysis of the data to less valuable self exploration, and suggests the concept of intellectual entrepreneurship (to boldly explore ideas). Balancing both boldness and self exploration, I have provided a dialogue of reflexivity within this dissertation in boxed areas of italicised text.

The aim of any professional doctorate is to prepare nurses to function in leadership roles in academic, clinical and research settings within dynamic and complex health care systems and communities (Ketefian, Davidson, Daly, Chang, & Srisuphan, 2005). The intent of the Doctor of

Nursing program undertaken to support this study, is to prepare nurses for leadership positions within the profession(Faculty of Nursing Midwifery and Health University of Technology Sydney, 2009). Maxwell (2002) contends that the responsibility of professional doctorate scholarly activity is for rigorous knowledge production by practitioners in the context of complex practice.

The knowledge produced through this study has expression through the construction of the dissertation text. The ontological premise of relativism that underpins this study allows understanding that the meanings of the nurse specialist framework will be co-constructed in dialectic interplay between the reader and the dissertation text (Chandler, 1995). Equally, the process of developing a dissertation is acknowledged as reflexive, in that language is selected to both develop the researcher's understanding, as well as to communicate understanding; what Maxwell terms writing "in" as well as writing "up" (2002, p.9).

This dissertation needs to meet the requirements and the expectations of various audiences or discourse communities. Discourse communities are marked in part by their specific shared language and understandings (Freed & Broadhead, 1987) and for this dissertation include the academic community, the professional community and the policy community. As there are multiple audiences for this research, there are a variety of text forms presented within the dissertation e.g., published work and conference presentations organised into chapters for ease of reading.

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Abstract

Specialist nursing services have been identified as an area of expected growth for the New Zealand health system. In the next decade more nurse specialists will be required particularly to provide services to manage long-term conditions, the burden of chronic disease and the provision of quality aged care. However, the current landscape and understanding of specialist nursing in New Zealand is well recognized as complex and fragmented, with professional groups looking for solutions. There are multiple pathways involving frameworks built on ever increasing lists of nursing competencies. As a nurse leader within New Zealand, my concern is that inconsistent specialist nursing workforce planning and pathways for nursing practice development will adversely affect needed service provision for the population. This dissertation reports the outcomes of my doctoral study, which suggests an alternate approach through the development of a single unified capability framework for specialist nursing practice in New Zealand. This study uses a qualitative descriptive and exploratory multi-method enquiry approach to review extant understandings and develop a consensus framework. A three-phased study with each phase informing the other was designed to answer the research question regarding the essential elements required for a single national framework for specialist nursing in New Zealand. The initial phase of the study considered the extant nurse specialist frameworks through literature review and document analysis, along with key stakeholder interviews to build elements for the next phase. The second phase used online survey software in an E- Delphi technique using the International Council of Nurses three criteria for orderly development of specialty practice. Following two rounds of the E-Delphi, the consensus outcome elements were integrated with a role development model to develop a draft framework. The third and final phase of the study validated the framework with a group of nurse specialists, culminating in the production of the New Zealand Nurse Specialist Framework (NZNSF). The dissertation widens the understanding of a more holistic approach to specialist nursing development, which holds great promise for the specialist nursing workforce in New Zealand and potentially internationally.

Chapter 1: Introduction

This chapter will introduce the background and design for the study and provide an overview of the structure for this dissertation. This dissertation presents the knowledge developed through the completion of a professional doctorate program of study.

The process of knowledge development can be viewed through models developed by Boyer's 1990 seminal work on the process of research in higher education *Scholarship Reconsidered*. The scholarships of discovery (identifying what is known or yet to be found), integration (making connections across disciplines and illuminating the data) and application (applying the knowledge gained to consequential problems, ensuring it is of use) have informed the journey of this study. This dissertation fulfils Boyer's final scholarship of teaching in that it seeks to transform and extend knowledge in relation to specialist nursing workforce planning for key stakeholders in the profession, policy makers and educators (Boyer, 1990; Maxwell, 2002).

Maxwell (2002) presents a strong argument for aligning professional doctorate knowledge production with Boyer's notions of scholarship. She asserts that the responsibility of professional doctorate scholarly activity is Mode 2 knowledge production. Mode 2 knowledge is that produced by professionals "reflecting upon practice where reflection is generated out of their own interests" (Maxwell, 2002, p. 3), and is rigorous knowledge production in the context of complex practice rather than academe.

Nursing workforce planning in the context of a rapidly changing health service is a highly complex area of activity. A single framework for specialist nursing practice in New Zealand has the potential to support accurate data gathering and enable planning of transparent pathways for service development. An agreed framework would additionally assist in building an evidence base for nurse specialist practice; supporting consistency and equity of expertise; reduction in role duplication, and enabling succession planning and sustainability (Fergusson, 2007).

This study builds in part on the Australian Health Minister's Advisory Council's National Nursing and Nursing Education Taskforce (N^3ET) project to develop a specialisation framework as part of a broader brief to build national consistency for Australia. The N^3ET was established

to implement the recommendations of *Our Duty of Care*, the 2002 report of the National Review of Nursing Education, with a subsequent Ministerial request to also focus on nurse specialisation in 2004. The specialisation framework project focused on defining specialty area criteria and determined that there were 14 specialty areas in Australia that meet all the developed criteria (National Nursing & Nursing Education Taskforce, 2006). Further work to define and develop consensus on the terminology for specialisation and advanced practice has completed this task (Heartfield, 2006). Further development of this work is proposed to consider national accreditation processes for nursing education and specialty frameworks for Australia (King, Ogle, & Bethune, 2010).

Reflection on the history that has brought New Zealand nursing to this point provides a background to the study.

1. Background to the study

The policy and professional education context for this study are useful to consider as background to this dissertation.

1.1 New Zealand nursing policy context

New Zealand had its own Ministerial Taskforce on Nursing in 1998, which undertook the first major review of nursing in New Zealand for more than 15 years. The taskforce report aimed to build a clear pathway for those nurses who wished to further their career through advanced and specialist nursing. The taskforce recommendations to the Minister of Health specific to specialist nursing were that the Nursing Council of New Zealand

> work with nursing organisations, agencies in the health and disability services sector, and postgraduate education providers to develop, recognise and validate specialist competencies, within a larger framework, which are linked to nationally consistent titles (Ministry of Health, 1998, p. 18).

However, in contrast to the later Australian Duty of Care report, New Zealand allocated no funding to the implementation of the recommendations, and further projects were not well co-ordinated. In response to specialty groups developing their own accreditation and standards, the Nursing Council of New Zealand established a broad framework for the

development of national nursing standards, with reference to competencies for specialty and advanced nursing practice (Nursing Council of New Zealand, 2002a).

The concerted effort and a predominate focus of the professional organisations since then, has been the development of the nurse practitioner pathway as the penultimate advanced nursing development. Specialist competencies were developed by the Nursing Council of New Zealand in 2001 (Nursing Council of New Zealand, 2001) but then removed with the introduction of the Health Practitioners Competence Assurance Act in 2003. The recommendation from the 1998 Taskforce for the development of a national framework for specialist nursing practice remains unmet.

Consumer pressure for specific services, technological changes, changes to other roles in the health workforce and resultant government policy, will continue to contribute to increasing specialist service requirements (Humphris & Masterson, 2000). The focal point for health workforce planning is the anticipated future health care demand related to the needs of an ageing population, and the increasing burden of chronic disease, with a subsequent strong requirement for an increased supply of flexible specialised services including nursing (Nursing and Midwifery Workforce Strategy Group, 2006). The specialist nursing service demand will therefore continue to grow and supply strategies are needed now.

Accurate problem definition is essential in order to formulate clear strategies for nursing workforce issues. A key challenge to planning for increased provision of specialist nursing services, is the difficulty of being able to clearly identify the current levels and areas of practice in relation to the numbers of the nursing workforce, as data collection is problematic (Ministry of Health, 2006). New Zealand planners need to understand both the demand and current supply of specialist nursing services, in order to begin to identify any gaps and develop strategies to address them. Nationally, effective nursing skill-mix projections, as part of workforce planning, would be supported by the development of a single unified framework for specialist nursing practice in New Zealand.

The future demand for nursing services is likely to require a range of advanced nursing skills to meet changing service requirements. These skills will range from the general to the specialist across specialty areas such as primary health care, and emergency care. The final framework will need clear potential connections to current New Zealand regulatory and professional frameworks. This study supports sound nursing workforce planning for supply of specialist

services in the context of a rapidly changing health service demand, through development of a single unified framework for specialist nursing practice in New Zealand. The final framework for specialist nursing will include educational expectations and competency or capability statements.

1.2 New Zealand nursing education context

There is appropriate regulation of nursing education by the Nursing Council of New Zealand (NCNZ) when linked to the preparation for, and entry to, regulated scopes of practice such as Enrolled Nurse, Registered Nurse and the Nurse Practitioner. There are however no specific regulatory requirements for specialisation development in contrast to other professions e.g., medicine, which can place nurses at risk. Recent work by the NCNZ to define expanded practice has been in response to the proliferation of new roles for nurses, which can potentially place them outside of their regulated scope of practice (Nursing Council of New Zealand, 2010a).

Some regulation and certification of nurses post-registration is undertaken by the NCNZ as part of continuing competency requirements under the Health Professional Competence Assurance Act (2003). Generally, the development and delivery of education programmes for registered nurses is the province of the tertiary providers, with five universities and four polytechnics offering post-registration education at either postgraduate (Masters) level or graduate (Bachelors) level. However, in order for registered nurse students to be eligible for funding grants from Health Workforce New Zealand (HWNZ), education programmes must be approved by NCNZ. This involvement is a function of the early history of the development of the funding specifications and is not a regulatory requirement. Education programmes are developed and offered in response to stakeholder demand (usually the local district health boards), with an increasingly strong trend to generic approaches. There are few professional colleges that have national acceptance as exists in other countries, such as Australia or the United States.

This has contributed to a more market-based approach to nurse specialist education and development of specialty areas (responding to individual consumer demand or government funding streams), rather than a professional strategy for nursing overall. This approach has the potential to be confusing for the profession, for health care colleagues and most importantly, for the community that nursing serves. A more recent review of workforce development planning, recommended to the Minister of Health that a single agency with a

whole of health and disability services workforce, and a whole of educational continuum responsibility be established to ensure that New Zealand has an affordable and fit-for-purpose health and disability services workforce (Ministerial Task Group on Postgraduate Training and Education, 2009).

1.3 Summary

Thus there is an opportunity in the current environment, what some might call a "policy window" (Mintrom & Norman, 2009), with indicative professional organisational support and government strategy direction, for the development of a national specialist nursing framework. Those taking advantage of policy windows to effect policy change are termed political entrepreneurs, and are characterised as being found where disruptive change occurs (Mintrom & Norman, 2009). The potential for disruptive change is evident in the proposed conceptualisation of specialist nursing within a single framework, rather than the current diverse approaches.

As stated, this study aims to develop a framework for specialist nursing in New Zealand through a consensus-building research approach. Research as structured inquiry is understood as arising from the Latin *in* ("in, at, on; into") and *quaerō* ("to seek, look for"), meaning to seek information (Soanes, 2001). The study "looks into" the current understanding of professional knowledge development and career frameworks, with the overall purpose of assisting in workforce planning for specialist nursing services.

2. Structure of the study

This section provides a high-level overview of the structure for this study with the detail regarding research design explicated further in Chapter Three.
The overarching question that this study seeks to answer is:

> *What are the essential elements required for a single national framework for specialist nursing in New Zealand*?

This question will be answered through a sequential three-phased study, with each phase informing the next, which incorporates the following objectives:

Phase One

- Identification and critical analysis of the extant specialist practice frameworks using international literature.
- Analysis of New Zealand key informant perspectives in relation to specialist nursing frameworks.

Phase Two

- Development of elements for inclusion in a specialist nursing framework from previous analysis.
- Identification of a potential framework through national key stakeholder-consensus building.

Phase Three

- Wider consultation and validation of the developed framework within the specialist nursing sector.

3. Structure of the Dissertation

So far *Chapter One* has introduced the intent of the dissertation and briefly explored the background and structure of the study that this dissertation reports. The overarching chapter structure of this dissertation is now presented to aid navigation by the reader.

Chapter Two develops a review of the relevant literature, which is structured around the two elements of policy and professional issues that provide a background to the study. In the first section (Section A), an exploration of the policy environment for workforce planning in New Zealand and internationally, with a specific focus on the specialist nursing workforce, is presented. The second section (Section B), provides a conceptual overview of specialist nursing from the literature. The broader context for recognition of specialist professional practice and competence development, is presented through exploration of other professional groups internationally, such as teachers, allied health professionals and doctors. This diversity was chosen to provide insights into how similar and different professional groups manage the issue of specialist practice and career frameworks. Specialist nursing practice is then explored in more detail, including a discussion of existing career frameworks that provide context for the study design detailed in the following chapter.

Chapter Three presents detail of the overall study design and provides a rationale for the methodological approach of this study. It includes arguments that support the use of the Delphi technique to develop a consensus framework. Each phase of the study is described, along with broad details of data collection and analysis. Subsequent sections detail more closely the methods employed within the study. The ethical considerations leading into the first phase of the study are presented.

Chapter Four expands on the development and undertaking of Phase One of the study, culminating in development of the Phase Two online questionnaire. This chapter is presented in two sections also, with Section A providing detail of the approaches to data collection and analysis for a focused exploration of the literature and documentation analysis. Section B reports the data collection and analysis approaches to key informant interviews, and the subsequent development of a framework for the Phase two questionnaire. The outcomes related to the potential characteristics of nurse specialists are presented, and the limitations of this phase of the study are discussed here.

Chapters Five and Six present the development and undertaking of the largest component of the study (Phase Two), in which the Delphi technique is used to develop consensus on the elements for a specialist nurse framework. These elements were subsequently crafted into an initial framework for validation with the specialist nurse sector. Chapter Five has two sections, with the first section (Section A), exploring the selection of the Delphi technique and the modifications undertaken for this study. In the second section (Section B) the online data collection approaches are explained and the approach to analysis of consensus is discussed.

Chapter Six reports in two sections also, with the overall approach to data analysis and the outcomes of the consensus-building processes explained in Section A. Section B presents detail of the methods used in the final development of a draft framework for specialist nursing in New Zealand, including the key considerations and limitations of this phase.

Chapter Seven provides detail of the third and final phase of the study, in which the developed framework from Phase Two was tested through an evaluation review process with a group of nurse specialists.

Chapter Eight provides a summative discussion of the implications of this dissertation for workforce planning in New Zealand. This chapter explores the development of the nurse specialist framework and associated tools for implementation for employers, education providers, professional nursing organisations and individual nurses. Recommendations are provided for further research.

An integral part of any research study is reviewing the extant knowledge in the area of interest to enable positioning of the work in a broad context. Having outlined the structure of the dissertation, the background literature in relation to workforce planning policy and professional issue perspectives for specialist nursing that informed the study, is presented in the following chapter.

Chapter 2 : Literature Review – policy and professional issues

This literature review seeks to establish the external environment in relation to the context of specialist nursing from a workforce planning perspective, as well as a professional perspective. Unsurprisingly, there are many points of commonality, as the central goal for both perspectives is to serve the public need for quality health care delivered by well prepared and competent health professionals. A published article is presented first to capture health workforce planning policy issues, followed by a literature review exploring professional specialist practice generally, with a subsequent specific focus on nursing. These two perspectives aim to situate the research question against a background of the political and professional context of specialist practice and are presented in two sections.

Section A: Health Workforce Planning Policy

Introduction

This article was published in 2009 in *Policy, Politics &Nursing Practice*, a peer-reviewed publication, and developed from the initial literature review that positioned the study in terms of health workforce planning.

Holloway, K., Baker, J., & Lumby, J. (2009). Specialist Nursing Framework for New Zealand: A Missing Link in Workforce Planning. *Policy, Politics, & Nursing Practice*, *10*(4), 269-275.

A competent, confident and regulated health workforce is a critical part of a society's health and well-being. Achievement of this requires workforce planning strategies mindful of contextual elements such as social, demographic, political, technological and economic factors, which strongly influence the constructs of efficient and effective health services (International Council of Nurses, 2005).

For New Zealand (as in many other countries), changing demographics, new government strategies and rising consumer expectations are strong drivers for increased demand for health care services. The health workforce is recognized as **the** key component in health services delivery comprising a large proportion of the costs (Duckett, 2007). The issue of inadequate

human resources for health care delivery is both a global and a local issue (Barraclough & Gardner, 2008; Duckett, 2005). Assuring the provision of a well qualified and sustainable health workforce to meet the identified drivers for future health needs is a priority for the New Zealand government (Ministry of Health, 2006a).

Current health workforce shortages relate not only to overall numbers but also to specific skills deficits in particular professions such as nursing. Registered nurses and midwives are acknowledged as an essential part of the health workforce providing up to 80% of direct patient care (Oulton, 2006; World Health Organisation, 2007). Within the nursing workforce, there are considerations such as the differing levels of practice skill (from novice to most expert), the roles of other health professional groups within the system as well as the policy context (Humphris & Masterson, 2000). Nursing workforce planning thus best develops within a framework that considers the broader context of health care service delivery.

Global Nursing Workforce Planning

Globally, many countries have been considering nursing workforce planning as a matter of priority in order to meet the future health service needs of their populations (International Council of Nurses, 2005). Specific workforce planning for nursing requires a clear understanding of the supply and demand elements (Buchan, 2000; Oulton, 2006). Merely increasing the overall supply of healthcare professionals is unlikely to be a sustainable solution to health workforce need as it does not account for specific increasing demands for services such as chronic and complex disease management.

The required future demand for nursing is likely to require a range of nursing skills to meet changing service requirements. These skills will range from the general to the specialist across specialty areas such as primary health care, emergency care. A specialty is defined for this discussion as the area of practice whereas specialist is defined as the level of practice. The definition of nurse specialist accepted internationally (and being considered for use in New Zealand) is the practice of a nurse “prepared beyond the level of a generalist nurse and authorised to practise as a specialist with advanced expertise in a branch of the nursing field” (International Council of Nurses, 2009, p. 6).

The expected future labour shortage will require also a greater focus on improving the performance and productivity of the available nursing workforce. Inadequate workforce planning is stated as one of the main causes of the current nursing shortage, along with poor

recruitment and allocation strategies (Buchan & Aiken, 2008). Solutions to the shortage include competitive remuneration, satisfying careers with a focus on retention of the existing workforce and clear career development pathways to support this (Buchan & Aiken, 2008; Duckett, 2005; Ministry of Health, 2006a).

Health policy makers globally are considering the impact on health workforce planning of issues such as access to services, the growing burden of chronic disease, an ageing population and the rising costs in health care systems. These issues have great resonance in the New Zealand context for health workforce planning and have been the focus of much attention in the last few years (Ministry of Health, 2006a).

Workforce planning in New Zealand

National health workforce planning is a relatively new process for New Zealand. The first Health Workforce Advisory Committee (HWAC) was set up under the New Zealand Public Health and Disability Act in 2000 to advise the Minister on workforce issues. Previously, workforce planning had largely focussed on discipline specific workforce demands rather than a whole of system approach which is required (Committee on Strategic Oversight for Nursing Education, 2009; Ministry of Health, 2006a).

A particular contextual element of concern in relation to effective health care service delivery in New Zealand is the availability of advanced nursing services through an adequate nurse specialist supply. A recent study forecast that for achievement of major government health strategies specifically in relation to chronic conditions management and primary health care, careful planning is required to address the nurse specialist supply problem (Nursing and Midwifery Workforce Strategy Group, 2006).

The New Zealand Ministry of Health now supports sector groups, such as the District Health Boards of New Zealand (DHBNZ), to develop national workforce action plans. There are 21 District Health Boards within New Zealand, which the Ministry of Health contracts to deliver health services to New Zealand, each having its own regional workforce development plan – creating points of tension within a national overview approach. A recent review of workforce development planning recommended to the Minister of Health that a single agency with a whole of health and disability services workforce and a whole of educational continuum responsibility be established instead to ensure that New Zealand has an affordable and fit-for-

purpose health and disability services workforce (Ministerial Task Group on Postgraduate Training and Education, 2009).

The focus for health workforce planning is the anticipated future health service needs for New Zealand. Future needs are (as in many western countries) expected to focus upon the ageing population and the burden of chronic disease with an increased requirement for autonomous practice from flexible specialised services including nurses (Nursing and Midwifery Workforce Strategy Group, 2006). A Ministry of Health discussion paper predicted that workforce demand in New Zealand will outstrip supply by 2011 (New Zealand Institute of Economic Research, 2004).

Between 2001 and 2021, the New Zealand population over 65 will almost double with an additional two-fold increase in the proportion over 85. Additionally, within this older population growth the proportion of Māori and Pacific peoples will grow substantially (Ministry of Health, 2006a). Planning for development and maintenance of an adequate nursing workforce to meet the expected needs of New Zealand's aging and culturally diverse population has been identified as an urgent problem (Nursing and Midwifery Workforce Strategy Group, 2006).

Accurate problem definition is essential in order to formulate clear alternatives or options for nursing workforce issues. A problem begins with the awareness that there is a mismatch between how the world is and how it could be (Hughes & Calder, 2007). The process of problem definition is central to policy development (Barraclough & Gardner, 2008; Hughes & Calder, 2007). Therefore a key step in planning for the future nurse specialist workforce is an understanding and definition of the workforce that currently exists (Page & Willey, 2007).

New Zealand Nursing Workforce

In New Zealand, nurses make up the largest proportion (40%) of the registered health professionals (Committee on Strategic Oversight for Nursing Education, 2009). A recent review of the New Zealand nursing workforce reported inadequacies in the provision of specialist nursing services that could meet identified future health service needs. More nurse specialists are needed to provide care in community based, older adult, primary care and rural services to meet health demand in these areas (Nursing and Midwifery Workforce Strategy Group, 2006). A key challenge to planning for increased provision is the difficulty of being able to clearly understand the current levels and areas of practice in relation to the numbers of the nursing

workforce as data collection is problematic (Ministry of Health, 2006a). New Zealand planners need to understand both the demand and current supply of specialist nursing services in order to begin to identify any gaps and develop strategies to address them.

Nationally, effective nursing skill mix projections as part of workforce planning, would be supported by the development of a single unified framework for specialist nursing practice in New Zealand. A consistent national framework has the potential to support accurate data gathering and enable nurses and service providers to identify and plan transparent and transferable pathways for specialist nursing service provision and development.

However, in New Zealand the identification of, and therefore the pathway for specialist nursing is not clear. It is difficult to ascertain even how many nurse specialists are currently practicing, as up until recently there were around 50 different nursing titles in use. Recent work to limit the number of titles for senior nurses and midwives used within the District Health Board (DHB) hospital sector (approximately half of the active workforce) to fifteen will assist with identification of specialist roles. However the roles for which the specialist titles are approved are not linked to specialist nursing standards (New Zealand Nurses Organisation & District Health Boards of New Zealand, 2007).

The approved titles are provided in Table 1 with additional information available in the cited report regarding the rationale for their selection and role descriptors to assist clarification (New Zealand Nurses Organisation & District Health Boards of New Zealand, 2007). Note that the Nurse Practitioner title is the only regulated and protected title and role.

Table 1 Endorsed National Senior Nurse and Midwife Titles
Nurse/Midwife Manager
Clinical Nurse/Midwife Manager or Charge Nurse/Midwife Manager
Associate Clinical Nurse /Midwife Manager or Associate Charge Nurse/Midwife Manager
Clinical Nurse/Midwife Coordinator
Nurse/Midwife Coordinator
Nurse/Midwife Educator
Nurse/Midwife Researcher
Nurse/Midwife Consultant
Nurse Practitioner – *regulated role*
Clinical Nurse/Midwife Specialist
Specialty Clinical Nurse / Midwife
Duty Nurse/Midwife Manager
Clinical Resource Nurse

(New Zealand Nurses Organisation & District Health Boards of New Zealand, 2007)

The differentiation of 'specialty nurses' was intended to articulate a role for registered nurses who have greater knowledge in a specific area of practice but who focus their practice on direct patient care exclusively. The clinical nurse specialist has a broader role of clinical leadership for nurses and other members of the health care team and for development of pathways and care protocol through research in addition to providing direct patient care. This differentiation by the working party was an attempt to reduce confusion around the clinical nurse specialist role and to enable recognition of the specialty nurses in District Health Boards without the wider expectations of leadership and research that exist for the clinical nurse specialist role (New Zealand Nurses Organisation & District Health Boards of New Zealand, 2007). Even though this work does not assist the 50% of nurses who are not part of the public hospital sector, it is an important initial step in developing national consistency.

Factors that further complicate an understanding of the current numbers of nurse specialists in New Zealand workforce are the different national methodologies for data gathering and analysis. DHBNZ recently completed a series of health workforce data reports using the Australian New Zealand Standard Classification of Occupations (ANZSCO) for classification and analysis (District Health Boards of New Zealand, 2007). The ANZSCO registered nurse classification has thirteen sub-classifications, which are mostly specialty practice areas but do

not include any indication of the level of practice. The ANZSCO does include the nurse practitioner (NP) title, which for New Zealand and Australia is a specific regulated scope of practice rather than an area of practice. The data for the DHBNZ reports is based on job title analysis acquired centrally from hospital based human resource departments.

In contrast, the other large nursing workforce data collector, the Nursing Council of New Zealand (NCNZ) has nurses self-reporting on their area of clinical practice from eighteen specialty areas (excluding education, research and management) as part of their annual renewal of practising certificates. According to the NCNZ, all nurses work in areas of specialty (and are therefore specialty nurses), however, the expertise level of their practice within these areas is not clearly identified (Clark, 2006). Self-reporting of clinicians is liable to be different from the reporting of DHB human resources departments, which are more likely to have identified nurse's area of practice by their role title. In summary, both systems collect data on the number nurses working in specialty areas but with different area classifications and neither identify their level of practice. The subsequent challenge in interpretation and correlation of both sets of data is clear from the attempted matching in Table 2.

Table 2 **Areas of defined clinical practice specialty *(matched items)***

Nursing Council of New Zealand (NCNZ) (self defined at individual level)	**District Health Boards of New Zealand (DHBNZ) based on ANZSCO (defined at hospital level - NP excluded))**
Accident and emergency	*Aged Care*
Assessment and rehabilitation	*Child and Family Health*
Child health, including neonatology	Community Health
Continuing care (elderly)	Critical Care and Emergency
District nursing	*Developmental Disability*
Family planning/sexual health	Disability and Rehabilitation
Intellectually disabled	*Medical*
Intensive care/coronary care	*Primary Health Care*
Medical (including educating patients)	*Mental Health*
Mental health (including substance abuse)	*Perioperative*
Obstetrics/maternity	*Surgical*
Occupational health	*Not elsewhere classified (other)*

Nursing Council of New Zealand (NCNZ) (self defined at individual level)	**District Health Boards of New Zealand (DHBNZ) based on ANZSCO (defined at hospital level - NP excluded))**
Other nursing	
Palliative care	
Perioperative care (theatre)	
Primary healthcare (including practice nursing)	
Public health	
Surgical	

These differences in both methodology and data category descriptions potentially limit the ability to compare and cross check the data – the italicized areas above are those that most obviously appear in both classifications. Other limitations are acknowledged within the DHBNZ reports themselves in relation to the quality of the raw data able to be gathered and also the inclusion of only hospital employed staff (50% of nursing population) excluding primary care organisations and non-government organisations (District Health Boards of New Zealand, 2007).

Variance in approach to collecting data and in defining specialty practice areas and nurse specialist numbers is challenging both nationally and internationally. As described previously, specialty is the area of practice whereas specialist is the level of practice. A national framework for understanding specialist nursing in New Zealand with clarity around specialty areas and specialist level practice descriptors would assist with data collection and thus provide enhanced information for both workforce planners and stakeholders in the health care system.

A most important stakeholder is the health care consumer as the development of a professional nursing workforce must always be linked to the health care needs of communities. As previously discussed, an increase in long term (chronic disease) condition management is a key facet of the consumer centred population health focussed future service models proposed for New Zealand (Ministry of Health, 2006a).

In the future, to benefit wider population groups, it is anticipated that nurse specialist roles will extend further into primary, community and aged care settings (Nursing and Midwifery Workforce Strategy Group, 2006, p. 16).

Consumers' expectations are that service providers are knowledgeable about assisting them to manage their complex health needs. Nurse specialists are often in the forefront of providing this kind of service and are preferred over less experienced and non nurse specialists by consumers (Wilkes, Cioffi, Warne, & Harrison, 2008). A framework that enabled clarity of identification of specialist nursing practice would enable closer examination of the relationship to client outcomes in terms of clinical effectiveness for New Zealand researchers. When able to be identified clearly, nurse specialist services have already been clearly linked to enhanced client outcomes in ophthalmology (Slight, Marsden, & Raynel, 2009), dementia care (Dewing & Traynor, 2005) and multiple sclerosis care (Forbes, While, Mathes, & Griffiths, 2006).

Advanced practice nursing frameworks assist in increasing productivity through building an evidence base about advanced practice, enhancing consistency and equity of expertise; supporting a reduction in role duplication and enable succession planning and sustainability (Ferguson, 2007). A specialist nursing framework for New Zealand would enable a more focused approach to provision of advanced nursing services.

A framework for collecting workforce data to identify current supply and enable development of a clear career pathway would greatly enhance future nursing workforce planning (Buchan & Aiken, 2008) which includes nurse specialists. The absence of a clear framework for articulating specialist nursing practice has important consequences for the quality of future workforce planning, the essential development of appropriate educational programs for the workforce and therefore provision of services (Heartfield, 2006).

In addition to health care consumers and nurses themselves, Duckett (2007) asserts that there are four other parties to consider in nursing workforce issues: education providers who design curricula; health service providers who employ nurses; health service regions that make decisions about pay and conditions; and the government that funds education and regulates migration. In the absence of a consistent national framework endorsed by the nursing profession in New Zealand, other key groups are developing structures to shape this level of nursing practice. Employers and the government, in response to workforce strategies around specific service needs such as cancer control and child health, are contracting isolated groups

to develop specialist nursing practice competencies or advanced skills lists (District Health Boards of New Zealand, 2005; Ministry of Health, 2003b). These multiple and isolated approaches are reactive and not effective or sustainable long term for New Zealand's nursing workforce planning.

Conclusion

The lack of progress towards a national framework for specialist nursing practice is an indication of the complexity both of the task and the health care context. The acknowledgment of the need for political support at professional organisational or government level to effect change for nursing is widely reflected in the literature (Atkinson & Tawse, 2007; Daly & Carnwell, 2003; Dewing & Traynor, 2005; Durgahee, 2003; English National Board for Nursing Midwifery and Health Visiting, 2000; Forbes et al., 2006; Reed, Inglis, Cook, Clarke, & Cook, 2007; Walker, 2005). Clear articulation of the role of the specialist registered nurse is needed in order to clarify the number needed in the workforce, the education curricula required, and the numbers that require supporting into postgraduate programmes (Duckett, 2007). A consensus framework detailing what constitutes a specialty area, specialist level of practice and the process for endorsement, supported by relevant nursing professional groups will provide clear articulation and thus enhance effective nursing workforce planning.

As providers of a health service for communities, nursing practice must be linked to the health care needs of those communities. Consumer pressure for specific services, technological changes, changes to other roles in the health workforce and resultant government policy will continue to contribute to increasing specialist service requirements (Humphris & Masterson, 2000). The specialist nursing service demand will continue to grow and supply strategies are needed now. There is an opportunity in the current environment, with indicative professional organisational support and government strategy direction, for the development of a national specialist nursing framework. Such a framework would provide consistency in articulating this level of practice and support more effective workforce planning into the future.

Section B: Specialist Nursing – concepts and trends

The aim of this section's literature review is to explore the key concepts and trends that will provide the foundation for the development of a single national framework for specialist nursing practice in New Zealand. Published literature was sourced through scholarly bibliographic databases such as OVID and ProQUEST, and by using techniques described by Sandelowski and Barroso (2003), including ancestry (tracking of citations) and descendency (use of citation indices). Additional literature was accessed through searching publicly accessible databases, with additional access sought where needed from organisations and government bodies. This combined approach increases the capture of what Sandelowski and Barroso (2003 p.798) term "fugitive literature" (studies that might otherwise escape retrieval), which are a potential threat to validity by developing an incomplete picture.

The literature in relation to the development of professional knowledge generally is explored and current themes identified. The broader context of the recognition of specialist professional practice and competence development, through exploration of other professional groups internationally, such as teachers, allied health professionals and doctors is presented. This diversity was chosen to provide insights into how similar and different professional groups manage the issue of specialist practice and career frameworks. Specialist nursing practice is then explored in more detail. Lastly, career frameworks are considered and the parameters of the current study presented.

1. Development of professional knowledge

The current health care context in New Zealand, as in many developed countries, is characterized by a greater demand for cost effectiveness and quality (Ministry of Health, 2006a). Optimal use of the health workforce resource is required as part of the efficiency drive. All health professional groups, including nursing, need to be able to define their knowledge and expertise as both a political necessity and a professional responsibility (Hardy, Titchen, Manley, & McCormack, 2006; Higgs, Richardson, & Dahlgren, 2004; Manley & Garbett, 2000).

The United Kingdom research team responsible for the 2006 Expertise in Practice project, also argue the political need for nurses to be recognized for their distinctive contribution to health care. One of the premises of the above project was that nurses lacked the language to

adequately describe their professional expertise, which impacted negatively on an appreciation of their place in health service provision. In the absence of a clear articulation of the significant contribution made by the profession to health-care outcomes, it is suggested that skilled nursing practice may become unavailable to consumers (Hardy et al., 2006). Therefore, a lack of clarity in relation to specialist nursing practice creates a potential risk to nursing care provision.

For the nursing profession there is a need to be able to articulate the dimensions and scope of the disciplinary knowledge that underpins "good" nursing practice (Higgs et al., 2004). Health professionals must understand the specific nature of their discipline practice knowledge, and the processes for its generation i.e. practice epistemology (Higgs et al., 2004). These authors argue that an understanding of both is imperative if the valuable contributions of distinct health professions are to be properly appreciated and integrated into the changing context of health care. This supports the need for a consistent career framework for specialist nursing in New Zealand to maximize the utilization of differing levels of nursing service provision.

Michael Eraut, a British educational researcher, has written extensively on the development of professional knowledge in both teaching and health professions. Eraut (1994) broadly defines knowledge as a domain which incorporates many elements derived from the literature i.e. procedural knowledge and propositional knowledge; practical knowledge (knowing how), and tacit knowledge (that which we know but cannot tell). Eraut (1994) further contends that any discussion of the development of professional knowledge must include the source of the knowledge, as well as the context and mode of its use. It is through research into tacit knowledge particularly, that the nature of professional expertise in nursing has been enhanced (Benner, 1984; Eraut, 1994). Higgs, Richardson and Dahlgren (2004) using Eisner's work on connoisseurship, describe a model of health professional practice that incorporates an appreciation of the artistry in practice, as well as the technical expertise.

Researchers in the Expertise in Practice project, identified, from the work of Benner and her colleagues among others, five key attributes of nursing practice expertise that are useful in relation to a framework of specialist nursing practice. The five requisite attributes are: holistic practice knowledge; skilled know how; saliency; knowing the patient; and moral agency (Hardy et al., 2006, p. 261). These elements are embedded in a recently published model of clinical judgment by one of the leading researchers in this area (Tanner, 2006). The Tanner Clinical Judgment Model includes four main aspects i.e. noticing; interpreting; responding and

reflecting. At each phase the practice of the nurse will differ in relation to their own level of capability – a potential framework for specialist nursing practice.

Yielder, an academic in medical radiation technology, following a broad review of the literature, developed the following definition of expertise which is relevant for specialist nursing:

> Professional expertise is embodied by practicing professionals who work with consistently high standards of knowledge, performance and process. These high standards include their professional attitudes, and the manner in which they conduct intra and interpersonal relationships. They integrate and transform these dimensions into flexible, fluid practice, working effectively with change.
> (Yielder, 2004, p. 78).

In summary then, the development of specialist knowledge and practice is not a linear process but a complex dynamic one (Eraut, 1994). The creation of knowledge is inextricably linked by Eraut to the use of knowledge by professionals. Much of the research into professional expertise supports this approach (Benner, 1984; Benner, Chesla, & Tanner, 1996; Manley & Garbett, 2000; Yielder, 2004). Any explication of specialist nursing practice needs to therefore incorporate a framework for professional knowledge development that includes aspects of both, situated informal and formal learning.

2. Specialist professional practice and regulation

Specialist professional practice can be broadly defined as being special, both in the sense of being "better, greater or otherwise different from what is usual" and being "intended for a particular purpose" (Soanes, 2001, p. 868). Across many professions it is accepted (and sometimes expected) that professionals provide a more specialised and quality enhanced service as their career progresses. This development in both scope and quality of professional practice is a dynamic and continual process that creates challenges for the mapping of a professional career. Thus there is a need for all professions to have public statements about what their qualified members are competent to do, including minimal occupational standards (Eraut, 1994). This means consumers can be confident in their expectations of professional service.

Professional practice is defined by Eruat (1994) as work which claims access to a specialist knowledge base, autonomous practice and provides a client service. Very often professional practice is bounded by a regulatory framework for the safety and clarity of service expectation by society. Many professionals practice within a regulatory framework which is either open (voluntary membership) or restricted (compulsory membership). Health professionals are generally situated within a restricted framework which requires by legislation, a valid current practicing certificate or registration in order to practice. Conversely, engineers and librarians are part of a voluntary framework where membership is offered to those who meet the relevant standard of professional competence (LIANZA Taskforce on Professional Registration, 2005). Both types of frameworks may detail levels of expertise or progression within the profession that include a consideration of specialist practice.

Specialisation benefits the professional groups, with a specialist frequently seen as having a higher professional status than a generalist (Cotton, 1997; Humphris & Masterson, 2000). Cynically, some suggest that specialisation and the regulatory credentialing of professional practice, is a mechanism for centrally controlling occupational groups and thereby increasing their productivity and efficiency (Cotton, 1997). Discussion of the location of control for professional groups would be incomplete without consideration of the interconnected power relationships between consumers, employers, government and regulatory bodies. The self-interest of professional groups (which carries within it an assumption of care for consumers) has historically been seen to be better served by internal rather than external regulation (Eraut, 1994). More recently however, the interests of consumers of professional services are being considered to be best met through increasing external accountability expectations.

Michael Eruat provocatively argues that regulation has therefore shifted from seeking protection from the unqualified practitioner, to protecting citizens from the qualified (1994, p. 5). Increasing external accountability as a mechanism for assuring trust is a flawed approach, as skilfully argued by Onora O'Neill in her 2002 BBC Reith Lecture "A Question of Trust". O'Neill argues that many of the processes to ensure trustworthiness may actually damage trust (O'Neill, 2002). The level of self regulation versus external regulation varies considerably across the differing professional groups, and is explored further in the following sections.

An overview of the professions of teaching, allied health and medicine is presented, with specific focus on the differing expectations of specialist practice in terms of regulation and

standard setting. International views are integrated, but the main focus, to provide local context, is on the experience for professional groups in Australia and New Zealand.

2.1 Teaching

Internationally, within the profession of teaching, there is debate about the setting of standards for practice beyond those of entry to the profession. Most countries have a framework of professional development that includes standards or competencies. Some however, see standard-setting beyond entry, as an attack on professional autonomy, an essential characteristic of professions as defined by Eraut (1994). Martin Thrupp, a Professor of Education at the New Zealand University of Waikato, provocatively suggests that the covert purpose of standards is to control and contain teachers through the assertion of the perspective of the standard-setter over the practitioner, indicating a lack of trust in the profession to be self managing (Thrupp, 2006).

The standards for teachers upon graduation are set by the New Zealand Teachers Council (the regulatory authority for early childhood, primary and post-primary teachers). The arguments supporting framework development for professional autonomy and quality assurance are undermined by Thrupp's suggestion that standards intend to control. Thrupp (2006) additionally asserts that there is a lack of clear evidence of practice improvement, and lack of contextual reliability of the developed standards as measures. This disquiet is echoed by the New Zealand Post-Primary Teachers Association (2006) in their public criticism in relation to the inflexibility and specificity of the standards. The key to gaining professional acceptance appears to be actively involving the profession in developing any standards or framework (as has been done in Australia), and in considering flexibility and transferability – valid points for this study to consider.

An interesting aspect of the Australian work is the conceptual infrastructure of the framework initially developed by Teaching Australia (2007). As of 2011, this work has been promulgated by the Australian Institute for Teaching and School Leadership, as the National Professional Standards for Teachers. There are three organising domains in the standards, including professional knowledge; professional practice; and professional engagement. Of particular interest when considering professional progression, is the use of capability statements and accomplishments for the framework, rather than competencies and performance criteria. Capability statements are described in the standards as being "inherently inspirational,

aspirational and future-looking" (p.10). This deliberate shift is in response to the concern around the potential of competencies to fragment and decontextualize professional practice (Ministerial Council on Education Employment Training and Youth Affairs, 2003).

The use of capability as a construct recognizes the wider range of professional qualities that was suggested by the Higher Education of Capability movement, in the United Kingdom, in the late 1980s. Capability was seen by this movement as "an integration of confidence in ones knowledge, skills, self-esteem and values" (Stephenson & Yorke, 1998, p1). This concept has potential for visioning professional nursing practice differently.

2.2 Allied Health

The level of regulation of allied health professionals varies enormously. In New Zealand, under the Health Practitioner Competency Assurance Act (2003), several of the professions are legislatively regulated. This group includes: chiropractors, dentists, dieticians, medical laboratory technologists, occupational therapists, optometrists, psychologists and physiotherapists. Continuing competence is a requirement of all the regulated professions in New Zealand, however formal frameworks for progression from entry level are not available for the allied health professionals.

In Australia, the allied health professional organisations publish the minimum standards and competencies for practice, usually on their individual websites (Department of Human Services, 2005). However this may be changing. A key outcome statement from the 2007 National Allied Health conference in Hobart, called for the development of a national framework of career pathways for allied health professionals in clinical, management, education and research areas (Allied Health Professions Australia (AHPA), 2007).

In the United Kingdom, Skills for Health are licensed by the Secretary of State for Education, to develop a competence-based career framework for Allied health professionals. Skills for Health are one of the 25 Sector Skills Councils that make up the UK Skills for Business Network. This framework links to the NHS Career Framework and has developed specific competencies that are relevant to the work of allied health professionals. One purpose of the framework is to make transparent the progression from initial entry to senior staff member (Skills for Health, 2007).

2.3 Medicine

For most western countries, in medicine, specialist development and professional recognition is managed through specialist professional colleges. Specialist practice within medicine can be conceptualized as relating to three main areas; technical processes, body parts and target populations (Heartfield, 2006). Many international medical professional colleges have adopted the CanMEDS Framework developed in Canada in the 1990s, by The Royal College of Physicians and Surgeons, and further refined in the Medical Education Directions for Specialists 2000 Project (Department of Human Services, 2005). This framework has been adopted by New Zealand and Australian medical training providers. The framework has several integrated elements, as illustrated in Figure 2.1. Each element has a detailed descriptor that includes knowledge, skills and attitudes for demonstration, which is similar to the competency frameworks used by other professions.

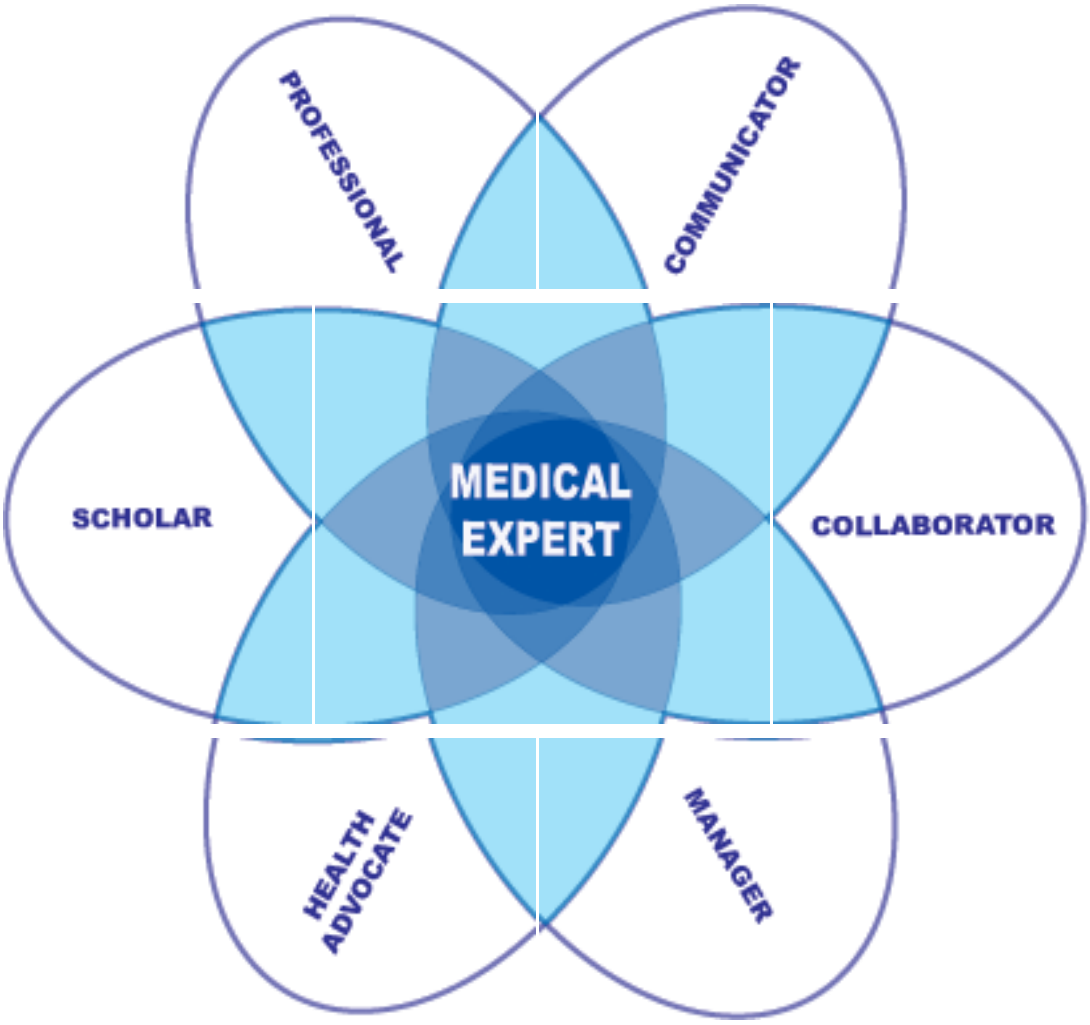


Figure 2.1: CanMEDS framework

[Retrieved 11 September 2007 from http://www.pgme.utoronto.ca/Resources/CanMEDS.html]

It is important to note in relation to medicine that whilst increasing specialisation is a clear trend, widely competent and experienced generalists are also recognized as being important. Sound core general skills are particularly relevant for the professional working in the smaller centers and in rural and other community settings. Increased demand for generalists in medicine is predicted in New Zealand, as a response to the increased focus on the secondary/primary care interface (Health Workforce Advisory Committee, 2005).

