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Professional Practice Attributes
Within
Public Health Nursing

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ABSTRACT

Modifiable organisational attributes that reflect a professional nursing practice environment are important determinants of both the experience of people who access health care services and the job satisfaction of nurses who work within health care organisations. Research relating to acute care settings, commonly known as the Magnet phenomenon has made an outstanding contribution to health sector knowledge by identifying features that attract and retain nurses, promote excellence in patient care, and achieve superior patient outcomes. These features have been studied by the Nursing Work Index Revised which measures attributes that reflect a professional nursing practice environment. More recently there has been an interest in the potential applicability of these attributes in the community setting. A recent study surveyed United States home health nurses and New Zealand district nurses to ascertain which of the Nursing Work Index Revised attributes were perceived by them as important to the support of their professional practice. In this study 92% of items previously tested in acute settings were considered important in community settings.

This descriptive study extends the previous work by investigating how another group of primary health care nurses in New Zealand (public health nurses) perceive the importance of specific organisational attributes within their practice setting. The Nursing Work Index Revised was utilised and participants were asked to rate their agreement or disagreement with the importance and presence of 48 attributes on the Nursing Work Index Revised against a 4-point Likert scale. The findings of the study validate the use of the Nursing Work Index Revised as a tool in the community setting. The study's findings, implications for nursing practice, future research and the potential use of this tool to support the development of primary health care nursing in the New Zealand health sector is presented.

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"The secret of success is making your vocation your vacation"

Mark Twain.

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CHAPTER ONE: INTRODUCTION

This study examines how nursing professional practice environments impact on the ability of public health nurses to practice to their full potential. The introduction will provide an overview of the study and how it evolved. The term professional practice environment will be discussed and an overview of the New Zealand (NZ) health sector will be presented. An outline of public health, public health nursing and the development of primary health care nursing will be provided. This is then followed by an explanation of the layout of the thesis.

1.1 Background to the Study

Since the mid 1990s, I have had an interest in how health organisations can best meet expected patient and nursing outcomes. In my career I have been employed in a variety of nursing leadership positions influencing the reshaping of a District Health Board's District Nursing Service to improve patient and nursing outcomes.

My study evolved from a comparative study examining the professional practice attributes of NZ district nurses, and both home health care and hospital based nurses in the United States (Flynn, Carryer & Budge, in press). In my capacity as Chairperson of the District Nurses Section, New Zealand Nurses Organisation (NZNO) I was asked to provide a letter of support for the national application to gain ethical approval for the research project. The study asked participants to complete a Nursing Work Index – Revised (NWI–R) questionnaire (Aiken & Patrician, 2000). The NWI-R questionnaire has been used to measure (the presence of) organisational attributes within hospitals and has been a major component of a body of literature known as the "Magnet" phenomenon. This literature suggests that modifiable organizational attributes reflecting a professional model of nursing are important determinants of both patient and nurse outcomes. A range of sub-scales has been derived from the attributes, the three most common sub-scales being control over

nursing practice, autonomy and nurse-physician relationships (Aiken, Havens, & Sloane, 2000; Havens & Aiken, 1999; Scott, Sochalski, & Aiken, 1999).

The NWI-R has usually been used to measure actual presence of the organisational attributes. However, Flynn, Carryer and Budge (in press) used the NWI–R to identify which of the organisational attributes community based nurses considered important to their professional practice. The reason for this was to develop a pool of potential items for a home health version of the NWI-R. Their study found that over 92% of the items comprising the NWI-R were considered important to the practice of New Zealand district nurses and home care nurse in the United States. (Carryer, Budge & Flynn, 2003).

The above study interested me as I was acutely aware of the paucity of empirical literature available with respect to the effects of organisational attributes on patient and nursing outcomes in community settings. Having read many of the Magnet studies I was attracted to the Magnet concept and therefore decided to study the professional practice attributes within public health nursing. I chose public health nursing as opposed to other primary health care nurses as the former are predominantly employed by the provider arm of District Health Boards, in the same manner as the district nurses. For the purpose of this study the public health nurses were asked to rate the attributes which make up the NWI-R for both their actual presence, and for their importance in their practice as pubic health nurses (this is further explained in Chapter Three).

The overall aim of the present study is threefold: to identify the organisational attributes public health nurses consider important to their professional practice; to distinguish which of these are perceived to be present in their practice environment; and to ascertain whether the professional nursing practice environment public health nurses desire is different from that of other nurses.

As a background to this study the next section provides an explanation of the key term "professional practice environment" along with an overview of the NZ health sector, public health nursing and the development of primary health care nursing in NZ in order to understand the current positioning of public health nurses.

1.2 Professional Practice Environment

The term professional practice environment is regularly used internationally in nursing. Sleutel (2000) defines the term as "a set of concrete or abstract psychological features, such as job characteristics, autonomy, and promotion opportunities perceived by job incumbents who compare these perceptions against a set of standards, values or needs" (p. 55). Hoffart and Woods (1996) define a professional nursing practice model as a "system (structure, process and values) that supports the registered nurse control over the delivery of nursing care and the environment in which care is delivered" (p. 354). Furthermore, they suggest that a professional practice model leads to improved outcomes and can be viewed as having five interrelated strands, comprising professional values, professional relationships, patient care delivery system, management approach and compensation and rewards.

The above model is also supported by Estabrooks et al. (2002). They suggest that an effective model must reflect the standards and values commonly promoted in professional education, valued by nursing leaders and perceived by employees as desirable. Furthermore they go on to define the practice environment as "a set of workplace features that when present, enable nurses to demonstrate professional practices characterized by decision making autonomy, clarity of mission, and organisational responsiveness" (p. 265).

The American Association of Colleges of Nursing (AACN) (2002) described the hallmarks of the professional nursing practice environment that apply to all professional practice settings and all types of nursing

practice, not only nurses working in hospitals. An AACN taskforce was established to identify the environmental characteristics of the practice setting that best support professional nursing practice and enable nurses to practice to their full potential. This taskforce examined literature on work environments that support professional nursing practice, including the Magnet hospital studies, (described in detail in Chapter Two), studies on the use of preceptors in the clinical setting, residencies or internships as a mechanism for more effective transition of new graduates into the practice arena, the use of differentiated nursing practice models and studies of environments that support interdisciplinary collaboration.

The AACN (2002) suggests that the first objective of the professional practice environment is to put the patient first. They identified eight hallmarks of a professional practice environment as follows:

- Manifest a philosophy of clinical care emphasizing quality, safety, interdisciplinary collaboration, continuity of care, and professional accountability
- Recognise contributions of nurses' knowledge and expertise to clinical care quality and patient outcomes
- Promote executive-level nursing leadership
- Empower nurses' participation in clinical decision making and organisation of clinical care systems
- Maintain clinical advancement programs based on education, certification, and advanced preparation
- Show professional development support for nurses
- Create collaborative relationships among members of the health care provider team
- Use technologic advances in clinical care and information systems.

(AACN, 2002 , p. 299-300).

The taskforce recommended that these eight hallmarks be implemented in all practice settings and all types of nursing practice in America and

furthermore suggested that new nurse graduates use the hallmarks as a framework to assist them to decide where to practice after graduating.

1.3 New Zealand Health Sector

Health sectors in western countries have experienced continual restructuring and redesign in a failed attempt to reduce the increasing cost of health care. Twaddle (2002) purports that these changes have been driven by an ideology of efficiency and a tendency to view professional or clinical autonomy as counter productive. Nursing leaders in America state that health care delivery has changed dramatically and rapidly (Aiken & Patrician, 2000). Moreover, many cost savings initiatives in health care have been at the expense of the professional practice workforce through continuous restructuring of services and alterations in skill mix (AACN, 2002). Since the mid 1980s the NZ health sector has been going through similar changes (Finlayson & Gower, 2001; Budge, Carryer & Wood, 2003). These authors suggest that hospital restructuring in NZ has changed the way in which nurses' work is organised and managed. The key issues for nurses following the health reforms include loss of nursing leadership, both clinical and executive, reduced staffing levels, altered skill mix, and high nursing staff turnover. Carryer (2001) argues that the effects of the loss of nursing leadership and loss of nursing control of practice became increasingly serious during the 1990s.