There are currently 35 vocational specialty scopes of practice, as gazetted in January 2010, by the Medical Council of New Zealand in an amended notice of scopes of practice and required qualifications (www.mcnz.org.nz). The growth in medical specialties and sub-specialties in New Zealand has been supported through deliberate government policy, such as the cancer control strategy, which highlights the need for more oncologists and surgeons and workforce strategies for development in these roles (Ministry of Health, 2003b). Typically, these strategies are accompanied by an equal growth in nursing specialty groups to provide nursing service for patients, without however, a similar level of professional specification or control (Humphris & Masterson, 2000).

2.4 Nursing

As with medicine, nursing practice has become increasingly diverse and complex in response to societal, political and technological challenges. Specialist nursing roles have been part of practice for many years, particularly in western health care settings. In the United Kingdom (UK) the term "specialist" referred to a nurse with extensive clinical expertise that was usually developed through experience in response to specific patient need (Hunt, 1999). The early specialist roles, for example, stoma care nurse, diabetic nurse and palliative care nurse, were developed in response to patient need for more detailed knowledge from their health care provider (Wilson-Barnett, Barriball, Reynolds, Jowett, & Ryrie, 2000). Specialist roles also developed to improve efficiency of service delivery through medical role substitution and increasing requirements from sub-specialist doctors, for nurses to care for their patients (Humphris & Masterson, 2000).

The role and title of clinical nurse specialist arose in the late 1930s in North America, in response to increasing knowledge, technology and unmet public need (Peplau, 1965). In the 1940s, the concept of specialization in nursing practice was further defined, with the development of the psychiatric Clinical Nurse Specialist (CNS). The first course for CNS

preparation began in 1954 at Rutgers University, just as the American Nurses Association published their early definition of nursing (Peplau, 1965).

The literature is potentially confusing, with a difference in nomenclature between the UK, Australia, New Zealand, the USA and Canada around the term "clinical specialist" and the question of whether specialist practice is advanced practice. Historically, in the United Kingdom there was no standardization of the preparation for the specialist role – commonly provided by "on the job" experience of 2-3 years duration (Hunt, 1999; Wilson-Barnett et al., 2000). This is no longer the case, with recent concern voiced that the term nurse specialist should not equate merely with the nurse working in a specialty field. For example, George Castledine (2004) suggests a seven-stage pathway, from generalist nurse to advanced nursing practice, which includes specialist nursing.

The positive contribution that specialist nursing roles make to the health outcomes of health care consumers, is well documented in the literature, although the caution is given not to overlook the generalist (Castledine, 2004; The National Breast Cancer Centre, 2005). Most countries, apart from the United Kingdom prepare generalist nurses who may go on to develop their practice in specialty areas of patient care.

2.4.1 Defining Specialist Nursing

A widely recognized definition of the nurse specialist is from the seminal work of former president of the International Council of Nurses (ICN), Margretta Styles, which recognizes specialist nursing practice as a progression from initial registration and states: *The nursing specialist is a nurse prepared beyond the level of a nurse generalist and authorised to practise as a specialist with advanced expertise in a branch of the nursing field (p12).*
(ICN Guidelines on Specialisation in Nursing, ICN Geneva (1992) cited in Russell, Gething and Convery (1997)).

This has been since reinforced by the 2009 definition of a nurse specialist as one "prepared beyond the level of a generalist nurse and authorized to practise as a specialist with advanced expertise in a branch of the nursing field" (International Council of Nurses, 2009, p. 6).

The ICN definition is widely referred to in the literature considering specialist nursing practice (National Nursing & Nursing Education Taskforce, 2006; Russell, Gething, & Convery, 1997; The National Breast Cancer Centre, 2005), and thus forms the standard for comparison with other

definitions. Unpacking the ICN definition provides some interesting areas for exploration in terms of understanding the concepts of beyond generalist practice; authorization to practice and a specific nursing field or branch.

In New Zealand, the notions of "special" knowledge and "higher" levels of judgment as found in the ICN's "beyond generalist" concept, are supported by an assumption of participation in ongoing education. There is a potential conflict in developing a specialist framework, in that nursing practice is viewed by the New Zealand Nursing Council (NZNC) as always occurring in specialty areas, with all nurses therefore potentially specialists.

Congruent with the ICN position, there is a consistent theme in United Kingdom nursing regulation literature that specialist nursing practice requires specific knowledge and skills, which are beyond a pre-registration program. Early work in the late 1990s by the Queensland Nursing Council is cited by the Royal College of Nursing as foundational for the 2003 RCN *Defining Nursing* document, so indicating the international cross-fertilization of ideas (Royal College of Nursing, 2003). The Queensland Nursing Council (2005) in their framework for practice suggest further stratification of specialist practice as a continuum, with beginning and advanced specialist practice. The varieties of international definitions of specialist practice are presented for ease of comparison in Table 2.1.

Table 2.1 International definitions of specialist nursing practice

United States	United Kingdom	Australia	New Zealand
Clinical nurse specialists are registered nurses, who have graduate-level nursing preparation at the master's or doctoral level. They are clinical experts within a specialty area, treating and managing the health concerns of patients and populations. (Fulton, 2005)	Specialist practice is the exercising of higher levels of judgment, discretion and decision making in clinical care. Such practice will demonstrate higher levels of clinical decision-making and so enable the monitoring and improving of standards of care. (Royal College of Nursing 2003 p. 22)	Building on a base of generalist preparation. Specialist practice focuses on a specific area. Specialist practice may occur at any point on a continuum from beginning to advanced. (National Nursing Organisations, 2004)	Specialty nursing practice is the exercise of higher levels of nursing judgment, discretion and decision-making in an area of practice with a specific focus and body of knowledge and practice. (Nursing Council of New Zealand, 2002a, p. 5)

Along with international variance in definitions, there are differences in the career frameworks and formal educational preparation expectations for developing nursing practice. Each country has also developed their own models or ladders for clinical career progression – this can best be illustrated through the following representations:

Table 2.2 Comparison of Post-Registration Career/Education Pathways

United States	United Kingdom	Australia	New Zealand
RN *(At degree or diploma level).* Clinical Nurse Specialist/Nurse Practitioner *(Certification in specialty at postgraduate level and master's degree)* (Hamric, Spross, & Hanson, 2009).	RN within a specialist area of practice *(at degree or diploma level).* Senior registered practitioner/experienced nurse Nurse consultant *(No educational framework)* (Royal College of Nursing, 2006b).	RN *(At degree level).* Experienced/Advanced RN *(Postgraduate diploma).* Nurse practitioner *(Master's degree or PhD.)* (Gardner, Chang, & Duffield, 2007).	RN *(At degree level).* Nurse Practitioner *(master's degree or equivalency).* (NZNC 2010).

2.4.2 Australia and New Zealand Specialist Nursing

The 1998 Trans-Tasman Mutual Recognition agreement supports transferability of registration for registered nurses across New Zealand and Australia. This close connection between regulatory bodies supports the relevance of Australian studies for the New Zealand context. Lack of consistency in nomenclature is recognized as a threat to both workforce planning and quality assurance (Holloway, Baker, & Lumby, 2009). Recently in Australia, research in relation to specialist nursing was undertaken to develop a shared definition of specialist nursing, as well as a framework for specialist nursing development including postgraduate education. The framework of specialist nursing (which included midwifery) had six separate criteria: covering geographic scope, links with ethical standards, focused skills and knowledge, community need, and evidence-based practice, based and linked to formal and education processes (Heartfield, 2006).

Specialist practice areas within Australia were identified by the National Nursing and Nursing Education Taskforce (NNNET) in six different ways: body systems; diseases; service or settings; interventions/therapy; client/population or as combinations of any of the previous (Heartfield

2006). These are very similar to the 10 categories referred to by Hildegarde Peplau in 1965: area of practice; organs and bodily systems; age; degree of illness; length of illness; nurse activities; fields of knowledge; subroles; professional goals and clinical services. Peplau identified that not all categories would be useful to the profession and that some should be immediately rejected (Peplau, 2003). Note that it is the categories related to professional goals that seem to be absent in the contemporary descriptions.

Overall, the rapid unstructured proliferation of specialisations noted by Russell, Gething and Convery in 1997 has continued in both Australia and New Zealand. Education and regulation are not linked for specialisation development as with medicine. The powerful professions of medicine and law have used their power to control the processes of preparation for their professions, and thus ensure self determination in a way not open to others less powerful, like nursing (Eraut, 1994).

The situation for nursing in New Zealand and to some degree Australia, is that regulation and certification is undertaken by the registration authority and education is predominately the province of the tertiary sector, not the professional colleges. This has contributed to a more market-based approach to specialist education and development (responding to individual consumer demand or government funding streams), rather than a professional strategy for nursing overall. Government funding streams and the impact of health service reform cannot be overlooked when considering how and why new specialist clinical roles develop (Humphris & Masterson, 2000).

An example of the impact of health reforms is evidenced by the proliferation of sub-specialty nomenclature influenced by government's primary health care strategy in New Zealand. A 2003 survey of primary health care nursing specialty roles was conducted as a small subset of nursing practice. In the sample of around 6,000 nurses within this scope, there were 13 different specialty areas of practice and nurse specialists were often named after funding streams to meet government targets, for example, the Plunket nurse; congestive heart failure nurse; asthma nurse; special access nurse (Expert Advisory Group on Primary Health Care Nursing, 2003). This approach has the potential to be confusing for the profession, for health care colleagues and most importantly, for the community that nursing serves.

The lack of a clear and consistent professional strategy for specialist nursing in New Zealand is of concern to nurse leaders (Ministry of Health, 1998; Trim, 2007). However, any strategy

must have at its heart the focus on communities served. As Peplau (2003, p.35) asserts "The primary commitment to society of the profession of nursing is the practice of nursing: all other functions are secondary." For nurse specialists to be of use to society there is a need for an evidence-based approach to specialist practice development and recognition. T he search for improved clinical progression pathways, positioning of nursing as equal within the health-care team and the development of nursing knowledge and research all contribute to the perception of specialist practice as being of value to nursing, to the individual nurse and most importantly, to the consumer (Fulton, 2005; Hunt, 1999; Scott, 1998).

The ICN suggests supporting the orderly development of areas of specialisation by adopting key process elements. The ICN Guidelines on Specialisation in Nursing elements include: regulation, resource planning and establishment of the minimum requirements of education; experience, performance and the maintenance of competence (Russell et al., 1997). Humphris and Masterton (2000) outline an infrastructure to support specialist practice that echoes the ICN perspective. Their model includes: regulation and role definition; education; career development and remuneration and additionally evaluation.

The predicted development of formal frameworks internationally for career development and specialist definition is slow (Scott 1998, Heartfield 2006). The lack of a nationally recognized infrastructure in the United Kingdom is seen by some as a major liability in terms of clarity of responsibility and accountability, for both managers and nurses (Humphris & Masterson, 2000). Currently there is no single national framework for specialist nursing development in New Zealand, which makes it difficult to target workforce development initiatives and career progression support. Within this void there lies an opportunity to build a national consensus framework as proposed by this study, to provide a clear and consistent professional strategy for specialist nursing.

3. Career frameworks

Clear career frameworks and descriptors of practice are useful in clarifying the terms and conditions of the profession's social contract, with its communities to provide nursing care, as previously stated. The literature suggests there could be numerous gains not only for the public but for the employer and for the profession in developing a clear framework. The Nursing Career Pathway Project, undertaken as part of the Australian National Review of Nursing Education, identified key elements for career pathways or frameworks as being responsive to health care needs of the society they serve; and involving recognition of skill development, and a framework for goals and strategies to achieve them (Price, 2001a). Internationally there is increasing activity in developing frameworks for areas of practice (National Nursing & Nursing Education Taskforce, 2006; National Professional Development & Recognition Programmes Working Party, 2005; Royal College of Nursing, 2005, 2006a, 2006b; The National Breast Cancer Centre, 2005).

Eraut (1994) asserts that for professional learning to be viewed as a lifelong process, coherent frameworks are needed. Such frameworks provide needed quality assurance for the public, as well as support for the professional in practice development (Eraut, 1994). Education is often suggested as providing the nurse with entry into specialty practice, competence currency and personal development opportunities (Russell et al., 1997). Closer exploration is needed to identify the gains and opportunity costs for both the profession of nursing, and the communities it serves in developing a career framework for specialist nursing.

3.1 The profession of nursing

The discussion of nursing as a profession requires an understanding of the key concepts. Eraut (1994) suggests that the concept of a profession was historically deemed necessary to provide a solution to the need for the social control of expertise. Expert occupational groups in the area of medicine and law developed the ideology of professionalism in the early nineteenth century. The ideal profession had great power and influence based on its exclusive access to professional knowledge and expertise. Johnson (1972 cited in Eraut, 1994) further defines the process of professionalisation as the way in which the professions seek status and privilege in accordance with the ideology.

The literature around the professionalisation of nursing (the seeking of power and privilege) assumes a "becoming" rather than an "arrived" status for nursing in terms of the ideology of professionalism. Professionalisation as a sociological construct can more critically be viewed as a strategy by nurses as an occupational group, to achieve monopoly in the health care labour market and therefore power and prestige. Some would assert the main function of master's level education is to promulgate the notion of the professional nurse as a way of establishing and defending a place in the health-care arena (Gerrish, McManus, & Ashworth, 2003). The professional nurse concept is therefore a mechanism for legitimizing nursing as an occupation of standing with other health professionals.

There is a potential tension between the discipline's professional aspirations and short-term expedience expectations from other groups in the health service (Masterson, 2002). The need for the nursing profession is to advance nursing mastery rather than to develop a level of beginning medical practice (Castledine, 2002). Specialist role development when used as a professionalisation strategy, must therefore integrate appropriate nursing discipline development in response to clear population health need.

3.2 The community

Scott (1998) asserts that a clear strategy for specialty frameworks and support for the professionalisation of nursing, will safeguard standards of patient care. Evidence to support this assertion is difficult to gather owing to the lack of role clarity and the challenges in teasing out nurse-sensitive outcomes related to specialist practice. The complexity of this task is evidenced by the body of research and discussion in the literature that declares the gap but cannot seem to bridge it! (Dunn, Pretty, Martin, & Gassner, 2006; Forbes et al., 2006; Humphris & Masterson, 2000). Manley and Garbett (2000) posit that a clarity of nursing practice level descriptors would enable clearer links to be made to client outcomes in terms of clinical effectiveness. Further, accreditation for public protection and the ability to benchmark best practice are suggested as being highly relevant to consumers (Manley & Garbett, 2000).

3.3 Education providers

The articulation of levels of expertise can be seen as the first step in credentialing, thus raising the issue of who controls the development of nursing as a profession (Cotton, 1997). A greater understanding of different levels of expertise would allow for an evidence-based approach to

professional preparation programmes and so would be relevant to education providers (Manley & Garbett, 2000).

3.4 Employers

A clear clinical career framework is seen as integral to improving the education, status and retention of nurses in clinical practice, and underpins other advanced role developments (Ministry of Health, 1998; Price, 2001a). In New Zealand, the Professional Development and Recognition Pathway (PDRP) is an example of a clinical career framework based on the work of Benner (1984). The PDRP however, is unavailable to over half the nurses who responded to a recent national registration survey (Clark, 2006). This is a concern when career frameworks are linked with remuneration and development of flexible career pathways (Manley & Garbett, 2000).

In the absence of a clear framework endorsed by the profession in New Zealand, there are other key groups developing structures to shape nursing practice. Employers are contracting groups to develop in isolation, further specialist nursing practice competencies or, in some cases, practice task lists for service contracts. This is being achieved through the District Health Boards of New Zealand (DHBNZ) workforce strategy groups, and Health Workforce New Zealand (HWNZ), through workforce strategies around specific service needs such as cancer control and child health (District Health Boards of New Zealand, 2005; Health Workforce New Zealand, 2010; Ministry of Health, 2003b). The shaping of nursing practice should be of concern to the profession, in relation to its ability to take responsibility and accountability for professional nursing practice. In short, this is the profession of nursing's business and responsibility.

4. Concluding remarks

The shaping of specialist nursing practice frameworks is of clear relevance to the profession as a professional project for this level of nursing practice. It is interesting to consider how other professional groups support and acknowledge the development of expertise. There is an opportunity in the current New Zealand health workforce environment for a single national specialist nursing framework to be developed through examination of the literature and of key stakeholder perspectives.

As providers of a health service to a community, the development of nursing practice must be linked to the health care needs of that community. Consumer pressure for specific services, technological changes, changes to other roles in the health workforce and resultant government policy, will clearly continue to contribute to various specialty service requirements. The need for nurse specialist services is likely to continue to grow in response (Humphris & Masterson, 2000; Ministry of Health, 2006b). A single framework has the potential to support accurate data gathering, and enable both nurses and service providers to identify and plan transparent and transferable pathways for nurse specialist service provision and development.

This chapter has presented the literature that underpins the policy and professional purpose and supports the significance of this research study. Specialist practice was explored, including a discussion of broader professional career frameworks, which provides context for the study design. The design of any research project must be congruent with the intent of the researcher and the research question. The broad detail of the study design is presented in Chapter Three, with a richer description of structure, method and outcomes provided by each phase in the following chapters.

Chapter 3 : Study Design Overview

This chapter presents an overview of the study design to answer the research question. The question seeks the essential elements required for a single national framework for specialist nursing in New Zealand. The previous literature review has situated this question in the context of national and international discussion around the present challenges in framing specialist nursing, both here in New Zealand and overseas. The position of the researcher, the naturalistic paradigm which informs this study, and the congruency of the methodology, methods and tools designed to answer this important research question are presented here.

1. Introduction

How the researcher conceives the world, i.e., their 'social reality', powerfully influences both the phenomena chosen to study and the research approach taken. The researcher's social reality is underpinned by assumptions of ontology and epistemology, which in turn shapes their paradigm or worldview (Cohen, Manion, & Morrison, 2000; Denzin & Lincoln, 2005). Clarifying the inquiry or research paradigm is an essential step in the research process, as it defines for the researcher (and subsequently the reader of the report) "what falls within and without the limits of legitimate inquiry" (Denzin & Lincoln, 1994, p. 108).

It is important therefore to first present my personal history, motives and presuppositions that shape this particular inquiry and inform my paradigmatic view (Caelli, Ray, & Mill, 2003). As a former specialist nurse, a current nursing academic and leader in national nursing education, I come to this study with several presuppositions which are presented below.

Key presuppositions

1. This work will make a positive contribution to the provision of health care for New Zealanders.
2. Developing a national framework for specialist nursing will advance the discipline of nursing in New Zealand.

3. Explication of current practice, contemporary professionals constructs, and expert opinion through a consensus framework, will provide an opportunity for colleagues to be more aware of their potential choices.
4. There is an opportunity in the current environment with indicative professional organisational support and government strategy direction, for the development of a national specialist nursing framework.

The focus of inquiry for this study is the range of specialist nursing frameworks in New Zealand, with the aim of developing a consensus framework. There are a number of approaches that could be taken to explore this area and contribute to an understanding of the topic. A study of the numbers of nurse specialists and frameworks currently in use in New Zealand would provide useful information, but not assist greatly in the development of a consensus model for specialist nursing. The development of a consensus model for specialist nursing requires an approach that allows for the exploration and description of the perceptions and knowledge of key stakeholders, both nationally and internationally.

The purpose of this research study is to discover and understand the current frameworks and context for specialist nursing practice, in order to develop elements for a national specialist nursing framework for New Zealand. This study utilises the naturalistic inquiry paradigm to explore the research question. Within this paradigm, there is an understanding that the social world is best understood from the perspective of the individuals engaged in the activity of interest (Cohen et al., 2000). This understanding guided the subsequent research design or study framework.

2. Study structure

The framework for the study emerges from a commitment within the naturalistic paradigm to connect with the perspectives of engaged individuals. Sandelowski further recommends that this be done as "as free from artifice as possible in the artifice laden enterprise known as conducting research" (2010, p.78). This approach to the research design also fits well with the level of question (Level One) of the study (Wood & Ross-Kerr, 2006). Although specialist practice has been studied in other contexts, there is little published in relation to New Zealand nursing and it is significant for the profession locally. An overview of the key features of the study framework i.e. the paradigm, methodology, method and collection and analysis tools

required to address the research purpose are presented in Table 3.1. Further discussion of these features is provided in the following section.

Table 3.1 Study Structure Overview

Feature	Description	Application to this study
Paradigmatic perspective	This study is informed by the Naturalistic paradigm (Denzin & Lincoln, 2005).	Knowledge about specialist practice frameworks is best developed through exploring the understanding of stakeholders in nursing practice, policy and education.
Methodology	Qualitative interpretive practices that allow explication of the key elements within the world of interest.	The study appropriately combines interviews, surveys and document analysis to facilitate a multiple-perspective examination of the complex construct of specialist nursing.
Method	Qualitative description as described by Sandelowski (2000).	Qualitative description as a research method follows the general tenets of naturalistic inquiry, by studying specialist nursing in its natural state in order to explicate meanings.
Tools	Delphi technique – a dialectical process incorporating stages which continue to inform each other (Keeney, Hasson, & McKenna, 2006).	The Delphi technique provides a structure for the study in terms of participant selection, data collection and analysis. This technique is appropriate for the study, which seeks to co-construct a consensus framework for specialist nursing.
Data analysis	Qualitative content analysis (Sandelowski, 2000, 2010).	Low-inference interpretation, where analysis stays close to the data supports, higher levels of consensus, which is the desired outcome of this study.

Denzin and Lincoln (1994) position the qualitative researcher as a “bricoleur” or the maker of a meaning collage, from a multiplicity of methodologies with different paradigmatic tools for understanding the phenomenon in question. The creation of the research bricolage (solution) as an interactive process, is naturally strongly shaped by the researcher and their inquiry paradigm. The following sections provide a description and rationale for the paradigmatic and methodological approach used in this study.

Caelli et al., (2003) suggested four areas that need to be addressed by any researcher to enable confidence in the credibility and rigor of the research outcomes. These areas are presented below and subsequently used to frame specific discussion about this study:

> 1. the theoretical positioning of the researcher;
> 2. the congruence between methodology and methods;
> 3. the strategies used to establish rigor; and
> 4. the analytic lens through which the data are examined (Data Analysis).
> (Caelli et al., 2003, p. 3).

2.1 Theoretical positioning

The theoretical positioning or paradigmatic perspective can be defined as the view that contains the ontological, epistemological and methodological premises that guide the researcher as a bricoleur (Denzin & Lincoln, 2005). The ontological question asks, "what is the understanding of the form and nature of reality or what is there that can be known?" That is, the paradigm or philosophical stance one takes in the world (Denzin & Lincoln, 1994, p. 108). The epistemological question relates to the understanding of the relationship between the knower (or researcher) and what can be known (Denzin & Lincoln, 1994). The position the researcher takes here will determine the approach taken to uncover knowledge. For example, a subjective approach would consider that knowledge is acquired through personal experience as opposed to the objective view of knowledge as something that is hard and tangible that exists independent of the individual experience (Cohen et al., 2000; Denzin & Lincoln, 1994).

Naturalistic inquiry arises from an understanding of reality as being multilayered and complex. Within this paradigm, reality is neither purely subjective nor objective, but constructed as a dialectic process between the two (Denzin & Lincoln, 1994). Put another way, the reality of specialist nursing is a phenomena that is constructed by various stakeholders in multiple ways. The dialectic process between the researcher and participants embedded in naturalistic inquiry approaches, enables active creation of a shared understanding, rather than a passive revelation by the researcher.

Construction of meaning in this way also fits well with the constructivist paradigm posited as an equivalent to naturalistic inquiry by Lincoln and Guba (in Denzin & Lincoln, 1994). In the constructivist/naturalist paradigm, the inquirer jointly constructs an understanding with the respondents through a process of: iteration, analysis and critique; reiteration, reanalysis and

so on. The goal of the inquiry is not to develop a definitively accurate description of the "real" world but " to construct something that works cognitively, that fits together and handles new cases, that may implement further inquiry and invention" (Goodman cited in Denzin & Lincoln, 1994, p. 127). The conventional line between ontology and epistemology is less clear in this approach, as an understanding of reality as constructed by the participants, also encompasses the nature of knowledge generation (Denzin & Lincoln, 1994).

Construction of a consensus model of specialist nursing practice for New Zealand will need to build on the foundations of what is currently understood through a dialectic iterative process. Qualitative interpretive practices that allow explication of the potential key elements within the world of interest, (Denzin & Lincoln, 2005) provide an appropriate approach for this study. Along with a clear articulation of implicit philosophic assumptions, an auditable data trail is required in order for readers to evaluate the quality of research reports (Caelli et al., 2003). The researcher must therefore provide a data and decision trail to explicate the paradigmatic and methodologically congruent foundations for their study. This dissertation presents the requisite trail in more detail within each phase of the study.

2.2 Congruence between methodology and methods

Methodology and method are terms regularly and confusingly interchanged in the research literature. What these terms often share is a connotation of some theoretical orientation to inquiry (Sandelowski, 2010). Methodology is understood for the purposes of this study as the principles that underpin the inquiry method or how the inquirer (researcher) can best go about finding out that which they believe can be known (Denzin & Lincoln, 1994). Methodologies according to Gobo (in press as cited in Silverman, 2006, p. 15) have four main components: a preference for certain methods; a theory of scientific knowledge (ontology); range of solutions to tackling the research problem and a systematic sequence of procedural steps. The methodology for this study comprises a preference for qualitative interpretive practices, to allow explication of key elements within the world of interest. The study design appropriately combines interviews, surveys and document analysis to facilitate a multiple perspective examination of the complex construct of specialist nursing through a phased approach.

The design and methods of a study must fit the methodology developed through reflection on ontological and epistemological assumptions that arise from the researcher's paradigmatic perspective i.e., there must be congruence. Failure to provide congruence leads to what Janesick (in Denzin & Lincoln, 1994) terms *methodolatry*, the slavish attachment to methods (a

cookbook approach), with little regard to the substance of the phenomenon under examination.

Methods are therefore the specific approaches that the researcher chooses to answer the research question. Largely, the work of researchers using qualitative practices can be divided into either general approaches (termed generic by Caelli et al. (2003)), or the following of specific methodological guidelines, such as those for grounded theory or phenomenology approaches. The increasing use of general qualitative approaches like qualitative description, without clear articulation of the implicit philosophic assumptions, raises concern for the integrity of the research process. This in turn creates challenges for the reader in evaluating the quality of research reports (Caelli et al., 2003; Rolfe, 2006; Sandelowski, 2010). The method chosen for this study is qualitative description, which as a research method follows the general tenets of naturalistic inquiry i.e., the studying of something in its natural state (Sandelowski, 2000).

Qualitative descriptive methods allow for dialectic processes, interpretive practices and knowledge development to explore specialist nursing in New Zealand in a way congruent with the naturalistic paradigm. Qualitative description assumes at a simple level that understanding is best gained through examining the perspectives of those that are engaged in the particular social world of interest, which is entirely congruent with the naturalistic paradigm (Sandelowski, 2000).

Overall the design and focus of any research endeavour needs to be congruent with the purpose of exploration of a specific topic area. The purpose of this research study is to discover and understand the phenomena that are current specialist nursing practice frameworks, in order to develop a national specialist nursing framework for New Zealand.

The study will utilise a descriptive and exploratory multi-method enquiry approach, integrating a literature review as an initial step of the Delphi technique, one of the key tools used to answer the research question. The use of multiple-data collection strategies, avoids an overemphasis on one data source, which could potentially lead to research that does not offer contextualized and comprehensive interpretations of the phenomenon of interest (Sandelowski, 2002; Thorne, Reimer Kirkham, & O'Flynn-Magee, 2004). The use of more than one research method within a study is considered as methodological triangulation (Burns & Grove, 2005; Denzin & Lincoln, 2003). The study appropriately combines interviews, surveys

and document analysis to facilitate a multiple-perspective examination of specialist nursing as a complex construct (Munhall, 2007). The study will take a three-phased approach, with each phase informing the other in a sequential fashion as illustrated in Figure 3.1.

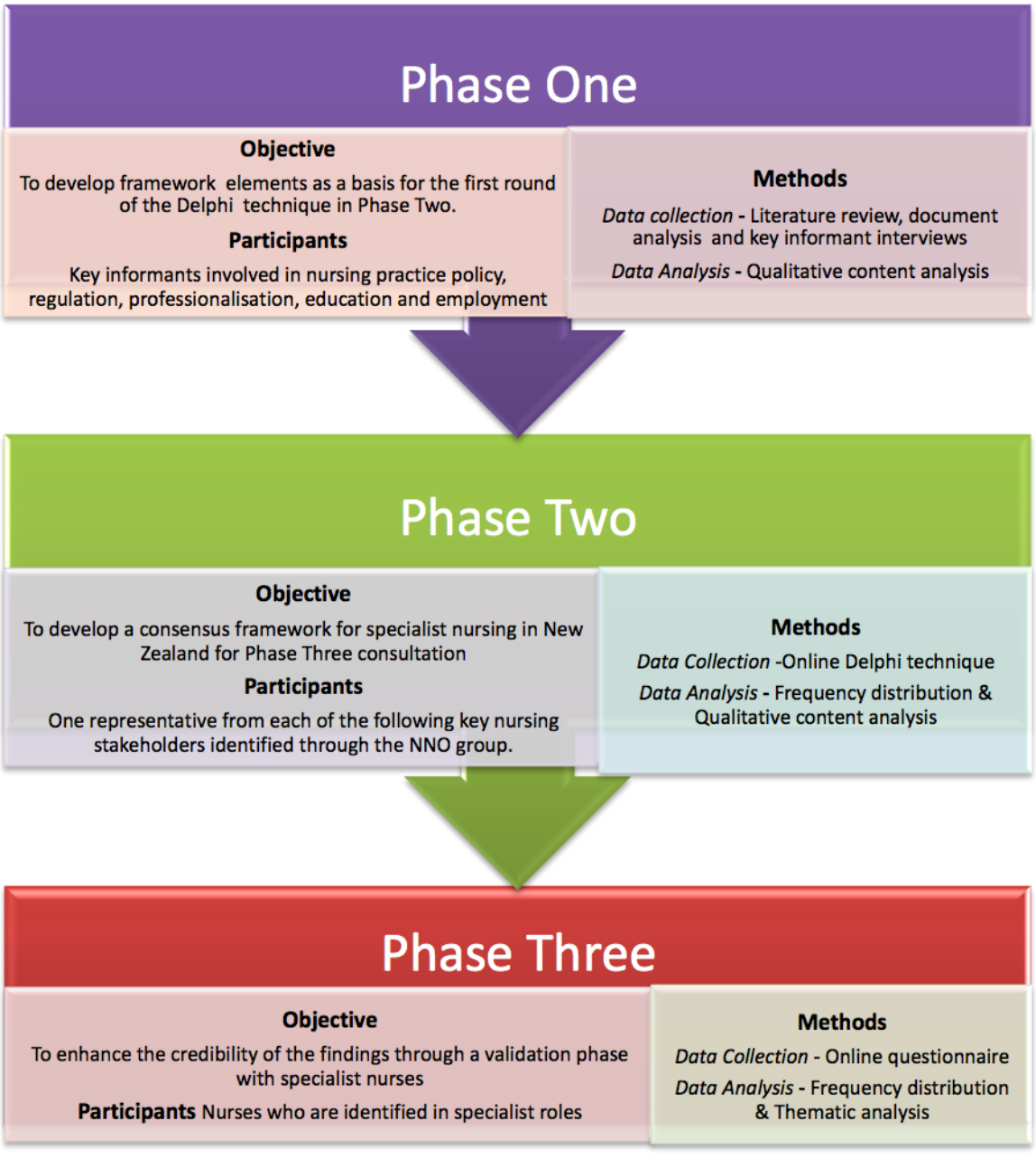


Figure 3.1 Structure of the Study

2.3 Phases of the study

The objective for Phase One is to develop framework elements through exploration of the literature and selected key informant perspectives as a basis for the first round of the Delphi technique in Phase Two. This approach is supported as appropriate to reduce potential bias and forced convergence, from pressure to agree with the recognized literature (Keeney et al., 2006).

The objective for Phase Two is to develop an initial consensus framework for specialist nursing in New Zealand, through an online Delphi process involving key stakeholders. The Delphi technique provides a structure for the study in terms of participant selection, data collection and analysis (Keeney et al., 2006). This technique is appropriate for the study, which seeks to build a consensus framework for specialist nursing.

The objective for Phase Three is to enhance the credibility of the framework through a validation phase with nurse specialists. Research such as this study, with purposive sampling and expert consensus, potentially has limitations of bias that are acknowledged in the literature. Participants in this phase were encouraged to reflect on their experiences and subsequent perceptions of resonance or dissonance within the developed framework, in order to enhance the utility of the framework (Keeney et al., 2006; Kennedy, 2004).

2.4 Strategies to establish rigor

The rigor of the research design is a critical element in the final utility of the framework. The criteria for establishing rigor within qualitative studies is an area of much debate in the literature, with multiple frameworks available to select from (Kearney, 2001; Munhall, 2007; Rolfe, 2006; Silverman, 2006). Sandelowski and Barroso (2003), as very experienced and highly published researchers, suggest that techniques such as maintenance of an audit trail; the use of protocols for document analysis and interviews; and expert peer review, enhance the descriptive, theoretical and pragmatic validity of the findings. The audit trail for this study incorporates documentation on the methodological decisions made during the project (in recognition of the emergent nature of qualitative designs), and the analytic decisions made in coding the data (Sandelowski & Barroso, 2003; Silverman, 2006). These elements ensure the trustworthiness of the design, an appropriate criteria for the constructivist paradigm (Denzin & Lincoln, 2003).

2.5 Data analysis – the analytic lens

The qualitative descriptive approach allows for low inference or close to data analysis. Sandelowski (2010) cautions that low inference does not mean no inference, with all research reporting requiring a level of interpretation. This caution was expressed in response to the apparent misunderstanding generated by a previous article on qualitative description written by Sandelowski in 2000. Low inference descriptors are also discussed by Silverman (2006) as being linked to increased reliability and therefore enhanced credibility. Additionally, the aim is to present the findings in everyday language rather than through an abstracted theoretical framework, such as might be used in phenomenology or ethnography (Sandelowski, 2000).

As this study is informed by the naturalist paradigm, data analysis methods are based on the assumption that there are no absolute truths and data obtained through the inquiry process is sufficient unto itself (Denzin & Lincoln, 1994; Silverman, 2006). The goal of analysis for qualitative description is to illuminate patterns in the data, and to stay close to the rich description supplied by the participants and the literature (Sandelowski, 2000; Sullivan-Bolyai, Bova, & Harper, 2005). This approach is highly appropriate for the development of the consensus framework for specialist nursing. Data analysis is discussed in more detail within each chapter as related to the specific phases of the study.

3. Ethical considerations

This study conformed to the guidelines prepared by the New Zealand Health Research Council (2002) for the preparation and undertaking of research involving human subjects, and the Australian National Statement on Ethical Conduct in Research Involving Humans (National Health and Medical Research Council, 2007). The Nursing Council of New Zealand Code of Ethics was used to guide the behavior of the researcher in this study. Ethical approval was applied for on an ongoing basis as appropriate. The initial approval for Phase One was given and further approvals for Phase's Two and Three granted once the questionnaire detail was known.

3.1 Informed Consent

The New Zealand Health Research Council (2002) suggests that informed consent should include comprehensive information about the proposed research given in a proper and appropriate medium, including any likely outcomes of participating in the research. This was provided in the Information Sheet about the study, and participants were asked to sign a

consent form. Consent to participate was voluntary and not influenced by financial reward or by duress, and participants were able to withdraw from the study at any time without fear. Consent forms for each of the phases may be found in Appendix 1.

3.2 Anonymity and Confidentiality

All data was considered confidential to the research and was discussed only between the researcher and her supervisors until such time as it was ready for presentation to the public via oral presentation or publication. Identifying features occurring in the data were altered to protect anonymity of all participants. The identity of the participants may be obvious to other participants in the expert panel owing to the nature of their positions. Anonymity cannot be guaranteed – McKenna (1994) termed the Delphi context as “quasi anonymity”. This is an identified potential weakness in the method which will be a particular threat in a small country like New Zealand . This threat was mitigated by the anonymous web mail response system and a request to participants to respect the confidentiality of the process. This was made explicit in the information sheet.

3.3 Potential Harm to Participants

The research involved a time commitment for participants that was potentially problematic for them in the context of their time pressured roles. The strategy to mitigate this was to use a flexible approach to interviewing scheduling, and the use of web-based technology for asynchronous involvement.

3.4 Participant's Right to Decline to Take Part

Each participant had the ability to withdraw at any point until the collection of data occurred from the study. I provided high flexibility for the research participants so as to fit in with their timetables as much as possible.

3.5 Uses of the Information

The results of the study are presented in this dissertation by the researcher, as fulfillment of the requirements of the Doctor of Nursing degree. Articles arising out of the research may be accepted for publication in appropriate nursing or education journals and for presentation at conferences.

3.6 Security of Data

Audiotapes, journal and notes will be kept in a locked and secure filing cabinet for five years, and computer records are password protected from unauthorized entry. A typist who signed a confidentiality agreement was used for transcribing interview recordings.

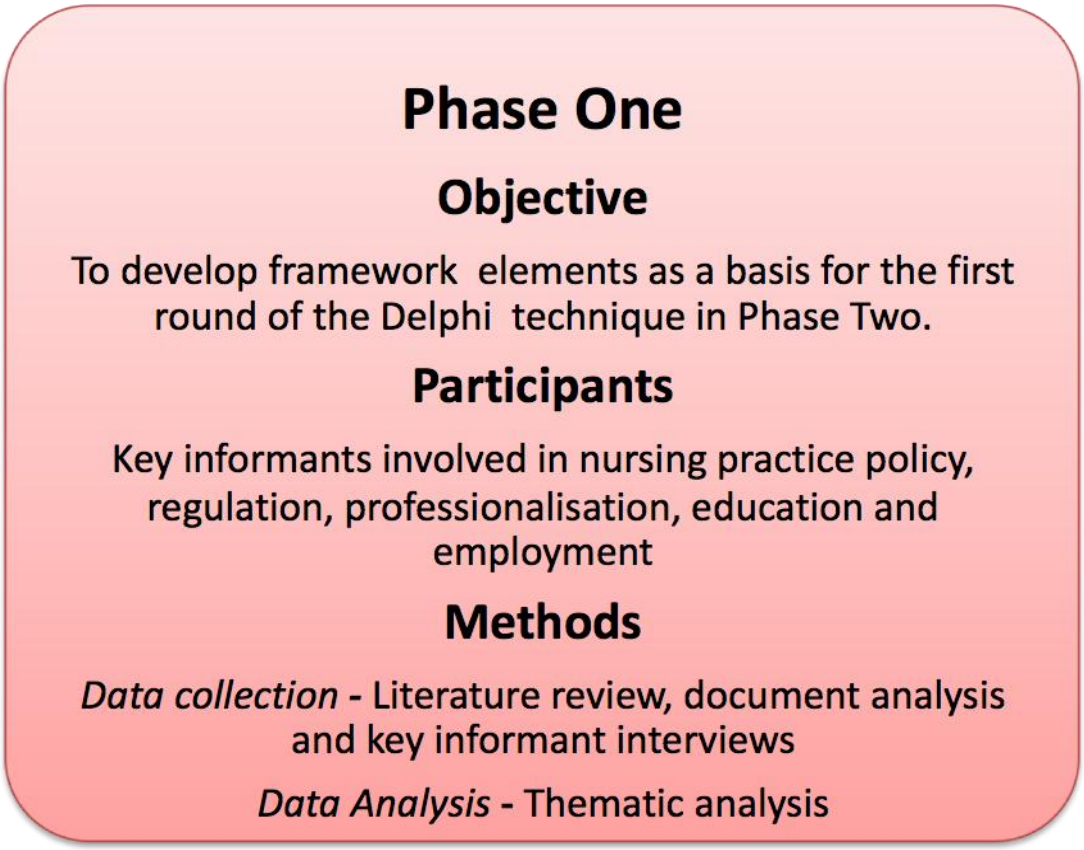
4. Concluding remarks

The significance of this study is in the clarification of the present confusion in relation to specialist nursing in New Zealand through the development of a single national framework. The framework will have potential connections to current New Zealand regulatory and professional frameworks, and will include educational expectations and competency or capability statements. This chapter builds on the previous literature review, to provide the design outline and theoretical foundations for this study.

As a generic qualitative method, informed by the interpretive paradigm, qualitative description provides the researcher a means to understand the complexity of specialist nursing frameworks in New Zealand. The purpose of this study approach is to develop an understanding of the who, what and where of events related to this complexity (Sandelowski, 2000). The ultimate aim of this qualitative descriptive study, using a Delphi technique, is to distil a consensus construction (specialist nursing framework) that is an enhancement on any preceding constructions and that works for New Zealand.

The following chapter presents a detailed outline of Phase One of the study and discussion of the emerging potential key elements that culminated in the online questionnaire required for the E-Delphi technique. The E-Delphi is a combination of electronic mail (email) and online questionnaires that aims to enhance participation (Avery et al., 2005).

Chapter 4 : Phase One



This chapter expands on the development and undertaking of Phase One of the study culminating in development of the Phase Two online questionnaire. The chapter is presented in two sections, with Section A providing detail of the approaches to data collection and analysis for a focused exploration of the literature and documentation analysis. Section B reports the data collection and analysis approaches to the key informant interviews, and the subsequent development of a framework for the Phase Two online Delphi questionnaire. The findings of the potential characteristics of nurse specialists are presented and the limitations of this phase of the study are discussed.

1. Introduction

This chapter is an account of the processes of data collection and analysis in this first phase of the study. Although presented as a linear, step-by-step procedure, the research analysis was actually an iterative and reflexive process. This interactivity, constantly applied in the process of qualitative inquiry, is described by Tobin and Begley (2004) as developing the principle of "goodness". Goodness is suggested by Tobin and Begley (2004) as being an essential element of study rigor and requires an explicitness of data collection and management reporting.

Phase One involved two steps, first combining an exploration of the literature and documentation analysis, and then selected key informant perspectives were gained through semi-structured individual interviews. The data analysed included the published literature (literature review), government health and professional documents, and the interviews of the key informants.

The beginning elements for this phase of the study were developed through a number of processes involving identification and critical analysis of extant specialist nursing frameworks. I conducted a review of published literature, existing specialist group documentation and interviewed key informants in relation to specialist nursing frameworks. Triangulation of information in this way is not uncommon as an approach to militate against early convergence in the analysis. Document analysis in particular, is often used in combination with other qualitative research methods such as literature review and interviews (Bowen, 2009).

Methodologies are concerned with utility rather than veracity in the view of Silverman (2006) as they cannot be true or false only more or less useful. It is incumbent on the researcher to clarify and defend for the reader the usefulness of any methodology chosen for their work. By examining information collected through these different methods I was able to corroborate findings across data sets, and thus reduce the impact of bias that potentially exist in a single study.

I have chosen to present the literature review and the document analysis as separate processes in Section A, and in Section B present the key informant interviews and final elements that emerged for Phase Two of the study. Separating these methods allows for clarity in the audit trail, however, in reality, each is intertwined with the other to construct meaningful elements to inform a framework for specialist nursing. This process is illustrated

through Figure 4.1 with each stage interlocking with each other for the ultimate outcome of the initial questionnaire for the Delphi technique in Phase Two.

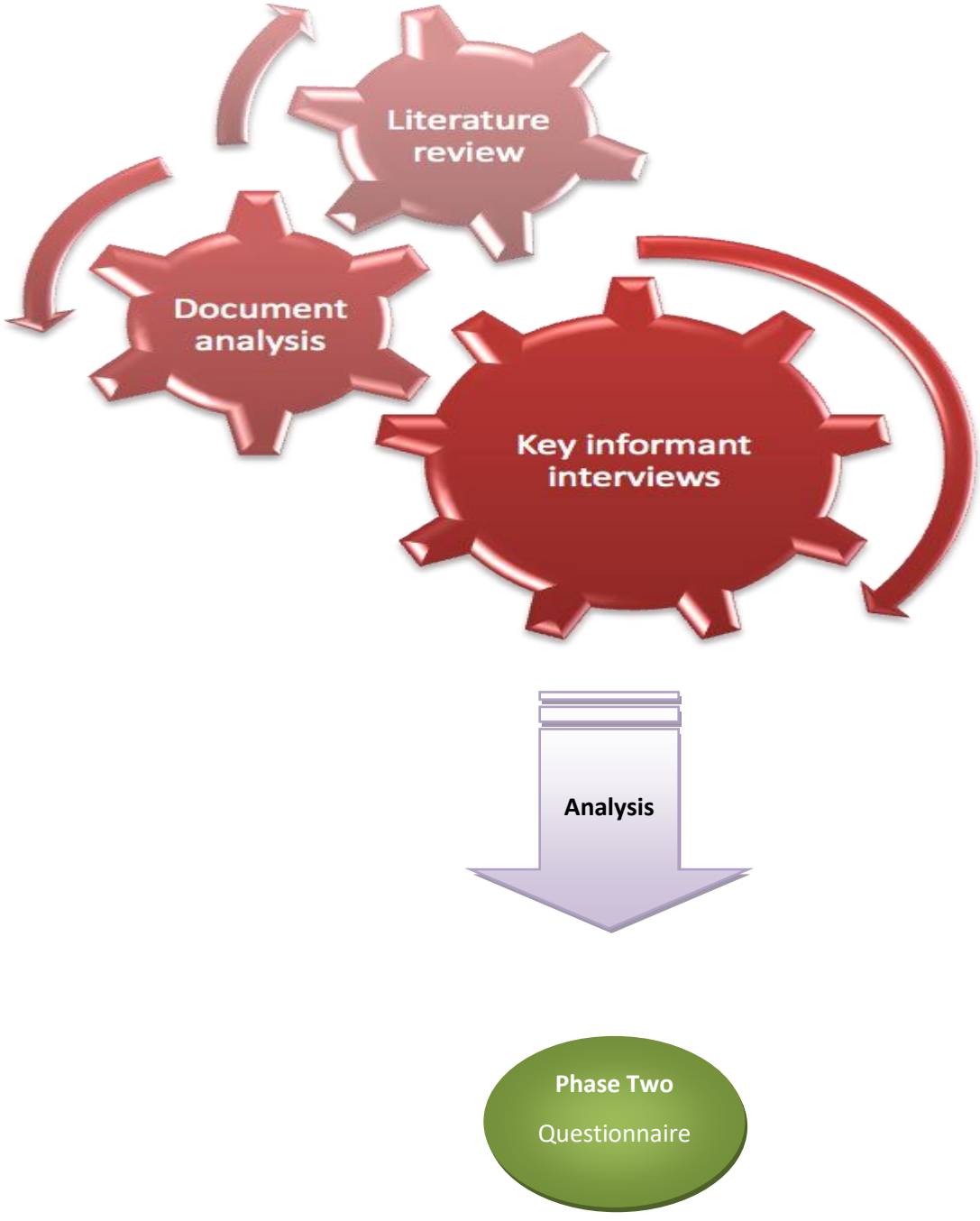


Figure 4.1 Phase One design

Section A: Literature Review and Document Analysis

Section A presents the first of two steps in the development of elements for the online Delphi questionnaire, through a focused exploration of the literature and an analysis of relevant documentation. The reflexive dialogue is begun here also in boxed areas of italicised text.

2. Literature review

A comprehensive review of the literature in relation to the broad professional and political context for specialist nursing practice is reported in Chapter Two. The outcome for this phase was to provide a further focused literature review to inform the development of key elements for Phase Two of the study. This study asks the overall question of the essential elements required for a single national framework for specialist nursing in New Zealand. The question this literature review sought to answer was; *what are the broad definitions, purpose and functions of professional frameworks in nursing?*

2.1 Approach to data collection

The utility of a single national framework is dependent on its fit with the current considerations of specialist groups, workforce planners and most importantly, the communities that nursing serves. Situating the framework in contemporary practice was deliberate in order to build on what was already known, so Phase One needed to identify and critically analyse extant specialist practice frameworks, using the international and national literature. I started my literature search amongst nurse writers on scholarly bibliographic databases, such as the Cumulative Index of Nursing and Allied Health Literature (CINAHL), ProQUEST and OVID as well as utilizing Google Scholar using the key words “nursing specialist”, “specialist nursing” and “frameworks”.

2.2 Approach to data analysis

A thematic analysis of literature identified through a review process, was undertaken to identify contemporary themes in specialist nursing frameworks. Keeping the research purpose in mind, the literature was carefully read to illuminate patterns as an inductive approach to developing key elements for the questionnaire. The general inductive approach is a systematic procedure using specific objectives to guide the analysis of qualitative data (Thomas, 2003). This approach fits with the goals of analysis for qualitative description to illuminate patterns in the data and provide low inference descriptions. To identify potential framework elements,

current international nursing frameworks were explored through the specialist nursing literature.

2.3 Findings

Clarifying terminology was a constant theme across much of the literature in regard to specialist nursing practice and the development of frameworks (Daly & Carnwell, 2003; Heartfield, 2006; Humphris & Masterson, 2000; International Council of Nurses, 2007; Machin & Stevenson, 1997). Related themes found in the literature were the importance of clearly and consistently defining framework language, and surfacing the underlying purpose of such constructions. The perception of specialist nursing as an inevitable development of role and therefore using role theory to explicate this level of practice, was strong. There was a wide variety of conceptual models identified to potentially underpin the specialist nursing framework development, and an area of promise in the literature, is the defining of capabilities, rather than competencies, for practice levels. Detail of these key themes is provided in the following discussion.

2.3.1 Clarifying language

Careful consideration needs to be given to language, as it is never neutral and defines as well as proscribes the concepts articulated (Björnsdottir, 2001). This is recognised by the work of the Australian National Nursing and Nursing Education Taskforce (N^3ET), who commissioned Dr Marie Heartfield to conduct an analysis of the language of specialisation, advanced nursing and midwifery practice, in preparation for development of a framework in Australia. Reviewing documentation from a wide range of government, regulatory, professional and industrial organisations revealed three main approaches to the understanding of specialisation in nursing. Formal or informal frameworks and associated language in relation to specialist nursing was viewed as providing for either the promotion, containment or diversification of nursing practice (Heartfield, 2006).

The promotion of specialist nursing practice is seen in the notion at both the individual and professional level that specialisation is an indicator of achievement. Containment of specialist nursing practice is seen in the regulation of practice to meet requirements for public safety, thus limiting unchecked expansion and extension. Interestingly in contrast, the government policy approach is to refer to the health workforce as one group that potentially allows for diversification across professional boundaries in order to meet consumer needs (Heartfield,

2006). Providing clarity in the assumptions of language and intent are integral to the potential of any subsequent framework to promote, meaningfully contain and support diversity in specialist nursing practice. A framework for this specific study is defined as a set of assumptions, concepts, values, and practices that constitutes a way of viewing reality (framework, 2008); in this instance specialist nursing practice.

Potentially frameworks should identify the minimum requirements of education, experience, performance and the maintenance of competence (Price, 2001a). The Nursing Career Pathway Project, undertaken as part of the Australian National Review of Nursing Education identified key elements for career pathways or frameworks as being responsive to health care needs of the society they serve; and involving recognition of skill development, and a framework for goals and strategies to achieve them (Price, 2001a). Internationally there has been increasing activity over the past decade in developing frameworks for areas of practice (National Nursing & Nursing Education Taskforce, 2006; National Professional Development & Recognition Programmes Working Party, 2005; Royal College of Nursing, 2005, 2006a, 2006b; The National Breast Cancer Centre, 2005).

The examination and clarification of language embedded in framework development activity enhances the potential for consensus building, which is the ultimate aim of this study, as shared knowledge leads to stronger consensus (Tucker, 2003). Definitions and application to the study for selected concepts that underpin the nurse specialist practice discussion, are therefore presented in Table 4.1.

Table 4.1 Defining Concepts

Concept	Definition (Merriam-Webster, 2008)	Application to this study
Special (*adjective*)	1. Out of the ordinary, unusual or exceptional. 2. Appointed, arranged etc for a particular purpose.	Areas of nursing practice that are designed for a particular purpose are *special.*

Concept	Definition (Merriam-Webster, 2008)	Application to this study
Specialist (*adjective*)	1. A person who specializes in a particular area of study, professional work. 2. A person skilled in or occupied with; an expert.	The *Nurse specialist* is skilled in or occupied with a particular field of professional work – i.e. nursing.
Specialty *(adjective modifier*)	A thing specialized in; special interest, field of study or professional work.	Nursing *specialty* is a field of professional work designed for a particular purpose.
Specialize *(verb)*	(Usually within) go give one's attention (to), work (in), or study (a particular job, subject etc).	A nurse specialist specializes or focuses on, works and studies within a particular area.
Higher *(verb)*	Advanced in complexity, development, or elaboration.	Higher levels of nursing judgment are more complex, developed or elaborated.

To explain further in relation to this New Zealand study; specialty is the *area* of practice whereas specialist is the *level* of practice (Holloway, 2009). Nurse specialist practice is conceptualized in the literature as being both a level beyond that of the general registered nurse and also more focused. This is consistent with the ICN definition of the nurse specialist, and appears to many as a natural progression of practice.

2.3.2 Understanding specialist nursing as inevitable development

Margretta Styles in her seminal work *Specialization in Nursing* (1989) used a biological metaphor to describe the nursing profession as an organism with specialist practice representing a natural and inevitable diversification within the profession. Styles (1989) presented three differing paradigms of political, economic and professional perspectives, to view the move towards increased specialization. Her conclusion was that the nursing profession as a social system was subject to forces from each of these perspectives, and was at risk of disintegration if unchecked specialization continued. However, Styles argued that if three essential conditions existed, nursing specialties could become established without disintegration of the profession as a whole.

The first condition was legitimacy or official sanction and translates into accreditation or credentialing. Homogeneity was the second condition that required consistency, equality, and parity among the specialties about issues such as definition and classification. The third condition was unity, or accord, and represented harmony about issues of purpose and standards. In other words, legitimacy, homogeneity, and unity are necessary for the orderly change, integration, and empowerment of each nursing speciality within the total profession (Styles, 1989). Clear consistent national frameworks can be seen to provide support for these conditions.

2.3.3 Understanding specialist nursing as a role

Machin and Stevenson (1997) used a three-dimensional model incorporating the elements of role adequacy, legitimacy and support to analyse and clarify a specialist psychiatric nursing practice framework. Role adequacy is related to the articulated level of minimum expected practical knowledge and skills for the nurse specialist. This "adequacy" can be developed through formal or informal education and experiences. Role legitimacy is concerned with the boundaries of professional practice and the acceptance of the appropriateness of the role within the community, nursing and the wider health care team. Role support refers to both the formal regulatory and policy structures, and the informal support within organisations for the role (Machin & Stevenson, 1997). Clarity within each element of this framework leads to role security, which has been linked to optimal role function (Machin, 1998; Shuriquie, While, & Fitzpatrick, 2007). This particular framework was isolated as providing a potential structure for considering specialist nursing in New Zealand.

Role frameworks may provide structure for delineation of the boundaries between specialist practice and generalist practice. There is much reported overlap and confusion in this boundary, compounded by the use of terms such as role extension and role expansion (Daly & Carnwell, 2003; Heartfield, 2006). Role extension and role expansion are seen as necessary in order for nursing to be responsive to the demands of the changing health care context, but must be used consistently (Heartfield, 2006).

Daly and Carnwell (2003) describe role extension as the addition of a particular skill or area of practice responsibility, usually owing to increased demand or the absence of other health professionals. The development of practice in this way may result in practitioners developing adhoc and unsustainable areas of service delivery, without holistic integration into nursing practice. Daly and Carnwell (2003) caution that role extension driven by organizational

expediency rather than a coherent professional strategy, may result in reduced clinical autonomy and increased direction of nurses by other health professionals. Role expansion is suggested as a more professional strategy with integrated increased autonomy, accountability and responsibility. This occurs within a specialist nursing role and involves additional skills such as diagnosis and prescribing. There is a formal pathway to role expansion that entails further education and may include regulation.

Conversely in the Australian literature, Heartfield (2006) found role extension and expansion were often used interchangeably, which is potentially confusing. Identified as essential to further enhancement of client outcomes, was the ability for expanded nurse roles such as the nurse practitioner, to extend their practice beyond the established scope of nursing practice. Recent work by the National Nursing Organisations (NNO) in New Zealand in developing a national glossary (Appendix 2) that defines key terms, provides a sound basis for the development of a clear framework (Holloway, 2009).

Reflexivity

The glossary is an example of the reflexive nature of this study, as my developing this with the NNO group occurred partly due to my relationship with the group as a researcher and partly because of my role as a nurse leader in education. Reviewing the glossary as a living document as the context for practice shifts, is an ongoing commitment and allows me to be in dialogue with nurse leaders in both roles. In this study, as the researcher, I am part of the "social world" under examination (Jootun et al., 2009).

2.3.4 Framework consistency and clarity

There are numerous gains, not only for the public but for the employer and for the profession in developing clear frameworks. Eraut (1994) asserts that for professional learning to be supported as lifelong process, coherent frameworks are needed. Such frameworks provide needed quality assurance for the public as well as support for the professional in practice development (Eraut, 1994). Education frameworks are often suggested as providing the nurse with entry into specialty practice, competence currency and personal development opportunities (Russell et al., 1997).

In 2008, in recognition of the need for a consistent framework, the ICN released a discussion document detailing the macro or high-level competencies across the spectrum of all roles engaged in the delivery of nursing care. The intent was to provide better tools to promote

more coherent decision-making about the nature of the nursing work force, better skill-mix decisions, and management of the current reconfigurations occurring within the health work force. The project was an integral part of ICN's work on the Nursing Care Continuum and Competencies (2008), and provided descriptive competencies for all levels of health worker within the care continuum: including support worker, enrolled nurse; registered nurse, nurse specialist and advance practice nurse. International feedback to this document during its development was mixed, with a strong sense that the framework should provide a macro rather than meso perspective for specialist nursing practice, as contextualization for local needs would need to be undertaken (personal communication, D Benton, 6 March 2008).

Domains of nursing practice provide an overarching structure for the development of any nursing practice framework, and have great similarity across the international literature as they are building for the most part on the ICN's three domains of professional, ethical and legal practice; care provision; and management and professional development (Figure 4.2). As an example, the Nursing Council of New Zealand's four domains for registered nurse practice, namely professional responsibility; management of nursing care; interpersonal relationships and interprofessional health care and quality improvement are derived from the ICN work.

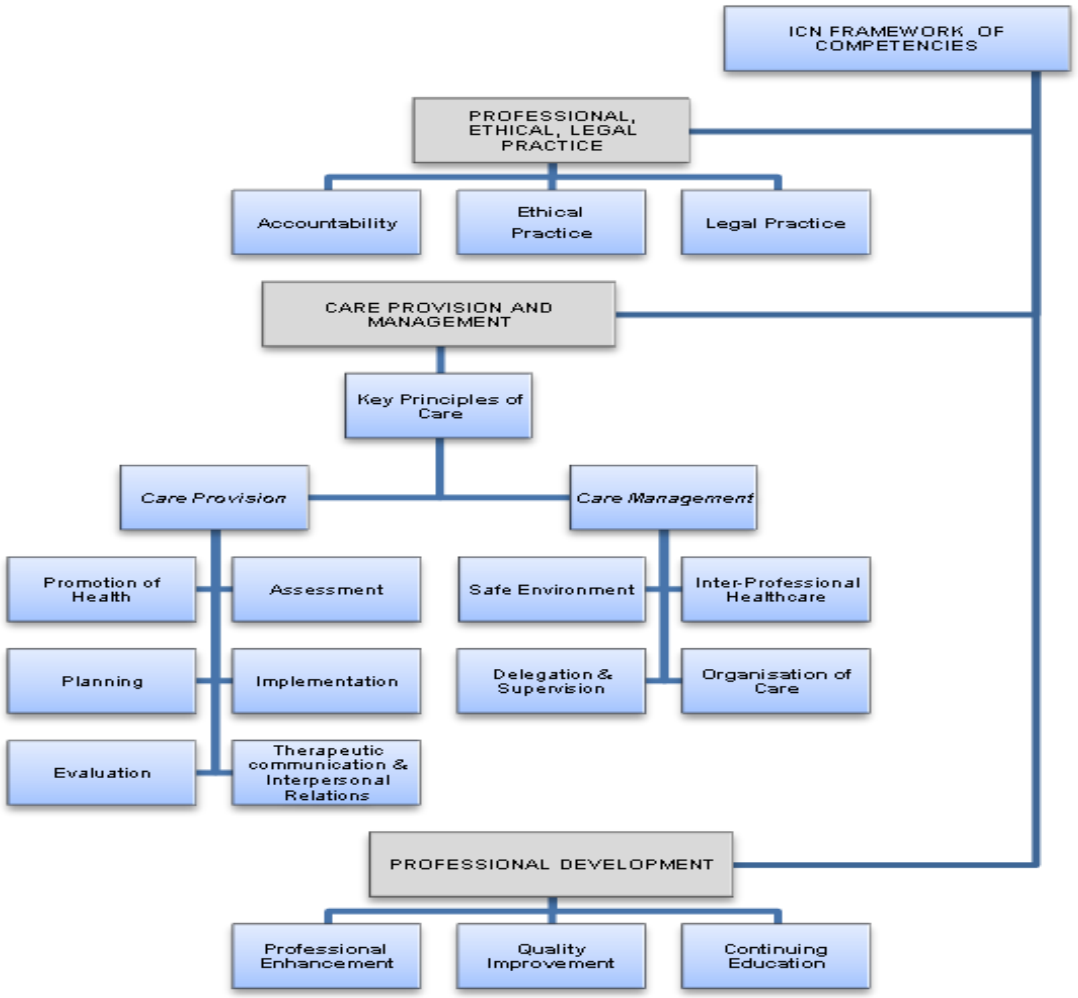


Figure 4.2 Revised ICN Competency framework

(International Council of Nurses, 2007, p.10)

2.3.5 Competencies for Nurse Specialists

Within the domains of practice, a common and widely discussed element in practice-level frameworks is the development of differentiated competencies as a key element (Australian Nursing and Midwifery Council, 2006; Chiarella, Thoms, Lau, & McInnes, 2008; Hendry, Lauder, & Roxburgh, 2007). The Royal College of Nurses released a draft integrated career and competency framework for discussion in 2003. This framework incorporated themes from what later became the National Health Service (NHS) Knowledge and Skills Framework, developed to identify broad functions required across all health worker roles (Department of Health, 2004). Initially, the nursing career and competency framework had four levels of practice: competent nurse; experienced nurse; senior practitioner and consultant nurse. Subsequent career and competency frameworks were developed for nurses working specialty areas of nursing: such as ophthalmic nurses, in-flight nurses, aesthetic medicine, travel health and outpatients, occupational health (Royal College of Nursing, 2003, 2005, 2006a, 2006b).

As the nurse specialist role was identified as a particular area of concern for nursing globally, the 2007/2008 high-level model was further developed into specific competencies. The ICN Framework of Competencies for the Nurse Specialist were released in 2009 and detailed the competencies for both the registered nurse and the nurse specialist, with detail of the knowledge and skills in addition to those required for practice as a registered nurse (International Council of Nurses, 2009).

In order to more clearly appreciate the additional knowledge and skills required for the nurse specialist, a further analysis of the ICN document was completed. The results are presented in Appendix 3 and represent a distillation from the original 93 competencies for the nurse specialist. Key points of difference relate to recognition of an increased responsibility for clinical decision-making, and the taking of leadership roles within the health care team. Overall there is a clear focus on an increased knowledge and skill base, which is consistent with the ICN definition of the nurse specialist.

Nursing competence and the proliferation of associated levelling competencies are increasingly being viewed as areas of concern (Chiarella et al., 2008). There are many definitions of competence and competencies in literature, and the impact of differences in terminology are well documented (McMullan et al., 2003; Watson, Stimpson, Topping, & Porock, 2002). Watson et al (2002) examined 61 papers concerned with the assessment of clinical competence, and found that in 22 cases the authors had made no attempt to clearly define or characterise what they meant by the term “competence”. This emphasizes the lack of clarity on the issue of competence in levelling nursing practice. There is still considerable confusion about the definition of clinical competence, and issues of reliability and validity have barely been addressed (Watson et al., 2002).

2.3.6 Capability as an alternative

The notion of capability informs this study as a way of developing a pathway for specialist nursing that challenges the dominant ideology of competence. Professional progression can be articulated by a framework of capability statements and accomplishments rather than competencies and performance criteria. Capability statements are described as being inherently inspirational, aspirational and future-looking. This deliberate shift responds to the concern voiced by nursing and other professional groups of the potential for competencies to fragment and decontextualize practice (Ministerial Council on Education Employment Training

and Youth Affairs, 2003). The Higher Education of Capability movement in the 1980s described capability as "an integration of confidence in ones knowledge, skills, self-esteem and values" (Stephenson & Yorke, 1998, p1). Competence is typically concerned with fitness **for** * purpose (or getting the job right), whereas capability infers concern also with fitness **of** purpose (or making judgments about the right job to do) (Lester & Chapman, 2001) Development of the concept of capability has potential for visioning professional specialist nursing practice differently. Capability is recognised as an integral part of specialist expertise, where specialists not only need to be knowledgeable about the specialty but be confident to apply their skills and knowledge in changing complex situations (Stephenson, 1998). Nurse researchers in New Zealand and Australia effectively used capability concepts to examine the role confusion for advanced practice nurses (Gardner, Dunn, Carryer, & Gardner, 2006). Capability has been described as the ability to go beyond what would normally be considered competent into excellence, creativity or wisdom (Lester & Chapman, 2001) and is therefore a good fit with the ICN definition of the nursing specialist as a *"nurse prepared **beyond** the level of a nurse generalist and authorised to practice as a specialist with **advanced expertise** in a branch of the nursing field"* (International Council of Nurses, 2009, p. 6)*.

**Bold font indicates emphasis for attention*

2.3.7 Capability frameworks

Scotland has been a major adopter of capability frameworks as part of the Modernising Nursing Careers (MNC) initiative launched jointly by the four UK Chief Nursing Officers in 2006. Priority areas identified as part of that initiative were the workforce development for competent and flexible nurses; career pathways; leadership and modernising the image of nursing(Department of Health – CNO's Directorate, 2007).

The NHS Education for Scotland (NES) response was to use capability frameworks to detail the expectations for specific specialty areas. The rationale for the areas chosen is not clarified, however, over the last three years, frameworks have been developed for:

- Acute Mental Health Care
- Working with Older People in Scotland – a framework for mental health nurses
- Community Health nursing
- Working with individuals with cancer, their families and carers: professional development framework for nurses – specialist and advanced levels
- Senior Charge Nurses

- Nurses in sexual and reproductive health

Capability frameworks in Scotland are built on the Sainsbury Centre for Mental Health "Capable Practitioner" project. The project conceived of capability as having five components[1]:

- a **performance** component which identifies "what people need to possess" and "what they need to achieve" in the workplace
- an **ethical** component that is concerned with integrating a knowledge of culture, values and social awareness into professional practice
- a component that emphasises **reflective** practice in action
- the Capability to **effectively implement** evidence-based interventions in the service configurations of a modern mental health system and
- a commitment to working with new models of professional education and responsibility for **lifelong learning** (Centre for Mental Health, 2001, p. 5)[*].

The frameworks are generally focused around key domains of knowledge for practice, the multi-professional approach, Practising Ethically, Care Delivery and Intervention and Leadership for Practice, which link to the components listed previously. Alternatively the English NHS appear to have used Benner's Novice to Expert framework (Benner, 1984) to develop a range of career and competency frameworks, which have three levels, from competent to experienced/proficient and finally senior/expert nurse:

- nurses working in the field of children and young people's cancer care
- paediatric endocrine nurse specialists
- ophthalmic nursing
- sexual and reproductive health nursing across the UK
- in-flight nurses
- nurses working in travel health medicine.

[*]*Bold font indicates emphasis for attention*

In conclusion, the core concept of specialist nursing is that of nursing scholarship applied within a legitimate nursing specialty. Firmly situated within a practice discipline, nursing scholarship has four cornerstones or bases: knowledge, experience, intellectual rigor and

commitment to service (Riley, Beal, Levi, & McCausland, 2002, p. 385). In developing a framework to detail this scholarship, five main themes emerged from the literature. Themes were related to the need for consistency and clarity in the concepts of nurse specialist and specialty practice; the identification of concepts for the framework, organizing domains for the framework, potential conceptual models for the framework and potential links to other frameworks. The overarching assumptions for the development of a framework for Specialist Nursing incorporated professional and regulatory aspects as summarized in Table 4.2

Table 4.2 Overarching Framework Assumptions from the Literature

A successful framework should include elements in relation to:				
• responsiveness to health care needs of the society they serve; • recognition of skill development • framework for goals and strategies to achieve them (Price, 2001b).	• regulation • resource planning • minimum requirements of education, experience, performance • maintenance of competence (Russell et al., 1997).	• regulation and role definition; • education; • career development remuneration • evaluation (Humphris & Masterson, 2000).	• role adequacy (minimum level of skill and knowledge) • role legitimacy (boundaries of practice) • role support (regulations/ policy and standards) (Machin & Stevenson, 1997).	• concept of capability as the integration of confidence in one's knowledge, skills, self-esteem and values instead of competency (Stephenson & Yorke, 1998).

3. Document Analysis

Construction of a consensus model of specialist nursing practice for New Zealand needs to build on the foundations of what is currently understood. Qualitative research provides an appropriate approach through interpretive practices that allows explication of key elements within the world of interest (Denzin & Lincoln, 2005). A key world of interest for this study was

the extant specialist nursing groups, and specifically, the frameworks they had created to present their practice. Analysis of the publicly available documentation, including government workforce data, meant there was no need to seek further permission for access as data was available on the Internet. This approach also represented what a health care consumer would be able to discover if researching, important in terms of developing a transparency for the communities nursing serves. A secondary aim of the document analysis was to suggest some questions that needed to be asked, and situations that needed to be observed as part of the research (Bowen, 2009). The overall intent of the analysis was to discover the discoverable national picture of specialist nursing frameworks in New Zealand.

3.1 Approach to Data Collection

Using government and professional portals along with Google as a primary search engine, national-level data (from District Health Boards, Non-Government Organisation (NGO) providers, and professional and registering bodies) on the current national specialist nursing workforce was analysed for trends, and to develop an understanding of the current situation in relation to specialist nursing frameworks in New Zealand. Relevant data was also accessed through searching publicly accessible databases and online documents. Examination of documents is appropriate in discovering the who, what and when of specific events or concepts (Sandelowski, 2000). These perspectives contributed to the development of a Delphi questionnaire for Phase Two.

3.2 Approach to Data Analysis

A deductive a priori document analysis template was developed from the research questions and the initial literature review undertaken in preparation for this study. This approach is supported as providing a data management tool and a clear evidentiary trail of the analysis supporting rigor (Fereday & Muir-Cochrane, 2008). Insufficient detail, low retrievability and biased selectivity are identified by Bowen (2009) as potential flaws of documentary analysis. This potential was mitigated by purposefully identifying and downloading all discoverable material over the period of six months from multiple sources, rather than being bound to one time.

The research questions that guided the template development were those that asked the extent to which current New Zealand specialist nursing practice frameworks:

- identify minimum requirements of education, experience, performance and the maintenance of competence
- address current and projected specialist workforce needs
- provide delineation of boundaries between specialist practice and generalist practice
- demonstrate linkage with extant education frameworks
- link with other national career or nursing workforce development frameworks.

Using these questions, along with the six specialist nursing criteria developed from the literature by the National Nursing & Nursing Education Taskforce (N^3ET) (2006), a template matrix to guide the analysis was developed. The matrix is presented in Appendix 4**.**

3.3 Findings

This analysis framework was then applied to the documents from specialty groups with a current public profile (i.e. internet and publication presence) within New Zealand. Publicly available information from each specialty group (college or section) was examined for detail of standards of practice; competencies beyond entry to the register; levels of practice nomenclature; linked to the national professional development and recognition pathway (PDRP) as the only current nationally endorsed career programme.

Mapping of the specialty practice areas was done by first identifying the publicly available published information available from the specialty practice sections or colleges. Specialty groups have been part of the largest professional organisation, New Zealand Nurses organisation (NZNO), since 1972. Nearly forty years later, an important step in this phase of the study was to define and map the current nursing specialty areas in New Zealand to both review current understanding and to guide development in the future. Any nomenclature developed for nursing specialty areas must allow for the diversity of the emerging nursing practice and therefore should have clear criteria to both determine inclusion and support future development. Specialist practice areas within Australia were identified by the National Nursing and Nursing Education Taskforce (N^3ET) in six different ways: body systems; diseases; service or settings; interventions/therapy; client/population or as combinations of any of the previous (Heartfield, 2006). These are very similar to the ten categories referred to by Hildegarde Peplau in 1965: area of practice; organs and bodily systems; age; degree of illness; length of illness; nurse activities; fields of knowledge; subroles; professional goals and clinical services.

The full document analysis is presented in table format for both the colleges and the sections of the largest professional and industrial organisation, the New Zealand Nurses Organisation (NZNO) and for the non-NZNO specialty groups or organizations in Appendix 5.

Additionally, there are some groups that develop their own structures, such as the ear nurses group, without standards or accreditation processes. Most (but not all) groups have developed their own standards or guidelines for practice, often but not consistently, linking them to frameworks such as the national professional development and recognition pathway (National Professional Development & Recognition Programmes Working Party, 2005; Nursing Council of New Zealand, 2008b) or a knowledge skills framework model adapted from the United Kingdom (Gould, Berridge, & Kelly, 2007). There is a lack of consistency across the groups in all elements of the analysis, which limits understanding by consumers and planners of health care services, aside from the nursing profession.

This information may exist outside of the public domain within the groups themselves, however, this is an area for development for most. Initial consultation occurred with the groups regarding the need for a toolkit to support essential information dissemination. Overall, the analysis confirmed the gaps in the current approach for New Zealand in terms of clarity of what is a specialty, specialist level of practice, and the pathway for developing to it. There are multiple individual frameworks and standards developed within some specialty nursing groups, but limited national consultation or consistency, and no centralised credentialing process, as supported for example, in the United States (American Nurses Association, 2010). Many of the specialty groups are under the umbrella of the New Zealand Nurses Organisation (NZNO) as either sections (smaller) or colleges. For example, the NZNO diabetes nurse specialist group provide standards and credentialing processes for generalist, specialty and specialist levels of practice, and further links to a recently developed knowledge skills framework (New Zealand Nurses Organisation, nd). The NZNO Children and Young person's nurses group in contrast, do not offer credentialing and have a framework with competency levels described as essential, specialist and advanced (New Zealand Nurses Organisation, n.d.-b). The flight nurses group have developed standards of practice but have not identified levels or credentialing processes (New Zealand Nurses Organisation, n.d.-a).

The impact of lack of clarity in the understanding of the specialist role is highlighted in recent concerns raised by workforce planners, over the inability to accurately measure current supply

for specialist nursing services and plan for future demand (Health Workforce New Zealand, 2010). Both the document analysis and literature review informed the initial questions for the key informant interviews, and contributed to the outcomes presented next in Section B.

Section B: Key Informant Interviews & Phase One Outcomes

This section presents the data collection and analysis of the key informant interviews and concludes with the outcomes of Phase One of this study, key considerations and limitations relevant to this phase.

4. Key Informant Interviews

The focus of the semi-structured interviews was intended to be the participant's perspectives on the requisite key elements of a national framework for specialist nursing practice. Semi-structured interviews are congruent with the descriptive nature of the methodology (Sandelowski, 2000) and the level of the research question (Denzin & Lincoln, 2003). The interview process was guided by introductory questions, with further probing questions used to elicit more complete and detailed information from the participant if needed (Wood & Ross-Kerr, 2006). Questions were piloted on nurse leader colleagues similar in characteristic to the sample group, as suggested by Wood and Ross-Kerr (2006). Each interview occurred at a mutually convenient time and place and was digitally recorded and transcribed verbatim.

4.1 Approach to Data Collection

4.1.1 Participant Selection

Key informants involved in nursing practice policy, regulation, professionalisation, education and employment were contacted by the researcher and recruited for a face-to-face concerning the development of a single specialist nursing framework for New Zealand. Key informants in nursing workforce development had been identified through review of national websites for professional organisations, and through professional networks. Some of them were known to me personally as a nurse leader within the relatively small professional nursing community in New Zealand.

Participants from Ministry of Health, Nursing Council of New Zealand, Nurse Executives of New Zealand, New Zealand Nurses Organisation, Council of Maori Nurses and College of Nurses

Aotearoa were sought as particpants. Purposive sampling in this manner was appropriate to ensure participants were informed of the purpose of the study (Sandelowski, 2000) to support the consensus approach (Keeney et al., 2006). It is important to note that those approached were not expected to be representative of their whole group or organization, but rather to provide an informed opinion on the matter of interest. Other inclusion criteria were accessibility within a reasonable timeframe, as indicated in the project plan, and access to the internet, as it was envisaged that this group would be invited to participate in Phase Two of the study. Many of these individuals were known to me though national networks. All six key informants identified consented, and this resulted in a total of six 90-minute interviews.

4.1.2 Ethical considerations

As many of the key informants were known to me personally, a research assistant was employed to make the initial contact and provide the information sheets and consent forms. Informed consent should include comprehensive information about the proposed research, given in a proper and appropriate medium, including any likely outcomes of participating in the research (Allmark et al., 2009; Health Research Council, 2002). This was provided in the Information Sheet about the study and participants were asked to sign a consent form. Consent to participate was voluntary and not influenced by financial reward or by duress and participants were informed they could withdraw from the study at any time up to the point of data analysis without fear.

This process allowed for the participants to decline the invitation without having to explain or experience perceived social or professional pressure to take part. The study involved a time commitment for participants that may have been problematic for them in the context of their time-pressured roles. The strategy to mitigate this was to use a flexible approach to interviewing scheduling, and the use of web-based technology for asynchronous involvement. There was a moderately low likelihood of risk/harm occurring and this did not eventuate. All participants approached by the research assistant agreed to be interviewed.

4.2 Approach to Data Analysis

Qualitative content analysis was the procedure used to identify themes from the interview data. In keeping with the intent to promote “goodness”, an explicit procedural description will be provided (Tobin & Begley, 2004). The analytic framework for the data analysis was the assumption that interviewing key informants would gather their impressions in relation to

specialist nursing frameworks, for use in the development of a questionnaire for Phase Two, therefore analysis stayed close to the data and was of low inference.

At the conclusion of each interview, field notes were made to aid later analysis, as suggested by Wood & Ross-Kerr (2006). The digital recordings were transcribed verbatim by a research assistant with stenographic training, and then checked against the recordings. Each transcript was returned to the individual participant for member checking prior to the final analysis. Member checking is sometimes utilised within qualitative research as a mechanism for ensuring the transcript validly represents the participant's views. However more recently, authors have suggested that it is a flawed process (Caelli et al., 2003; Rolfe, 2006) with Thorne and Darbyshire terming it "Adulatory Validity" (2005, p. 1110). The purpose of member checking in this instance was primarily to enhance the trust relationship with participants through transparency of process, as they were all invited to continue into Phase Two. The themes identified from the interviews formed part of the Delphi questionnaire, and thus enabled further comment and validation by the participants as part of the research process.

Overall the level of analysis was guided by the assumption that the data would be providing manifest rather than latent content, a key initial step in analysis. The difference is that manifest content analysis will describe the obvious elements of text, whereas latent content would involve interpretation of the underlying meaning of text (Granheim & Lundman, 2004). Within this framework, it is essential to acknowledge that there is unavoidably a degree of inference and interpretation when considering any data (Granheim & Lundman, 2004).

Granheim & Lundman (2004) suggest that before developing the meaning units (themes), the researcher must first select the unit of analysis and then content areas. For phase one of this study, the meaning unit was each entire interview transcript, and the content areas related to the responses to questions. The themes within the responses were then condensed to provide short descriptions while still preserving the meaning – a process termed as condensation or abstraction by Granheim & Lundman (2004).

Themes emerged through close examination of the interview transcripts, although as Munhall (2007, p. 179) reminds us, "People do not talk in themes; we impose themes on their language." Careful reading of the transcripts several times, along with listening to the recorded interviews was undertaken, as analysis requires that the researcher is completely familiar with the data (Burns & Grove, 2005). Then NVivo software was used in further review

of the transcripts to support coding and categorizing the data. The strongest themes that emerged across the participant's responses were identified within the data and subsequently integrated with the key elements developed from the literature review analysis, to develop the Delphi questionnaire. The procedure suggested by Granheim & Lundman (2004, p. 108) provides a guide for the analysis process – an example is provided below in Table 4.2. As manifest content was the focus for this study, condensed meaning units were not further interpreted for their underlying meaning.

Table 4.3 Sample analysis grid

Meaning unit	Condensed meaning unit (description close to the text as appropriate for manifest content and intent of study for low inference)	Theme
"Those nurses often have a different way of being." KI3	Different way of being	Importance of personal attributes of nurse specialist.
"Nurses who ask the questions and make the links of enquiring, they make the links." KI1	Enquiring and link making	
"Their self-knowledge really, and their own self-assessment of their skill base, I think, would be the thing to me, is when I think back of those nurses I think their self-knowledge about where their limitations were." KI2	Self-knowledge and skill base	

4.3 Findings

The key themes were identified through analysis of the informant interviews, and data arising from the interviews will be used to highlight the key findings (*in italics*) with key informants identified as KI1-KI6. Presenting quotations is acknowledged in the literature as a balancing act between allowing participants' views to be heard in their own voices (Fossey, Harvey, McDermott, & Davidson, 2002), versus simply presenting interesting quotes which support a particular theory (Greenhalgh & Taylor, 1997). The strategy to support rigor in this process is to purposefully undertake analysis within a framework that is made transparent to the reader.

The manifest themes are presented in relation to the content areas identified by the questions asked in the semi-structured interviews, to provide low inference analysis. Aside from the information required to begin development of the Delphi questionnaire for Phase Two, I wanted to check with these nurse leaders how relevant the proposed single framework would be from their perspective, and any risks they saw inherent in the application. First I will discuss the characteristics of the nurse specialist that emerged as key themes for Phase two, and then briefly, the themes in relation to the framework development.

4.3.1 Characteristics of the nurse specialist

Any framework for specialist nursing practice would need to incorporate the distinctive characteristics of this nurse. Nurse specialists were clearly identified by the interviewees as needing to have leadership skills in order to pull a multidisciplinary team together, advanced knowledge and skills within their area and enhanced clinical decision making A range of statements supported the view of the nurse specialist as more developed than the generalist in his/her reflective practice and clinical judgment.

4.3.2 Importance of personal attributes of nurse specialist

Participants discussed that the nurse specialist needed to have a different level of thinking. The strong perception was that nurse specialists were highly reflective and capable of metacognition (thinking about their thinking) in order to identify the most appropriate nursing action. Phrases like *pattern recognition*, *flexibility* and *enquiring* with *self knowledge* underpin this theme. As one participant expressed it, the difference was supported both by experience and by education:

> *It's about pattern recognition and yeah, drawing on a whole lot of different knowledge that they have gathered over time … nurses who ask the questions and make the links of enquiring, they make the links.* KI1

Recognizing that a key behaviour for the nurse specialist was managing a complex environment by virtue of their personal cognitive attributes, two participants reflected on nurses they would have identified as specialist and what made them so:

> *They're more flexible in their thinking; they're able to probably accommodate more demands that are put upon them. There's more than accommodation than what there used to be - those nurses often have a different way of being.* KI3

> *Their self-knowledge really, and their own self-assessment of their skill base, I think, would be the thing to me, is when I think back of those nurses I think their self-knowledge about where their limitations were.* KI2

This has implications for how nurse specialists are educated and supported in their development and supports the concept of capabilities as a potential model for the developed framework.

4.3.3 Advanced clinical judgment development

The participants were very clear that the nurse specialist has advanced clinical judgment and the ability to consider a patient situation holistically. Participants were unanimous in commenting that this would require a *combination of formal education and experience*. The perceived importance of concepts like *situated learning though reflective practice*, *formal education, expert knowledge and science knowledge* were evident in the participant responses. One participant reflected the common strong belief in situated learning very clearly as evidenced in the following excerpt:

> *Yeah, so if you've got somebody who comes in for elective orthopaedic surgery and is having a total hip done, from a nursing perspective well you're not just thinking about the procedure, you're thinking about the whole context of what they're coming for. The fact that they're obese, or the fact that they're underweight, or the fact that they've got a cardiac problem or they look like they've got a cardiac problem, or they're going off and you think well what the hell's going on here? The whole essence of the art and science of nursing comes to the fore, because yes you do learn, or you gain knowledge, some of it you learn by reading and some of it you learn by observation, some of it you learn by being there.* KI3

The details of what participants expected in specialist knowledge to support advanced clinical judgment ranged from the specific areas of knowledge, to the ability to transfer and use knowledge across contexts:

> *Those sorts of nurses often have a really good grasp of the – particularly the biological sciences that underpin their practice.* KI1

> *The thing that determines specialist areas are a mixture of the extra knowledge that you require in order to practice safely in a particular situation.* KI2
> *There's a difference in – not so much task – in the knowledge, from a knowledge point of view, I mean, you would – if I was to say I was a specialist cancer nurse, I would hopefully have a nursing and clinical – nursing and probably a certain amount of medical knowledge around cancer, you know pathophysiology, I mean the stuff that underpins the disease process, which will impact on the nursing care that I'm delivering.* KI3

This has further implications for how nurse specialists are educated and supported in their development, and again supports the concept of capabilities as an element for the questionnaire. Overall, participants did not support long lists of competencies, as there was a feeling that any framework needed to be sustainable and not overly prescriptive. One participant was particularly mindful of the potential for unintended consequences of any framework development:

> *So I think we've got to be really wary about how such a framework would be used and it's got to be sustainable and not become a whipping boy for us.* KI5

4.3.4 Specialty area development

When asked what should determine a specialty area, the participants were quite clear that specialties should be linked to patient and population need – as one commented:

> *Driving the need for nurse specialists is the need for care.* KI6

In reality however, many identified that specialty area development was often about funding streams and medical diagnosis. As one participant commented:

> *… the notion of nurses specialising in a body part or a disease state is inherently uncomfortable for me. On the other hand, I'm reasonably pragmatic and I can see that there are enough people in the country with diabetes and there are enough people in the country with respiratory disease that even whether I like it or not there's clearly some value.* KI4

The notion of having agreed criteria to determine the area of specialty to support nurse specialist development in New Zealand was welcomed by the participants and subsequently formed part of the Phase Two questionnaire.

4.3.5 Leadership and autonomy

Participants were very clear that the nurse specialist had a leadership role in both intraprofessional and interprofessional teams. The nurse specialist was seen as serving as a key resource for both nursing and other health care team members in their area of specialty patient care.

All of the previous characteristics for the nurse specialist were utilised in combination with the literature review and document analysis, to develop the Phase two questionnaire.

4.3.6 The benefits and risks of a single framework

All participants were asked if a framework was required and their rationale for the response. This was deliberate as I wanted to challenge my own perception that a single framework was appropriate and would be of use for New Zealand nurses. The lack of a framework was identified as a major problem when participants were asked if a nurse specialist framework was required. The lack of clarity in articulating the levels of service was perceived to significantly impact on the contribution that nursing could make for patient care and on professional identity:

> *I think it's a huge problem and I think it makes us incredibly vulnerable to being endlessly messed with by well-meaning funding and planning managers and PHO leaders ... We seem to be like a large putty which the sector moulds and, you know, develops buds at their whim, because we have so little clarity*.KI4

The expected benefits of having a framework were noted as being related to improved service provision for patients and clearer career progression for nurses:

> *Need national consistency because then the patient gets certainty of service – no matter where, to aid workforce planning and for fairness and equity for nurses.* KI6

> *To also bring on nurses who have got potential, or you know, have that drive and career aspirations ... maybe specialisation is in that kind of funnel (to NP).* KI5

There was also a discussion of the risks involved of developing a framework that was inflexible and that did not link to other frameworks well. Concern was highlighted about the *ability to link* with generic frameworks like the registration competencies, and the need for *transferability and flexibility* – that would be supported by core components. One participant spoke of an experience with a framework which was not recognized as connected:

> *Well there's a tension there with Nursing Council because the primary health care one, which was done specifically to reflect primary health care nursing skills, Council did not endorse, because we were going to use that, rather than the Practice Nurse model, because the wording was not exactly the same as the competent criteria. I think that's a real problem actually because the – it was specialty based, but every one of the Council generic competencies was intertwined within the specialty one. And the thing that most concerns me about the Council's approach that the wording of the generic competencies has to be used for them to recognise is that it actually waters down what nurses most want.* KI5.

Overall, the development of a framework for specialist nursing was supported by the interviewees, with sensible caution around sustainability and clarity of purpose voiced. Sustainability was voiced as an issue by most participants in acknowledgement of the size of the New Zealand nursing workforce, and the lack capacity of education programmes to be overly specific to small areas of practice. This was very useful in reinforcing the assumption underpinning the study, of the need for framework development and provided clear direction for potential impact. In summary, there was a high degree of consistency with themes emerging from key informants and the literature.

5. Phase One Outcomes

This section discusses the combination of findings from the literature review, document analysis and key informant interviews. The elements and key concepts identified through these analyses, were then integrated into the Delphi questionnaire for Phase Two of the project, as detailed in the following section.

The domains of practice promulgated by the Nursing Council of New Zealand (NCNZ) were, used in response to the clear mandate from participants for the framework to easily link to existing structures. The NCNZ domains and associated competencies were frequently noted in documentary analysis of extant specialty frameworks. Capability concepts as an organizing structure from the literature review, were selected to provide a potential frame for consideration through the Delphi process. To create the elements for the Phase Two questionnaire, the NCNZ domains of practice were integrated with the theme elements from key informants and the capability concepts, as illustrated in Table 4.4.

Table 4.4 Phase One Outcomes

NCNZ Domains	Capability concepts (Stephenson & Weil 1992)	Key themes from interview data
Management of nursing care	Take effective and appropriate action within unfamiliar and changing circumstances.	Autonomous Holistic in assessment Flexible thinking Enquiring Ability to make links with knowledge Use different models of interaction – have a repertoire of therapeutic models Self-knowledge of limitations Pattern recognition
Interpersonal relationships	Explain what they are about.	Way of being as a nurse – grounded in nursing philosophy Range of therapeutic models Nurse as Teacher Nurse as Leader
Interprofessional health care & quality improvement	Live and work effectively with others.	Leadership within the team Interprofessional Intraprofessional
Professional responsibility	Continue to learn from their experiences as individuals and in association with others, in a diverse and changing society.	Situated learning Through reflective practice Formal education Expert knowledge Science knowledge

The capability concepts were also considered through the lens of the Strong model of advanced practice and found to have strong congruence (Gardner et al., 2007) to explore their fit with advanced nursing practice. The Strong model of advanced practice nursing elements of **Direct comprehensive care** – highly developed skills and knowledge to inform service coordination, care delivery and direction of care; **Support of systems** – optimizing patients' utilization of, and progression through, a health service; **Education** – patients, communities,

clinicians and students; **Research** – creating and support a culture of inquiry and **Professional leadership** – professional activity and dissemination of expert knowledge to the public and the profession are also integrated into this matrix (Hamric et al., 2009) - see Appendix 7.

6. Key considerations and limitations

The culmination of the analysis of the literature, of extant frameworks through document analysis, and the key informant interviews was the identification of key elements for the development of the Delphi questionnaire to be undertaken in Phase Two of the study. There was a high degree of congruence with the views expressed by key informants and key areas evident in the literature, which supported the face and content-related validity of the first round Delphi questionnaire (Burns & Grove, 2005).

A limitation of the document analysis was the lack of publicly available information from the specialty groups reviewed. This could have led to a skewed understanding of the depth of the extant frameworks that will potentially be mitigated by the expert group, some of which have detailed knowledge of the current groups.