The most recent major change in the New Zealand health sector was the release of the NZ Health Care Strategy (Ministry of Health (MoH), 2000) which describes the goals, objectives and national framework for health sector development. This was followed by the release of the Primary Health Care Strategy (MoH, 2001). The Primary Health Care Strategy suggests that most of the principles, goals and objectives outlined in the NZ Health Strategy will only be achieved through a primary health care system.

The NZ Health and Disability Sector Act (2000) saw the establishment of 21 District Health Boards (DHBs). Each DHB has a population-based approach and is responsible for assessing health needs, establishing strategic and operational plans, funding primary health care and disability services and providing public health, hospital and some community services within their region (MoH, 2000).

Primary Health Organisations (PHOs) are defined as not for profit local structures that will be accountable for public funds they receive through DHBs to provide primary health care services that meet the needs of their enrolled populations (MoH, 2001). All New Zealanders are now expected to enroll with a PHO that will deliver a set of essential primary health care services by a group of providers and practitioners, all of whom are theoretically involved in decision making. The services will include approaches directed towards improving and maintaining the health of populations. Included in this are first line services to restore peoples' health when they are not well (MoH, 2001).

The overall goal of the NZ Health Strategy and the Primary Health Strategy is to improve the health status of the population and reduce inequalities (MoH, 2001). PHOs aim to promote the health status of New Zealanders by combining primary health care skills with public health practice and establishing meaningful engagement with the community. It is expected over time that various organisations currently providing primary health care through individual agreements with DHBs will be involved in forming PHOs.

(Professor) Linda Aiken, Director of the Center for Health Outcomes and Policy Research at the University of Pennsylvania in Philadelphia, has led much of the research in the United States and internationally regarding the impact of organisational attributes of hospitals on nurses and patient outcomes. Professor Aiken met with the NZ. Minister of Health in 2002, subsequently the Minister expressed strong support of the Magnet hospital principles for NZ District Health Boards and some District Health

Boards are now pursuing the introduction of the Magnet concept and principles (Nursing Sector Update, June 2003). The Chief Nurse Advisor for the Ministry of Health established a NZ Magnet Advisory Network in February 2002, subsequently known as Magnet NZ. The Magnet NZ concept is "to improve the health of New Zealanders by developing nursing workforce environments that are focussed on improving patient outcomes through quality, safety and retention and recruitment of skilled nurses" (Hughes, 2003, p.2). The research underpinning this initiative will be explored in Chapter Two.

With the advent of PHOs in NZ, there is an opportunity to consider, in this new context, appropriate professional practice environment attributes that reflect the "Magnet" evidence. As some hospitals in NZ are currently pursuing the introduction of Magnet concepts, it may be possible for DHBs to introduce the Magnet principles across the primary, secondary and tertiary sector. This could assist in an improved health continuum of care for people who access health services within a DHB.

In the future it is envisaged that most primary health care nurses will become part of PHOs (MoH, 2001). One of the overall aims of this study, as previously noted, is to identify the organisational attributes public health nurses consider important to their professional practice. It is therefore timely to begin exploring the applicability of previous Magnet research to nurses in community or primary health care locations. To understand the current role and the potential role of the public health nurse, the next sections provide an overview of public health, public health nursing and primary health care nursing.

1.4 Public Health

Public health is defined by Acheson (1988) as "the science and art of preventing disease, prolonging life and promoting health through the organised efforts of society". The National Health Service (NHS) in Scotland suggest that the key goals of public health are to improve health

and well-being in the population, prevent disease and minimise its consequences, prolong life and reduce inequalities in health. Public health practice takes place at a variety of different levels with individuals, families and communities at a local, regional and national level (NHS Scotland, n.d). The key purposes of public health in Scotland are echoed in the recently published booklet in NZ by the Ministry of Health (MoH) titled "Achieving Health for All People – Whakatuki te Oranga Hauora Mo Nga Tangata Katoa" (MoH, 2002a). The publication provides a framework for public health action over the next three to five years and beyond and is based on the notion of keeping people healthy and improving the health of populations as opposed to treating individual diseases, disorders and disabilities.