Reflexivity

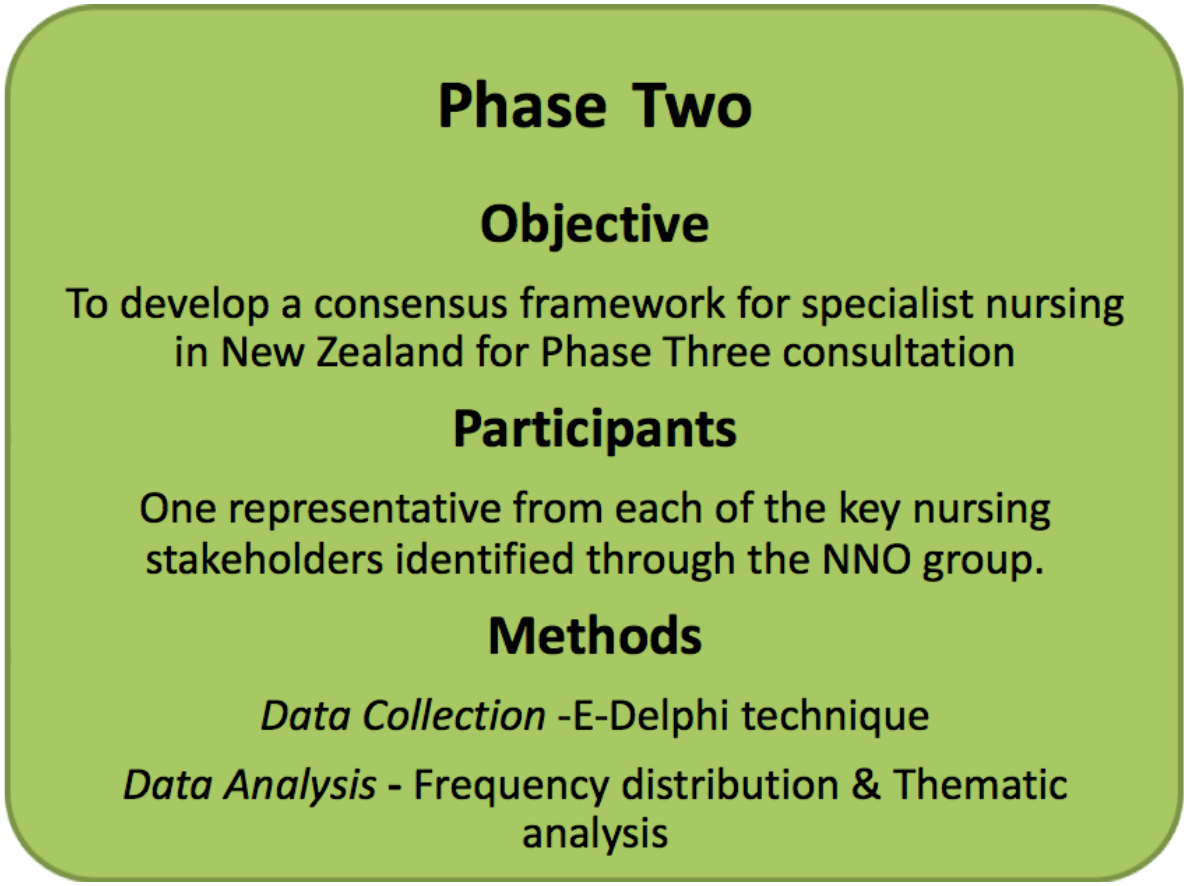
A challenge in this study for me was my dual role as researcher and my relationship with many of the key informants as a nurse leader within nursing education. During the process of interviewing the key informants, national conversations began to occur regarding the need for specialist nursing and standards to be the focus of professional groups. There were elements of insider/outsider perspective for me as researcher and as a nursing leader. Having raised the profile of the issue I was involved in ongoing conversations by virtue of my role as nurse leader and researcher with key informants in New Zealand nursing.

I was aware of the need to ensure that I did not unduly influence the informants during the interview or place interpretations upon their responses that were not true to the data. I kept a full record of my decision trail in developing the elements for the questionnaire, which I shared with my supervisors. Knowing the informants and their standing in the New Zealand nursing community I also was aware of the need to consider all of the data equally without prejudice. Munhall (2007) discusses this aspect of the research process as reflexivity and stresses the need for the researcher to surface the potential for a relationship of circularity of the data to the investigator.

7. Concluding remarks

This first Phase of the study involved a comprehensive review of the literature, and of extant nursing frameworks and key informant opinions in relation to the development of a specialist nursing framework. Having identified a range of potential key elements, including a capability rather than competency approach, the next step was to utilise the Delphi technique to develop a consensus framework. Chapters Five and Six present the development and undertaking of the largest component of the study (Phase Two), where the Delphi technique is used to develop consensus on the elements for a specialist nurse framework.

Chapter 5 : Phase Two - Part One



This chapter presents the development and undertaking of the largest component of the study (Phase Two) in which the Delphi technique was used to develop consensus on the elements for a specialist nurse framework. Chapter Five has two sections with the first section (Section A) exploring the selection of the Delphi technique, and the modifications undertaken for this study. In the second section (Section B) the online data collection approaches are explained and the limitations discussed.

1. Introduction

Phase One involved a descriptive and exploratory multi-method-enquiry approach, integrating a literature review as an initial step of the Delphi technique, one of the key tools used to answer the research question. The objective for Phase Two was to further identify specific elements for a consensus framework for specialist nursing in New Zealand, through an online or E-Delphi process involving key stakeholders. The Delphi technique provided a structure for the study in terms of participant selection, data collection and analysis (Keeney et al., 2006). The modified Delphi technique used in this study was consistent with traditional Delphi technique in terms of overall approach, for example, using a sequence of rounds with chosen experts, with the objective being to arrive at consensus.

An overview of the Delphi technique is provided, then the specific modifications and interpretation is presented through the study design detail. Data collection commenced with the development of an initial online questionnaire, which was then adapted for subsequent iterative rounds guided by the Delphi technique. Analysis of each of the three rounds of the Delphi technique is presented, culminating in the identification of the consensus framework model for testing in Phase Three.

Section A: The Delphi Technique – background and application to the study

The Delphi technique (subsequently referred to as the Delphi) is a widely recognized research approach to gathering purposeful input from groups, and has been modified for use across many discipline areas over the years. However, as experienced Delphi researchers and writers Turoff and Hiltz commented, “The straightforward nature of utilizing an iterative survey to gather information ‘sounds’ so easy to do that many people have done ‘one’ Delphi, but never a second” (1995, p. 1). Many researchers concur that the complexity of the Delphi is not evident until they actually use it (Crisp, Pelletier, Duffield, Adams, & Nagy, 1997; Donohoe & Needham, 2009; Hasson, Keeney, & McKenna, 2000; Keeney et al., 2006). Addressing the potential for complexity and confusion about the Delphi is begun by understanding the antecedents of the method, then clarifying the rationale for selection in this study, discussing risks to validity and reliability, and finally detailing broadly the modified process used and then more specifically the subsequent iterative rounds (Keeney et al., 2006).

2. Background to the Delphi Technique

The original developers of the method proposed two main types of Delphi; the Classic and the Policy (Skulmoski, Hartman, & Krahn, 2007). Over time, these two have morphed into multiple approaches, which is probably at the heart of the confusion around key components such as: consensus, accuracy, reliability, and validity; the panel and the notion of expert, iteration and controlled feedback; the role of the researcher, and anonymity. The multiple approaches have been conceptualized as three overall types of Delphi:

- *Policy Delphi* – the aim is not consensus but to identify and understand a variety of viewpoints suggested as a forum for ideas – panel anonymity and controlled feedback occur for this approach also (Burns & Grove, 2005; Crisp et al., 1997)
- *Decision Delphi* – purpose is to come to a decision with the difference being that the panel members are not anonymous although their responses are (Burns & Grove, 2005; Crisp et al., 1997)
- *Classic Delphi* – focus is on reaching consensus (the type used for this study). It involves the presentation of a questionnaire to a panel of informed individuals in a specific field of application, in order to seek their opinion or judgment on a particular issue (McKenna, 1994). Crisp, Pelletier, Duffield, Adams and Nagy (1997) see the process as a forum for facts where anonymity is usually assured for the panellists and there is iteration with controlled feedback by the researcher.

The Classic Delphi arose historically, from a methodology developed at the RAND Corporation by Olaf Helmer and Norman Dalkey in the late 1940s, and was designed to elicit expert opinion in a systematic manner for mostly technological forecasting (Sackman, 1974; Skulmoski et al., 2007). The Douglas Aircraft company established Project RAND (an acronym for Research and Development) in 1946, to study the broad subject of inter-continental warfare – the initial use of the technique was reported to be to estimate the number of A bombs required to level a specific target (Skulmoski et al., 2007). The word Delphi refers to the hallowed site of the most revered oracle in ancient Greece, where forecasts and advice were sought (Evans, 2007). The Delphi Oracle had a network of informants and was considered to be one of the most truthful – this is the link to the concept of data from many sources equalling credibility (Kennedy 2004). Although Dalkey and Helmer did not feel the Delphi Oracle was the most appropriate concept,

it has nevertheless become the recognized name of the process they developed (Linstone & Turoff, 1975). Reiger (1986) charted the development of the Delphi from its secret beginnings within the military, to novelty for corporate planners once it was declassified in the mid-1960s. Subsequent decades saw the Delphi heavily critiqued as part of the qualitative quantitative debate (Sackman, 1974) entering a period of great scrutiny (Rieger, 1986). Later, in the last century, the Delphi was seen as having entered a phase of continuity (Rieger, 1986), whereas now it can be seen to have become mainstream with articulation of "best practice" approaches – offering a modern perspective for tourism research as an example (Donohoe & Needham, 2009).

The current study draws on the broader definition offered by Linstone and Turoff, key researchers and writers in the use of Delphi, that they felt best summarized both the technique and its objective:

> Delphi may be characterized as a method for structuring a group communication process, so that the process is effective in allowing a group of individuals, as a whole, to deal with complex problems (Linstone & Turoff, 1975, p. 3).

3. Rationale for selection of Delphi

From a historical perspective, the use of expert opinion where there was limited development of empirical evidence was the rationale for the development of the Delphi process. The underlying assumption was that group expert opinion was more reliable than a single expert voice (Helmer, 1966). The concept of using expert opinion is an accepted part of health care practice. The Delphi has often been utilized as a research method in nursing, to explore a variety of professional and clinical issues as clearly illustrated by the 259 articles with the key word Delphi published in the esteemed international *Journal of Advanced Nursing* alone, between 1976 and 2010. In the area of nursing workforce development research, the Delphi has been useful to determine competencies for district nurses in health promotion (Irvine, 2005), the support requirements of nurse practitioner development in the UK (Marsden, Dolan, & Holt, 2003), the development of competency and career frameworks for diabetes nurses (Davis, Turner, Hicks, & Tipson, 2008), and role clarification between clinical nurse specialists and nurse practitioners (Roberts-Davis & Read, 2001). The Delphi is also often

employed when setting research priorities, both at the macro (whole of profession) and micro (specialty interest group) levels (Pollard & Pollard, 2004; Powell, 2003).

Large numbers of graduate researchers have utilised the Delphi because of its flexible research potential, although Skulmoski (2007) cautions about the need to balance flexibility with a concern for validity. A review of dissertations on the ProQuest Dissertations and Theses database reveals 3000 scholars in health research have Delphi as one of their key words. Exploring Google Scholar (a database of scholarly literature) using search terms "dissertation" and "Delphi", it is evident Delphi approaches remain popular, with 9840 records since 2000, of which 6540 are recorded in the last five years, with 766 to November 2010 alone. The subsequent decades have seen the use of Delphi expand into investigations of the fields of business, science, medicine, and education (Evans, 2007; Keeney et al., 2006). The technique is now widely recognized as a very adaptable and mature research method used in many discipline areas across the globe, with an ability to be either qualitative or quantitative (Skulmoski et al., 2007). The pan-discipline nature of the Delphi as a research tool is evident in the multidisciplinary nature of references across different bodies of literature.

Developing a group consensus through Delphi is therefore appropriate when the complexity of the problem or issue that the research seeks to resolve, does not lend itself to precise analytical techniques but would benefit from collectively formed statements (Linstone & Turoff, 1975). The Delphi is particularly appropriate for those problems without adequate information on present and future development, and where there are numerous issues to be explored around policy options (Turoff & Hiltz, 1995). Four main categories of research objectives that best suit the Delphi were described by Murray Turoff in an early paper (1970, p. 149) as those who require the researcher to:

- explore or expose the underlying assumptions that lead to differing judgments;
- seek out information which may generate a consensus on the part of the respondent group;
- correlate informed judgments on a topic spanning a wide range of disciplines; and
- educate the respondent group as to the diverse and interrelated aspects of the topic.

The characteristics of the problem of developing a consensus framework for specialist nursing in New Zealand, requires an exploration of underlying assumptions that underpin current

divergent judgments and aims to both educate the respondent group and generate a consensus. The choice of the Delphi is supported in that it has been used before in framework development to articulate career structures for diabetes nurses (Davis et al., 2008) build a competency framework for General Practitioners in musculoskeletal specialty practice (Hay, Campbell, Linney, & Wise, 2007) and in tourism and information systems research (Donohoe & Needham, 2009; Okoli & Pawlowski, 2004).

There are of course other ways of undertaking a group consultation process, by either a nominal group technique (NGT) or face-to-face (FTF) meetings. The nominal group technique was developed by Van de Ven and Delbecq (1974) to provide a structured format to interactional meetings and consist of three steps. First, group members work independently around a table to generate individual responses to a posed problem statement. The responses are then shared by each individual with the wider group, and an unstructured group discussion takes place. Finally the group is then asked to rank the responses in order of priority. This process is also described in the literature as estimate-talk-estimate (Cohen et al., 2000; Van de Ven & Delbecq, 1974).

Which is better? Previous research by Van de Ven and Delbecq, the developers of the NGT for group brainstorming in the 1960s, supported the use of NGT or Delphi over FTF meetings, with Delphi being suggested as most appropriate if there are issues of geographical distance to consider (Van de Ven & Delbecq, 1974). The main rationale for the recommendation for NGT or Delphi, related to the lack of structure, conformity pressures and high costs of the FTF or interactive group discussions. Recently Graefe and Armstrong (2010) replicated Van de Ven and Delbecq's work comparing FTF with Delphi and NGT, by asking groups to undertake a judgment task that required estimates of the answers to factual questions. While there were no significant findings in terms of accuracy of outcomes as all groups managed to reach the similar conclusions, there were differences in evaluations of process perceptions.

The Delphi method achieved a higher score than FTF, for the perception of freedom to participate or reduction in conformity pressure (Graefe & Armstrong, 2010). Linstone and Turoff (1975) refer to conformity pressure as the "bandwagon effect", of domination by individuals in group decision-making that is minimized through anonymous participation in a Delphi process. This can allow greater expression of differing perspectives within a heterogeneous group, and can be a key influence on the validity of the consensus statements (Donohoe & Needham, 2009; Linstone & Turoff, 1975; Tucker, 2003).

There was a slight preference for the group process in FTF rather than computer mediated (as in the Delphi), but as the researchers note there is no evidence that high levels of satisfaction are correlated to good performance (Graefe & Armstrong, 2010). A recommendation for the use of Delphi was made when costs of travel and scheduling challenges prevent groups meeting together physically. In summary, both NGT and Delphi are effective mechanisms for structuring a group consultation process, however Delphi is preferred for national studies such as this one particularly, as there is the potential risk of bandwagon effect from strong individual positions.

Additionally, the philosophical underpinning of this research that positions reality as meaningfully constructed through an interpretive process with those engaged in the area of interest, fits well with the tool chosen for this study. The Delphi is highly interpretive at every stage and aims to engage with those that have a clear interest in the outcome as recommended by Linstone and Turoff (2002).

However, as Turoff and Linstone (2002) clearly state, the Delphi is not appropriate for every research problem and cautions us not to "oversell" the method. The literature cites several opinions concerning the limitations of Delphi studies, with concern expressed about the need to balance flexibility and innovation with a regard for validity (Skulmoski et al., 2007). The risks to trustworthiness and mitigating strategies are discussed further in the next section.

4. Trustworthiness – criteria for validity

Carefully documenting the decision trail of modifications made to the Delphi process, supports the validity and reliability of the outcomes (Beretta, 1996; Goodman, 1987; Hasson et al., 2000; Keeney et al., 2006; Powell, 2003). Sandelowski and Barroso (2003), as very experienced and highly published researchers assert that techniques such as maintenance of an audit trail; the use of protocols for document analysis and interviews; and expert peer review enhance the descriptive, theoretical and pragmatic validity of findings. The audit trail of this phase of the study will incorporate documentation on the methodological decisions made during the Delphi (in recognition of the emergent nature of qualitative designs), and the analytic decisions made in coding the data (Sandelowski & Barroso, 2003; Silverman, 2006). Some argue that the critiques of the Delphi arise from researchers within the positivist paradigm, and reflect the

lack of clarity in the epistemological positioning of studies using the Delphi (Mullen, 2003). This oversimplifies the concern in my view, and does not negate the requirement for trustworthiness of design, an appropriate criteria for the constructivist or naturalist paradigm (Denzin & Lincoln, 2003).

Key concerns raised by critics relate to the selection of "experts" for the panel (McKenna, 1994; Mullen, 2003; Sackman, 1974), the process of consensus (Keeney et al., 2006; Landeta, 2006), questionnaire construction and the level of anonymity and/or interaction between panel members (Mullen, 2003), the time taken in the process, and as with other methodologies, the potential for researcher bias (Keeney et al., 2006; Landeta, 2006; Linstone & Turoff, 1975). Turoff and Linstone (2002) in response to early Delphi design concerns developed a checklist of eight basic pitfalls for researchers to be aware of.

These eight pitfalls are useful to consider although not all are relevant to the Classical Delphi approach selected for this study. Forecasting Delphi as an example, runs the risk that participants may have differing time perspective of what constitutes the future from next week to next century. More generic pitfalls are that there may be the tendency to force consensus for prediction certainty; the preference for simplicity over complexity may affect judgments; illusory expertise in the panel can damage the credibility of outcomes; sloppy execution on the part of either the researcher or the participant; pessimism bias in some participants. As previously stated there can also be overselling of the Delphi as the perfect process meaning potential risks to validity are not mitigated and lastly the acknowledgement that there is the potential for deceptive manipulative action by either the participant or the researcher (Linstone & Turoff, 2002).

For every risk there should be a mitigating strategy as supported by Donohoe and Needham (2009) in a recent published discussion of best practice in Delphi research. Even though their research focus was tourism, many of the practices detailed are useful across other disciplines. The risks to trustworthiness mentioned previously and planned mitigation measures for this particular study are presented in Table 5.1. These have been divided into preparatory design risks and process risks, with mitigation measures outlined here but discussed in more detail in the Delphi round discussion sections.

Table 5.1 Delphi Risks and Mitigation Measures

Design risks	Mitigation measures for Specialist framework study
Expert panel not considered valid reducing outcome trustworthiness	Experts must have knowledge of the subject area (Hsu & Sandford, 2007) evidenced by their public engagement in national discussion around specialty nursing. Experts must be expanded beyond those personally known to the researcher by "snowballing". Sampling for experts is purposive and transparent. Pragmatically expert panel is influenced by funding (Keeney et al., 2006). Exclusion/Inclusion criteria must be developed (Hsu & Sandford, 2007).
Expert panel not responding as no benefit identified for them	Personal touch in recruiting from Phase One participants improves chances of return (McKenna, 1994) with follow-up as necessary.
Round One questionnaire is not sufficiently clear, disengaging participants	Use of conceptual framework to structure questionnaire (Burns & Grove, 2005). Use of data from Phase One to focus the panel from the start of the process (Keeney et al., 2006). Round One questionnaire piloted and adapted as needed (Burns & Grove, 2005).
Process risks	
Disengaged participants due to lack of clarity in questionnaire process and prolonged response periods	Use of both graphical and textual feedback to the panel to enhance their understanding (Linstone & Turoff, 2002). Three-week turnaround for round two and three with intermittent contact to encourage participation (Keeney et al., 2006). Number of rounds set at two to three maximum (Keeney et al., 2006).
Sloppy execution	Maintenance of clear audit trail by researcher of participant interactions and analysis decisions (Beretta, 1996; Donohoe & Needham, 2009; Goodman, 1987; Hasson et al., 2000; Hsu & Sandford, 2007; Keeney et al., 2006; Powell, 2003).
Technology failure of e-delphi process	Back-up plan developed to use mail or phone system if internet issues occur (Donohoe & Needham, 2009).
Researcher bias leads to manipulation of the process	Maintenance of clear audit trail by researcher of participant interactions and analysis decisions (Beretta, 1996; Donohoe & Needham, 2009; Goodman, 1987; Hasson et al., 2000; Hsu & Sandford, 2007; Keeney et al., 2006; Powell, 2003).
Specious consensus reached	Consensus level set prior to study at 80% (Keeney et al., 2006).
Anonymity compromised	Only researcher is aware of those participating – all data is aggregated when returned to participants apart from their own responses.

5. Modified Delphi process

There are multiple modifications of the Delphi, but one key feature is the involvement of experts in an anonymous process, either by mail or using computer mediated communications as in the E-Delphi. The initial step is the recruitment of the expert group, who are then presented individually with a single-problem statement or set of statements. They provide the researcher with their individual responses. The researcher then compiles the responses and presents those compilations back to the expert group individually. The experts are then asked to respond to the same problem statements, now being aware of the thinking of whole group. This process is iterative until consensus has been reached by the group about the refinement, inclusion or exclusion of the problem statements (Cohen et al., 2000; Linstone & Turoff, 1975). The intent is to move the group toward a polarization of responses and clear identification of areas for consensus and dissensus (Cohen et al., 2000). In essence, the Delphi is a multistage research approach, with each stage building on the results of the previous one. The modified Delphi process used by this study is illustrated by Figure 5.1. Particulars related to each round will be provided through the next sections.

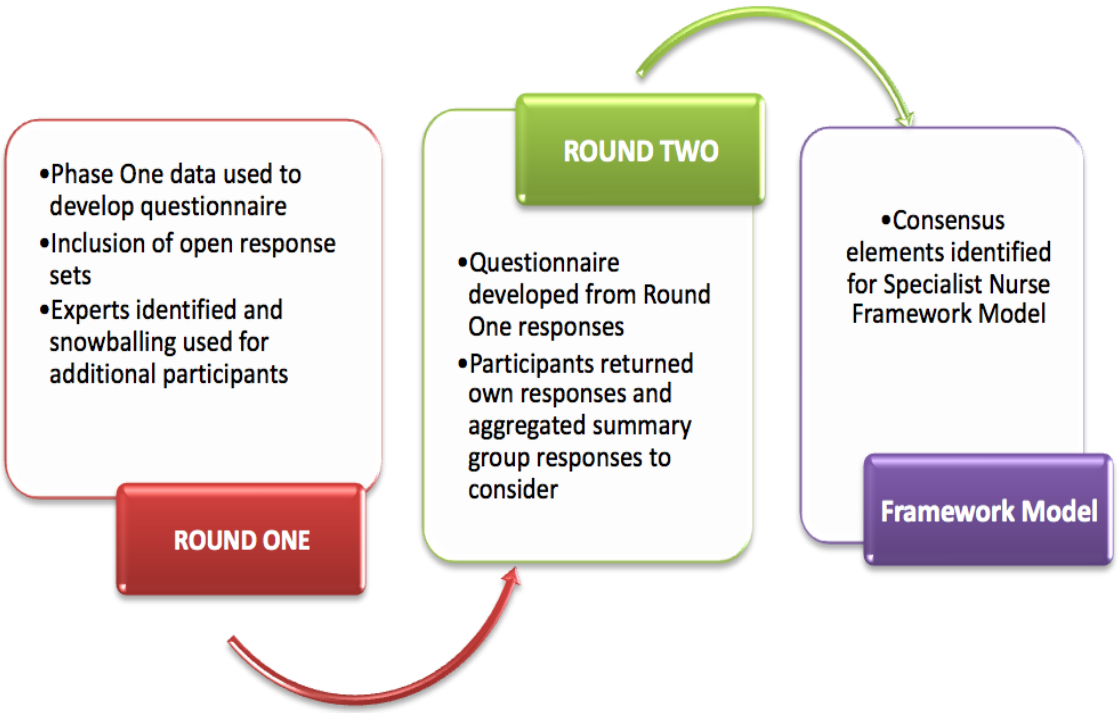


Figure 5.1 Modified Delphi process

An alternate way of conceptualizing the modified Delphi is a process involving preparation (Delphi round one), convergence (Delphi rounds two and three) and followed by reporting of consensus. Acknowledging the Delphi is very design sensitive, Donohoe and Needham (2009) identified critical design decisions (CDD) required particularly in the preparatory phase, such as expert panel selection and questionnaire design to mitigate against methodological problems or risks. Detail of the critical design decisions made within the preparatory and convergence phases of the data collection in this phase of the study are presented next.

Section B: Approaches to Data Collection & Key Considerations

This section details the approaches to the various elements of the Delphi technique including the development of the Delphi questionnaire, selection of participants and the use of computer-mediated communication in data collection. The discussion is presented in chronological order of the steps in the Delphi technique.

6. Round One

The first round of the Delphi is extremely important, with the selection of the most appropriate participants and development of an initial questionnaire that will engage and have them commit to the process.

6.1 Participants

One of most common criticisms of Delphi has been the lack of clarity in the process of the selection of experts (McKenna, 1994; Mullen, 2003; Sackman, 1974). This is a high-stakes component of the study, with the ultimate success or failure of a Delphi study previously linked to the characteristics of the expert panel (Powell, 2003). Defining both the characteristics of the expert panel and the process for selection is therefore important. Representativeness of the group is not required for statistical purposes, however, the validity of the findings is identified as being highly dependent on the the qualities of the expert panel, rather than its numbers (Powell, 2003). Given these selection criteria, key individuals to include for New Zealand would be representatives from industrial, professional and regulatory groups as well as employers (Directors of Nursing) and of course specialist nurse groups.

The purposeful sample of experts was recruited from national nursing organisations or education providers across New Zealand. Panel eligibility criteria included i) a position title or role that reflected the potential for direct involvement in national nursing workforce discussions ii) publicly discoverable contributions to the dialogue around specialty nursing practice and/or nurse specialists iii) personal recommendation by one of the Phase One participants iv) availability of a computer with email and internet access. Fifteen were invited (including the six participants from Phase One previously identified in national nursing leadership positions). The invited participants were mostly females (n=13) with males the minority (n=2) and all, in addition to meeting the inclusion criteria, had postgraduate qualifications.

The Delphi process is suggested to follow a "funneling" approach, where the distillation of consensus occurs through the iterative structure (Donohoe & Needham, 2009). The funneling potentially occurs more rapidly when those participating have expertise in the area under consideration, thus the need to enroll an expert panel. This assumption is supported by the definition of an expert offered by Edward de Bono:

> *An expert is someone who has succeeded in making decisions and judgments simpler through knowing what to pay attention to and what to ignore* (www.edwarddebono.com).

The number of experts required is not clear – based on an exhaustive literature search and a decade of experience using the technique, recent researchers concluded it depended upon funding, logistics and rigorous inclusion and exclusion criteria (Kenney, Hanson & McKenna 2006). All participants needed to have access to the internet and be able to engage with the iterative Delphi process for the period of the study – anticipated to be spread over a two-month period. There is a tension acknowledged in the selection process, with the potential for bias on the basis that those who accept are likely to have a vested interest in the area of concern (Keeney et al., 2006).

Marsden, Dolan and Holt (2003) suggest that although there is no requirement to be exhaustive in selecting the expert panel, to mitigate against bias it is necessary to go beyond those known to the researcher. They asked the experts identified in their study of Nurse Practitioner deployment to identify other key stakeholders in the Nurse Practitioner field (a form of snowball sampling) (Marsden et al., 2003). Snowballing was also part of this study,

with those initially invited to participate from Phase One of this study also asked to recommend any others for inclusion to increase heterogeneity of the panel.

There are no universally agreed criteria for the selection of expert panel members, although it is generally accepted that simply choosing those that are knowledgeable is insufficient (Hsu & Sandford, 2007; Keeney et al., 2006). Confidence in the calibre of the experts is important – literature suggests it is useful to include strategic positions at both macro and micro levels of policy within the research area, and those having a vested interest in the topic (Kenney, Hanson & McKenna 2006; Marsden, Dolan & Holt, 2003). Hsu and Sanford (2007) also recommend being strategic in selecting opinion leaders that will utilize the outcomes of study.

Having opinion leaders involved in the process will potentially have a positive influence on the adoption of the subsequent framework, as suggested by innovation diffusion theory specifically, positive deviance as an adaptation of that. The theory of positive deviance posits that solutions to problems that face a community (in this instance the community of nursing) often exist within that community, and that some members possess wisdom that can be generated to improve conditions for others. This also means that solutions and innovations developed from within are more likely to be accepted (Clancy, 2010; Singhal, Shirley, & Frost, 2010). The definition of innovation is used here as "the success of carrying a new idea into practice" (Melnyk & Davidson, 2009, p. 28), as related to the aim of the study, to provide a single specialist nursing framework for New Zealand.

6.2 Ethical considerations

Ethical approval for the Round One questionnaire was sought from the University of Technology Sydney Human Ethics and Research committee, and to the New Zealand Central Regional Ethics committee as per the initial proposal. Ethics committee approvals were granted and participants sent an email invitation with the information sheet attached, and the survey web-link to click on. Participants were told that they had been invited to participate in this expert panel to build a consensus specialist nursing framework, in recognition of their involvement and interest in specialist nursing in New Zealand. They were informed that they joined other colleagues in New Zealand who would remain anonymous. They were informed that collective responses would form an integral part of the consensus-building approach nationally. Participants were free to withdraw from the research project at any time without consequences, and without giving a reason. Data collected and aggregated however, would

not be able to be withdrawn. Participants were clearly informed that consent to participate was implied by completion of the questionnaire as is common practice (Duffy, 2002).

6.3 Development of Questionnaire

The modified Delphi utilized for this study used the literature and key informant interviews to generate a starting point for the group communication, rather than the more traditional approach of an open qualitative first round. Using qualitative data in this way to form the basis for the mostly closed-ended questionnaire is widely accepted as an effective modification (Hasson et al., 2000; Keeney et al., 2006). This modification is often used by researchers to reduce the number of iterations required, and reduce responder exhaustion in the study (Keeney et al., 2006).

Best practice principles for designing questionnaires are as applicable to the Delphi process as with any other research approach (Hasson et al., 2000; Keeney et al., 2006; Linstone & Turoff, 1975). Design was underpinned by recognition that the first round Delphi questionnaire must have the following characteristics: a clear purpose; clarity over what was included in the questionnaire to meet that purpose; exhaustive coverage of elements to be included; and include the most appropriate kinds of questions to elicit the kind of data required to answer the research purpose (Burns & Grove, 2005; Cohen et al., 2000). The first round questionnaire therefore, needed both closed questions for the participants to respond to in terms of level of agreement, and also open-response fields for the inclusion of any fresh ideas. The opportunity for participants to raise fresh ideas is supported to avoid early closure or forced convergence in the Delphi (Keeney et al., 2006). Information provided to participants needed to be enough to make the meaning and intent clear, whilst not over explaining, which could make those more knowledgeable participants lose interest.

Data collection for this phase of the study utilized online delivery. There is a history of using computer-mediated communication in Delphi studies since 1978, although this has been increasingly more commonly in the last decade (Im & Chee, 2003). Online questionnaire research methods are explored in more detail later in this section. Once developed, the online questionnaire was piloted as recommended in the literature to check for clarity of questions, completeness of response sets, and timing and success of data collection technique (Burns & Grove, 2005).

6.3.1 Clarity of purpose

Developing a specialist nursing framework for New Zealand is the stated research purpose of this study, and therefore the International Council of Nurses (ICN) criteria for the orderly development of specialist roles was felt appropriate to structure the Delphi questionnaire. The ICN criteria outline the need for articulated regulation, resources and clinical practice requirements to promote sustainable nursing specialty development (Price, 2001b). Sustainability is a key concern in nursing specialty development (Styles, 1989), thus each of these criteria was considered significant to include. Operationalising the ICN criteria through mapping of the key elements from Phase One of the study, with links to other frameworks such as Nursing Council of New Zealand domains of practice and capabilities (see Chapter Four), allowed for development of a structural matrix for the initial questionnaire as presented in Table 5.2.

Table 5.2 Matrix for Delphi Questionnaire

ICN criteria	Elements	Data Sources
Regulation requirements	Linkage to other frameworks Definitions of specialist nursing	Document analysis Literature review
Resources requirements	Definition of specialty area	Literature review
Clinical practice requirements presented using two overarching conceptual frameworks	The Nursing Council of New Zealand domains of practice: • *Management of nursing care within specialty area* • *Interprofessional health care & quality improvement* • *Professional responsibility* • *Interpersonal relationships* *(Nursing Council of New Zealand, 2005).* Capability framework (Fraser & Greenhalgh, 2001): • *Take effective and appropriate action within unfamiliar and changing circumstances* • *Make sound judgments in the face of incomplete information and divergent problems* • *Live and work effectively with others* • *Explain what they are about* • *Enquiring approach.*	Literature review Document analysis Key stakeholder interviews

Statements were developed to seek feedback from participants in terms of rating levels of agreement and ranking statements to identify levels of importance. Achieving adequate response rates and tracking participant engagement is a key issue for the Delphi. Zoomerang™ (online questionnaire software) was chosen as a technology for data collection as this enabled ease of survey design, automated data collation and analysis tools (Duffy, 2002).

The design of the questionnaire began with taking the key elements identified in Phase One and asking participants to rate their level of agreement in the first round of expert panel consultation. One element was structured as a ranking choice, as the aim was to develop a consensus definition of specialist practice from those already in the literature in Phase One. When rating items, a five-scale Likert (from strongly agree to strongly disagree) response was adopted as recommended by Burns & Grove (2005) as the most common and effective. The second round involved taking the elements with highest levels of agreement and asking participants to rank order in level of importance as per the process illustrated in Figure 2. An outline of the Round One questionnaire matrix is provided in Table 4, with the full questionnaire available in Appendix 8.

Table 5.3 Round One Questionnaire Outline

ICN criteria	Topics	Participants response set
Regulation requirements (Two closed questions with open response)	Requirement for linkages to other national and health target frameworks and groups. Definition of specialist nurse practice.	Rate level of agreement with statements. Rank definitions for forced choice.
Resources requirements (Three closed questions with one open response)	Defining legitimate area of specialty using N^3ET criteria. Statements about specialty areas of nursing. Statements about a specialist nurse framework in New Zealand .	Rate level of agreement with statements. Rate level of agreement with statements. Rate level of agreement with statements.
Clinical practice requirements (Three closed questions with three open response)	Four domains of NCNZ (number of capability statements presented). Total = 32 1. Management of nursing care (19) 2. Interprofessional health care and quality improvement (4) 3. Professional responsibility (6) 4. Interpersonal relationships (3)	Rate level of agreement with statements.

6.3.2 Online design considerations

To enhance panel participation the study used a novel distribution medium – electronic mail (email) and online questionnaire termed the "E-Delphi"(Avery et al., 2005). Although there is a possibility that use of email and online technology may reduce the ability of topic experts to participate in the study, this has not proved impossible to overcome (Marsden 2003). The internet questionnaire approach planned for this study provided novelty and engaged interest, although support for online access was available if required for "digital immigrants" who might struggle with the medium (Jones, Murphy, Edwards, & James, 2008; Prensky, 2001).

An important technical consideration when designing online tools is to ensure compatibility with different web browsers (Duffy, 2002; Evans, 2007; Jones et al., 2008). The online questionnaire was therefore piloted in both Microsoft Internet Explorer and Mozilla Firefox – two commonly used browsers. Another technical design issue is navigation complexity, which can be overwhelming for participants if there are too many "clicks" and instructions are not clear. The incidence of poor design in this instance can be monitored by the number of participants who visit the site versus the number that complete the questionnaire. If significantly more visit than complete, then a review of the design is strongly recommended (Duffy, 2002).

Generally, the internet is used for research in three different ways: as a resource locator for information and journals; for the administration of demographic questionnaires to understand the characteristics of internet users, and for empirical investigations using the internet as a data collection tool (Im & Chee, 2003). Nursing research has more recently begun to utilize the investigation potential of the internet, with literature increasing in this area over the last decade (Duffy, 2002; East, Jackson, O'Brien, & Peters, 2008).

The E-Delphi (otherwise known as using the internet as the communication mechanism for the Delphi process) has become more accessible due to the availability of survey software in the last few years. Computer-mediated communication (CMC) either via email or through web-based tools, has been part of the Delphi technique since 1978, although much more common since the 1990s (Turoff & Hiltz, 1995). The combination of Delphi and CMC was strongly supported by Turoff and Hiltz (1995), with their view that the "merger of Delphi and Computer Mediated Communications potentially offers far more than the sum of the two methods".

There are both advantages and disadvantages to using online systems for research. The literature outlines the following key advantages:

- asynchronous in time and place – this fits well with one of the key elements in the Delphi process (East et al., 2008; Turoff & Hiltz, 1995)
- reduces geographical barriers (Ahern, 2005; Cantrell & Lupinacci, 2007; Duffy, 2002)
- promotes anonymity within group – McKenna (1994) qualified this as "quasi-anonymity" in that the researcher knows the identity of participants
- data analysis support – most software comes with capability in collation and frequency analysis (Duffy, 2002; Jones et al., 2008)
- cost effective – reduced travel cost when undertaking a national survey (Duffy, 2002; East et al., 2008)
- ease of recruitment – email contact (Cantrell & Lupinacci, 2007; Duffy, 2002)
- supports reflective responses – linked to ability to take time to respond and participants may choose to contribute to only that aspect of the problem to which they feel best able to contribute (Ahern, 2005; Cantrell & Lupinacci, 2007; Duffy, 2002).

The disadvantages are fewer but worthy of consideration:

- response rates can be lower than for mail questionnaires (Duffy, 2002; Jones et al., 2008)
- digital immigrants may struggle – both researcher and participants may need support (Duffy, 2002)
- the absence of non-verbal cues in discussion (Cantrell & Lupinacci, 2007)
- potential privacy threat for data from hackers (Duffy, 2002; Jones et al., 2008).

As New Zealand nursing is a relatively small community, the use of a personal touch in supporting good response rates is possible (Jones et al., 2008; McKenna, 1994). The online software enabled follow-up of non-responsiveness (made possible with software tracking). The questionnaire software allows selection of different collector mechanisms, such as personal email (allows tracking of response to web questionnaire) or general email with web link. These techniques however do pose a threat to anonymity, which must be acknowledged and managed by the researcher (Jones et al., 2008; Keeney et al., 2006).

6.3.3 Survey software selection

When choosing survey software the literature suggests that the important questions to ask are:

- what do you want the questionnaire to do?
- what is better practice?
- what does it cost and what do you get? (Ahern, 2005; Cantrell & Lupinacci, 2007; Duffy, 2002).

Having reviewed the different commercial options (more efficient than designing my own website), Zoomerang™ (www.zoomerang.com) was chosen for its range of question types available (Jones et al., 2008) and that surveys could be both imported from Microsoft Word and also exported as PDF or Word documents once designed. To aid with data analysis, export capacity into Microsoft Excel is essential (Duffy, 2002). The software cost was manageable and the functionality in terms of reporting and follow-up processes met requirements. Using commercial software meant that questionnaire design in terms of appearance and structure was relatively straightforward. There are pretested templates for rating and ranking questions and also open-response capability. The tool was customized with personal greeting, appropriate logos and information for participants e.g., the information sheet was linked to an introductory web page also, so that participants could be fully informed prior to taking the questionnaire, and contact details of the principal researcher were provided as hyperlinks at the start and end of the questionnaire

6.3.4 Summary of risk management for Round One

The risks for Round One of the study are presented in Table 5.4 with the plan and actions taken to mitigate.

Table 5.5.4 Risk management summary for Round One

1. ***Risk – Expert panel not considered valid reducing outcome trustworthiness***	
Mitigation plan	Study process
Experts must have specialized knowledge of the subject area (Hsu & Sandford, 2007). Experts must be expanded beyond those personally known to the researcher by" snowballing". Sampling for experts is purposive and transparent. Pragmatically expert panel engagement is influenced by funding (Keeney et al., 2006). Exclusion/Inclusion criteria must be developed (Hsu & Sandford, 2007).	Key stakeholders identified by their public engagement in national discussion around specialist nursing as part of Phase One. All Phase One participants asked to nominate others for recruitment who were then contacted by research assistant. Recruitment was purposive and with consent processes conducted by research assistant. Use of E-Delphi meant geographical barriers were addressed and cost for participants minimized. Inclusion criteria - employed in areas of nurse leadership; previous history of engagement with specialist nursing; access to the internet.
2. ***Risk – Expert panel not responding as no benefit identified for them***	
Mitigation plan	Study process
Personal touch in recruiting from Phase One participants improves chances of return (McKenna, 1994).	All Phase One participants were offered information and left with consent forms regarding their participation in Round Two at the conclusion of their interview. Follow up emails were sent to all Phase One participants with 100% uptake of opportunity. Email was the main form of contact enabling regular updates throughout the process.

Table 5.4 Risk Management Summary for Round One (cont'd)

*3. Risk – **Round One questionnaire is not sufficiently clear, disengaging participants***	
Mitigation plan	Study process
Use of conceptual framework to structure questionnaire(Burns & Grove, 2005).	The International Council of Nurses (ICN) criteria for the orderly development of specialist roles was utilized to structure the questionnaire.
Focus the panel from the start of the process (Keeney et al., 2006).	Use of data from Phase One focused panel on key areas from literature and national context.
Round One questionnaire to be piloted and adapted as needed (Burns & Grove, 2005).	Questionnaire piloted with individuals in similar leadership roles and some minor wording changes made for clarity.

7. Round Two

In the second round, participants were asked to re -rank their agreement with each questionnaire statement, with the opportunity to change their score in view of the group's response. The rankings are summarized and then included again in a repeat version of the questionnaire. At this point if high levels of consensus (as previously determined) are reached, then the process is complete.

8. Approach to Consensus Analysis

The key questions to answer through the Delphi process were: What are the elements identified as essential for a specialist nursing framework in New Zealand? And, what level of agreement is there for the elements identified to form the specialist nursing framework? Consensus analysis is the key process in determining inclusion of elements in to the framework.

Setting the level of importance for consensus-building is an integral step in the Delphi. The level of importance needs to be clearly identified prior to conducting the research study

(Keeney et al., 2006). For this study the level of importance was set at the level of agree or above on the responses from each item. It is important to differentiate between importance (rated highly enough for inclusion in subsequent phases of research) or consensus (Hardy et al., 2004), or put another way, how much the participants agree with the issue or how much they agree with each other (Kenney et al., 2006). The researcher is urged to be mindful of the tendency, through the process of refinement, to induce convergence and to consider the deliberate introduction of ambiguities (Linstone & Turoff, 1975).

The term "agreement" for Delphi takes two forms: the extent to which each respondent agrees with the statement under consideration (typically rated on a numerical or categorical scale), and the extent to which participants agree with each other; the consensus element of these studies (typically assessed by statistical measures of average and dispersion) (Jones & Hunter, 1995). A consensus on beliefs in a defined group over a certain period can best be explained by the existence of a shared knowledge (Tucker, 2003). Consensus in this study is therefore context bound (in terms of time and persons) and an indication of shared knowledge and agreement about specialist practice.

Consensus percentage is varied in the literature, and this is one of the key criticisms of the Delphi (Hardy et al., 2004; Keeney et al., 2006) reinforcing the need for strong rationales to be given for whatever levels are chosen. Studies have often set consensus at 75% – given the widespread interest in the topic and level of general agreement regarding the key elements from the Phase One participants, I felt a consensus of 80% was justified in Round One, to synthesize a number of clear statements.

After each round the data is analyzed against the two parameters for agreement, with those reaching the threshold of 80% forming part of the next iteration of the Delphi questionnaire. For the second round of the Delphi, the consensus level was set higher, at 90%, in order to distil the "most consensual" elements for the specialist nurse framework. Increasing the levels of consensus between rounds fits well with the metaphor of funnelling and distilling consensus, through the iterative structure (Donohoe & Needham, 2009).

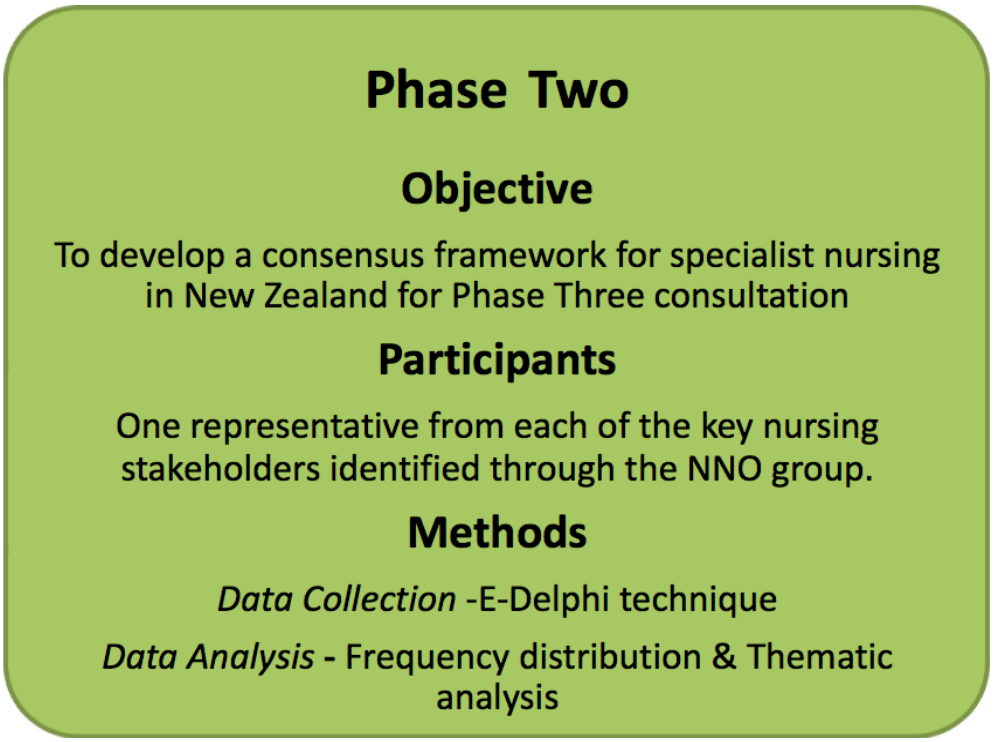
The scale on which experts expressed their opinion in the study, was assumed to be an ordinal scale. There are some instances when Likert scales are viewed as interval scales when considered as continuous measures with an underlying interval continuum – this is an area of current debate in the literature (Burns & Grove, 2005; Greatorex & Dexter, 2000; Jamieson,

2004; Pell, 2005; Wood & Ross-Kerr, 2006). Measures of central tendency for the ordinal level are the median, and the measure of variance is the range (Wood & Ross-Kerr, 2006) and this is what is presented here.

Being mostly quantitative in nature, data from the online questionnaire was analyzed using ranking or rating techniques. Subsequent rounds indicated to participants the level of agreement and dispersion of scores from the previous round. A means of showing the dispersion of scores was important, as a bi-modal distribution would have demonstrated a lack of consensus that might otherwise be hidden (Powell, 2003). The opportunity to revise previous scores in light of the group responses is an important element in the move towards consensus outcome of the Delphi (Powell, 2003). Once identified, the consensus elements were used to construct a draft framework for testing in Phase Three of the study.
This chapter has covered the background and rationale for the selection of the Delphi technique as the primary tool to answer the research question and develop a framework for specialist nursing in New Zealand. The implications for the use of the online medium to collect data have been discussed and the process for identifying consensus within the Delphi technique detailed.

Chapter Six details the outcomes of the Delphi technique as the second part of Phase Two, culminating in the development of a draft framework for validation in Phase Three of this study.

Chapter 6 : Phase Two – Part Two



This chapter continues discussion of the largest component of the study (Phase Two), in which the Delphi technique was used to develop consensus on the elements for a specialist nursing framework. This chapter is presented in two sections with Section A detailing the analysis and outcomes of the consensus-building processes. Section B covers detail of the methods used in the final development of a draft framework for specialist nursing in New Zealand. The key considerations and overall limitations of Phase Two of the study are discussed.

Section A: Phase Two Outcomes

The outcomes are presented in Rounds, and with the structure of the ICN three criteria for orderly development of specialty practice that framed the questionnaire. These criteria relate to requirements for regulation, resources and clinical practice as detailed previously.

1. Round One

1.1 Response rates

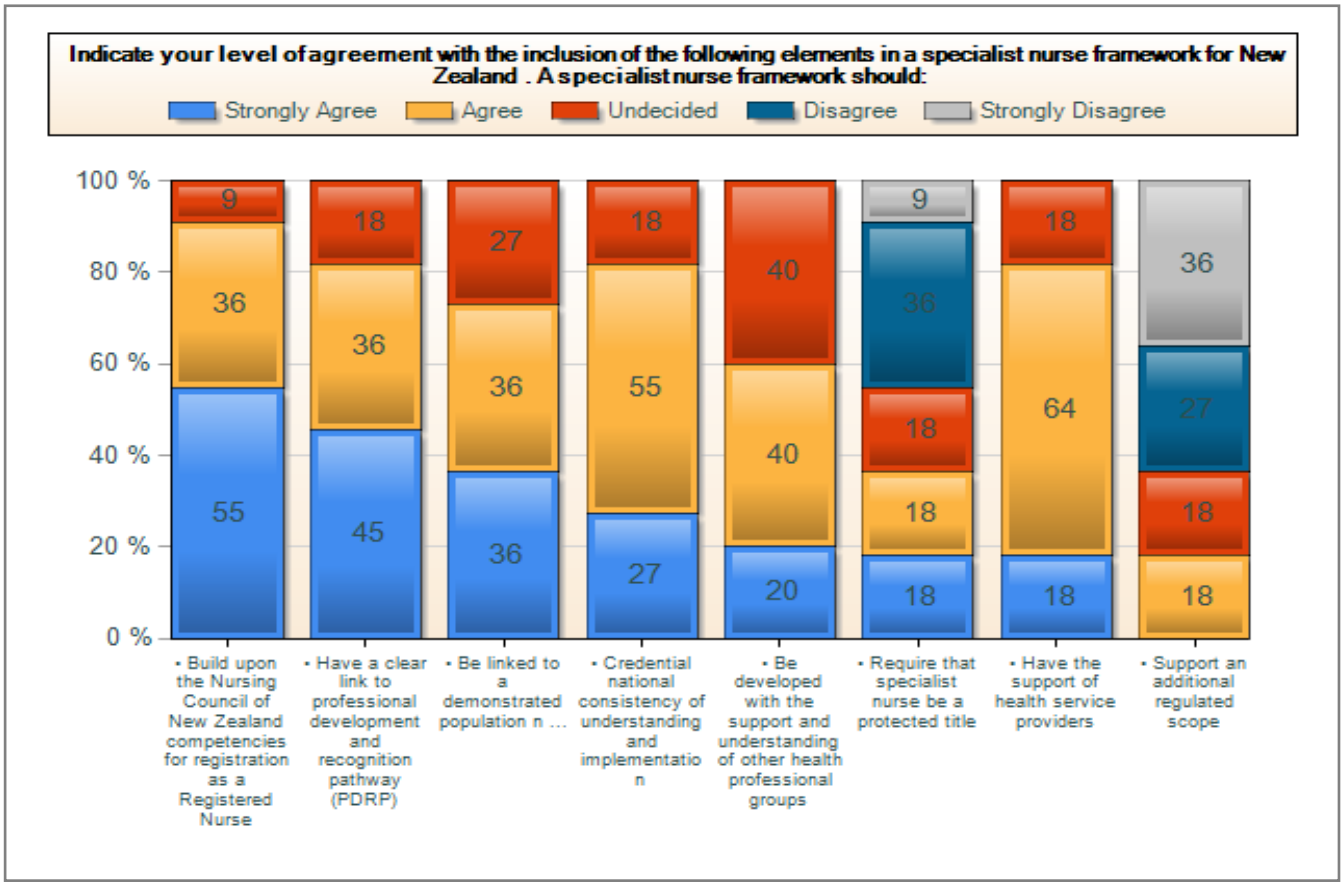
Generally, the literature indicates that response rates for online surveys are less than those of postal surveys (Duffy, 2002). This however is strongly mitigated by a specific and personal approach (Jones et al., 2008), as was the situation with this research. Of the 15 participants invited to respond, 11 completed the round one questionnaire. The response rates for Round One were calculated as a 78.5% participation response rate, and an overall 73% response rate. The participation percentage is calculated by dividing the number of people who submitted a completed survey (n=11) by the number who visited the website (n=14), and multiplying that number by 100 (Duffy, 2002). A large differential between those that visited and those that participated would suggest significant design concerns. The more traditional measure of the response percentage is calculated by dividing the number that responded (n=11) out of those that were invited (n=15), and multiplying that number by 100. As the number who visited was only slightly more than those who participated, there were assumed to be no serious concerns over the design requiring correction (Duffy, 2002).

1.2 Findings

All results are presented as bar graphs (generated from the Zoomerang™ software program) with the percentage of responses in each of the five Likert categories (strongly agree to strongly disagree). For the rating questions (all but one in Round One), the level of importance was set at agree and strongly agree for inclusion into the Round two questionnaire, and consensus was set at 80%. Therefore only those elements that reached the threshold of 80% of responses in agree or strongly agree, were considered consensus elements. Analysis of the initial consensus statements from Phase One is presented in table form in the following presentation of findings. For the sole-ranked question, a different form of analysis (as detailed in question three findings) was undertaken. The open-response data was analysed and where further elements emerged, these are indicated in the findings for that section and were subsequently incorporated into the Round Two Questionnaire.

1.2.1 Regulation responses

Question 1 Essential framework relationships



For each element the Level of Agreement [LOA] (sum for those who either agreed or strongly agreed), was calculated and determination was made of those that met the consensus threshold percentage of 80%. Although the response sets in this question ranged from strongly disagree to strongly agree, there was a marked skewing, with the mode being agree. The elements that initially met the LOA and consensus threshold in relation to a specialist nurse framework are presented in Table 6.1:

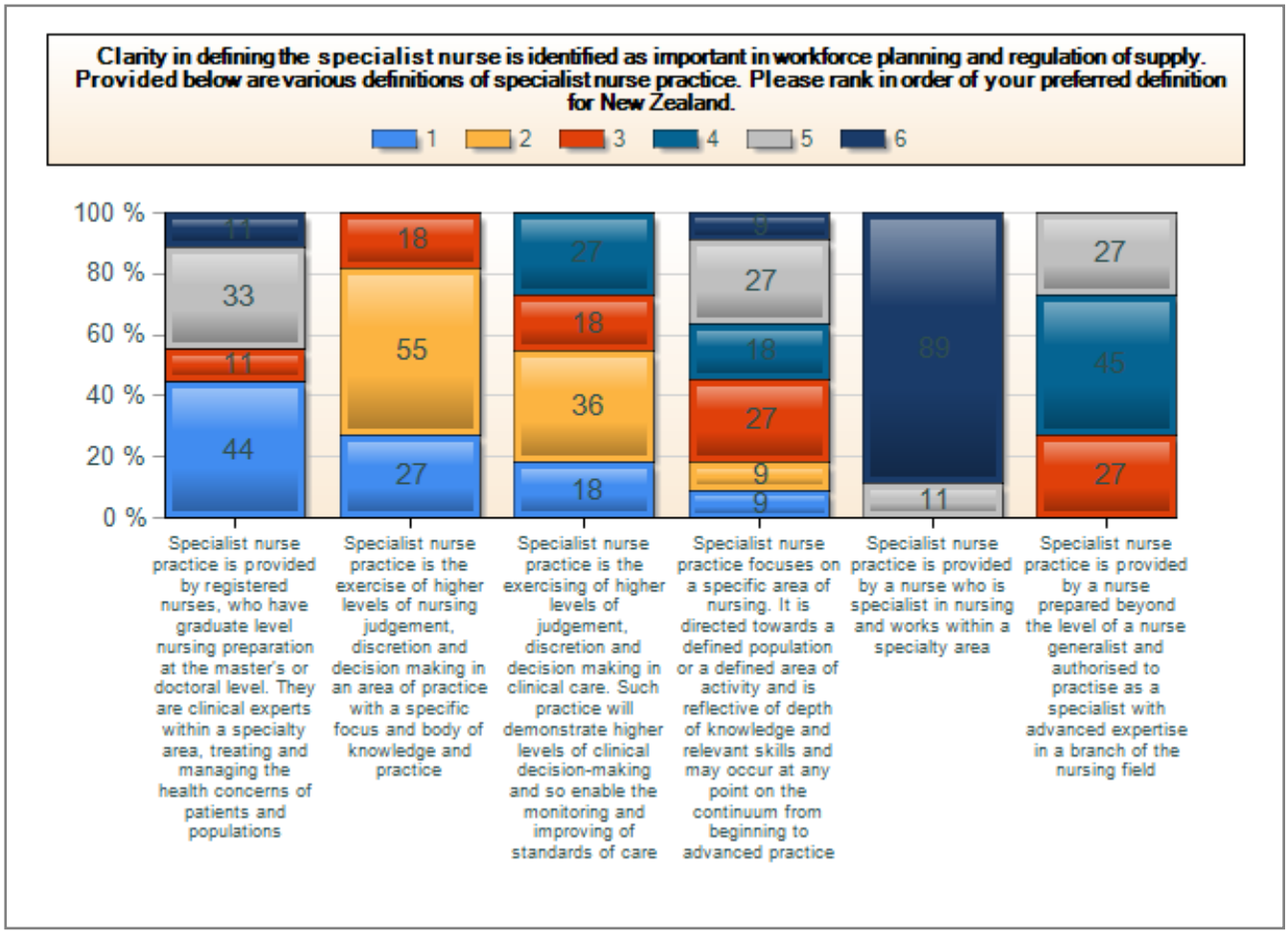
Table 6.1 Initial consensus elements

Consensus elements	Level of consensus
Build upon the Nursing Council of New Zealand competencies for registration as an RN.	91%
Credential national consistency of understanding and implementation.	82%
Have the support of health service providers.	82%
Have a clear link to professional development and recognition pathway (PDRP).	81%

Question 2 Participant Comments

The same question set was presented again to participants in Round Two, as there were no additional elements proposed by participants in the open-response data, rather positive commentary on the stated elements.

Question 3 Defining Specialist Nurse Practice for New Zealand



As this was the only ranking question in Round One, a different form of analysis was undertaken. The responses were analysed by transforming the ranks into scores using a well-established electoral vote system. The Borda count voting system allows ranks to be transformed into scores to ascertain a "winner" (Unwin & Shoumitro, 2008). The Borda count voting system is currently one of the most frequently used social-choice procedures because it allows for the consideration of multiple options other than plurality voting, which determines only the highest-ranked items, rather than all the potential choices (Unwin & Shoumitro, 2008). Each member of the expert panel ranked all of the elements presented in this question. Top ranks received a score of *n-1*, where n=*6,* the total number of options presented for a specific element. Second-place ranks received *n-2* points and the last place rank received zero points.

The points were totalled to provide a Borda count score for each element in order to rank the elements in order of importance. The final score is presented as a percentage of the highest potential Borda count score (if all participants indicated that element to be first ranked) to indicate the level of concordance. To ascertain the support indicated by participants placing the element in their top three, each is also presented as a percentage of scores in the top three rankings for that specific element. Strong support was determined to be indicated by over half of the participants ranking an element in their top three.

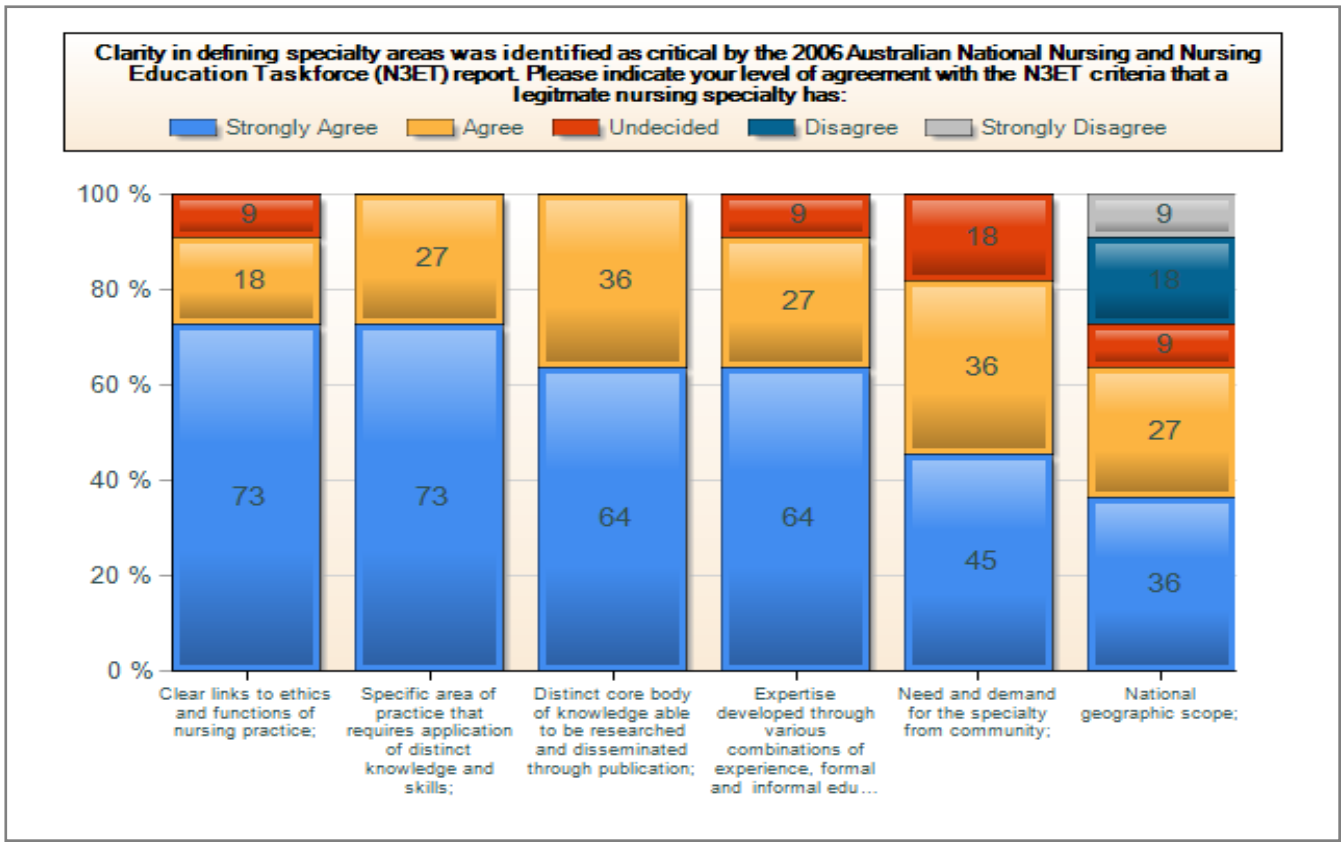
It is evident that the first three ranked definitions were more popular than the others, meeting the criteria for strong support by having more than 50% of votes recorded in the top three. The first ranked definition was significantly more popular, with 100% of participants ranking it within their top three and the achievement of 82% of the highest possible Borda count score. The limited spread of scoring across the other elements is indicated by the reduced percentage of the potential total scores. The most unpopular definition is significant in all measures, with 91% of participants ranking this last or not at all and was removed from Round Two of the questionnaire.

Table 6.2 Definition of specialist nursing practice

Rank (Borda count score)	**Definitions**	**% of highest possible score *n*=55**	**% of participants ranking in top three**
1st (45)	Specialist nurse practice focuses on a specific area of nursing. It is directed towards a defined population or a defined area of activity and is reflective of depth of knowledge and relevant skills and may occur at any point on the continuum from beginning to advanced practice.	82	100
2nd (38)	Specialist nurse practice is provided by registered nurses, who have graduate-level nursing preparation at the master's or doctoral level. They are clinical experts within a specialty area, treating and managing the health concerns of patients and populations.	69	72
3rd (26)	Specialist nurse practice is the exercise of higher levels of nursing judgment, discretion and decision-making in an area of practice with a specific focus and body of knowledge and practice.	47	55
4th (25)	Specialist nurse practice is the exercising of higher levels of judgment, discretion and decision-making in clinical care. Such practice will demonstrate higher levels of clinical decision-making and so enable the monitoring and improving of standards of care.	45	45
5th (22)	Specialist nurse practice is provided by a nurse prepared beyond the level of a nurse generalist and authorized to practise as a specialist, with advanced expertise in a branch of the nursing field.	40	27
6th (1)	Specialist nurse practice is provided by a nurse who is specialist in nursing and works within a specialty area.	2	0

1.2.2 Resource Planning Requirements

Question 4 Levels of agreement with N^{3}ET criteria for specialty areas of practice

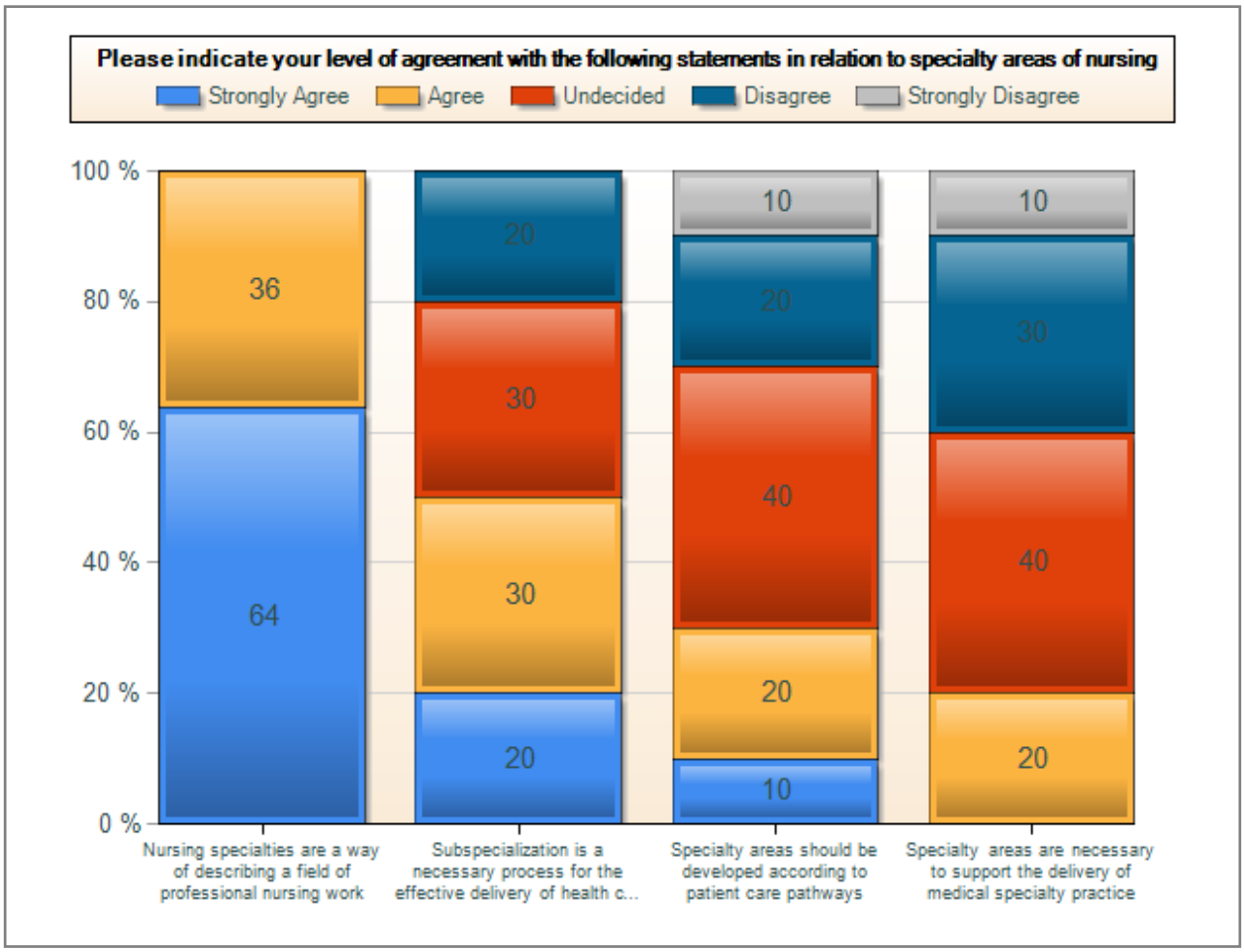


High levels of agreement and consensus are noted within this question, with the exception of the last element regarding national geographic scope. The elements that initially meet the LOA and consensus benchmarks in relation to specialty criteria, are presented in Table 6.3

Table 6.3 Criteria for Specialty

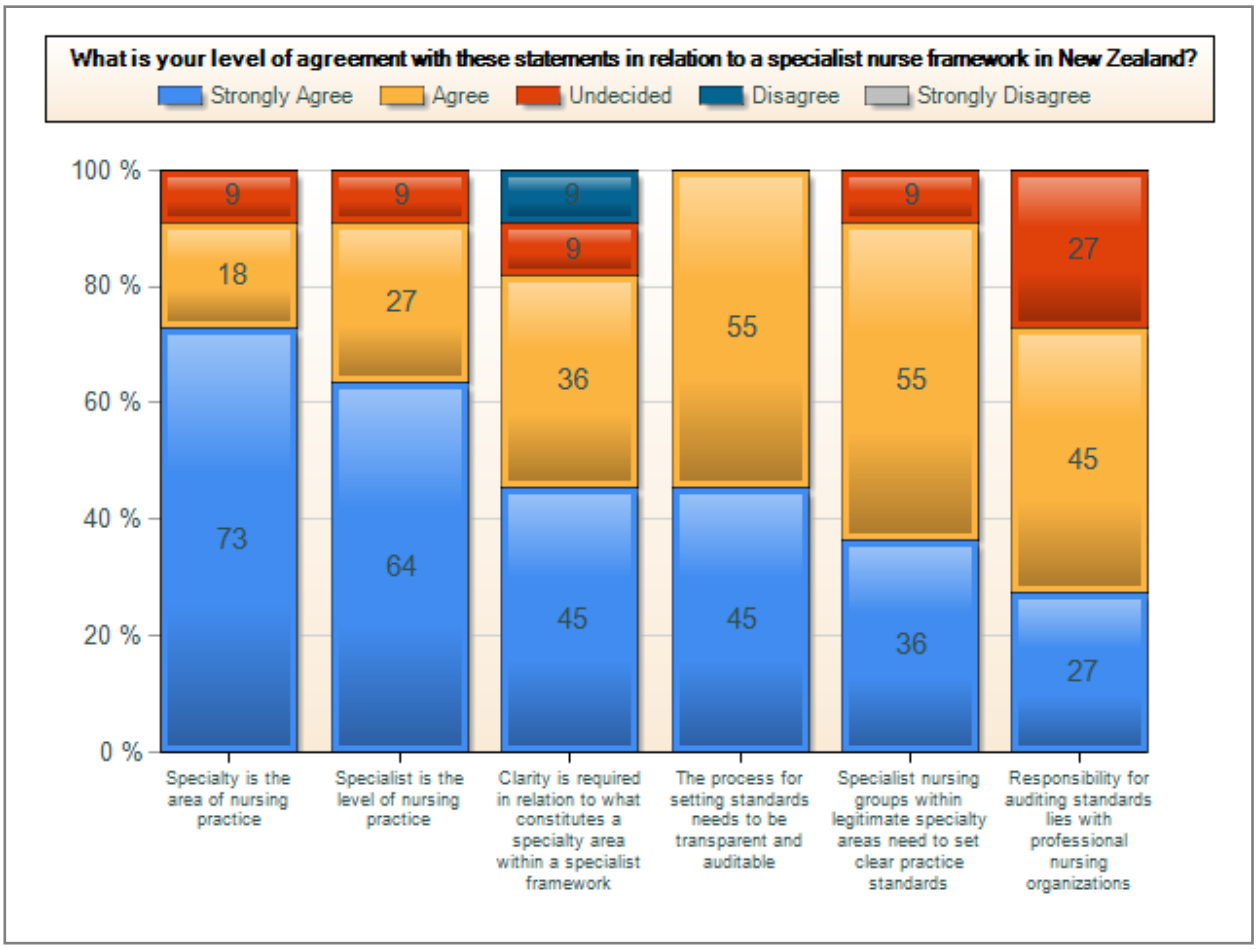
Consensus elements	Level of consensus %
Specific area of practice that requires application of distinct knowledge and skills.	100
Distinct core body of knowledge able to be researched and disseminated through publication.	100
Clear links to ethics and functions of nursing practice.	91
Expertise developed through various combinations of experience, formal and informal education.	91
Need and demand for the specialty from community.	81

Question 5 Specialty areas of nursing statements



Participants had less agreement to these statements about specialty areas of nursing but were quite consistent in disagreeing with the link of these to medical practice. There was only one element that initially meets the LOA and consensus benchmarks in relation to specialty criteria. There was 100% consensus that nursing specialities are a way of describing a field of professional nursing work.

Question 6 Specialist Nurse Framework for New Zealand



There was a high level of agreement with the elements in this question, with only one element not meeting the consensus threshold i.e., *the responsibility for auditing standards lies with the professional nursing organizations*. The elements that did initially meet the LOA and consensus benchmarks in relation to specialist framework are presented in Table 6.4.

Table 6.4 Specialist Framework Conditions

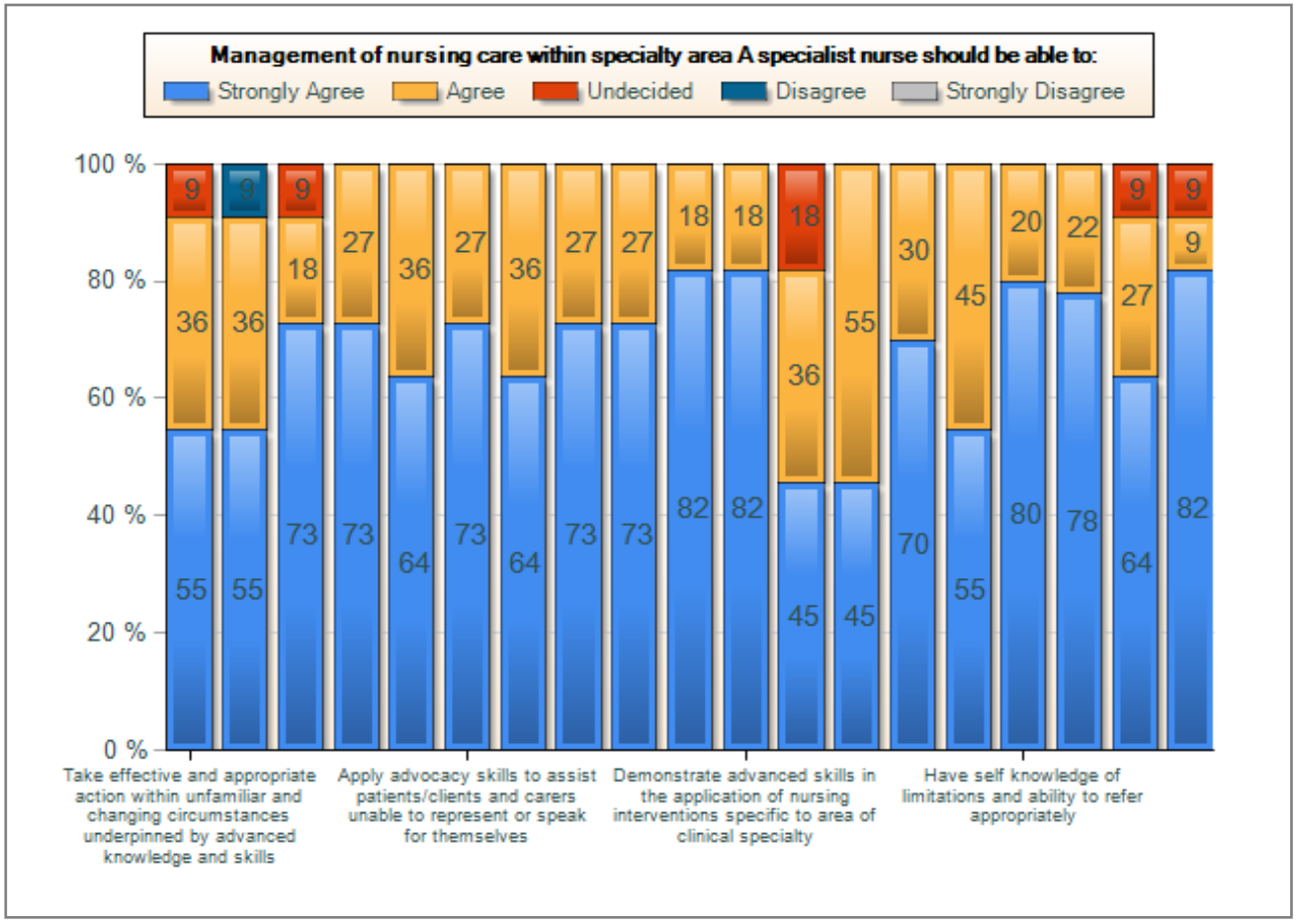
Consensus elements	Level of consensus
The process for setting standards needs to be transparent and auditable.	100%
Specialist nursing groups within legitimate specialty areas need to set clear practice standards.	91%
Specialty is the area of nursing practice.	91%
Specialist is the level of nursing practice.	91%
Clarity is required in relation to what constitutes a specialty area within a specialist framework.	81%

Question 7 Participant comments

No further elements emerged from the open-response data for this section. The provided commentary was support for the clarification of what constituted specialty areas, to avoid a narrowing of practice and reduction in service to consumers. Some discussion was evident about the differentiating of specialist and generalist services – an important concept that will be discussed further later in this chapter.

1.2.3 Clinical Practice Capabilities

Question 8 Management of nursing care as a Nurse Specialist



This section clearly had a very high degree of agreement and consensus, which was problematic in that all elements would have met the threshold for inclusion. A consideration in this section was to reduce the overall number of elements, to make any subsequent model manageable for implementation. Therefore the level of agreement [LOA]was set at strongly agreed only and the consensus lowered to 70%, which is still an acceptable level (Hardy et al., 2004; McKenna, 1994). This resulted in a reduction from 19 to 11 elements. The elements that meet the LOA and consensus thresholds are presented in Table 6.5.

Table 6.5 Management of Nursing Care

Consensus elements (strongly agreed only)	Level of consensus
Implement or delegate and supervise planned expert nursing care to achieve outcomes.	82%
Demonstrate advanced skills in the application of nursing interventions specific to area of clinical specialty.	82%
Demonstrate that practice is individually and professionally situated rather than job referenced.	82%
Have self-knowledge of limitations and ability to refer appropriately.	80%
Demonstrate pattern recognition skills - knows patient group both as a typical case and as individuals.	78%
Act as a resource for individuals, families and communities in coping with changes in health, with disability and with death.	73%
Carry out a relevant and systematic health and nursing assessment utilizing specialist knowledge including performing and/or ordering specialist diagnostic tests and procedures as permitted in the scope of practice.	73%
Accept accountability and responsibility for professional judgment, actions and continued competence in area of specialist practice.	73%
Be able to make links with diverse knowledge bases.	70%
Take an enquiring approach and works their way around problems, rather than accept practices and assumptions as given.	73%
Apply advocacy skills to assist patients/clients and carers unable to represent or speak for themselves.	73%

Question 9 Participant comments

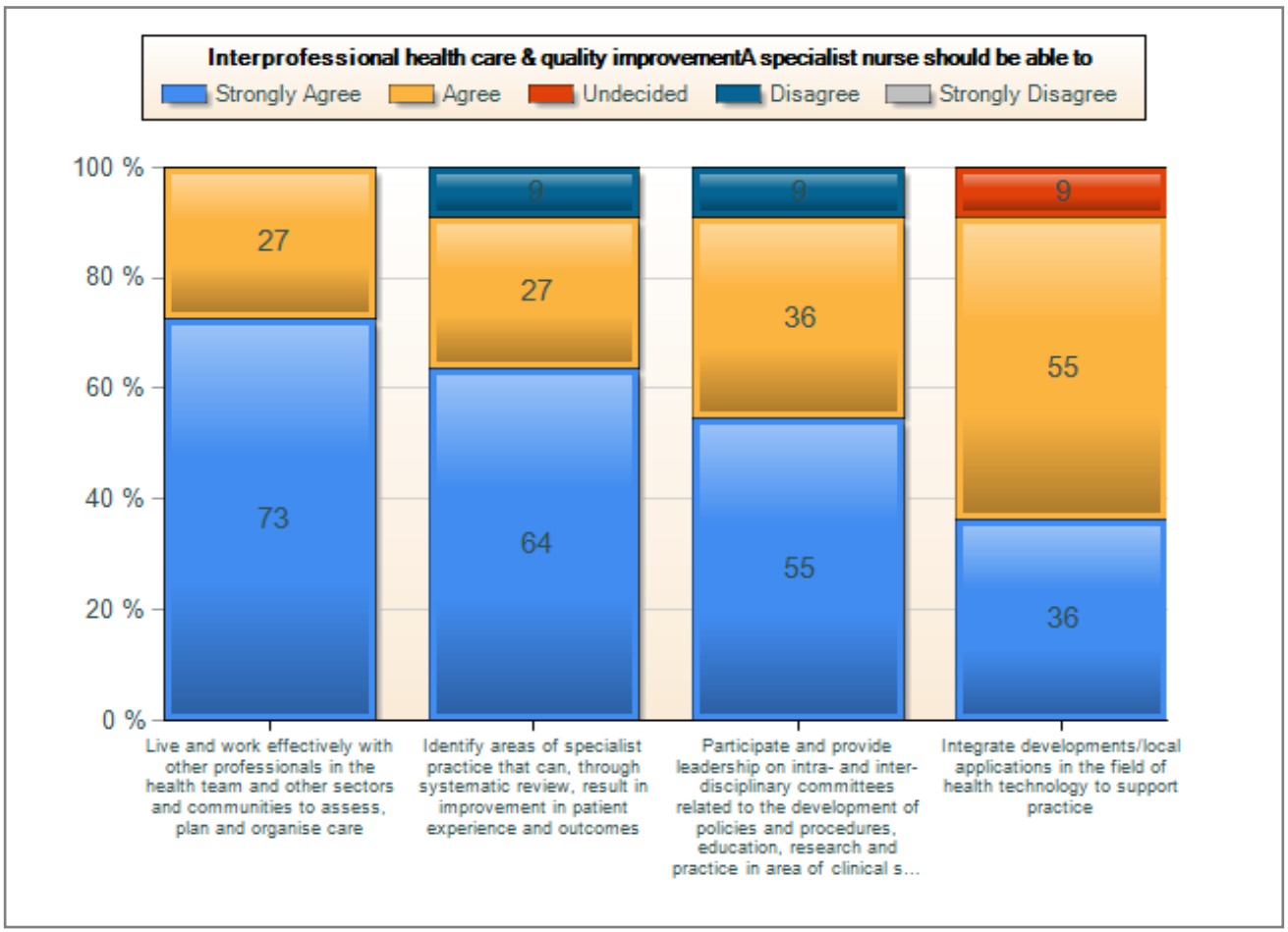
Additional elements from the open-response data in this section were added to the Round Two questionnaire i.e.:

- evidence the process quality and outcomes of their practice in a variety of ways as per the value compass (JACHO)
- capable of flexible and creative response

- able to lead complex care plans within multidisciplinary teams across health and social systems
- act as consultant, clinical case manager for clients with complex needs.

Participants were given the opportunity to comment on any excluded elements from this section in Round Two.

Question 10 Interprofessional health care and quality improvement as a Nurse Specialist

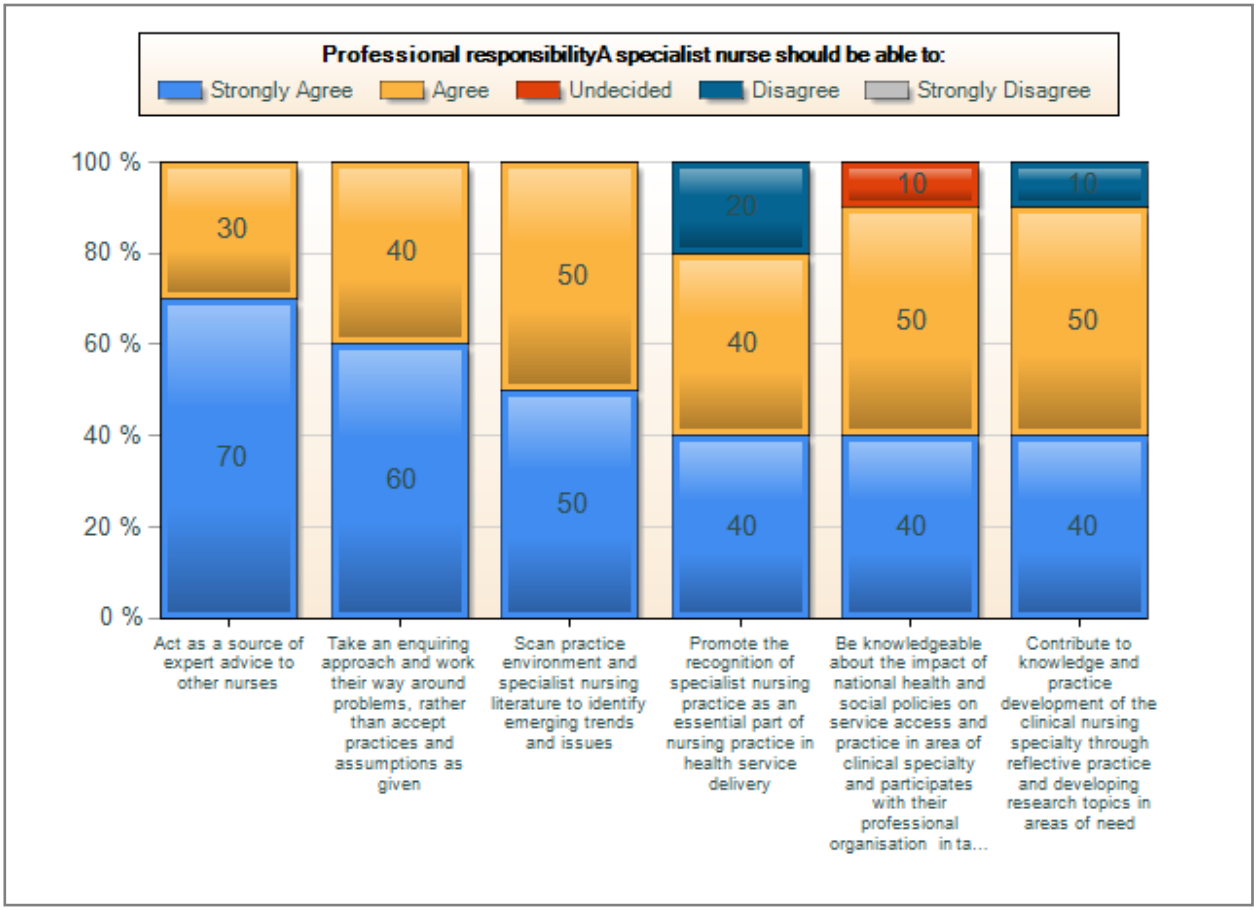


A high level of agreement and the consensus threshold was met, therefore all elements were retained for ranking in the next round. Within this however, there were clearly preferred elements as indicated by the percentages recording strongly agree, and some ambivalence around two of the elements, with one participant disagreeing or undecided for three of the four.

Question 11 Participant comments

No further elements were added from the data in this question.

Question 12 Professional Responsibilities as a Nurse Specialist

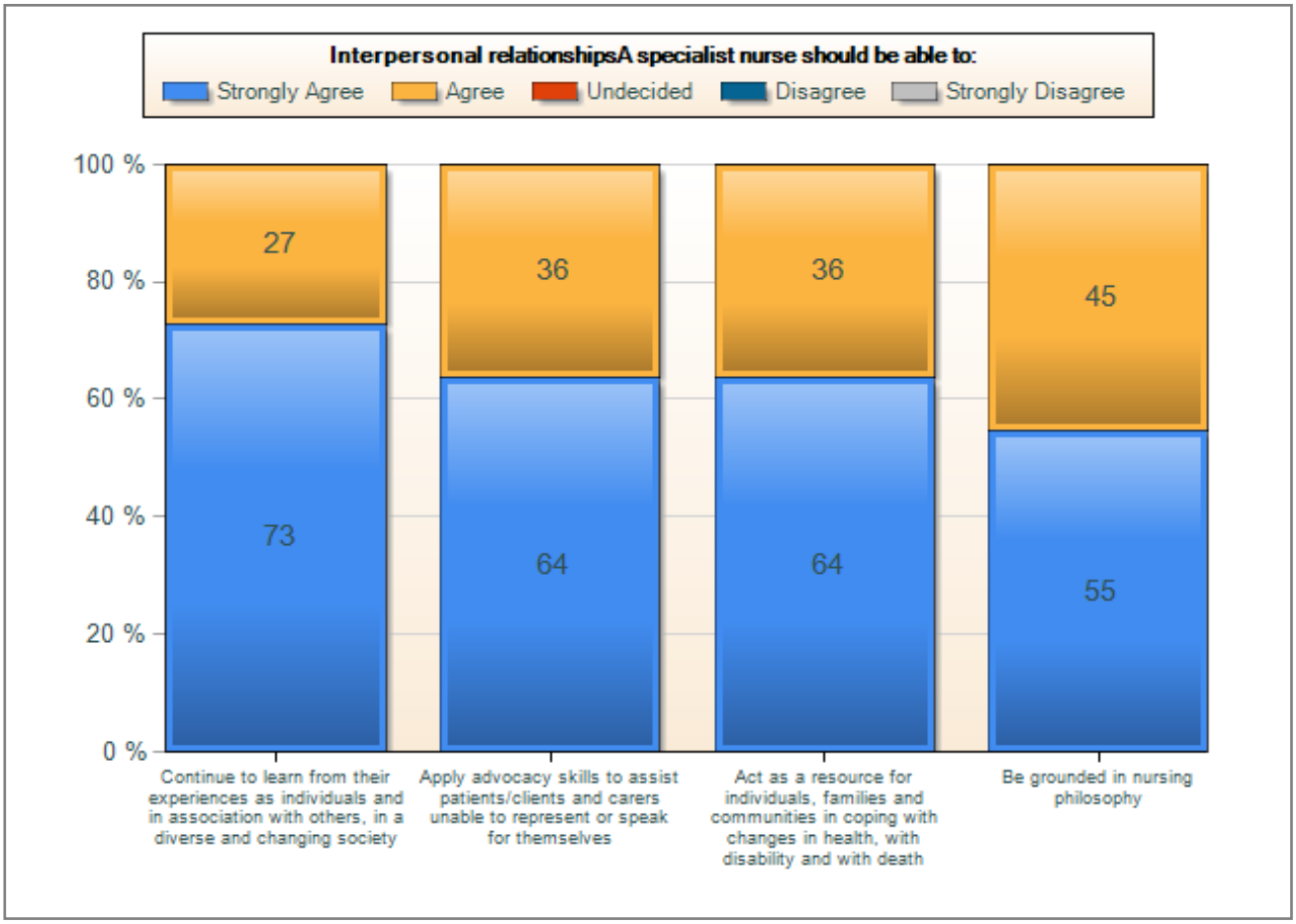


As in the previous question, there was a high level of agreement and the consensus threshold was met, therefore all elements were retained for ranking in the next round.

Question 13 Participant comments

No further elements were added from the data in this question.

Question 14 Interpersonal relationships as a Nurse Specialist



As in previous questions, there was a high level of agreement and the consensus threshold was met, therefore all elements retained for ranking in next round.

Question 15 Participant comments

Commentary provided at this point was minimal and related to a perception of a lack of discriminatory value in the elements in question 14, as these were felt by the participant to be applicable to all registered nurses.

1.3 Completion of Round One Controlled feedback was provided to participants in the form of a document detailing the aggregated responses and their own personal response, as required by the Delphi process (Keeney et al., 2006) along with the following message:

Thank you for completing round one of the Delphi study as part of the expert group – I have provided for you an initial analysis (percentages ranked in descending value) of the group responses, your individual responses and the group comments. There are some really interesting trends and I would ask you to think about your original responses as you again

respond to the seven sections of the survey. Feel free to add any additional comments in the survey as before.

2. Round Two

The questionnaire development for Round Two was informed by the participant responses to Round One. As mentioned, the participants were presented with a report including the Round One data as graphs, and their own responses to consider before being presented with the Round Two questionnaire. The graphs were easy to understand and clarification was offered if they were unsure. This a recognized area of potential misunderstanding by participants, therefore offering support is important (Keeney et al., 2006). The Round Two questionnaire was modified slightly from the Round One tool, to reflect additional elements added into question eight from the open response set data.

2.1 Response rates

Of the eleven participants invited to respond to Round Two, ten completed the round two questionnaire, which was made available for two months to allow for slow responders. Two email reminder rounds were sent out to support completion. This approach was effective as demonstrated by the response rates for Round Two, calculated as a 100% participation response rate and an overall 91% response rate. This pleasing response rate was assisted by the level of personal contact with participants, made easier by the survey software, which allowed targeting of those that had not completed, rather than a blanket approach. The response rates per round and the overall response rates are presented (based on the initial group of 15 invitees and 14 website visitors) in Table 6.6.