In NZ, the MoH has overall responsibility for the funding and planning of public health services. Public health funding is divided between non-government organisations and Public Health Units. There are twelve Public Health Units that provide services in the communities across the 21 DHBs and the units are responsible for delivering both health protection and health promotion activities (MoH, 2002a).

1.4.1 Public Health Nursing

In NZ, public health nursing emerged in 1902 following an outbreak of dysentery in Papawai. The Chief Health Officer recommended to the Native Department that a nurse be sent to assist the doctor to teach health to the Maori people (McKegg, 1992). Under the Native Department, Maori women were encouraged to train native health nurses. The duties of native health nurses were to provide advice to Maori women on hygiene, food preparation, feeding and care of their children, and also advice to pregnant women, and if possible, care for them at delivery (Burgess, 1986). As time went on, the native health nurses were asked to attend Europeans living in the 'back-blocks' (McKegg). However, the scheme did not develop as expected and the Native Department was transferred to the Department of Health in 1911.

In 1912 school medical inspections were instituted but school nurses were not appointed by the Education Department until 1917. In 1920 a new Health Act was passed dividing NZ into four health districts and the nurses employed by the Education Department were transferred to the health districts under the Department of Health (NZ Nurses Association, 1980). This amalgamation saw a change of title from native health nurse to district health nurse but the 'school health nurse' title remained (Seeman, 1986). The breadth of the district health nurse work was extensive and they worked with individuals, families and groups in a variety of settings providing predominantly family centred care to at risk groups and to people with communicable diseases (Barham, 1984).

In 1953 the service combined with the Industrial Health Nurse and the title changed to public health nurse (Department of Health, 1986). The following three decades saw little change to the service. However, significant factors were occurring that affected public health nurses, in particular the role of plunket nurse, the emergence of primary health care, the evolving roles and responsibilities of community health workers, and in the 1970s, the establishment by the Government of a subsidised practice nursing scheme formalising the role of practice nurses.

Since the 1980s public health nurses have been caught up in almost constant restructuring both locally and nationally. Local events included trial programmes in 1981 to see if a generalist nurse could be formed by combining the skills of the district nurse and the public health nurse (Takarangi, 1993; Kinross, Nevatt & Boddy, 1987) and the amalgamation of district health offices. National events included the formation of Area Health Boards in 1983; the introduction of Health Development in 1986 (which was seen as a means to promote community development to encourage positive health); General Management in 1987; and the down sizing and budgeting constraints of the Department of Health in 1988 (Brunton & Shaw, 1991).

In 1980 the Director-General of Health was the employing authority for nurses employed by hospital boards. The State Service Commission was the employing authority for public health nurses. According to Shaw (1991) public health nurses were geographically based and provided "population health with a focus ranging from individual problems to community wide targets" (p. 16). During this time there was a national career pathway and many support networks. However, after the formation of area health boards the role of public health nurses changed and became fragmented. Their nursing leadership was disestablished and replaced with non-nursing mangers in charge of larger services (NZ Nurses Association, 1980). While a number of nurses may have retained senior roles, an effective public health nurse voice was lost in many areas with senior nurses having to report to yet another manager (A. Shaw, personal communication, February 11th, 2004).

Along with the change of employer from the Department of Health to Area Health Boards was the shedding of the previous centrally controlled decision making and national coordination from the Department of Health. Decentralised decision making meant that public health nursing services could develop independently in every area health board (NZ Nurses' Association, 1986). As each service changed, public health nurses lost common lines of communication with other area health boards. Soon after this change the reforms which stemmed from the Green and White Paper (Upton, 1991) saw the Department of Health become the Ministry of Health, and emphasis placed on contracting for outputs and outcomes, not processes. This lead to further erosion of the role of the public health nurse.

Wagner (1998) states that since the formation of area health boards, health services have been politically driven towards a contract-based, market-orientated competitive service by respective governments, with a shift to capitation funding in some areas of the primary health care sector. According to Voyle (2000) the health reforms were to link hospitals and community based services more closely together in health service delivery

and the funding structure for public health nursing was changed. However, the changes have resulted in a more competitive funding environment for public health nurses, which has discouraged co-operation and the sharing of information among local community health services (Voyle, 2000).