Table 6.6 Response Rates

	Participation response % (completed *n*/website visitor *n*) x 100	**Completion response %** (responded *n*/invited *n*)x100
Round One	78.5	73
Round Two	100	91
Overall	71	67

2.2 Findings

The results for Round Two are presented as tabled data for each question, with comparison from Round One data provided where appropriate. As there had been a high level of

agreement, with many of the statements presented in Round One, participants were asked mostly to rank, not rate levels of agreement, with the elements in Round Two. This was to determine the priority of elements for the framework. The level of agreement [LOA] was set at agree and strongly agree and consensus was set at 90% as previously discussed. Therefore only those elements that reached the threshold of 90% of responses in agree or strongly agree were considered consensus elements. Opportunity was provided to participants for open responses within each section as previously, to add further comments.

Participants were asked to rank the statements in order of importance with 1 indicating most important and so on. These scores were then analysed using the Borda Count method as in Round One. The Borda count voting system allows ranks to be transformed into scores to ascertain a "winner" (Unwin & Shoumitro, 2008). Each member of the expert panel ranked all of the elements presented in this question. The ranks were then converted into scores as detailed in the Borda count voting system. Top ranks received a score of *n-1*, where n= the total number of options presented for a specific element. Second-place ranks received *n-1* points and the last place rank received zero points (Cheng & Deek, 2007; Unwin & Shoumitro, 2008). The points were then totalled to provide a total score for each element, along with the percentage of participants that had chosen that ranking.

To support analysis of the Borda Count scores and percentage of support for the inclusion or exclusion of the elements into the draft framework, thresholds were set. Those highly ranked elements that had achieved either 50% of the total potential score or that 50% or greater of participants had ranked in the top three (or both), were considered as essential elements. The results are expressed in table form and presented in descending order, from most to least preferred, with shaded areas indicating those elements that are excluded from draft framework development.

2.2.1 Regulation responses

Table 6.7 Essential Framework Relationships – Round Two

	Consensus%	
	Round One	**Round Two**
Build upon the Nursing Council of New Zealand competencies for registration as an RN.	91	90
Have a clear link to professional development and recognition pathway (PDRP).	81	90
Have the support of health service providers.	82	90
Be linked to a demonstrated population need.	72	80
Credential national consistency of understanding and implementation.	82	80
Require that specialist nurse be a protected title.	36	40
Be developed with the support and understanding of other health professional groups.	60	40
Support an additional regulated scope.	18	20

Three of the four initially identified threshold consensus statements meet the raised consensus level of 90%, whilst retaining the same expectation for level of agreement (i.e. agree or strongly agree). The requirements for a Nurse Specialist framework for New Zealand are that it should:

- build upon the Nursing Council of New Zealand competencies for registration as a RN
- have the support of health service providers
- have a clear link to the national professional development and recognition pathway (PDRP).

Table 6.8 Specialist Nurse Practice Definition – Round Two

Rank (Borda count score)			% of highest possible score *n*=40	% of participants ranking in top three
Round One	**Round Two**			
1st	1st (26)	Specialist nurse practice is the exercise of higher levels of nursing judgment, discretion and decision-making in an area of practice with a specific focus and body of knowledge and practice.	65	90
2nd	2nd (22)	Specialist nurse practice is the exercising of higher levels of judgment, discretion and decision making in clinical care. Such practice will demonstrate higher levels of clinical decision-making and so enable the monitoring and improving of standards of care.	55	77
3rd	3rd (19)	Specialist nurse practice is provided by registered nurses, who have graduate level nursing preparation at the master's or doctoral level. They are clinical experts within a specialty area, treating and managing the health concerns of patients and populations.	47.5	50
4th	4th (16)	Specialist nurse practice focuses on a specific area of nursing. It is directed towards a defined population or a defined area of activity and is reflective of depth of knowledge and relevant skills and may occur at any point on the continuum from beginning to advanced practice.	40	50
5th	5th (15)	Specialist nurse practice is provided by a nurse prepared beyond the level of a nurse generalist and authorized to practise as a specialist with advanced expertise in a branch of the nursing field.	37.5	30

The rankings remained unchanged from Round One, with the definition that had been rated the highest in remaining the highest ranked. The participant's most preferred definition for specialist nurse practice was: *Specialist nurse practice is the exercise of higher levels of nursing judgment, discretion and decision-making in an area of practice with a specific focus and body of knowledge and practice.* This definition was slightly less popular than in round one, with 90% of participants placing it in their top three as opposed to 100% but strong support was evident.

Levels of disagreement are indicated by the bimodal data for the third-ranked definition, which had an even split of 40% ranking it as either first or last, the remaining votes were split between a third or fourth ranking. There were no votes for second place, lowering the overall Borda score accordingly. This illustrates the sensitivity of the Borda Count Score in militating against extremes of voting.

2.2.2 Resource Planning Requirements

Table 6.9 Criteria for Specialty Area – Round two

	Consensus%	
	Round One	**Round One**
Specific area of practice that requires application of distinct knowledge and skills.	100	100
Distinct core body of knowledge able to be researched and disseminated through publication.	100	100
Expertise developed through various combinations of experience, formal and informal education.	91	100
Clear links to ethics and functions of nursing practice.	91	90
Need and demand for the specialty from community.	81	90
National geographic scope	63	70

The consensus on criteria for defining a specialty area was consistent across the rounds, with the national geographic scope being ranked last. Failing to meet the threshold for consensus in either round meant this criterion was absent from the final framework.

Table 6.10 Specialist Statements – Round two

Round One Consensus %		Rank (Borda Count)	% of Highest possible score *n*=30	% of Participants ranking in top three
100	Nursing specialties are a way of describing a field of professional nursing work.	1st (25)	83	100
30	Specialty areas should be developed according to patient care pathways.	2nd (18)	60	100
50	Subspecialisation is a necessary process for the effective delivery of health care.	3rd (7)	23	67
20	Specialty areas are necessary to support the delivery of medical specialty practice.	4th (4)	13	37

The responses to this question were rated in the first round and then ranked in the second. There was a shift in the response to these statements between the rounds. While the highest ranked statement was congruent with its consensus rating in Round One, that which included subspecialisation, had become less popular, whilst the second-ranked element demonstrated strong support. Examining the score for the third-ranked element more closely, revealed that the even spread of support in Round One had become more negative, with over 80% of participants placing it in the bottom two.

Table 6.11 Specialist Nurse Framework Statements – Round Two

	Consensus%	
	Round One	Round Two
The process for setting standards needs to be transparent and auditable.	100	100
Clarity is required in relation to what constitutes a specialty area within a specialist framework .	81	100
Specialty is the area of nursing practice.	91	100
Specialist is the level of nursing practice.	91	90
Specialist nursing groups within legitimate specialty areas need to set clear practice standards.	91	90
Responsibility for auditing standards lies with professional nursing organizations.	72	78

There was significant concordance between rounds in terms of consensus for five of the six elements in this question set. This data provides a strong message for clarity in standard setting and endorsement for the differential between specialist and specialty.. The bottom-rated element was excluded from consideration as an essential element for the framework, owing to the lack of support.

2.2.3 Clinical Practice Capabilities

The four domains of practice from the NCNZ competencies for registration (Nursing Council of New Zealand, 2005) provided a framework for the nurse specialist capabilities section of the questionnaire.

Table 6.12 Management of Nursing Care – Round Two

Rank (Borda Count)		**% of Highest possible score** *n*=80	**% of Participants ranking in top three**
1st (48)	Take an enquiring approach and work their way around problems, rather than accept practices and assumptions as given.	60	62
2nd (43)	Carry out a relevant and systematic health and nursing assessment utilizing specialist knowledge including performing and/or ordering specialist diagnostic tests and procedures as permitted in the scope of practice.	54	50
3rd (39)	Act as a resource for individuals, families and communities in coping with changes in health, with disability and with death.	49	50
4th (38)	Demonstrate advanced skills in the application of nursing interventions specific to area of clinical specialty.	46	43
5th (28)	Have self knowledge of limitations and ability to refer appropriately.	35	37
6th (28)	Implement or delegate and supervise planned expert nursing care to achieve outcomes.	35	25
7th (26)	Apply advocacy skills to assist patients/clients and carers unable to represent or speak for themselves.	33	12
8th (22)	Demonstrate that practice is individually and professionally situated rather than job referenced.	28	12
9th (18)	Demonstrate pattern recognition skills – knows patient group both as a typical case and as individuals.	23	11

Three of the additional elements in Table 6.13 (added in response to feedback from the participants in Round One), were strongly supported by all participants, as either strongly agree or agree. Further analysis of support by strong agreement, allowed ranking as below, with the first two elements equal at 50% in strongly agree and agree.

Table 6.13 Management of Nursing Care – Round Two Additions

	Consensus%
Able to lead complex care plans within multidisciplinary teams across health and social systems.	100
Act as consultant, clinical case manager for clients with complex needs.	100
Capable of flexible and creative response.	100
Evidence the process quality and outcomes of their practice in a variety of ways as per the value compass (JACHO).	78

Table 6.14 Interprofessional Health Care & Quality Improvement – Round Two

Rank (Borda Count)		**% of highest possible score *n*=30**	**% of participants ranking in top three**
1st (18)	Live and work effectively with other professionals in the health team and other sectors and communities to assess, plan and organize care.	60	88
2nd (14)	Participate and provide leadership on intra- and inter-disciplinary committees related to the development of policies and procedures, education, research and practice in area of clinical specialty.	47	55
3rd (14)	Identify areas of specialist practice that can, through systematic review, result in improvement in patient experience and outcomes.	47	100
4th (9)	Integrate developments/local applications in the field of health technology to support practice.	30	60

In Round One data these elements all had high levels of agreement and consensus, the fluctuation in data here is less consistent. The third-ranked item is unique in that no participants ranked it as last, however 50% ranked it as third. Conversely the first-ranked item was ranked as 1st or 2nd by 77% of participants, indicating a significant level of support greater than for the other items.

Table 6.15 Professional Responsibility – Round Two

Rank (Borda Count)		**% of highest possible score *n*=50**	**% of participants ranking in top three**
1st (34)	Take an enquiring approach and work their way around problems, rather than accept practices and assumptions as given.		
2nd (25)	Act as a source of expert advice to other nurses.	50	62
3rd (23)	Contribute to knowledge and practice development of the clinical nursing specialty through reflective practice and developing research topics in areas of need.	46	50
4th (21)	Be knowledgeable about the impact of national health and social policies on service access and practice in area of clinical specialty and participates with their professional organisation in taking action.	42	55
5th (21)	Scan practice environment and specialist nursing literature to identify emerging trends and issues.	42	50
6th (5)	Promote the recognition of specialist nursing practice as an essential part of nursing practice in health service delivery.	10	12

The first and last-ranked items are clearly outliers of this data set, with a degree of agreement across the middle-four items. It is interesting to note that the third-ranked item had a higher score even though fewer participants had placed it in the top three, with the majority of votes

placing fourth and no participants placing last. However, the spread of votes in the fourth item was more even, with two participants ranking it last.

Table 6.16 Interpersonal Relationships – Round Two

Rank (Borda Count)		**% of Highest possible score *n*=30**	**% of participants ranking in top three**
1st (22)	Act as a resource for individuals, families and communities in coping with changes in health, with disability and with death.	73	89
2nd (13)	Continue to learn from their experiences as individuals and in association with others, in a diverse and changing society.	43	75
3rd (10)	Apply advocacy skills to assist patients/clients and carers unable to represent or speak for themselves.	33	100
4th (6)	Be grounded in nursing philosophy.	20	36

This final question set yielded some surprising results, in that the third-ranked item, despite not being ranked first by any participants, still made the threshold of support by being in the top three of greater than 50% of participants. The fourth-ranked item clearly had little support, with five participants ranking it last and may reflect a lack of consensus on the concept of a nursing philosophy. The-first-ranked item had strong support, with only one participant ranking it last and all others ranking it as either first or second.

Section B: Phase Two Outcomes Summary

The Delphi participants were very clear about the need for clarity of language in the nurse specialist framework and to ensure that there was a transparent linkage to extant framework, particularly the professional development and recognition pathway. There was strong support for the framework to be consumer rather than profession-focused.

The final consensus elements from the Delphi study are presented here as a summary structured within the ICN criteria for orderly development of a nursing specialty. These results were sent to participants, along with an offer to provide comment or seek clarification if needed. No further clarification was needed and no additional comments were made by participants.

3. Section One: Regulation requirements

A nurse specialist framework should:

- build upon the Nursing Council of New Zealand competencies for registration as a Registered Nurse
- have a clear link to professional development and recognition pathway (PDRP)
- have the support of health service providers
- credential national consistency of understanding and implementation
- provide clarity in relation to what constitutes a specialty area within a specialist framework.

Specialist nursing groups within legitimate specialty areas need to set clear practice standards, with a transparent and auditable process. Consensus that specialist is the level of nursing practice, whereas specialty is the area of nursing practice.

The most preferred definition for New Zealand of nurse specialist practice was:

> Specialist nurse practice is the exercising of higher levels of judgment, discretion and decision-making in clinical care. Such practice will demonstrate higher levels of clinical decision-making and so enable the monitoring and improving of standards of care.

4. Section Two: Resource planning requirements

Agreed Delphi criteria for legitimate specialty area are that there should be:

- clear links to ethics and functions of nursing practice as nursing specialties are a way of describing a field of professional nursing work
- specific area of practice that requires application of distinct knowledge and skills

- need and demand for the specialty from communities and that specialty areas should be developed according to patient care pathways
- distinct core body of knowledge able to be researched and disseminated through publication
- expertise developed through various combinations of experience, formal and informal education.

5. Section Three: Clinical practice capabilities within the domains of registered nurse practice

5.1 Management of nursing care within specialty area – nurse specialists are able to:

- take an enquiring approach and work their way around problems, rather than accept practices and assumptions as given
- carry out a relevant and systematic health and nursing assessment utilizing specialist knowledge including performing and/or ordering specialist diagnostic tests and procedures as permitted in the scope of practice
- act as consultant, clinical case manager for clients with complex needs
- capable of flexible and creative response
- able to lead complex care plans within multidisciplinary teams across health and social systems.

5.2 Interprofessional health care & quality improvement - nurse specialists are able to:

- live and work effectively with other professionals in the health team and other sectors and communities to assess, plan and organize care
- participate and provide leadership on intra- and inter- disciplinary committees related to the development of policies and procedures, education, research and practice in area of clinical specialty
- identify areas of specialist practice that can, through systematic review, result in improvement in patient experience and outcomes
- integrate developments/local applications in the field of health technology to support practice.

5.3 Professional responsibility - nurse specialists are able to:

- act as a source of expert advice to other nurses
- contribute to knowledge and practice development of the clinical nursing specialty through reflective practice and developing research topics in areas of need
- scan practice environment and specialist nursing literature to identify emerging trends and issues
- be knowledgeable about the impact of national health and social policies on service access and practice in area of clinical specialty and participates with their professional organisation in taking action.

5.4 Interpersonal relationships - nurse specialists are able to:

- act as a resource for individuals, families and communities in coping with changes in health, with disability and with death
- continue to learn from their experiences as individuals and in association with others, in a diverse and changing society
- apply advocacy skills to assist patients/clients and carers unable to represent or speak for themselves.

6. Development of the framework

The consensus elements now required formation into a model incorporating overarching context elements, such as linkage to health care need and connections to other frameworks that could be tested with a specialist group in Phase Three of the study. The linkage to health care need was developed as a further adaptation of the Supportive Care tiered approach from Dr Margaret Fitch in Canada, and initially adapted by Supportive Cancer Care Victoria (2008), which describes four levels of health-care need in terms of population proportion (i.e. All, Many, Some and Few). Connecting these tiers to the nursing titles project, which had clarified the language for nursing roles (New Zealand Nurses Organisation & District Health Boards of New Zealand, 2007) with connections to the professional development and recognition pathway (PDRP), and education frameworks resulted in the model illustrated in Figure 6.1.

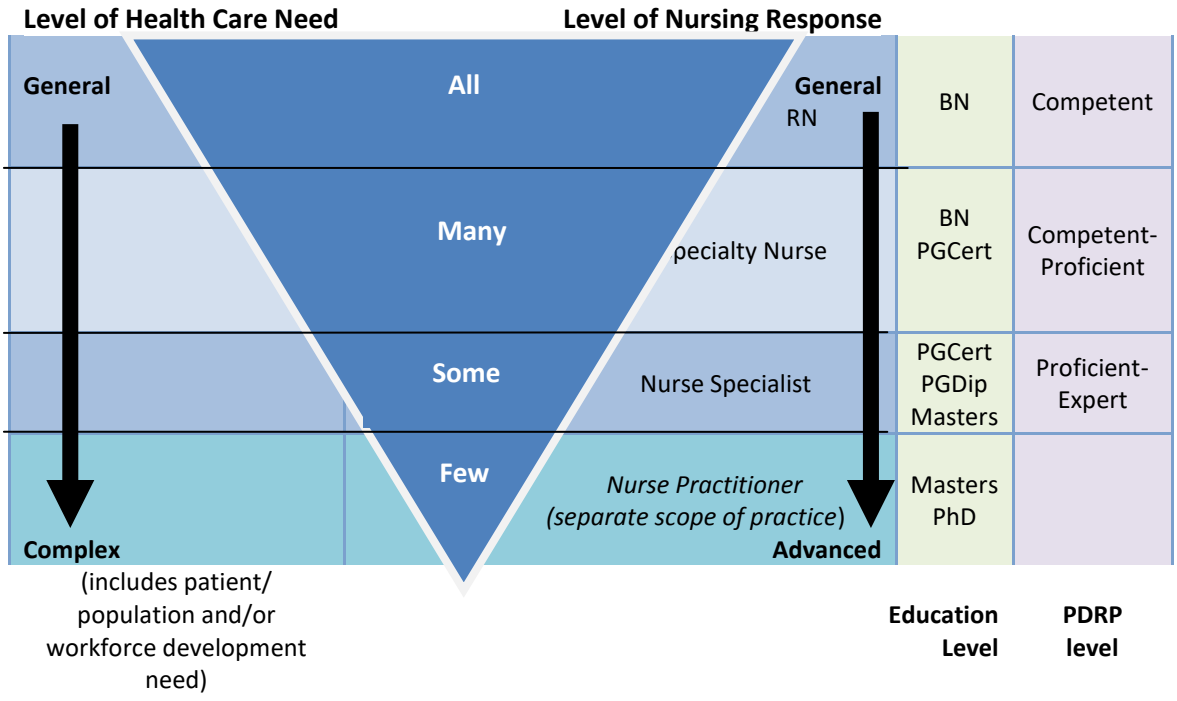


Figure 6.1 Health Care Context Model for Nurse Specialist

As the level of health care need increases from simple to complex there is a corresponding need for more advanced levels of nursing response. The Nurse Practitioner(NP) is acknowledged as the "most expert" of advanced nursing roles, and fits within a separate scope of nursing practice (Nursing Council of New Zealand, 2008a). The NP role is included in this model for completeness in illustrating the nurse specialist as advanced practice within the scope of Registered Nurse (RN). Complexity of care relates to not just clinical intervention complexity for a single individual, but may include increasing complexity of service provision across populations or workforce development leadership requirements.

The education framework is based on the work of the 2003 Expert Advisory Group on Primary Health Care Nursing in determining a framework for professional education for the primary health care nursing workforce (Ministry of Health, 2003a). As a bachelor's degree is the entry level for the profession in New Zealand, it is widely accepted that postregistration education should be at postgraduate level. Advanced thinking as developed by postgraduate education is not perceived as automatically congruent with advanced practice; there are contextual and situated learning issues to consider. The articulation of a formal education pathway does not intend to diminish the value of professional knowledge developed through informal learning

and situated learning, but to clarify the expectations as required of a career pathway or framework (Price, 2001b).

As the registered nurse moves from competent to advanced practice their area of practice may become more focussed in a specific area. This area can be narrow or broad and provides scope for the description of the "specialist generalist" nurse, which has been problematic for areas such as rural nursing. The key requirement is for the area of practice to be a "legitimate" area of specialty as defined by the agreed criteria.

There is a link between the development of nursing practice and the corresponding formal education. The New Zealand Qualifications Authority (NZQA) (www.nzqa.govt.nz) sets out clear descriptors which provide a lens to view the formal educational development of the nurse specialist as presented in Figure 6. Note particularly that the main difference in level eight (or postgraduate) education is the focus on the key principles of a subject area (specialty) within a discipline. The concepts of self direction, research and scholarship fit well with the capability concepts of dealing with complexity. This is in contrast to the more general level seven (baccalaureate) education, which allows for specialisation of knowledge but the main focus is on the discipline knowledge within broad parameters and functions, and a more stable context.

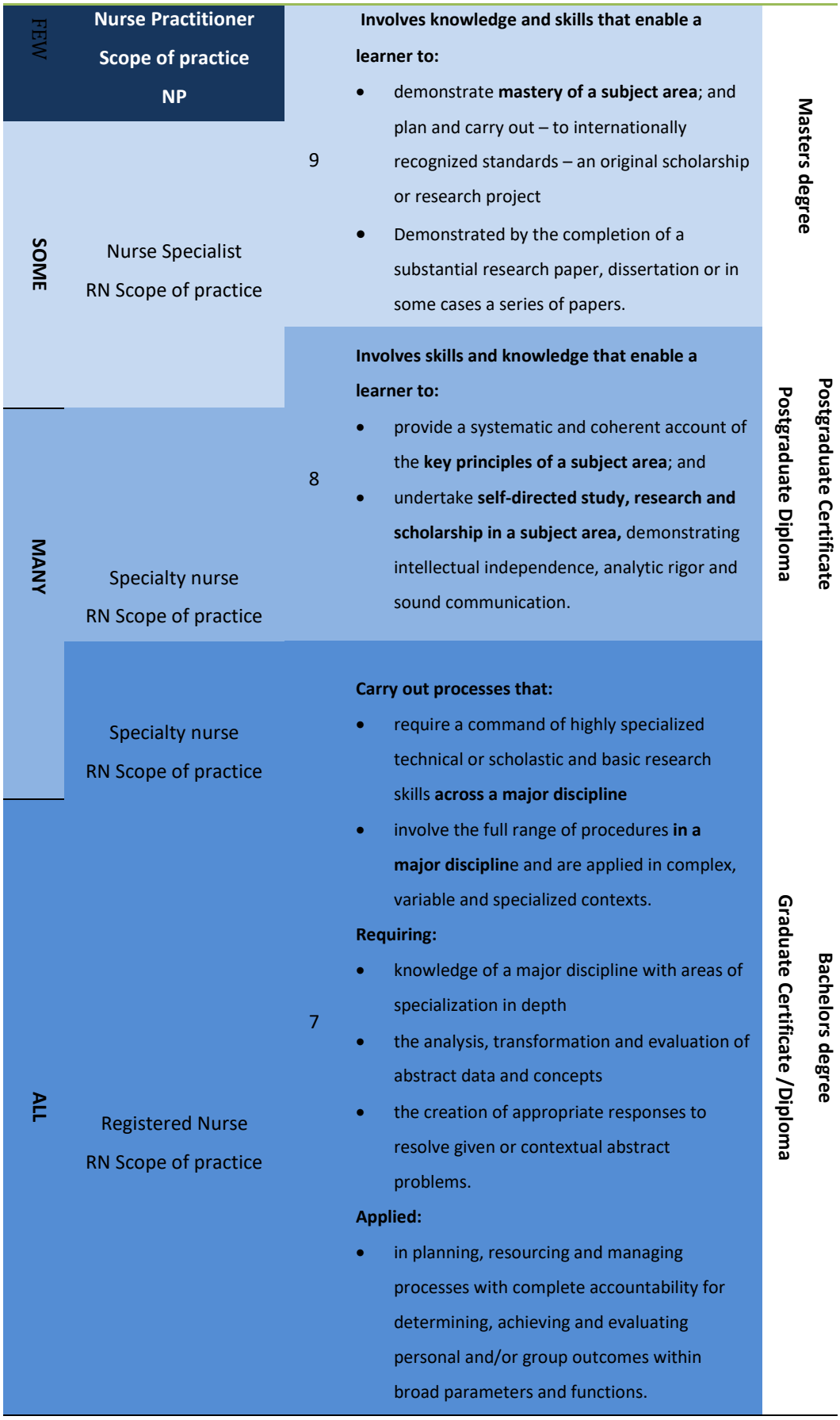


Figure 6.2 Specialist practice development and NZQA levels

The specialist nurse framework model was developed within this overarching context, using key requirements identified by the Delphi participants, as a foundation and role theory, and as an informing conceptual framework. Role theory was used to understand that any role (like that of a nurse specialist) requires that a part or identity be assumed by specific social participants, with expectations held and understood for that role by all participant's including patterned and characteristic behaviours (Biddle & Thomas, 1966). Support for the use of role theory in this way is demonstrated by the work of Brookes, Davidson, Daly, & Halcomb (2007) who applied a symbolic interaction role theory perspective to investigate the community nurse role. Community nurses identified themselves in professional situations through the way that they behaved in the role, the guiding influences of others on their actions, and internal and external views of the role (Brookes et al., 2007). Role theory provides a way of incorporating the wider contextual elements that are needed to develop a sustainable approach to nurse specialist development. Without clarity of role expectations and support from the wider context of health care, potential for the contribution of specialist nursing services to improved patient outcome, is at risk.

Adapting the Machin and Stevenson (1997) role development model for the nurse specialist is congruent with previous applications to describe the role of psychiatric nurses, and is used with permission (personal communication T Machin 2009). The three role elements were combined with the ICN definition of nurse specialist i.e., that the nurse specialist was a nurse prepared beyond (*role adequacy*), the level of a nurse generalist and authorized to practice (*role legitimacy*) as a specialist, and with advanced expertise in a branch of the nursing field (*role support*).

This integration and adaptation of the model elements with the ICN definition of nurse specialist, provides a relevant organising structure for the nurse specialist framework as illustrated in Figure 6.3 and detailed in Table 6.17.

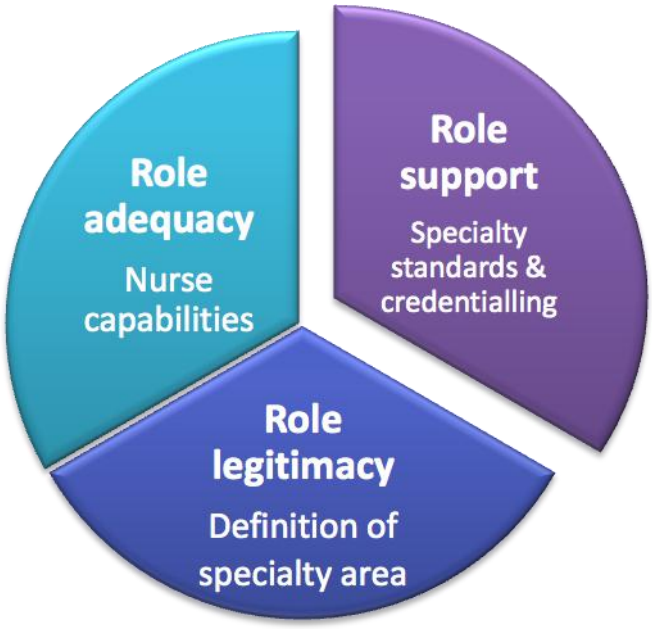


Figure 6.3 New Zealand Nurse Specialist Framework

Table 6.17 Framework Development

Machin & Stevenson (1997)	Components of ICN definition (2009)	Application to Specialist Nurse framework
Role adequacy - minimum level of skill and knowledge	A nurse prepared beyond the level of a nurse generalist.	Capability rather than competency statements. Education framework.
Role support - regulation, policy and standards	Authorized to practice as a specialist with advanced expertise.	Authorisation not regulation. Standard setting and credentialing processes. Linked to PDRP.
Role legitimacy- boundaries of practice	Branch of the nursing field.	Definition of nursing specialty meets set criteria. Links to health care need.

Each of the individual parts of the New Zealand Nurse Specialist Framework (NZNSF) are considered separately but as whole form a framework to support the development of specialist nursing in New Zealand. The NZNSF could be considered as a professional reference

point for nurse specialists in New Zealand. The accountability for the various components is shared across the health care context, with Role Adequacy sitting clearly with the nurse specialist and specialty groups. The capabilities that sit within this aspect of the framework have been developed from the Delphi process as described previously. The role of specialty groups is to define the specific expectations in terms of knowledge and skills for their specialty area.

Role legitimacy will be determined by specialty groups providing evidence that they meet the five criteria, as detailed through the Delphi process. The tool developed for the purpose of document analysis in Phase One, provided a foundation for detail of the evidence needed to meet the New Zealand criteria for a legitimate specialty area.

Role support is a broader view of the role of the nurse specialist, with involvement required from the employers and regulatory authorities, as well as the specialty groups, in recognition that nurses practice within a wider system. This entire framework echoes the LACE Consensus Model for Advanced Practice Registered Nurses (APRN) developed in America by a consensus conference in April 2008. The Licensure, Accreditation, Certification, Education (LACE) model was developed and supported by licensing bodies, accreditors, certifiers that offered APRN certification for regulatory purposes and educational organizations. The LACE consensus model is planned for implementation by 2015 and promises enhanced public protection and improved utilization of this workforce (Stanley, 2009).

Operationalising each of the three parts further will develop the NZNSF into a toolkit for specialist nursing groups. This work will be tested in Phase Three of the study.

7. Key considerations and limitations

The culmination of Phase Two of this study was distillation of key consensus elements from the expert group using an E-Delphi technique. The positive response rates and the quality of expertise shared within this Delphi group, provided confidence in the outcome's relevance to specialist nursing in New Zealand.

The potential limitations of this phase of the study are clearly linked to the quality of expertise in the Delphi group. Whilst anonymity is assured, their expertise is not discoverable to any external reviewers. The final phase of the study is therefore critical to the overall validity of the elements distilled through the Delphi technique.

Consensus, as has been acknowledged previously, is a context-specific indication of shared understanding and thus the application of these elements to other international contexts may be limited. However, the identified resonance of the elements with international literature supports the potential for utility.

8. Concluding remarks

This second phase of the study involved the use of two rounds of the E-Delphi to elucidate expert consensus on the key elements for a specialist framework for New Zealand. Combining these elements using role theory and the 2009 ICN definition of the nurse specialist, culminated in a three-part NZNSF integrating role adequacy, role support and role legitimacy. The following chapter details the testing of the validity of this framework in terms of utility and relevance to specialist nurses in New Zealand.

Reflexivity

A limitation (as well as an extension) of the study is the insider/outsider component, which continues in a spiral action of me influencing and being influenced in national conversations as a nurse leader. A national consortium was formed following a consensus workshop early in the year after the final round of the Delphi study. One of the work streams identified was to consider the place of specialty standard and I was invited to contribute to the group.
I was aware of the competing need to complete my research study and protect the rigor and trustworthiness of the outcome, rather than rush to solutions. Concomitantly, I was concerned that a framework would be developed without my being able to make a contribution, which would negate the outcome of my work. I engaged in frequent conversation with my supervisors about managing this tension. Using a research diary I was able to track my analysis and discussions and so work to raise my awareness of the potential for bias in analysis, and need for development of the framework from only the research data. I challenged myself by considering constantly not only what I knew, but importantly ***how*** *I knew it (Finlay, 2002; Jootun et al., 2009). I developed a timeline of key events so as to overtly track the potential patterns of influence. During this period I deliberately sought opportunities to discuss my work, with the aim of preparing the profession for the framework as evidenced in the timeline. Reflecting back constantly to the data that had emerged from the Delphi as the foundation for the framework, allowed me to examine my decision-making in terms of development of the final framework. There has been some spill over, I believe, in terms of clarifying elements of the final framework for utility in the "real world". This on reflection, has enhanced the framework, but will need to be tested in the final phase of the project, an essential part of this process given my closeness to the framework. Exposing the work to public gaze is an essential part of protecting the research from becoming too inward looking and self –fulfilling.*

Chapter 7 : Phase Three

1. Introduction

This chapter provides detail of the third and final phase of the study, in which the developed framework from Phase Two was tested through an evaluation review process with nurse specialists. Delphi research with the use of purposive sampling and expert consensus, has potential bias in that the outcome reflects the composition of the expert panel. Evaluating and validating the findings of the Delphi consensus process to enhance the credibility of the framework is supported by experienced Delphi researchers (Keeney et al., 2006; Kennedy, 2004; McKenna, 1994). Participants in this phase were encouraged to provide feedback on the experience of operationalising the framework to explore perceptions of resonance or dissonance.

The evaluation and validation process involved one specific specialist group who were offered the opportunity to participate in an online survey evaluating the framework in response to a

request to share information from the study. The process of operationalising the framework culminating in the development of a toolkit for specialty groups using elements from previous phases of the study, is presented in this chapter. The notion of a toolkit has been utilised previously to support the integration of a new model or process, most recently in the United Kingdom with the recently developed website Advanced Nursing Practice Toolkit (www.advancedpractice.scot.nhs.uk).

The use of a specific group of nurse specialists was an adaptation of the original plan to access all specialist nurses by title within a single District Health Board. The rationale and process of this modification was a response to a serendipitous opportunity for a more in-depth evaluation and testing of the framework.

2. Approach to Data Collection

2.1 Participants

The convenience sample of nurse specialists was recruited from one expert advisory group representing nurses working in a particular specialty area throughout New Zealand. Participant eligibility criteria included i) a position title or role that reflected direct involvement in specialty nursing workforce development ii) availability of a computer with email and internet access and iii)not previously part of the study.

Twelve nurses were invited to participate in the online survey. The invited participants were mostly female (n=11) – reflective of the population of registered nurses in New Zealand, which is only 7.5% male (Nursing Council of New Zealand, 2010b). All were experienced nurse specialists in their area of practice and had email and internet access. None of them had been involved in the previous phases of the research and most were unknown to me personally.

Reflexivity

As part of the nursing profession, the social world of study, I was aware there was potential for my position to influence some of the participant responses (Jootun et al., 2009). The increasing attention being directed nationally at clarifying specialty nursing practice areas and specialist nursing services created a sense of urgency for my study. The increased attention was in part due to shifting policy contexts within a new government, and also professional organisations concern to engage in workforce development dialogues that had the potential to change the shape of the profession.. The development of national consortia in 2009 was an initial step in this new focus, sensitising many specialty groups to the need for transparency and demonstrated utility. As part of the NNO group I was careful to moderate my enthusiasm for the concepts I was exploring and allow the space for others to develop lines of inquiry.

Invited attendance at a regular advisory group meeting provided an opportunity to present the NZNSF and work through application to the specific group context. The group was informed about the study and provided with an information sheet similar to that used in Phase Two – see Appendix 1. The information sheet outlined the voluntariness of engagement in the research and anonymity of response, as email addresses would not be associated with the responses. This involved a different distribution technique than that used in Phase Two i.e., the survey was distributed as a link within an email, rather than using the survey software, which allows tracking and targeted reminders. Consent to participation was clarified as being indicated by completion of the online survey.

2.2 Framework development

As a conceptual model, the-three dimensional NZNSF required further detailing, in order for New Zealand nurse specialists to be able to evaluate its utility and relevance. Considering the three role dimensions of adequacy, support and legitimacy individually, a toolkit guide based on the accountabilities was developed to assist application (Appendix 10). A toolkit to support the utility of models is a well-recognized device as demonstrated by the advanced practice toolkit most recently developed by the NHS Education for Scotland, which provides hyperlinked additional material as an online resource. For the NZNSF toolkit each of the dimensions is explored more fully and issues of accountability and context are discussed as outlined in Table 7.1.

Table 7.1 Contexts and Accountability for Framework Dimensions

Context	Role	Accountability
The nurse	Adequacy	Nurse/education/specialty group
The specialty	Legitimacy	Specialty group/professional organisations/employers
The health care system	Support	Specialty group/professional organisations/employers/NCNZ

2.2.1 Role Adequacy

Role adequacy relates the expectations of the nurse specialist practice from the communities they serve and the broader professional heath care context (Machin & Stevenson, 1997; Shuriquie et al., 2007). Fraser and Greenhalgh (2001) in their useful commentary on the increasing complexity of the clinical environment, assert that more capable rather than competent clinicians are needed to manage the zone of complexity. This is the space where there is reduced predictability of task and environment but not yet chaos. The complexity zone is where the nurse specialist is situated as illustrated by Figure 7.1 (adapted from the work of Fraser and Greenhalgh (2001, p. 2).

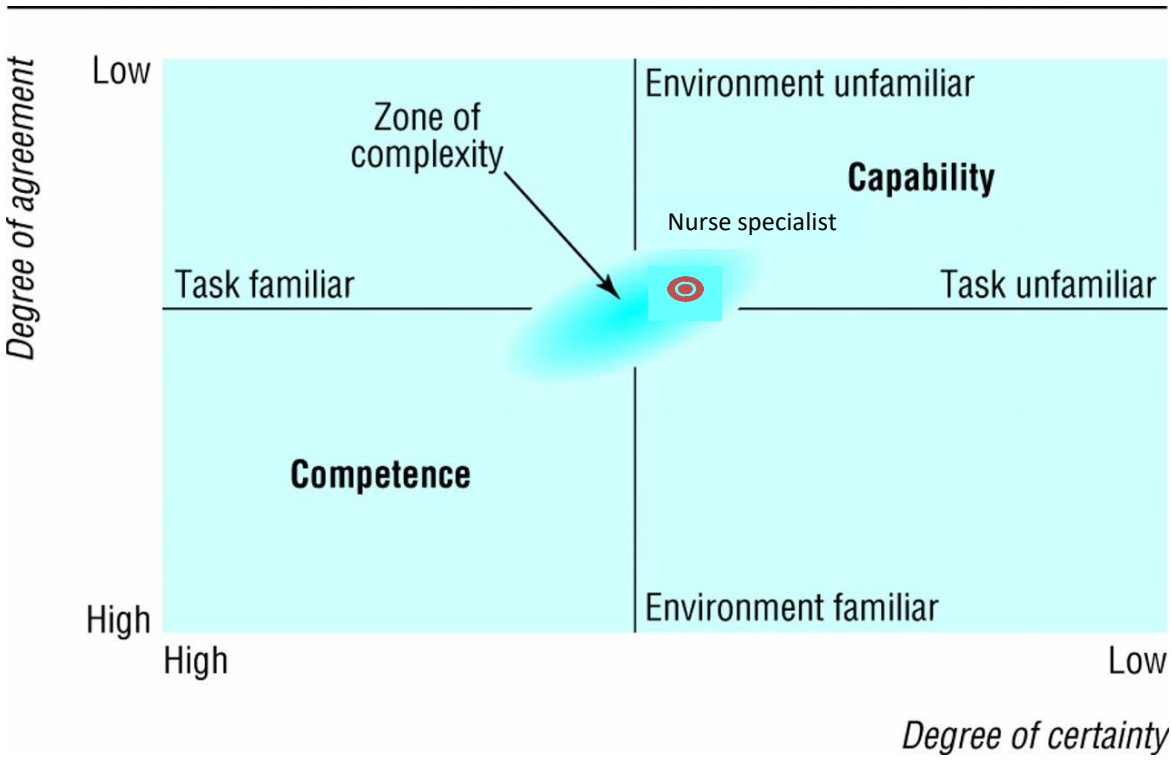


Figure 7.1 Complexity Zone and the Nurse Specialist

The nurse specialist is capable of effectively managing nursing care within uncertain and unfamiliar environments. Thus the nurse specialist is able to go beyond what is standard practice into clinical wisdom, and to take effective and appropriate action within those unfamiliar and changing circumstances – identified as the essence of capability (Stephenson, 1998). Additionally, the nurse specialist is able to recognize when required health care action is outside of the scope of the registered nurse and utilize the NCNZ process for expanded practice (Nursing Council of New Zealand, 2010a).

The adequacy dimension of the NZNSF combines external frameworks such as the Professional Development and Recognition Pathway (PDRP) and registration competencies from NCNZ with concepts of capability, clinical judgment and the tiers of health care need as detailed in Table 7.2.

Table 7.2 Adequacy Dimensional Elements

Concept	Application
NCNZ competencies	Regulatory competencies for nursing registration comprising four domains and 20 competencies (NCNZ, 2007).
Professional Development and Recognition Pathway (PDRP)	PDRP developed by employers or professional organisations to meet regulated continuing competence requirements.
Capability	Capability is individually situated, profession-referenced and demonstrates knowledge/s in use (Eraut, 1994).
Clinical Judgment	Clinical judgment is an interpretation about a patient's needs, and/or the decision to take action (or not), using standard or new approaches as deemed appropriate by the patient's response (Tanner, 2006, p. 204).
Health Care Need Tiers	Based on the work of Victoria Cancer Council – health and well being support needs are classified as being on a continuum (All Many Some Few).

Capability statements were developed from the key elements identified by the Delphi group. There are challenges for the use of capability statements, rather than the more common competencies to articulate the specialist level of practice. Disaggregation of capability into measurable components of fitness **for** purpose risks losing the rich subjective dynamic

expectations of fitness **of** purpose (Lester & Chapman, 2000; O'Reilly, Cunningham, & Lester, 1999). Recognizing the tensions, there appears to be a continuum of approaches to developing capability statements from quite detailed atomistic taxonomies to more mystic general aspirations (O'Reilly et al., 1999).

The two different poles present the registered nurse and the profession with challenges to consider. The atomistic approach generally generates volumes of documentation expectations that create an undesirable burden for colleagues. The mystic approach lacks clarity of expectation for the registered nurse, the employer and the public, increasing inconsistency and undermining workforce planning as previously discussed at length. A middle way developed here is to link the broader generic expectations of "how a nurse specialist will practice" – the professional craft of practice (Hardy et al., 2006) with standards of service delivery and knowledge specific to the specialty. The adequacy statements as in Table 27 therefore include three clinical judgment capability expectations, linked to specialty standards developed by the legitimate specialty groups as a role-support requirement. The more generic "dealing with complexity" section has six capability expectations, making a total of nine. The larger generic group supports the notion of specialist practice being more about the way someone practices, rather than purely the "what they might know". This is promising for increasing flexibility of specialist roles, rather than seeing it as a sub-specialist cul-de-sac.

Table 7.3 Role Adequacy Capabilities

Clinical judgment capabilities (specific and linked to role support):
• Undertake holistic, relevant and systematic nursing assessments utilizing specialist knowledge and skill (as defined by legitimate specialty group) • Demonstrate advanced professional skills specific to area of clinical specialty (as defined by legitimate specialty group) in both clinical judgments and subsequent nursing interventions • Identify and articulate areas of specialist nursing practice that can, through systematic review, result in improvement in client experience and outcomes.
Dealing with complexity capabilities (generic):
• Take an enquiring approach and work around problems, rather than accept practices and assumptions as given, developing flexible and creative responses • Continue to learn from experiences both as an individual and in association with others • Act as consultant, clinical case manager, resource for clients and families with complex needs, and as a source of expert advice to other nurses and health care professionals • Work effectively with other professionals in the health team and other sectors and communities to assess, plan and organize care in complex and unstable contexts • Participate and provide leadership related to the development of policies and procedures, education, research and practice in area of clinical speciality at local and national level • Contribute to further clinical knowledge development in the specialty need area through reflecting on own practice and developing research topics in areas of need.

All adequacy statements are cross-referenced to the NCNZ competencies for the registered nurse to enable easy linkages to PDRP processes, and grouped using the Health Care Tier model as presented in Table 7.4.

Table 7.4 Role adequacy matrix

	Role description	Role adequacy *(level of performance on a continuum)*	PDRP level
All nurses	Will come in contact with people with a specialty need	Demonstrate core competencies of registered nurse practice and routine professional development	Competent
Many nurses	Will participate more frequently or for short intensive periods in the care of people with a specialty need	Confidently manage nursing care (as determined by practice standards) within stable contexts *(Specialty Practice Nurse)*	Competent /Proficient
Some nurses	Will choose to become nurse specialists within the specialty and may be designated in senior roles by employers (*Nurse Specialist)*	**Clinical judgment capabilities** [NCNZ competencies] • Undertake holistic, relevant and systematic nursing assessments utilizing specialist knowledge and skill (as defined by legitimate specialty group) [2.2] • Demonstrate advanced professional skills specific to area of clinical specialty (as defined by legitimate specialty group) in both clinical judgments and subsequent nursing interventions [1.2;2.1] • Identify and articulate areas of specialist nursing practice that can, through systematic review, result in improvement in client experience and outcomes [2.4;4.1;4.2;4.3] **Dealing with complexity capabilities** [NCNZ competencies] • Take an enquiring approach and work around problems, rather than accept practices and assumptions as given, developing flexible and creative responses [1.2;1.3] • Continue to learn from experiences both as an individual and in association with others [2.4;2.5] • Act as consultant, clinical case manager, resource for clients and families with complex needs and as a source of expert advice to other nurses and health care professionals [2.3; 2.4;3.1;3.2;3.3;4.1;4.2] • Work effectively with other professionals in the health team and other sectors and communities to assess, plan and organize care in complex and unstable contexts [2.4;4.1;4.2;4.3] • Participate and provide leadership related to the development of policies and procedures, education, research and practice in area of clinical speciality at local and national level [2.4;4.1;4.2;4.3] • Contribute to further clinical knowledge development in the specialty need area through reflecting on own practice and developing research topics in areas of need [1.1;2.5; 4.3]	Proficient/ Expert

	Role description	Role adequacy *(level of performance on a continuum)*	PDRP level
Few nurses	*(Nurse Practitioner)*	**Advanced NCNZ Competencies** These nurses will build on the capabilities of the specialist nurse through additional experience	

The responsibility for demonstrating adequacy lies with the individual nurse as per New Zealand's regulatory requirements of the Health Practitioner Competency Assurance Act (2003). However, there is a key role for education providers to develop appropriate education programmes to support the development of the capabilities. Employers also have a role in supporting integration of the capability expectations and processes into the appropriate PDRP levels. The legitimate specialty groups have a very significant part in providing role support through the development of specialty standards of practice expectations as is discussed next.

2.2.2 Role Support

Role support concerns authorisation to practice and involves the legitimate specialty group, employers and professional organisations. As registered nurses, there is a foundational expectation that nurse specialists will be aware of the boundaries of their scope as prescribed by the Nursing Council of New Zealand. Where specialist practice appears to be pushing the boundaries of that scope (i.e. expanding) then decision-making frameworks as provided by NCNZ will be used.

The setting of professional standards is work widely recognized as belonging to the legitimate specialty groups (Chiarella et al., 2008; Eraut, 1994; Nursing Council of New Zealand, 2002b, 2007; Styles, 1989; The National Breast Cancer Centre, 2005). Eraut (1994) asserts the importance of transparent methodologies in developing standards (which are professional judgments) in order to support confidence in their uptake. The Australian Coalition of National Nursing Organisations (CoNNO) was invited in 2006 by the N^3ET to lead the development of a set of governance standards for nursing and midwifery organisations. The resulting toolkit provides overarching governance principles that are useful for New Zealand specialty groups and umbrella professional organisations to consider. The seven principles promulgated are accountability, integrity, legality, leadership, stewardship, efficiency and social responsibility (National Nursing Organisations, 2006).

Transparency of standard setting is supported by a shared process that is used consistently by legitimate specialty groups. Knowledge and Skills frameworks (KSF), have become a popular

structure for describing nursing practice standards in specialty areas of practice in the United Kingdom (Trend-UK, 2010), and more recently in New Zealand (personal communication, S Trim November 2010). The KSF defines and describes the knowledge and skills that nurses need to apply to their work, in order to deliver quality services (www.rcn.org.uk) . Both the diabetes and respiratory nurses have adapted the KSF to detail expectations for those specific areas of practice, including levels of nursing care delivery. Using KSF as a framework and integrating additional elements of role support, the following process (see Figure 7.2) is suggested.

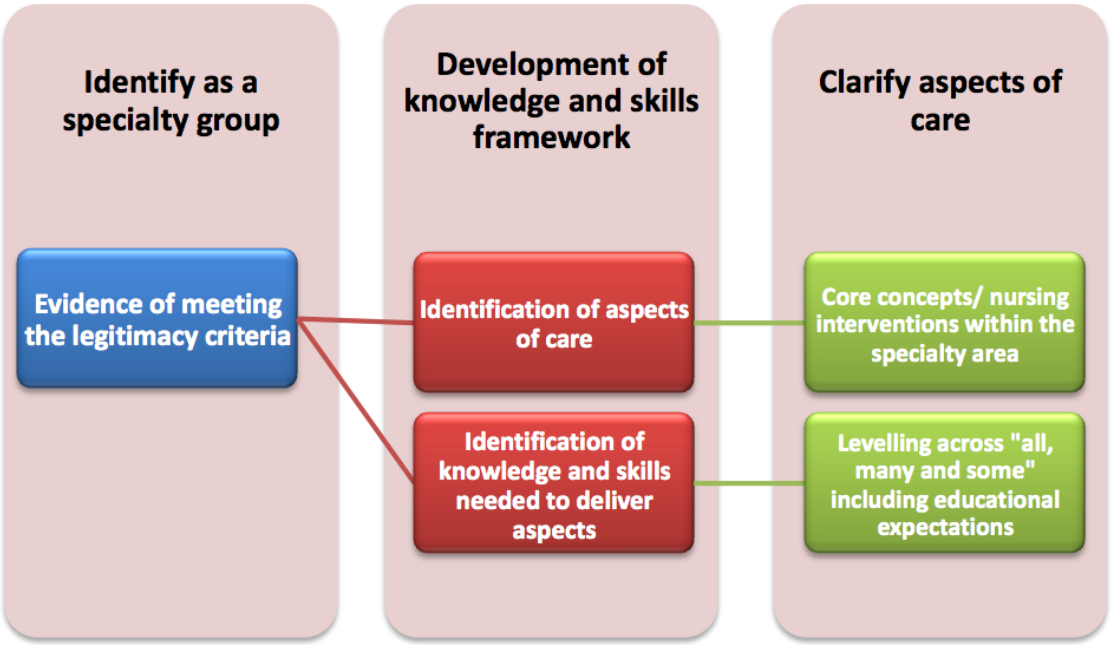


Figure 7.2 Draft process detailing role support for legitimate specialty group

Reflexivity

Nursing practice standards were the original constructions for the role support elements however the increasing uptake over the last 18 months of the Knowledge and Skills framework was noted during national conversations about developing guidelines and workforce development. There is more likelihood of uptake of the framework from this study if there are obvious linkages to extant frameworks as identified in the beginning of the study. Thus the KSF is integrated into this section as a mechanism for articulating expectations of legitimate specialty groups.

This information would not perhaps have been as readily available to me, had I not been in the national conversations in my role as nurse leader in education – the concept of policy entrepreneur is a useful way for me to frame the emic/etic perspectives of this study.

Aspects of care are defined as the core concepts/interventions specific to nursing practice within the specialty area, and should cover elements such as assessment, pathophysiology, interventions, medications, health promotion and context of care. The Health Care Tier model is referred to again in this dimension – creating essential cross-connections, so that each dimension is interdependent of another. That the area of specialty is required to be deemed legitimate by the newly formed consortium of professional organisations, is potentially an important cross-connection (National Consortia consultation document November 2010).

2.2.3 Role Legitimacy

Legitimacy refers to the state of being legitimate and is used here in the sense of conforming with recognized standards (Merriam-Webster, 2008). The recognized standards for a legitimate specialty group were developed from the work of the Australian N^3ET and modified slightly through the Phase Two Delphi from six to five criteria. Operationalising the five criteria for the New Zealand context was built on the documentation analysis rubric used in Phase One. Evidence expectations were then developed, replicating the process as undertaken by the research team for the N^3ET matrix (personal communication, R Ogle, 10 August 2009).
As in the Australian project, for the tool to have utility for New Zealand nurses, the criteria must be deconstructed and concrete evidence examples generated (Ogle, Bethune, King, & Wellman, 2006). Developing a shared understanding of the elements within the five criteria will contribute significantly to the utility of the framework in building a consistent approach. Developing a shared understanding enhances validity and reliability of the assessment process. If understanding is not present then nurses will deconstruct the criteria to make sense of

them. There is a strong threat to validity in this double interpretation process (Holloway & Haggerty, 2003). Table 7.5 presents the New Zealand tool and a worked example is provided in Appendix 9 to illustrate the process.

Table 7.5 New Zealand Legitimacy Criteria and Evidential requirements

NZ Criteria	Evidence expectation
Criterion 1: There are clear links to the ethics and functions of nursing practice	• The speciality identifies that it is for registered nurse practice in a specialized area of nursing – review specialty groups own definitions and frameworks • Evidence is gained by searching for a specialty association/college and courses accessible on the internet, which identifies the unique skills of that particular specialty above those of core nursing and/or midwifery practice for that particular specialty • The speciality is not largely part of the jurisdiction of another specialty. There may be some blurring but essentially the specialty/area is determinable and succinct
Criterion 2: Describes a field of professional nursing work that requires application of distinct knowledge and skills	Evidence of skills and knowledge sets above those of entry to the profession: • Evidence is gained by search for a specialty association/college and courses accessible on the internet, which identifies the unique skills of that particular specialty above those of core nursing and/or midwifery practice for that particular specialty • The speciality is not largely part of the jurisdiction of another specialty. There may be some blurring but essentially the specialty/area is determinable and succinct *Documented advanced competencies that are specialisation specific* • Nationally focused, freely available to the public and associated with a key national specialty group • Evidence of sound governance processes for their development and maintenance

NZ Criteria	Evidence expectation
Criterion 3: There is a need and demand for the specialty from community and it is developed according to patient care pathways	*There is a pool of nurses who practice in the specialty at least 50% of the time:* • Workforce surveys • Membership numbers (annual reports) *There is employment demand:* • Review job ads *Projections include specialty:* • Review national workforce reports *A national scope would be evidenced by numbers of nurses in the specialty working across New Zealand.* *Specialty groups have published standards that link to other frameworks*.
Criterion 4: There is a distinct core body of knowledge able to be research and disseminated through publication	*At least 100 books exist about the specialty (as in Australian tool):* • Search library catalogs and Google books website • Peer reviewed literature exists nationally • Journals exist about the specialty (national or international) *Research undertaken in the specialty:* • Mechanisms exist for supporting, reviewing, and disseminating research • Research grants Conferences national/international
Criterion 5: Requires expertise developed through various combinations of experience, formal and informal education	Postgraduate courses exist nationally Professional development courses Employment linked to mentoring Education in the specialty available

An issue that arose for the Australian group following the 2006 N^{3}ET project was concern from those specialities not deemed to be “legitimate” (personal communication, R Ogle, 10 August 2009). In order to address this concern there needed to be transparency about the contribution that a national framework will make to the health care context in New Zealand.

Considering legitimacy as a key criteria will decrease the number of specialty groups and address many of the current workforce planning concerns (Holloway et al., 2009).

There is potential for groups to feel diminished and marginalized if they do not meet legitimacy criteria. The "common unity" provided by special interest groups provides professional support and networking opportunities particularly internationally, that could over time grow into legitimate specialty areas of practice. The contribution of all specialty groups to patient outcomes could be further clarified by visioning them as a professional community of practice as described by Wenger (2000). Communities of practice are practitioners characterized by a shared domain of interest, with relationships that allow shared learning. Smaller special-interest groups that arise in response to a specific patent, professional or organisational need may be the seeds of innovative care delivery.

2.2.4.1 Evolution of specialty areas

The evolution of specialty groups in advanced nursing as seen by Hamric and colleagues (2009) is useful to consider here. Specialty areas are said to arise in four stages, beginning with innovative practice opportunities in response to change in care delivery technology complexity, which results in some additional training. Stage Two is where organized education programmes begin to be developed and literature may begin to appear on the role of the nurse in the specialty. Stage Three involves pressure for standardization with core curricula, or literature around nurses in the specialty and some credentialing expectations. The final stage is of maturity and growing interdisciplinarity, where nurses are acknowledged as experts within the specialty and collaboration is accepted (Hamric et al., 2009).

Smaller groups could situate themselves within a larger framework as they develop. The five patient pathways as developed in the United Kingdom to structure postregistration career pathways, provide interesting potential (Department of Health, 2008). Patient pathways in this model are defined as groups of patients with similar health care needs owing to their conditions, their continuum of need, and the types of nursing interventions required. Alternatively, the N^3ET work in Australia developed 10 skill domains as an overarching framework for specialty development (Ogle et al., 2006). After removing the non-direct nursing practice areas of midwifery and knowledge acquisition and dissemination from the Australian model, the two potential frameworks are compared (matched where able) with a potential pathway framework for further testing in New Zealand identified in Table 7.6.

Table 7.6 Specialty macro area mapping

Australian Skills Domains (Ogle et al., 2006)	**United Kingdom Patient Pathways (Department of Health, 2008)**	**Potential NZ pathways *Occurs across the primary to tertiary interface***	***Comments***
Primary Care	First contact, access and urgent care	Primary health care	*Includes population, public health and health promotion.*
Paediatric Care	Children, families and public health	Children and family, young person's care	
Care of the Older Person	Long-term care	Older persons care	
Mental Health Care	Mental health and psychosocial care	Mental health and addictions care	
Time Critical Care	Acute and critical care	Acute and critical care	*Includes emergency, acute medical and perioperative care.*
Perioperative Care			
Acute and Supportive Care	First contact, access and urgent care.	Long-term conditions and supportive care.	

Patient pathways for New Zealand are yet to be refined through further consultation; however linking to them was a consensus statement from Phase Two of the research. Having assembled the components of the model, the testing needed to begin, for as the traditional saying indicates "The proof of the pudding is in the eating."

2.3 Process for data collection

Online survey software (as used in Phase Two) was used to create the questionnaire for data collection. Participants were asked to rank their level of agreement using a five-scale response from strongly agree to strongly disagree, with the elements of the framework. They were then asked to rate the usefulness of the framework to them personally and professionally. Open response fields were also provided for participants to add any additional comments on the framework.

2.4 Approach to data analysis

The Zoomerang survey software allowed for collection of all data in an exportable spreadsheet format for analysis of frequency distribution and manifest content analysis, as was appropriate for this level of data (Burns & Grove, 2005). Quantitative data was analysed for frequency scores of response in order to determine levels of agreement and disagreement with the framework and perceptions of usefulness (Burns & Grove, 2005). The qualitative data from open response fields was analysed for themes individually and across the respondents (Burns & Grove, 2005).

3. Phase Three Outcomes

3.1 Response rates

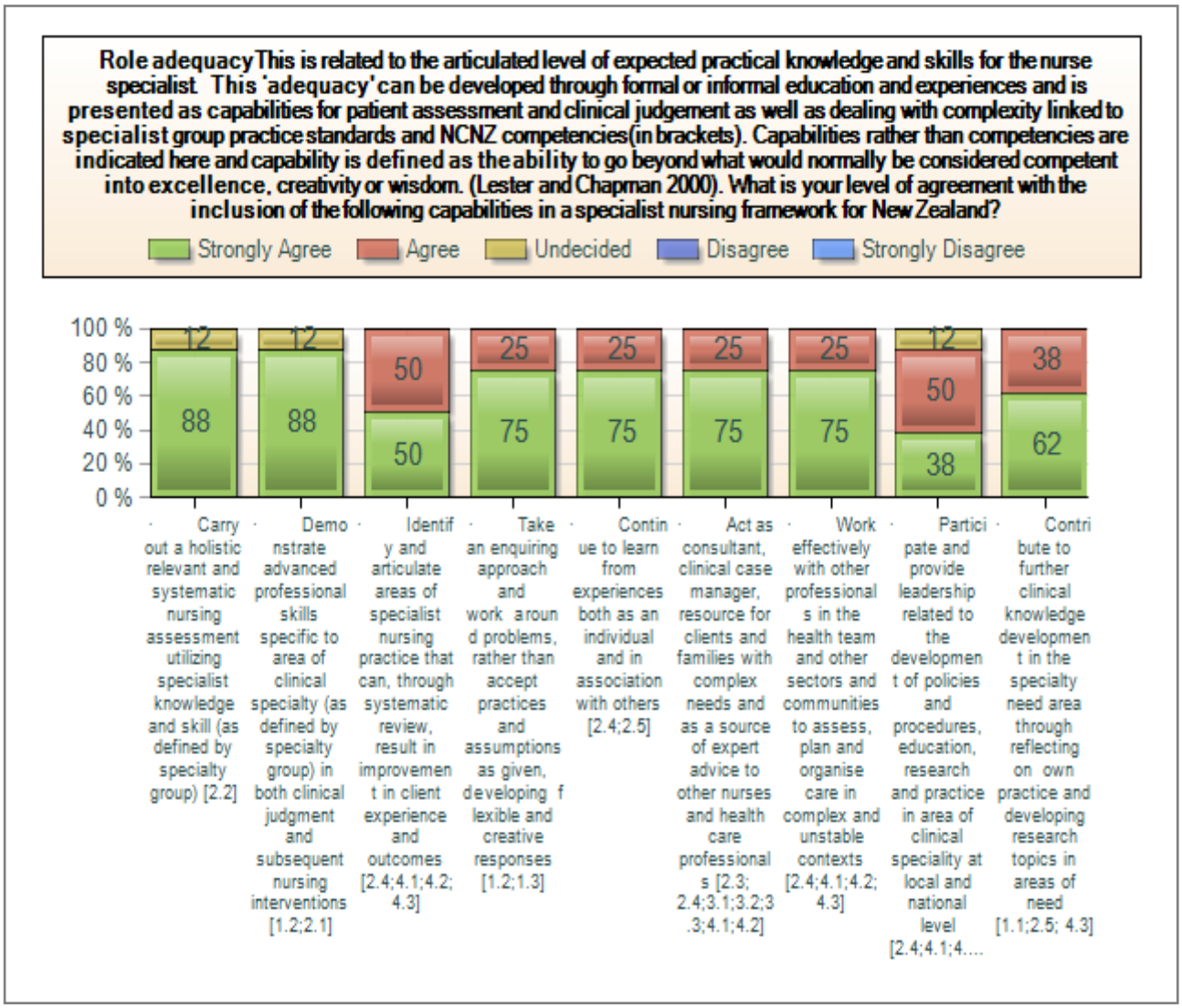
Twelve nurses were invited to participate in the online survey and eight (n=8) completed the online questionnaire – a response rate of 67%. Due to prior commitments, the twelve that were issued invitations to participate did not all attend the workshop – those attending numbered eight. The fact that the other four did not attend could have adversely affected their desire to participate. The participation rate (calculated as in Phase Two) was 60% owing to multiple visits by some participants. Although all participants met the inclusion criteria of access to the internet, two contacted me to clarify the process of completing the website survey as they had difficulty. As no identifying data was collected for this phase of the study, it is unknown which of the 12 participants completed the survey.

3.2 Findings

All results are presented as bar graphs (generated from the Zoomerang^{TM} software program) with the percentage of responses in each of the five Likert categories (strongly agree to strongly disagree). Quotes from the open response sets are included (*in italics*) to support the

discussion. The findings are presented in relation to the three role development dimensions of the NZNSF model.

3.2.1 Role Adequacy



Eight of the nine capability statements enjoyed a high degree of support from participants, with rankings of 50 to 88 percent strongly agreeing with them. The outlier was the capability relating to leadership with comment made by one participant about the challenges of providing leadership for too small a group:

> *Leadership is often hard to provide at a national level if the specialty consists of a small group of nurses, probably should include regional level also.*

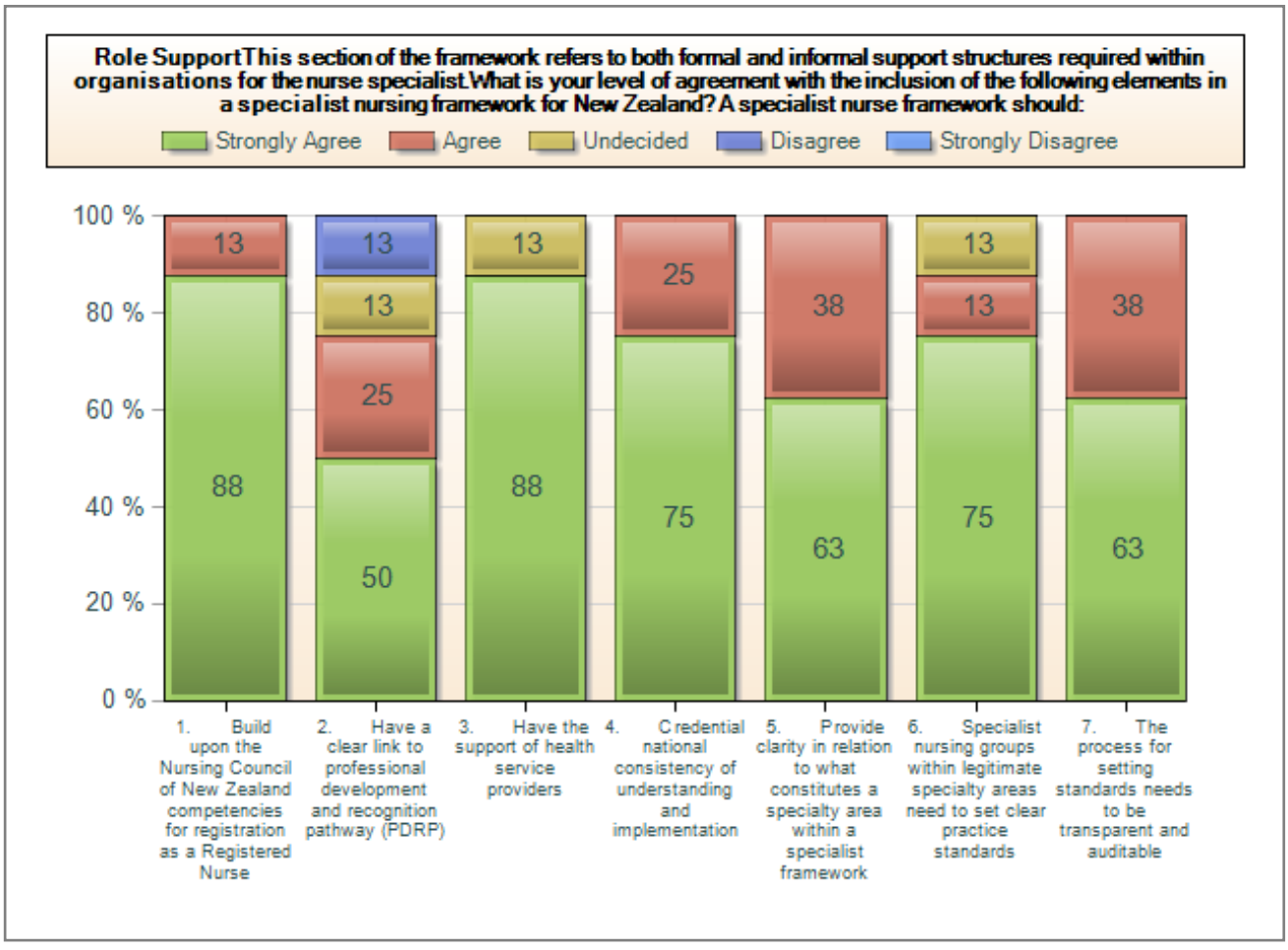
Even so the overall approval ratings for this element (agree and strongly agree) was 88% therefore this capability statement remained.

The final question in the online survey relates to the participants perceptions of usefulness of the framework. They were asked to rate the framework on a three-point Likert scale as very useful, slightly useful or not useful at all. One hundred percent of the group rated the framework as very useful for assisting the employers to understand the role (role support) with an additional comment that the framework:

> *Is very concise and has clear definitions of what is expected of a specialist nurse. As I was reading through it I kept saying to myself I do that.*

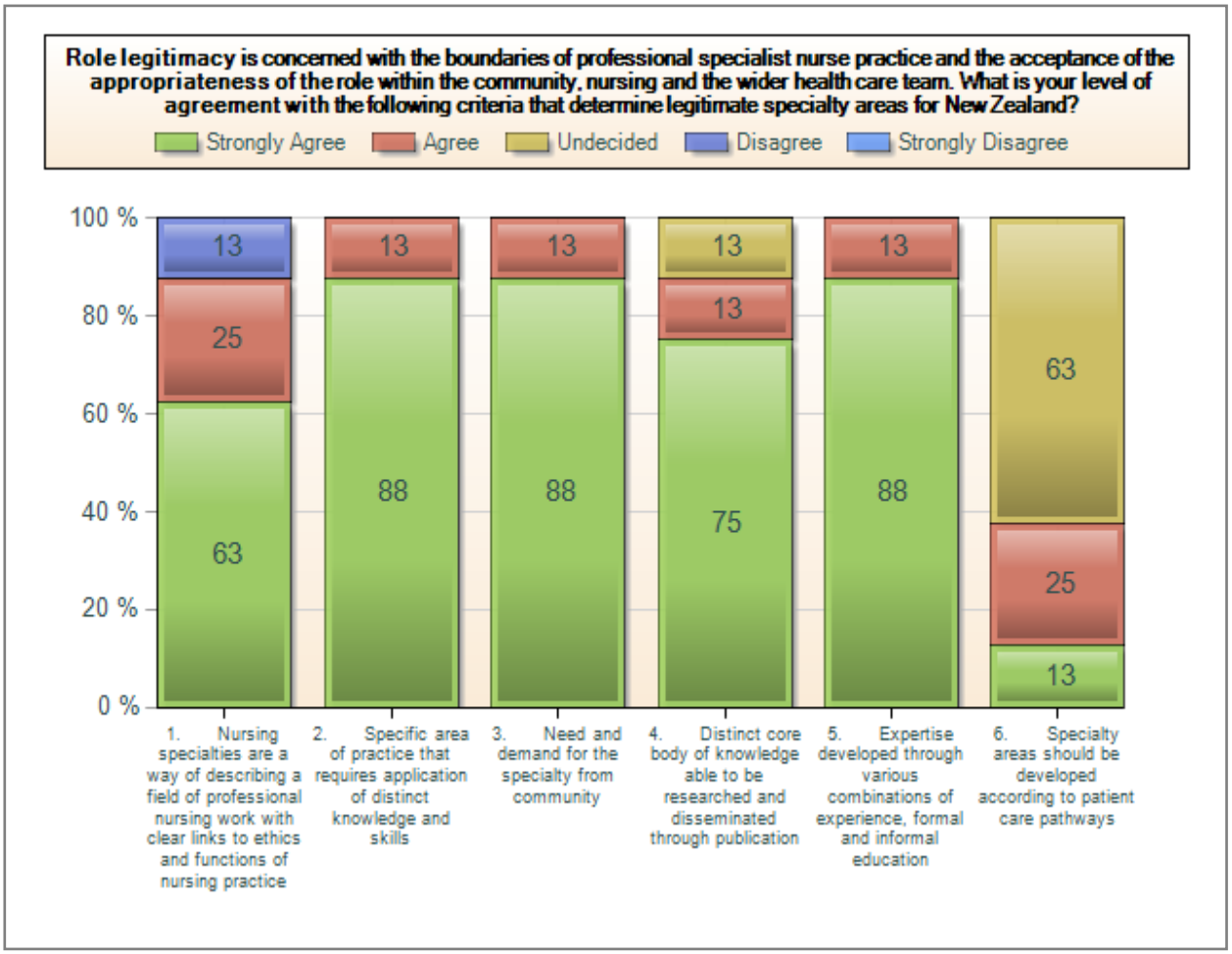
Overall, the findings supported the utility and relevance of the NZSNF for this specific group of specialist nurses who belonged to a well-established national specialty group.

3.2.2 Role Support



Most of the elements related to role support had a level of strong agreement to agreement, with the group. The outlier is the element referring to the link with PDRP that 25% of participants either disagreed or were undecided about. Although the PDRP is a national framework that supports registered nurses to demonstrate continuing competency, it is not compulsory. Thus the uptake is nationally inconsistent (Vernon, Chiarella, Papps, & Dignam, 2010), and this is potentially illustrated by the level of unease by the participants with this element. In view of the often-voiced desire in the wider context, to have frameworks connect together rather than separate, this element will remain.

3.2.3 Role Legitimacy



Participants evidenced a strong degree of agreement (63-88%), with the legitimacy criteria apart from criterion six relating to patient care pathways, which had the majority of participants undecided. This is possibly a reflection of the lack of familiarity of the language of patient care pathways, as one participant commented:

I think of pathways as a set of instructions for a particular procedure/treatment. Complex patients always fall off a pathway.

For this to be included in the future framework, further work in clarification would need to occur.

4. Key considerations and limitations

In the absence of role clarity (as articulated through a role-development model), the nurse specialist role becomes shaped by the varying and potentially inconsistent expectations of stakeholders, leading to role conflict and role overload (Bryant-Lukosius, DiCenso, Browne, & Pinelli, 2004). The development and clarification of the NZNSF provides support for New Zealand nurse specialist to articulate their practice with a consistent language and conceptual model.

A key challenge for this model is to make the toolkit accessible to all registered nurses. Therefore further testing with a larger group would be useful. A limitation for this phase was that the group that were the participants were highly motivated to work with me to develop a consistent framework, and therefore may not be typical of all specialty nursing groups. Boundary objects like this framework may be interpreted differently by the various communities of specialty and sub-specialty practice which in turn will impact on the adoption of this model.

Reflexivity

As this group had approached me to work with them in clarifying their articulation of their area of specialty practice, I was again challenged to reflect not only on what I knew, but importantly how I knew it (Finlay, 2002; Jootun et al., 2009). Knowing only two of the participants personally was helpful in promoting a sense of freedom from bias and supporting voluntariness for potential research participants.
Having worked with this group for a day I accepted an offer to continue to work with them on developing their applied framework for promulgation. This process did not form part of the study and the work did not start until I had closed off the survey so as to avoid any influence on their decisions to participate. This work is ongoing.
Engagement in the consortia group was increasing at the same time, with my being able to bring my work to discussions seeking frameworks and systems for specialty nursing.

This chapter concludes the discussion of the three phases of the research study, which have culminated in the development of a framework for specialist nursing in New Zealand. Throughout the study reflexive commentary has been provided for the reader with the intent of enabling insight into the dialectic processes between the researcher and the study. The final chapter in this dissertation now considers in more detail the role of the researcher in this study, and provides clear recommendations for workforce planning to support the provision of specialist nursing services in New Zealand.

Chapter 8 : Conclusion and recommendations

1. Introduction

The aim of any professional doctorate is to prepare nurses to function in leadership roles in academic, clinical and research settings within dynamic and complex health care systems and communities (Ketefian et al., 2005). The intent of this doctoral work is as a nurse leader to support the vital role of the nurse specialist within the dynamic health care context of Aotearoa New Zealand, through development of a national framework.

Reflexivity has been a key component of the process in this study as my multiple roles of nurse researcher, nurse leader and nurse academic intersect. My "bricolage" or solution (Denzin & Lincoln, 2005) is multifaceted, in response to these intersections. The concept of policy entrepreneur (Mintrom & Norman, 2009) is used to situate my place in this research study which has become a professional project. This study is a professional project in that the outcome of this work combines the two crucial elements identified by Larson (1979) in positioning nursing as being able to influence and control setting the market for specialist nursing services, and also determining the cognitive basis (or education requirements) to which this service is tied. Through these processes the usual intent of professional projects is to protect market share and therefore power and prestige. Whilst this is acknowledged as a potential outcome of the dissertation, it is not my primary intent. The primary intent here is more congruent with the commitment of nursing to the communities it serves, in that framework clarity potentially protects the delivery of community-valued services.

Finally, this chapter provides a summary of the implications of the research study for workforce planning in New Zealand, and for the health-care consumer. Recommendations are provided for each of these key stakeholder groups.

Recognising that knowledge development is a scholarly activity, the following discussion will integrate Boyer's (1990) concepts of scholarship i.e., discovery, integration, application and teaching to detail my doctoral journey, and the current destination. Each of Boyer's scholarship concepts, together with the research objectives from each of the three phases, provides a framework to present the major conclusions of the study that sought to answer the question:

What are the essential elements required for a single national framework for specialist nursing in New Zealand?

2. Phase One (Discovery) – Discovering the beginning elements

The objective for Phase One was to develop framework elements through exploration of the literature and selected key-informant perspectives as a basis for the first round of the Delphi technique in Phase Two. The scholarship of discovery (identifying what is known or yet to be found) is evident in the initial literature review, data analysis and key stakeholder interviews of the study.

Discovering and exploring the study context through interrogation of the literature, extant frameworks and key stakeholders, was a critical first step in developing a holistic view of specialist nursing practice. The provision of specialist nursing services had been identified in 2006 by the New Zealand Ministry of Health, as one of the key elements of concern in assuring workforce supply for the future health and well-being of the New Zealand population. Some eight years before this a Ministerial Taskforce on Nursing had surfaced similar concerns. But there had been no national strategic response. With the development of the Future Workforce group as part of the District Health Boards of New Zealand (DHBNZ) with a focus on nursing as a key workforce, consideration was being given to the role of the nurse specialist in the delivery of care. In part, this was because of workforce initiatives; as more policy makers turned their focus to nursing, professional nursing organisations were also reviewing the role and function of specialty groups. With the increasing interest in workforce development, nursing was at the crossroads of professional identity, with a real potential for the limiting of roles (Gage & Hornblow, 2007).

The lack of clarity in articulating the specialist level of practice, and inconsistency in defining the nurse specialist role created a challenge for the expected increase in demand for specialist nursing services. While there were many frameworks and definitions of specialist nursing practice, unclear language and conflicting expectations did not support effective workforce planning. Themes found in the nursing workforce literature underpinned the importance of clearly and consistently defining framework language, and surfacing of the underlying purpose of such constructions. The impact of lack of clarity in the understanding of the specialist role was highlighted recently, in concerns raised about the inability to accurately measure current

supply for specialist nursing services, in order to plan for future demand (Health Workforce New Zealand, 2010).

The perception of specialist nursing as an inevitable development of a nurse's role and therefore using role theory to explicate the specialist level of practice was a significant decision. A wide variety of approaches were identified to potentially underpin the specialist nursing framework development; an area of promise in the literature was the use of capabilities rather than competencies to explore role adequacy.

The challenge to the dominant ideology of competencies as a way of describing nursing practice is acknowledged. Competence is not however abandoned as a concept, but rather used as a foundation for the more dynamic and responsive capabilities. This approach builds on the work of the capability movement in the United Kingdom, which sought to take a more holistic view of education (Stephenson & Yorke, 1998). Eruat (1994) suggests competence is a stage in the development of expertise rather than a destination. Thus the nurse specialist who is defined by the ICN as "going beyond" is seen as becoming capable rather than more competent.

Clarifying the antecedents of nurse specialist practice and capability was identified as important to sustain workforce development. Developing linkages to educational pathways was supported by both key stakeholders and the literature, although interestingly not always evident in the extant frameworks. This absence perhaps reflects the national and international debate about the place of formal education in the development of registered nursing practice at all levels (Haggerty, McEldowney, Wilson, & Holloway, 2009; Jordan, 2000; Jordan, Coleman, Hardy, & Hughes, 1999; Pelletier, Donoghue, & Duffield, 2003; Pelletier, Donoghue, & Duffield, 2005; Shuriquie et al., 2007). In New Zealand, support for formal education in nursing workforce development is found in the funding specifications from Health Workforce New Zealand (formerly Clinical Training Agency), that fund only postgraduate-level education (Clinical Training Agency, 2009).

Professional knowledge development requires both informal and formal education across professional and academic settings (Eraut, 1994). Experience alone does not create expertise, rather this is an active process requiring reflection and transformation (Eraut, 2005; Hatano & Oura, 2008). Ultimately, the development of capability is a transformative experience that requires situated formal and informal learning (O'Reilly et al., 1999). Transformative

experience is used here in the sense of effecting change in the frame of reference, rather than merely adding more detail into the existing view (Mezirow, 1997). Exploring further the links between these concepts, is an area of promising research for informing education curricula development.

In summary, across the three-focused-discovery areas (documentation/key stakeholders/literature), there was thematic congruence for the development of consistent language and frameworks for nurse specialist practice that included an education pathway.

3. Phase Two (Integration) – Developing the consensus framework

The objective for Phase Two was to develop a consensus framework for specialist nursing in New Zealand, through an online modified Delphi process involving key stakeholders. The Delphi technique provided a structure for the study in terms of participant selection, data collection and analysis (Keeney et al., 2006). This technique was appropriate for the study, which sought to build a consensus framework for specialist nursing. Integration (making connections across disciplines and illuminating the data) occurred through the E-Delphi, with expert colleagues from intraprofessional groups refining the key elements of a national framework for specialist nursing.

An additional outcome of this phase was the testing of the E-Delphi approach for efficacy in data collection and analysis. The experience of this novel medium was that it is supportive of high levels of engagement, with the ability to track respondents and support them to complete questionnaires through email reminders. Providing the participants with both aggregated and individual responses in between the Delphi rounds was simplified through using the survey software, thus reducing the researcher burden.

The Delphi participants were very clear about the need for clarity of language in the nurse specialist framework, and to ensure that there was a transparent link to extant framework, particularly the professional development and recognition pathway. There was strong support for the framework to be consumer rather than profession focused. The ICN criteria for the orderly development of a specialty informed the ordering of elements drawn from the literature and stakeholder interviews, and formed the structure of the first round Delphi

questionnaire. Following two rounds the Delphi was completed, as high degrees of consensus (set at >80%) had been reached.

The final consensus elements from the Delphi study provided a definition for New Zealand of specialist nurse practice that is:

> *The exercising of higher levels of judgment, discretion and decision-making in clinical care. Such practice will demonstrate higher levels of clinical decision-making and so enable the monitoring and improving of standards of care.*

Although nursing is not mentioned in the definition as the modifier of care and decision-making, it is implicit in the word clinical. Whilst the Delphi group reached consensus on the above definition, I believe there is an argument to be made for a broader view of specialist nursing to frame a model, as provided by the 2009 ICN definition of nurse specialist i.e., "a nurse prepared beyond the level of a nurse generalist and authorized to practice as a specialist, with advanced expertise in a branch of the nursing field"(p. 6).

A desire to broaden the view of specialist nursing and clarify the role, led to the adaptation of a role-development model from Machin and Stevenson (1997). The three dimensions of role support, role adequacy and role legitimacy provided a holistic approach to the nurse specialist framework. Adapting the Machin and Stevenson (1997) role-development model for the nurse specialist, was congruent with the original authors' use (as an adaptation from an earlier model to support development of alcohol counsellors) to describe the role of psychiatric nurses. The three role elements were combined with the ICN (2009) definition of nurse specialist (for the broader view) i.e., that the nurse specialist was a nurse prepared beyond (*role adequacy*) the level of a nurse generalist, and authorized to practice (*role legitimacy*) as a specialist, with advanced expertise in a branch of the nursing field (*role support*).

Nursing as a profession exists as part of the wider health care system and is defined in relationship to those other components. Often nurses define themselves in relation to medicine (what nurses do that doctors don't) which can be seen as professionally self-serving. Nursing could choose to define itself in relation to population need and patient pathways, and thus move from the potential of framing of ourselves as subordinate to other disciplines. Patient care requires an integrated approach from all disciplines, with clarity over roles and

responsibilities. Clarity through credentialing of advanced roles protects both consumer and colleague.

The role development New Zealand Nurse Specialist Framework (NZNSF) is referenced to the overarching context of health care need, which is understood through a four-tiered model adapted from the Victoria Cancer Council (Supportive Cancer Care Victoria, 2008). Within this model (all, many, some and few) patients have care needs that increase in complexity and are aligned with increasing expertise in nursing care delivery (provided by all, many some and few). Increasing expertise is evidenced by focusing on a specific part of the nursing field, accompanied by increase in depth of skilled behaviour (capability). The model provides a useful way for policy makers to start to consider skill mix and workforce planning and for specialty groups to articulate their contribution.

4. Phase Three (Application) – Enhancing utility

Application (applying the knowledge gained to consequential problems, ensuring it is of use) was performed by taking the key elements from the first two phases, to build a framework model and test it with a national nurse specialist group. The overall objective for Phase Three was to enhance the credibility of the framework through a validation phase with nurse specialists. Research such as this study with purposive sampling and expert consensus potentially has limitations of bias that are acknowledged in the literature. Participants found strong resonance in the model with their specialty practice experience, and commented on how it would assist them to articulate their practice level more clearly.

There are other similar concepts developed in recognition of atomistic and measurable competence as an impoverished concept. The early work of Michael Polanyi in his description of connoisseurship as the pinnacle of the art of practice declared that it “can be communicated only by example and not by precept” (1958, p. 54). Adaptive expertise from the work of educationalist Giyoo Hatano is also useful to explore. Adaptive experts understand how things work, can modify known procedures and invent new approaches within dynamic environments (Hatano & Oura, 2008), thus very similar to capability concepts.

The provision of language to either articulate what is already known or to scaffold the building of knowing is a critical element in the development of professional knowledge (Eraut, 1994).

The framework and the accompanying toolkit have strong potential from the participant data to support clarity of articulation and scaffolding. The promulgating of the nurse specialist framework and toolkit is the further challenge of research activity.

The development of the NZNSF for testing with the specialist group raised issues of optimum level of detail supplied for the accompanying toolkit. There is a balance to be sought in providing too much detail and risking atomisation and loss of meaning through disaggregation of concepts, in contrast to providing insufficient detail to support engagement. We live in a risk averse and suspicious culture where increased accountability is perceived incorrectly as the solution to a lack of trust (O'Neill, 2002). However, no amount of measuring and micromanagement will satisfy if there is no trust in the process or profession (O'Neill, 2002). Linking the NZNSF to the national Professional Development and Recognition Pathway (PDRP) whilst useful on the one hand, risks adding to a perceived culture of low trust, with over assessment and regulation. A survey completed in 2006 of 427 registered nurses engaged in PDRP processes, found significant areas of concern about the time commitment for these processes, and subsequent resistance (Carryer, Russell, & Budge, 2007). Recent research evaluating the continuing competence framework in New Zealand raised concerns also in relation to the transferability and standardization of the PDRP (Vernon et al., 2010). Therefore it is important that the profession understand the intent of the NZNSF, to be an enabling guide rather than a regulatory hurdle. This can only be achieved through further dialogue to support consensus-building.

The final requirement of Boyer's model to transform and extend knowledge through teaching, is an ongoing commitment begun through publication and dissemination of this work to key stakeholders in the profession, and the formation of key recommendations for specific groups. Adoption of the model will be enhanced by operationalising through the toolkit approach.

A framework has been defined as a set of assumptions, concepts, values, and practices that constitute a way of viewing reality, in this instance nursing specialist practice (framework, 2008). Frameworks can also be viewed as boundary objects which separate social groups but also identify points of reference that support stable relationships and connections between groups (Law & Singleton, 2005). Wenger (2000) describes boundaries as being important to connect communities of practice and provide learning opportunities for those outside the community or group. Boundary objects take the form of either artefacts (shared tools or documents), common language, or shared processes or procedures that facilitate the co-

ordination of the community of practice (Wenger, 2000). The NZNSF is a boundary object that has the potential to provide all three perspectives for nurse specialists. and the wider health care context.

Discussion of the political activity needed to transform and extend the knowledge gained in this study and support teaching scholarship, is presented within a frame of political entrepreneurship.

5. Reflections on political entrepreneurship

Political entrepreneurs are characterised as being able to take advantage of policy windows to effect policy change and can be found where disruptive change occurs (Mintrom & Norman, 2009). Of course, not all change involves policy entrepreneurship, but is arguably evident in the major change proposed to the conceptualisation of specialist nursing in New Zealand. Mintrom and Norman (2009) describe the policy entrepreneur as having four central elements "displaying social acuity, defining problems, building teams and leading by example" (p. 651). In reflecting upon my various roles that have influenced the progress of the doctoral study this model provided a framework for considering the reflexive relationship.

Displaying social acuity relates to using policy networks and having sound relationships within those networks (Mintrom & Norman, 2009). As national co-ordinator of Nurse Education in the Tertiary Sector (NETS), my leadership role has privileged me with access to colleagues across the workforce network. The relationship of this to my study is evidenced by the leadership of the NNO glossary development, which published some of the key concepts of the NZNSF i.e., the differential between specialist as level of practice, and specialty as an area of practice and other publications as listed in Appendix 10.

As Victor Hugo is famously quoted "An invasion of armies can be resisted; an invasion of ideas cannot be resisted" (Hugo, 1877). The consideration of specialty nursing as a problem to be investigated was a deliberate political act, in recognition of the professional project imperative for clarifying this level of practice. Through the networks I have as an academic and as a nurse leader, I became aware of this as a significant issue for the profession and educators, with unsustainable expansion of specialty groups requiring individual programmes, for regulators

with inconsistent expectations potentially impacting on public safety, and with workforce planners identifying a supply and demand concern.

My understanding of reality is that it is meaningfully constructed through a dialectic process with those engaged in the area of interest. Working in teams is my preference and the design of this study supported team-building through the Delphi process and subsequent specialty group phases. Construction of an understanding of specialist nursing practice through the development of a framework, required the building of participant teams to draw on their direct experience as well as their thoughts and impressions.

Knowing some of the group through my various other roles was both an advantage in terms of supporting participation (McKenna, 1994) and a potential disadvantage in terms of perhaps unduly influencing them. Using a reflective journal during this process, as suggested by Cutcliffe (2003) allowed me to reflect not only on **what** I knew, but importantly, **how** I knew it (Finlay, 2002; Jootun et al., 2009). I therefore developed a timeline of key events so as to overtly track the potential patterns of influence (see Appendix 8).

Leading by example is what I have attempted to do through operationalising the NZNSF through a toolkit and engaging with specialty groups that have contacted me. Participation in national consensus activity around the defining and credentialing of specialty standards, provides me with an opportunity to contribute to the momentum of the professional project for nurse specialists.

6. Summary

The purpose of the professional doctorate is to prepare nurses to make significant contributions in leadership roles to research and practice settings within dynamic and complex health care systems and communities (Ketefian et al., 2005). Figure 8.1 summarizes how this study has met those requirements.

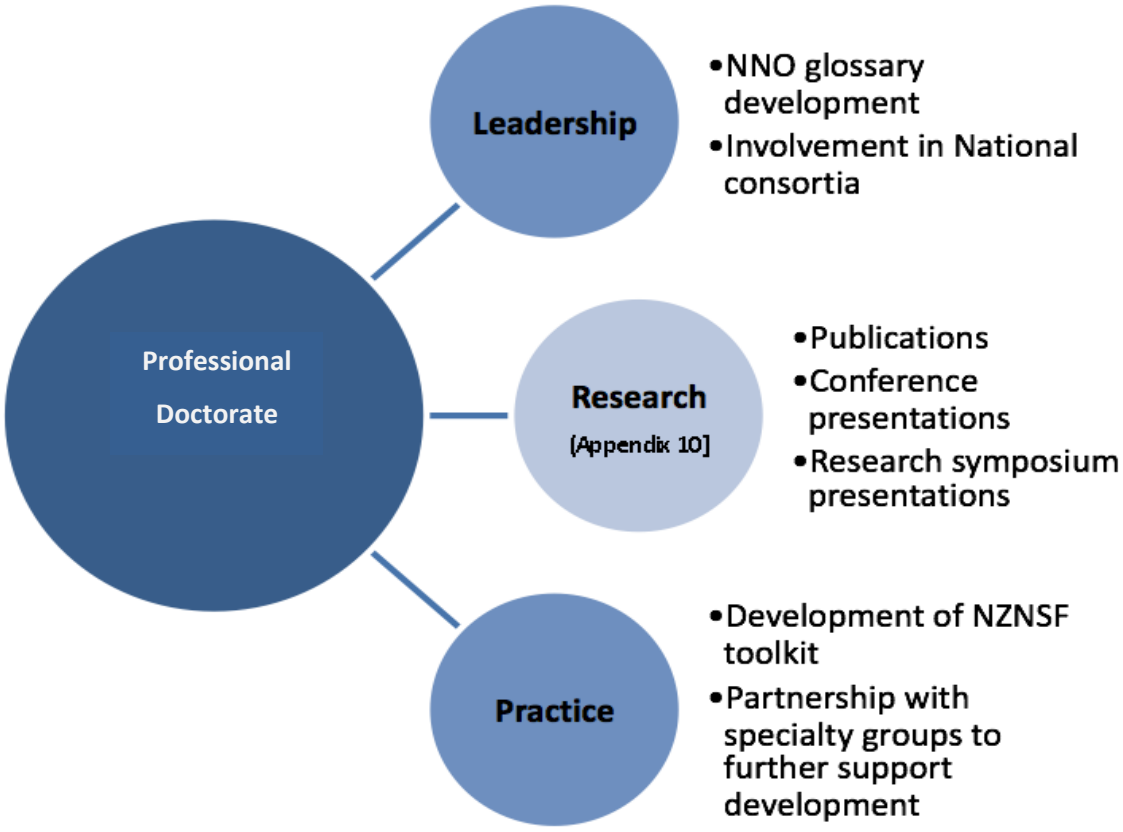


Figure 8.1 Illustration of doctoral components

7. Recommendations

The study has identified several recommendations for further action and research that need to be considered by specialty nursing practice groups, education providers and the nursing profession as a whole. These recommendations are framed in the dimensions of the role development NZNSF, and have been considered in light of the data that has been collected over the term of the study, and reflects the opinions of the participants and my own critical analysis.

7.1 Role Adequacy

- That further research is undertaken into the potential of knowledge-skills frameworks to articulate further the development of the nurse specialist capabilities.

7.2 Role Legitimacy

- That specialty groups engage with the process of defining themselves as communities of practice if legitimacy criteria are not yet met.
- That further work is done on developing a credentialing process for those groups that do meet the legitimacy criteria.
- That speciality groups make publicly available their frameworks for practice within their area of nursing practice.

7.3 Role Support

- That specialty groups consider the governance standards promulgated by the Coalition of National Nursing Organisations (CoNNO) in Australia as a mechanism to strengthen inter and intra disciplinary relationships.
- That the knowledge and skills framework is explored as a mechanism by all specialty groups to articulate their specialty area expectations.
- That employers and regulators accept the integration of the NZNSF elements into the PDRP framework.
- That education providers explore further the linkages between concepts of capability, adaptive expertise and transformative learning for the purpose of informing education curricula development.

8. Final remarks

As the doctoral dissertation concludes it seems appropriate to reflect upon the pre-voiced goal of inquiry not to develop a definitively accurate description of the “real” world but “ to construct something that works cognitively, that fits together and handles new cases, that may implement further inquiry and invention” (Goodman cited in Denzin & Lincoln, 1994, p. 127). The New Zealand Nurse Specialist Framework shows promise in both fitness for purpose and fitness of purpose. The cognitive dissonance experienced by colleagues as they encounter the newly constructed model will hopefully engage, rather than alienate, articulate rather than

silence specialist nursing voices, and hopefully lead to further development. As T. S. Eliot said in his famous 1942 poem *Little Gidding*:

We shall not cease from exploration and the end of all our exploring will be to arrive where we started and know the place for the first time (Eliot, 1942).

This study has been successful in identifying the key elements for a nurse specialist framework for New Zealand. The outcome of doing so is to now arrive at the point of redefining descriptors of practice levels, and understanding specialist nursing differently. Delivery of specialist nursing service is a professional role that requires adequacy, legitimacy and support to contribute effectively to the health and well-being of Aotearoa New Zealand.

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Appendix 1 Consent and information forms

UNIVERSITY OF TECHNOLOGY SYDNEY

Research Project: Specialist Nursing in New Zealand:

Development of a framework

Phase One: Key Stakeholder Information Sheet

The purpose of this doctoral research project is to develop a framework for specialist nursing practice in New Zealand through a consensus-building approach. The project will identify key elements of a potential specialist nursing framework from the literature and key stakeholder interviews. These elements will be refined and presented for comment and analysis in order to construct a framework through a national Delphi consensus process. Further consultation will occur through an online survey seeking the perceptions of specialist nurses in relation to the consensus framework.

I am contacting identified national key stakeholders such as yourself, to invite you to participate in an initial interview concerning the development of a single specialist nursing framework for New Zealand. The focus of the interview will be your perspectives on the requisite key elements of a national framework for specialist nursing practice. Topics for discussion are likely to include experience, educational preparation, performance and the maintenance of competence; current and projected specialist workforce needs; differences between specialists and generalist practice, other frameworks already in existence and potential for linkage to them.

With your permission, I would like to digitally record the interview. This information will be transcribed verbatim. The information will be encrypted and stored in a locked cabinet at the Faculty of Health Education and Social Sciences, Whitireia Community Polytechnic, Porirua. All information will be confidential and you will not be identified in any way.

Ethical approval for this study has been granted by the University of Technology, Sydney, Human Ethics Committee TS HREC REF NO. 2008-51A) and New Zealand Multi Region Ethics Committee (Ref. No: MEC/08/07/EXP). (insert reference number and date). If you have any concerns about the research you can contact Kathy Holloway or her chief supervisor Dr Jacqueline Baker (details below). You are free to withdraw your participation from this research project at any time without consequences, and without giving a reason. Data collected and aggregated however, will not be able to be withdrawn.

I will contact you in May 2008 to establish the best date and time to invite your participation. I look forward to talking with you soon.

Signature (researcher)

NOTE: This study has been approved by the University of Technology, Sydney Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the University Ethics Committee through the Research Ethics Officer (ph: 00612 9514 9615, Research.Ethics@uts.edu.au) and quote the UTS HREC reference number 2008-51A. Alternatively you could contact the NZ Multi-Region Ethics Committee at (04) 470 0655 and quote ref no MEC/08/07/EXP. Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

Contact details

Kathy Holloway
Email Kathryn.holloway@whitireia.ac.nz
Phone: (04) 234 3103 ext 3804 or 0274774719

Dr Jacqueline Baker
Email: Jacqueline.Baker@uts.edu.au
Phone No: (00612) 9514 5072

UNIVERSITY OF TECHNOLOGY, SYDNEY

Research Project: Specialist Nursing in New Zealand: Development of a framework

Phase One: Key Stakeholder Interview Consent Form

I _____ agree to participate in the research project being conducted by **Kathy Holloway** of the University of Technology, Sydney for the degree of **Doctor of Nursing**.

I understand that the purpose of this study is to develop a framework for specialist nursing practice in New Zealand through a consensus-building approach.

I understand that my participation in this research will involve one interview of no more than 90 minutes at a mutually convenient time and place. This interview will be recorded and transcribed verbatim.

I am aware that I can contact Kathy Holloway or her chief supervisor Dr Jacqueline Baker if I have any concerns about the research. I also understand that I am free to withdraw my participation from this research project at any time I wish, without consequences, and without giving a reason.

I agree that Kathy Holloway has answered all my questions fully and clearly.

I agree that the research data gathered from this project may be published in a form that does not identify me in any way.

_____ ____/____/____

Signature (participant)

_____ ____/____/____

Signature (researcher)

NOTE:

This study has been approved by the University of Technology, Sydney Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer (ph: 00612 9514 9615, Research.Ethics@uts.edu.au) and quote the UTS HREC reference number 2008-51A. Alternatively you could contact the NZ Multi-Region Ethics committee at (04) 470 0655 and quote ref no MEC/08/07/EXP Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

UNIVERSITY OF TECHNOLOGY SYDNEY

Research Project: Specialist Nursing in New Zealand: Development of a framework

Phase Two: Delphi Study Participant Information Sheet

The purpose of this doctoral research project is to develop a framework for specialist nursing practice in New Zealand through a consensus-building approach. The project has identified key elements of a potential specialist nursing framework from the literature and key stakeholder interviews. These elements have been refined and are presented here for comment and analysis in order to construct a framework through a Delphi consensus process.

I am contacting those identified by myself or others as having a well-developed deep level of understanding in relation to this area of professional work and invite you to respond to an online survey concerning your perceptions and level of agreement with the provided elements. Your response will form an integral part of the consensus- building approach nationally.

Please find in the email sent to you with this information sheet a link to the online web survey to begin the Delphi process. Your participation in this research will involve completing at least two to three rounds of an online survey taking approximately 30 minutes each round at a time and place convenient to you within the set calendar period as indicated in the email.

Ethical approval for this study has been granted by the University of Technology, Sydney, Human Ethics Committee (UTS HREC REF NO. 2008-51A) and New Zealand Multi Region Ethics Committee (Ref. No: MEC/08/07/EXP). If you have any concerns about the research you can contact Kathy Holloway or her supervisor(s) Dr Jacqueline Baker or Dr Judy Lumby. You are free to withdraw your participation from this research project at any time without consequences, and without giving a reason. Data collected and aggregated however, will not be able to be withdrawn.

The information will be encrypted and stored in a locked cabinet at the Faculty of Health, Whitireia Community Polytechnic, Porirua. All information will be confidential and you will not be identified in any way. The data from the study will be reported in an aggregated and non-identifiable way in my final Doctor of Nursing thesis document.

Please note that your consent to participate is implied by the completion of the online questionnaire.

Thank you for your participation – it is greatly appreciated.

Signature (researcher)

NOTE: This study has been approved by the University of Technology, Sydney Human Research Ethics Committee and New Zealand Multi Region Ethics Committee Reference No: MEC/08/07/EXP. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer (ph: 00612 9514 9615, Research.Ethics@uts.edu.au) and quote the UTS HREC reference number. Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

Contact details Kathy Holloway

Email Kathryn.holloway@whitireia.ac.nz

Phone: (04) 234 3103 ext 3804 or 0274774719

Dr Jacqueline Baker

Email: Jacqueline.Baker@uts.edu.au

Phone No: (00612) 9514 5072

Dear Colleague, I need your help!

The purpose of my doctoral research project is to develop a framework for specialist nursing practice in New Zealand, through an online Delphi consensus-building approach.

Please find in this email a link to the online web survey to begin the Delphi process. Your participation in this research will involve completing at least two to three rounds of an online survey taking approximately 30 minutes each round, at a time and place convenient to you within the set calendar period as indicated in the email. All information will remain strictly confidential and only be used for this purpose.

Please consider the information sheet that follows which explains more about the research project and my ethical obligations, before deciding to respond.

All responses received before **Friday the 14 August 2009** will be analysed.

Thank you in anticipation

You have been invited to participate in this expert panel to build a consensus specialist nursing framework in recognition of your involvement and interest in specialist nursing in New Zealand. You join other colleagues in New Zealand who will remain anonymous. The collective response will form an integral part of the consensus-building approach nationally.
The International Council of Nurses criteria for the orderly development of specialist nursing roles have been adapted as a general framework for the questionnaire:

- Regulation
- Resource
- Clinical practice.

The first phase of this project identified key elements of a potential specialist nursing framework from the literature and key stakeholder interviews. These elements have been refined and are presented for your comment and analysis. Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate.

If you have questions at any time about the survey or the procedures, you may contact Kathy Holloway at 0274 774719 or by email at kathryn.holloway@whitireia.ac.nz

Thank you very much for your time and support and please start by clicking the arrow below

Research Project: Specialist Nursing in New Zealand: Development of a framework

Phase Three: Online Survey Participant Information Sheet

The purpose of this doctoral research project is to develop a framework for specialist nursing practice in NZ through a consensus-building approach. The project identified key elements of a potential specialist nursing framework from the literature and key stakeholder interviews. These elements have been refined and developed into a framework for specialist nursing in New Zealand, through a Delphi consensus process.

I am contacting you as an identified nurse specialist to invite you to respond to an online survey concerning your perceptions of how relevant, applicable and practical the specialist framework is to you. Your response will form an integral part of the consensus building-approach nationally.

Please find in the email sent to you with this information sheet a link to the online web survey to begin the Delphi process. Your participation in this research will involve completing an online survey, taking approximately 20 minutes at a time and place convenient to you, within the set calendar period as indicated in the email.

Ethical approval for this study has been granted by the University of Technology, Sydney, Human Ethics Committee (UTS HREC REF NO. 2008-51A) and NZ Multi Region Ethics Committee (Ref. No: MEC/08/07/EXP). If you have any concerns about the research you can contact Kathy Holloway or her supervisor(s) Dr Jacqueline Baker or Dr Judy Lumby. You are free to withdraw your participation from this research project at any time without consequences, and without giving a reason. Data collected and aggregated however, will not be able to be withdrawn.

The information will be encrypted and stored in a locked cabinet at the Faculty of Health Education and Social Sciences, Whitireia Community Polytechnic, Porirua. All information will be confidential and you will not be identified in any way. The data from the study will be reported in an aggregated manner in my final Doctor of Nursing thesis document.

Please note that your consent to participate is implied by the completion of the online questionnaire.

Thank you for your participation – it is most appreciated.

Signature (researcher)

NOTE: This study has been approved by the University of Technology, Sydney Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer (ph: 00612 9514 9615, Research.Ethics@uts.edu.au) and quote the UTS HREC reference number. Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

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Appendix 2 NNO Glossary of terms

New Zealand National Nursing Organisations

Glossary of Terms

Endorsed in June 2009 by

NEW ZEALAND NURSES ORGANISATION

COLLEGE OF NURSES AOTEAROA NZ

Te Ao Maramatanga

New Zealand College of Mental Health Nurses (Inc.)

Partnership, Voice, Excellence in Mental Health Nursing

Nurse Education in the Tertiary Sector

Publication development led by Kathy Holloway

National Coordinator, Nurse Education in the Tertiary Sector (NETS)

New Zealand National Nursing Organisations Glossary

Introduction

Nursing practice in Aotearoa/New Zealand recognizes the place of Māori as tangata whenua and Te Tiriti o Waitangi as the nation's founding document, which has a strong relationship with the health sector. The National Council of Māori Nurses had a reserved representative position on the NNO working group, and all minutes and draft documents have been circulated to them for review and input. Improving Māori health outcomes is a foundational expectation of nursing practice competencies and underpins this document.

This is a living document that provides description and definition of terminology utilised in relation to nursing practice in Aotearoa/New Zealand. Across many disciplines it is accepted (and sometimes expected) that professionals provide a more specialised and quality-enhanced service as their career progresses. This development, in both scope and quality of professional practice, is a dynamic and continual process that creates challenges for the mapping of a professional career. As with other health professions, nursing practice has become increasingly diverse and complex in response to societal, political and technological challenges.

Clarity in terminology emerges as a key challenge, to both describing what currently exists and in planning for new and responsive areas of practice. This glossary builds on international work (much of which has been developed from International Council of Nurses guidelines) and national documents, to provide a foundation of agreed terminology that can be used to articulate the contribution that nursing can make to the health care of the public of Aotearoa/New Zealand.

The Nursing Council of New Zealand (NCNZ) [1] defines Nursing practice as:

> Using nursing knowledge in a direct relationship with clients or working in nursing management, nursing administration, nursing education, nursing research, nursing professional advice or nursing policy development roles, which impact on public safety.

The National Professional Development & Recognition Programmes Working Party (2005)[2] defines Advanced Nursing Practice as:

> *Reflecting a range of highly developed clinical skills and judgments acquired through a combination of nursing experience and postgraduate education. Essentially, advanced-nursing practice requires the application of advanced nursing knowledge, with practitioners drawing not only on their own clinical experience, but also on the experience and research of the profession as a whole.*

Advanced, or advancing, nursing practice is seen on a continuum and is the broad term used in New Zealand to encompass a range of developing practise and employment roles underpinned by post registration education and practise expertise.

Nursing Council Regulated Scopes (those indicated are under review in 2009)

Enrolled Nurse	Enrolled nurses practise under the direction of a registered nurse or midwife to implement nursing care for people who have stable and predictable health outcomes in situations that do not call for complex nursing judgment.
Nurse Assistant (*under review)*	Nurse Assistants assist registered nurses to deliver nursing care to individuals in community, residential and hospital settings.
Registered Nurse (*under review)*	Registered Nurses utilise nursing knowledge and complex nursing judgment to assess health needs and provide care, and to advise and support people to manage their health.
Nurse Practitioner	Expert registered nurses who work within a specific area of practice incorporating advanced knowledge and skills (2008).

Glossary

Competence	Competence is the combination of skills, knowledge, attitudes, values and abilities that underpin effective performance as a nurse.[1]
Expanded practice	Pushing the boundaries of nursing role development [3] A professional strategy with increased range of autonomy, accountability and responsibility. Usually occurs within a specialist nursing practice and involves additional skills such as diagnosis and prescribing. There is a formal pathway to role expansion that entails further education and may include regulation [4]
Extended practice	The addition of a particular skill or area of practice responsibility, usually in response to increased demand or consumer need [4]
Nursing practice – general	General practice encompasses a comprehensive spectrum of activities. It is directed towards a diversity of people with different health needs. It takes place in a wide range of health-care settings, and it is reflective of a broad range of knowledge and skills. General practice may occur at any point on the continuum, from beginning to advanced practice [6]

Nursing practice – specialty	Specialty practice focuses on a particular area of nursing practice. It is directed towards a defined population or a defined area of activity and is reflective of increased depth of knowledge and relevant skills. Specialty practice may occur at any point on the continuum, from beginning to advanced practice [5&6]
Specialist	Level of nursing practice
Specialty	Area of nursing practice

References

1. Nursing Council of New Zealand, (2005). *Competencies for the registered nurse scope of practice*. Author: Wellington.
2. National Professional Development & Recognition Programmes Working Party, (2005). *National Framework for Nursing Professional Development & Recognition Programmes & Designated Role Titles*. National Nursing Organisations, New Zealand Wellington. p. 1-39.
3. Srivastava, N., Tucker,J. S.,Draper, E. S., Milner, M., (2008). A literature review of principles, policies and practice in extended nursing roles relating to UK intensive care settings. *Journal of Clinical Nursing*. **17**(20): p. 2671-2680.
4. Daly, W.M. and Carnwell, R. (2003). Nursing roles and levels of practice: A framework for differentiating between elementary, specialist and advancing nursing practice. *Journal of Clinical Nursing,* **12**(2): p. 158-167.
5. Royal College of Nursing. *Defining Nursing* 2003 [cited 24 March, 2007]; Available from: http://www.rcn.org.uk/__data/assets/pdf_file/0008/78569/001998.pdf.
6. Queensland Nursing Council. (2005). *Scope of practice framework for nurses and midwives*. [cited 14 May, 2007]; Available from: http://www.qnc.qld.gov.au/upload/pdfs/practice_standards/Scope_of_practice_framework_for_nurses_and_midwives_framework.pdf.

Appendix 3 ICN Nurse Specialist Competency differential analysis

Area of Competence	Additional Nurse Specialist Competencies as different from Registered Nurse Competencies (International Council of Nurses, 2009)
Accountability	Accepts accountability and responsibility for professional judgment, actions and continued competence in area of specialist practice Consults with other health care professionals and relevant organisations/agencies when individual or group needs fall outside the scope of nursing practice and area of competence.
Ethical Practice	Ensures the patient's/client's right to access information.
Principles of Care Provision	Applies relevant advanced knowledge and skills in field of clinical specialty nursing practice. Applies critical thinking and the systems approach to problem-solving in the delivery of care Provides a rationale for how nursing-care decisions and interventions relate to interventions being received from other members of the care team. Applies advocacy skills to assist patients/clients and carers unable to represent or speak for themselves Integrates developments/local applications in the field of health technology to support practice Acts as a resource for individuals, families and communities in coping with changes in health, with disability, and with death.
Promotion of health	Achieves cooperative and collaborative working relations between own and other care settings, professionals, specialty interest, and advocacy and patient groups Applies knowledge of resources available for health promotion and health education to management of specialist care.
Assessment	Carries out a relevant and systematic health and nursing assessment utilizing specialist knowledge including performing and/or ordering specialist diagnostic tests and procedures as permitted in the scope of practice.
Implementation	Implements or delegates and supervises planned expert nursing care to achieve outcomes. Demonstrates advanced skills in the application of nursing interventions specific to area of clinical specialty. Responds effectively to emergency and disaster situations, taking a leadership role in triage and organization of care. Introduces, tests, evaluates innovation and change to nursing and health care practice.
Inter-professional health care	Works collaboratively with other professionals in the health team and other sectors and communities to assess, plan and organise care. Communicates and shares relevant expertise and information with other members of the care team involved in providing services. Participates with members of the health and social care teams in decision-making concerning patients/clients through contributing expert advice. Incorporates the views of patient/client and families in decision-making by the interprofessional team and assists and/or leads in the negotiation of a mutually agreed and supported decision. Participates and provides leadership on intra- and inter- disciplinary committees related to the development of policies and procedures, education, research and practice in area of clinical specialty.

Area of Competence	Additional Nurse Specialist Competencies as different from Registered Nurse Competencies (International Council of Nurses, 2009)
	Refers patients and accepts referrals from other health-care providers to ensure patients/clients have access to expert intervention.
Delegation and Supervision	Provides expert advice to other nurses on the appropriateness of delegating activities and supervision strategies. Contributes to policy and protocol development that relate to delegation of clinical responsibilities specific to area of specialty and supervisory accountability.
Professional Enhancement	Promotes the recognition of specialist nursing practice as an essential part of nursing practice in health-service delivery. Contributes to knowledge and practice development of the clinical nursing specialty through identifying and conducting research in areas of need. Acts as a source of expert advice to other nurses. Scans practice environment and specialist nursing literature to identify emerging trends and issues. Demonstrates knowledge about the impact of national health and social-care policies on service access and practice in area of clinical specialty, and participates with their professional organisation in taking action. Advocates for and participates in obtaining legal recognition of specialist qualifications and related scope of practice.
Quality Enhancement	Uses valid evidence in evaluating the quality and effectiveness of specialist nursing practice. Identifies areas of specialist practice that can, through systematic review, result in improvement inpatient experience and outcomes. Based on valid and reliable research, introduces, tests, evaluates and manages evidence based practice.
Continuing Education	Participates in single and multidisciplinary learning and contributes to patient-focused learning opportunities.

Appendix 4 Document analysis matrix

Phase One criteria	N^{3}ETcriteria	Evidence expectations
Identify minimum requirements of education, experience, performance and the maintenance of competence	Criterion 2: The specialty defines itself and subscribes to the overall purpose, functions and ethical standards of nursing Criterion 5: The specialty practice is based on a core body of nursing knowledge, which is being continually expanded and refined. For example, mechanisms exist for supporting, reviewing and disseminating research.	Expectations clearly identified Research published
Address current and projected specialist workforce needs	Criterion 4: There is both a demand for and a need for the specialty service from the community	Link to policy or health strategy documents
Provide delineation of boundaries between specialist practice and generalist practice	Criterion 3: The specialty is a distinct and defined area of nursing practice, which requires an application of specialty, focused knowledge and skill sets.	Levelling clarified Credentialing processes
Demonstrate linkage with extant education frameworks	Criterion 6: Specialty expertise is gained through various combinations of experience, formal and informal education programs including but not limited to continuing education and professional development.	Education frameworks or recommendations for pathways of study
Link with other national career or nursing workforce development frameworks	Criterion 1: The specialty is national in its geographic scope.	Conference/research linkages PDRP links

Appendix 5 NZNO College analysis – framework components

NZNO Colleges	Standards	Framework	Levels of practice	Linked to PDRP	Accreditation offered
Perioperative Nurses College	Education (2005) Not available	Not evident	Not evident	Not evident	Not evident
College of Emergency Nurses	Education (2006)	Not evident	Not evident	Not evident	Not evident
Neonatal Nurses College	Not evident	Not evident	Not evident	Not evident	Not evident
College of Practice Nurses	Yes	Yes	Not evident	Yes	Not evident

NZNO Section analysis

NZNO Sections	Standards (year)	Framework	Levels of practice	Link to PDRP	Accreditation Offered
Cancer Nurses	No	None	No – MOH paper only	Not evident	No
Cardiac Nurses	No	No	No	Not evident	No
Children & Young People	Yes (2008)	Competency Level Skill	Essential Specialist Advanced	Not evident	No
Critical Care Nurses	Yes Practice (2002) Education (2010)	NZNO standards for practice	No	Not evident	No
Diabetes Nurse Specialists	Yes (2009)	Yes	Generalist Specialty Specialist	Not evident	Yes
District Nurses	Yes (2004)	Specific Competencies In clinical areas	NG Comp Prof Expert	Yes	No
Duty & Clinical Nurse Managers	No	No	No	Not evident	No
Flight Nurses	Yes (2007)	No	No	Not evident	No
Gastroenterology	Yes (2000)	NZNO standards	No	Not evident	Yes – templates for
Gerontology	No	No	No	Not evident	No

NZNO Sections	Standards (year)	Framework	Levels of practice	Link to PDRP	Accreditation Offered
Infection Control Password site	Unknown	Unknown	Unknown	Not evident	Unknown
Public Health Nurses	No	No	No	Not evident	No
Respiratory Nurses	Yes (2008)	Competencies	Fundamental Comp Prof Expert	Yes	No
Stomal Therapy	No	No	No	Not evident	No
Women's Health	No	No	No	Not evident	No

Non NZNO Specialty group analysis

Group	Standards (year)	Framework	Levels of practice	Link to PDRP	Accreditation Offered
Ear Nurses Group http://www.ensg.co.nz/	Attributes and training standards (date unknown)	no	Nurse specialist criteria	Not evident	Training for specialist (+3yr clinical and accreditation)
New Zealand College of Mental Health Nurses	http://www.nzcmhn.org.nz/uploads/21290/attachments/standards.pdf	No	No	No	Yes
Renal Nurses	Yes	Yes	Not evident	no	No

Appendix 6 Capabilities and the Nurse Specialist

Capabilities & *Strong model*	**Specialist Registered Nurse (ICN plus stakeholder elements)**
Take effective and appropriate action within unfamiliar and changing circumstances make sound judgments in the face of incomplete information and divergent problems *Direct comprehensive care*	Applies relevant advanced knowledge and skills in field of clinical specialty nursing practice Applies critical thinking and the systems approach to problem solving in the delivery of care Provides a rationale for how nursing care decisions relate to interventions being received from other members of the care team. Applies advocacy skills to assist patients/clients and carers unable to represent or speak for themselves Integrates developments/local applications in the field of health technology to support practice Acts as a resource for individuals, families and communities in coping with changes in health, with disability and with death Carries out a relevant and systematic health and nursing assessment utilizing specialist knowledge including performing and/or ordering specialist diagnostic tests and procedures as permitted in the scope of practice Implements or delegates and supervises planned expert nursing care to achieve outcomes Demonstrates advanced skills in the application of nursing interventions specific to area of clinical specialty Responds effectively to emergency and disaster situations taking a leadership role in triage and organization of care Introduces, tests, evaluates innovation and change to nursing and health care practice. Autonomous, Holistic in assessment, Flexible thinking, Enquiring, Ability to make links with knowledge Use different models of interaction – have a repertoire of therapeutic models, Self knowledge of limitations, Pattern recognition
Live and work effectively with others *Support of systems*	Works collaboratively with other professionals in the health team and other sectors and communities to assess, plan and organise care Communicates and shares relevant expertise and information with other members of the care team involved in providing services Participates with members of the health and social care teams in decision making concerning patients/clients through contributing expert advice Incorporates the views of patient/client and families in decision-making by the interprofessional team and assists and/or leads in the negotiation of a mutually agreed and supported decision Participates and provides leadership on intra- and inter- disciplinary committees related to the development of policies and procedures, education, research and practice in area of clinical speciality Refers patients and accepts referrals from other health care providers to ensure patients/clients have access to expert intervention. Provides expert advice to other nurses on the appropriateness of delegating activities and supervision strategies Achieves cooperative and collaborative working relations between own and other care settings, professionals, specialty interest, and advocacy and patient groups Applies knowledge of resources available for health promotion and health education to management of specialist care. Contributes to policy and protocol development that relate to delegation of clinical responsibilities specific to area of speciality and supervisory accountability. Leadership, Interprofessional and Intraprofessional

Capabilities & Strong model ANP	Specialist Registered Nurse (ICN plus stakeholder elements)
Explain what they are about *Professional leadership*	Promotes the recognition of specialist nursing practice as an essential part of nursing practice in health service delivery. Ensures the patient's/client's right to access information. Contributes to knowledge and practice development of the clinical nursing specialty through identifying and conducting research in areas of need. Acts as a source of expert advice to other nurses. Scans practice environment and specialist nursing literature to identify emerging trends and issues. Demonstrates knowledge about the impact of national health and social care policies on service access and practice in area of clinical specialty and participates with their professional organisation in taking action. Advocates for and participates in obtaining legal recognition of specialist qualifications and related scope of practice. Accepts accountability and responsibility for professional judgment, actions and continued competence in area of specialist practice. Consults with other health care professionals and relevant organisations/agencies when individual or group needs fall outside the scope of nursing practice and area of competence. Way of being as a nurse – grounded in nursing philosophy. Range of therapeutic models. Teacher. Leader.
Enquiring approach *Research* *Education*	Uses valid evidence in evaluating the quality and effectiveness of specialist nursing practice Identifies areas of specialist practice that can through systematic review result in improvement in patient experience and outcomes. Based on valid and reliable research, introduces, tests, evaluates and manages evidence based practice. Participates in uni-disciplinary and multidisciplinary learning and contribute to patient-focused learning opportunities. Situated learning. Through reflective practice. Formal education. Expert knowledge. Science knowledge.

Appendix 7 Specialist Nurse Framework Phase Two – Survey results example

Framework for the Specialist Nurse Round Two results

[NB percentage numbers rounded up for ease of reporting]

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.

Section One: Regulation requirements

1. Considering the Round One group responses to this question and your own, please indicate your level of agreement with the inclusion of the following elements in a specialist nurse framework for New Zealand. A specialist nurse framework should:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
• Build upon the Nursing Council of New Zealand competencies for registration as a Registered Nurse	4	5	1	0	0	
	40%	50%	10%	0%	0%	
• Have a clear link to professional development and recognition pathway (PDRP)	4	5	1	0	0	
	40%	50%	10%	0%	0%	
• Be linked to a demonstrated population need	3	5	1	1	0	
	30%	50%	10%	10%	0%	
• Credential national consistency of understanding and implementation	3	5	2	0	0	
	30%	50%	20%	0%	0%	
• Require that specialist nurse be a protected title	2	2	1	3	2	
	20%	20%	10%	30%	20%	
• Have the support of health service providers	1	8	1	0	0	
	10%	80%	10%	0%	0%	
• Support an additional regulated scope	0	2	1	0	7	
	0%	20%	10%	0%	70%	
• Be developed with the support and understanding of other health professional groups	1	3	5	1	0	
	10%	30%	50%	10%	0%	

3. Clarity in defining the specialist nurse is identified as important in workforce planning and regulation of supply. Provided below are the top five previously selected definitions of specialist nurse practice. Please rank in order of your preferred definition for New Zealand.						
	1	**2**	**3**	**4**	**5**	
Specialist nurse practice is provided by registered nurses, who have graduate level nursing preparation at the master's or doctoral level. They are clinical experts within a specialty area, treating and managing the health concerns of patients and populations	4	0	1	1	4	
	40%	0%	10%	10%	40%	
Specialist nurse practice focuses on a specific area of nursing. It is directed towards a defined population or a defined area of activity and is reflective of depth of knowledge and relevant skills and may occur at any point on the continuum from beginning to advanced practice	2	1	0	5	2	
	20%	10%	0%	50%	20%	
Specialist nurse practice is the exercise of higher levels of nursing judgment, discretion and decision- making in an area of practice with a specific focus and body of knowledge and practice	2	3	4	1	0	
	20%	30%	40%	10%	0%	
Specialist nurse practice is the exercising of higher levels of judgment, discretion and decision making in clinical care. Such practice will demonstrate higher levels of clinical decision-making and so enable the monitoring and improving of standards of care	1	4	2	2	0	
	11%	44%	22%	22%	0%	
Specialist nurse practice is provided by a nurse prepared beyond the level of a nurse generalist and authorized to practise as a specialist with advanced expertise in a branch of the nursing field	1	2	2	1	4	
	10%	20%	20%	10%	40%	

Section Two: Resource planning requirements

4. Clarity in defining specialty areas was identified as critical by the 2006 Australian National Nursing and Nursing Education Taskforce (N^3ET) report. Considering the Round One group responses to this question and your own, please indicate your level of agreement with the N^3ET criteria that a legitimate nursing specialty has:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
National geographic scope	2	5	0	1	2	
	20%	50%	0%	10%	20%	
Clear links to ethics and functions of nursing practice	6	3	0	1	0	
	60%	30%	0%	10%	0%	
Specific area of practice that requires application of distinct knowledge and skills	5	5	0	0	0	
	50%	50%	0%	0%	0%	
Need and demand for the specialty from community	2	7	1	0	0	
	20%	70%	10%	0%	0%	
Distinct core body of knowledge able to be researched and disseminated through publication	4	6	0	0	0	
	40%	60%	0%	0%	0%	
Expertise developed through various combinations of experience, formal and informal education.	4	6	0	0	0	
	40%	60%	0%	0%	0%	

5. Please rank the following statements in relation to importance of their inclusion in a specialist framework with 1 being most important.

	1	2	3	4	
Nursing specialties are a way of describing a field of professional nursing work	7	2	0	0	
	78%	22%	0%	0%	
Specialty areas are necessary to support the delivery of medical specialty practice	0	1	2	5	
	0%	12%	25%	62%	
Subspecialization is a necessary process for the effective delivery of health care	0	1	5	3	
	0%	11%	56%	33%	
Specialty areas should be developed according to patient care pathways.	2	5	2	0	
	22%	56%	22%	0%	

6. Considering the Round One group responses to this question and your own, what is your level of agreement with these statements in relation to a specialist nurse framework in New Zealand?

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Clarity is required in relation to what constitutes a specialty area within a specialist framework	2	8	0	0	0
	20%	80%	0%	0%	0%
Specialist nursing groups within legitimate specialty areas need to set clear practice standards	4	5	1	0	0
	40%	50%	10%	0%	0%
The process for setting standards needs to be transparent and auditable	6	4	0	0	0
	60%	40%	0%	0%	0%
Responsibility for auditing standards lies with professional nursing organizations	5	2	2	0	0
	56%	22%	22%	0%	0%
Specialist is the level of nursing practice	6	3	0	1	0
	60%	30%	0%	10%	0%
Specialty is the area of nursing practice.	7	3	0	0	0
	70%	30%	0%	0%	0%

Section Three: Clinical practice capabilities

The four NCNZ domains of practice have been used as an organising framework. Capabilities rather than competencies are indicated here, and capability is defined as the ability to go beyond what would normally be considered competent into excellence, creativity or wisdom (Lester & Chapman, 2000). Indicate your level of agreement with these statements, in relation to desired specialist-nurse capabilities for New Zealand.

	1	2	3	4	5	6	7	8	9
Take an enquiring approach and work their way around problems, rather than accept practices and assumptions as given	3	1	0	2	1	1	0	0	0
	38%	12%	0%	25%	12%	12%	0%	0%	0%
Apply advocacy skills to assist patients/clients and carers unable to represent or speak for themselves	0	2	0	1	1	1	1	0	2
	0%	25%	0%	12%	12%	12%	12%	0%	25%
Act as a resource for individuals, families and communities in coping with changes in health, with disability and with death	1	2	0	2	0	1	2	0	0
	12%	25%	0%	25%	0%	12%	25%	0%	0%
Carry out a relevant and	4	1	0	0	0	0	1	2	0

systematic health and nursing assessment utilizing specialist knowledge including performing and/or ordering specialist diagnostic tests and procedures as permitted in the scope of practice	50%	12%	0%	0%	0%	0%	12%	25%	0%
Implement or delegate and supervise planned expert nursing care to achieve outcomes	0	0	3	0	1	1	0	1	1
	0%	0%	43%	0%	14%	14%	0%	14%	14%
Demonstrate advanced skills in the application of nursing interventions specific to area of clinical specialty	0	2	2	0	1	2	1	0	0
	0%	25%	25%	0%	12%	25%	12%	0%	0%
Have self-knowledge of limitations and ability to refer appropriately	0	0	1	2	1	1	2	1	0
	0%	0%	12%	25%	12%	12%	25%	12%	0%
Demonstrate pattern recognition skills – knows patient group both as a typical case and as individuals	0	0	1	0	2	1	1	3	0
	0%	0%	12%	0%	25%	12%	12%	38%	0%
Demonstrate that practice is individually and professionally situated rather than job- referenced.	1	0	0	1	1	0	0	1	5
	11%	0%	0%	11%	11%	0%	0%	11%	56%

9. Round One group additions to this section are presented below. What is your level of agreement with these statements in relation to a specialist nurse capabilities?

	Strongly Agree	**Agree**	**Undecided**	**Disagree**	**Strongly Disagree**
Evidence the process quality and outcomes of their practice in a variety of ways as per the value compass (JACHO)	2	5	2	0	0
	22%	56%	22%	0%	0%
Capable of flexible and creative response	4	6	0	0	0
	40%	60%	0%	0%	0%
Able to lead complex care plans within multidisciplinary teams across health and social systems	5	5	0	0	0
	50%	50%	0%	0%	0%
Act as consultant, clinical case manager for clients with complex needs.	5	5	0	0	0
	50%	50%	0%	0%	0%

11. Interprofessional health care & quality improvement Please rank the following statements in relation to importance of their inclusion in a specialist framework, with 1 being most important. A specialist nurse should be able to:

	1	2	3	4	
Live and work effectively with other professionals in the health team and other sectors and communities to assess, plan and organise care	3	4	1	1	
	33%	44%	11%	11%	
Participate and provide leadership on intra- and inter-disciplinary committees related to the development of policies and procedures, education, research and practice in area of clinical speciality	4	1	0	4	
	44%	11%	0%	44%	
Identify areas of specialist practice that can, through systematic review, result in improvement in patient experience and outcomes	2	2	4	0	
	25%	25%	50%	0%	
Integrate developments/local applications in the field of health technology to support practice.	1	1	4	4	
	10%	10%	40%	40%	

13. Professional responsibility Please rank the following statements in relation to importance of their inclusion in a specialist framework, with 1 being most important A specialist nurse should be able to:

	1	2	3	4	5	6
Promote the recognition of specialist nursing practice as an essential part of nursing practice in health service delivery	0	0	1	0	2	5
	0%	0%	12%	0%	25%	62%
Contribute to knowledge and practice development of the clinical-nursing specialty through reflective practice and developing research topics in areas of need	2	0	2	3	1	0
	25%	0%	25%	38%	12%	0%
Act as a source of expert advice to other nurses	2	1	2	2	1	0
	25%	12%	25%	25%	12%	0%
Scan practice environment	0	3	1	2	2	0

and specialist nursing literature to identify emerging trends and issues	0%	38%	12%	25%	25%	0%
Be knowledgeable about the impact of national health and social policies on service access and practice in area of clinical specialty and participates with their professional organisation in taking action	1	2	2	0	2	2
	11%	22%	22%	0%	22%	22%
Take an enquiring approach and work their way around problems, rather than accept practices and assumptions as given.	4	3	0	1	0	1
	44%	33%	0%	11%	0%	11%

15. Interpersonal relationships Please rank the following statements in relation to importance of their inclusion in a specialist framework, with 1 being most important

A specialist nurse should be able to:

	1	**2**	**3**	**4**
Continue to learn from their experiences as individuals and in association with others, in a diverse and changing society	2	3	1	2
	25%	38%	12%	25%
Be grounded in nursing philosophy	1	1	1	5
	12%	12%	12%	62%
Apply advocacy skills to assist patients/clients and carers unable to represent or speak for themselves	0	2	6	0
	0%	25%	75%	0%
Act as a resource for individuals, families and communities in coping with changes in health, with disability and with death.	6	2	0	1
	67%	22%	0%	11%

Appendix 8 Dialectic Timeline

	Dialectic timeline											
Publications							*NNO glossary*	*NZNO conference presentation - Competent on the way to capable*	*Publication in Nursing Policy and Practice Journal*	*International research conference presentation- Time to consider the special character of specialist nursing.*		*Revised NNO glossary 2011*
Research processes	Preparation for study - Ethics Approval - Doctoral Assessment	**Phase One**	Phase One interviews with key stakeholders	Data analysis and questionnaire development	**Phase Two**	Delphi round one - invitation to key stakeholders	Delphi round two	Development of model	**Phase Three**	Meet with specialist group	Online questionnaire and refinement of model	Writing thesis
	2008				**2009**				**2010**			
	Jan-Mar	Apr-Jun	July-Sep	Oct-Dec	Jan-Mar	Apr-June	July-Sep	Oct-Dec	Jan-Mar	Apr-June	July-Sep	Oct-Dec
Stakeholder external projects	**Support**					Discussion with NCNZ re definition of expanded practice		Consortia group issued first draft of specialty credentialing processes		Feedback given on expanded scope of practice	Consortia presentation using research model to frame specialist practice	
	Legitimacy					NNO identified need to clarify language resulted in authoring development of NNO glossary Consortia group begin work on specialty credentialing framework - invited to consult		Asked to present to NCNZ doctoral project	Consensus conference	Asked by consortia to lead discussion with Nursing Council to refine expanded practice definition	Consensus workshop development with NENZ	Consensus workshop - Consultation document for specialty standards
	Adequacy											
National Environment				NZNO paper on reducing numbers of colleges and sections	Credentialing paper from MOH	NNO meeting		NCNZ consultation on RN scope of practice	Consensus conference outcome			Consensus conference

Appendix 9 Specialty Criteria worked example

NZ Criteria	Evidence expectations
Criterion 1: There are clear links to the ethics and functions of nursing practice	• Nephrology as a specialty identifies that it is for registered nurse practice building on RN competencies in a specialty area of nursing • Specific standards are developed building on American and Canadian specialty groups work • The specialty of nephrology is a distinct area of practice.
Criterion 2: Describes a field of professional nursing work that requires application of distinct knowledge and skills	*Evidence of skills and knowledge sets above those of entry to the profession:* • Specific standards are developed building on American and Canadian specialty group's work. *Documented advanced competencies that are specialisation specific:* • Nationally focused, freely available to the public and associated with a key national specialty group through the renal society of Australasia • Evidence of sound governance processes for their development and maintenance evidenced by expert nurse advisory group.
Criterion 3: There is a need and demand for the specialty from community and it is developed according to patient care pathways	There is a pool of nurses who practice in the specialty at least 50% of the time There is employment demand evident through nursing vacancies listed in this specialty Projections include specialty – identified in recent workforce reports by Ministry of Health
	A national scope would be evidenced by numbers of nurses in the specialty working across New Zealand. Specialty groups have published standards that link to other frameworks-work underway to kink to PDRP
Criterion 4: There is a distinct core body of knowledge able to be researched and disseminated through publication	*At least 100 books exist about the specialty*[1] 33,000 references in Google scholar for nephrology nursing Research undertaken in the specialty and conferences available annually in Australasia *([1]from Australian tool)*
Criterion 5: Requires expertise developed through various combinations of experience, formal and informal education	Postgraduate courses exist internationally in Australia Professional development courses are available Employment linked to mentoring is underway by the Nursing Advisory Group (NAG) Education in the specialty available overseas

Appendix 10 Draft toolkit for specialty groups

Professional nursing groups seeking specialty classification have responsibility for:

- developing evidence to meet the threshold legitimacy criteria for a specialty
- determining aspects of care specific to the specialty area
- identifying the knowledge and skills framework (KSF) needed to deliver those aspects of care (within the registered nurse scope)
- levelling the expectations across the "all, many and some" groups of RNs.

Role legitimacy

As per response to first consortia consultation against five criteria:

- clear links to ethics and functions of nursing practice as nursing specialties are a way of describing a field of professional nursing work
- specific area of practice that requires application of distinct knowledge and skills
- need and demand for the specialty from communities and that specialty areas should be developed according to patient care pathways
- distinct core body of knowledge able to be researched and disseminated through publication
- expertise developed through various combinations of experience, formal and informal education.

Role adequacy

Results from Delphi study [links to NCNZ competencies]

Clinical judgment:

- carry out a holistic relevant and systematic nursing assessment utilizing specialist knowledge and skill (as defined by specialty group) [2.2]

- demonstrate advanced professional skills specific to area of clinical specialty (as defined by specialty group) in both clinical judgment and subsequent nursing interventions [1.2;2.1].

Dealing with Complexity:

- identify and articulate areas of specialist nursing practice that can, through systematic review, result in improvement in client experience and outcomes [2.4;4.1;4.2;4.3]

- take an enquiring approach and work around problems, rather than accept practices and assumptions as given, developing flexible and creative responses [1.2;1.3]

- continue to learn from experiences both as an individual and in association with others [2.4;2.5]

- act as consultant, clinical case manager, resource for clients and families with complex needs and as a source of expert advice to other nurses and health care professionals [2.3; 2.4;3.1;3.2;3.3;4.1;4.2]

- work effectively with other professionals in the health team and other sectors and communities to assess, plan and organise care in complex and unstable contexts [2.4;4.1;4.2;4.3]

- participate and provide leadership related to the development of policies and procedures, education, research and practice in area of clinical speciality at local and national level [2.4;4.1;4.2;4.3]

- contribute to further clinical knowledge development in the specialty need area through reflecting on own practice and developing research topics in areas of need [1.1;2.5; 4.3].

Nurse Specialist Standards – using KSF

Nursing	
Practice standards	*Define aspects of care specific to the specialty area* - Core concepts/interventions specific to nursing practice within the specialty area[3]. Should cover at least assessment, pathophysiology, interventions, medications, health promotion and context of care.
Specialist knowledge for clinical decision making and clinical judgment *Carry out a holistic relevant and systematic nursing assessment utilizing specialist knowledge and skill (as defined by specialty group) [2.2]*	Identify specialty knowledge needed to deliver aspects of care for population of nephrology clients: • Communication • Assessment • Pathophysiology • Interventions • Pharmacology • Health promotion • Context of care. E.g., Blood Pressure; Blood Sugar; Nutrition; Anaemia; Cardiovascular Disease; Hyperlipidaemia; Bone Disease; Smoking ; Referral to Nephrology Care Team; Education; Dialysis Access
Advanced professional skills for specialist nephrology nursing care *Demonstrate advanced professional skills specific to area of clinical specialty (as defined by specialty group) in both clinical judgment and subsequent health care interventions [1.2;2.1]*	Identify specialty skills needed to deliver aspects of care for population of nephrology clients *Clinical Judgment:* • Communication • Assessment • Pathophysiology • Interventions • Pharmacology • Health promotion • Context of care.

Role support

Work with employers and use the NCNZ expanded practice decision-making framework to assist development of organisational standards.

Appendix 11 Publications and Presentations from this study

Peer reviewed publications

Holloway, K., Baker, J., & Lumby, J. (2009). Specialist Nursing Framework for New Zealand: A Missing Link in Workforce Planning. *Policy, Politics, & Nursing Practice, 10*(4), 269-275.

Peer reviewed conference presentations

Holloway, K. (2009). Competent on the way to capable. Peer-reviewed conference presentation at *Opening doors: Celebrating nursing research* conference, Wellington, New Zealand, 21-21 November 2009.

Holloway, K., Lumby, J. & Baker, J. (2010). Time to consider the special character of specialist nursing. Peer-reviewed abstract published in proceedings and presented at *21st STTI International Nursing Research Congress*, Orlando, Florida, 12-16 July 2010.

Accepted- not yet presented

Holloway, K. (2011). If we build it, will they come? Building a national framework for educating the capable nurse specialist. Peer reviewed conference presentation at *NET2011 conference,* Cambridge, England, 5-9 September 2011.

National publications

Holloway, K. (2009). *New Zealand National Nursing Organisations Glossary of Terms*: New Zealand National Nursing Organisations.

Holloway, K. (2011). *New Zealand National Nursing Organisations Glossary of Terms 2nd Ed.*: New Zealand National Nursing Organisations.

Non-peer reviewed conference presentations

Holloway, K. (2007). *Specialist Nursing in New Zealand: Development of a framework.* Paper presented at the Research Student Symposium, University of Technology Sydney.

Holloway, K. (2008). *Competent on the way to capable?* Paper presented at the Research Student Symposium, University of Technology Sydney.

Holloway, K. (2009). *The Online Delphi – Consensus in cyberspace*. Paper presented at the Research Student Symposium, University of Technology Sydney.

Holloway, K. (2009). *The journey to the idea – invited presentation*. Paper presented to the Nursing Council of New Zealand. Wellington.

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