The move to health development in 1986 changed how public health services worked at the district level. The public health workforce, including public health nurses, became members of multi-disciplinary teams that worked on programmes to meet identified community needs. They were no longer expected to be a generalist public health nurse working in all aspects of public health, but specialist nurses focussing on one or two areas of work (Brunton & Shaw, 1991). This change resulted in narrow contract specifications that did not reflect human need (College of Nurses Aotearoa, 2001). The current Ministry of Health service specifications have regional variations and outline the focus of public health nursing practice. The focus of the contracts is for public health nurses to work with their communities providing Well Child care for school-aged children, primary prevention and health promotion to improve the health of populations, and in some areas responsibility for infectious disease follow-up (Expert Advisory Group on Primary Health Care Nursing, 2003).

Voyle (2000) suggests that the constraints to effective public health nursing practice need to be addressed. These constraints to practice for public health nurses and other primary health care nurses are outlined in the vision and goals of the Primary Health Care Strategy (2001). The strategy suggests changing the competitive funding environment, negotiating new working relationships, and that establishing new systems and processes (MoH, 2001).

Internationally other health services are also influencing the way public health nursing services are delivered. The National Health Service (NHS) Scotland (n.d) outlines a review of the contribution of nurses, midwives

and health visitors to improving the health of the public in Scotland. The NHS suggests that nurses' contribution dates back to the time of Florence Nightingale, a well known public health campaigner, who responded to the poor life expectancy in the late 19th and early 20th centuries. However the emphasis on public health has been diluted and devalued over recent years, which the NHS states "is partly due to an overemphasis on individual responsibility for improving health and the impact of the NHS market, with its emphasis on quantifying activity" (p. 1). The NHS has made recommendations regarding the future development of nursing roles in public health, focusing on individuals and their families, communities and public health strategy and leadership. Many of the recommendations outlined by the NHS Scotland (n.d) are echoed in the framework for activating primary health care nursing in NZ explained in detail further in Section 1.51.

1.5 Primary Health Care

According to the Primary Health Care Strategy (2001) the vision for Primary Health Care is:

> *People will be part of local primary health care services that improve their health, keep them well, are easy to get to and co-ordinate their ongoing care. Primary Health Care services will focus on better health for a population, and actively work to reduce health inequalities between different groups (MoH, 2001, p. vii)*

Carryer, Dignam, Horsburgh, Hughes and Martin (1999) state that the "desire for population based health care and an increased emphasis on primary health care is long-standing" (p. 4). Furthermore, they suggest that nurses such as public health nurses, district nurses, specialist community nurses and practice nurses have been and should be again at the forefront in delivering population based primary health care.

The Declaration of Alma-Alta, World Health Organisation (WHO, 1978), defined primary health care as "the first level of contact individuals, the family and community have with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process". This definition has led to confusion between the terms primary care and primary health care in the literature. WHO (1996) now suggest that if there is not a change of emphasis from primary medical care to genuine primary health care, advances will not be made and health care will remain disjointed. Nurses view primary health care as "a conceptual framework for providing public health and primary care services; it includes delivery of essential, affordable, accessible, and acceptable health care to the community, with an emphasis on disease prevention and health promotion, community involvement, multi-sectoral co-operation, and appropriate technology (Stanhope & Lancaster, 1996, p. 1100) Carryer et al. (1999) proposes that the confusion between primary care and primary health care has been fundamental to the delayed development of nursing in primary health care in New Zealand.

The practice nurse subsidy introduced in the 1970s was planned as an opportunity for nurses to provide a free service as a 'first point of contact' with the health system by providing uncomplicated health advice, assessments and intervention. It has however been common for general practitioners to insist on seeing the patient as well, to enable them to claim for a general medical subsidy. This reduced autonomous decision making by practice nurses as primary health care providers and reinforces the College of Nurses Aotearoa's (CNA) statement that "as long as primary health care is covertly understood as primary medical care then community development, disease prevention and health promotion will be marginalised" (CNA, 2001, p.6). Over the years the practice nurse subsidy has reduced which has further impeded primary health care nursing in the general practice setting. People are now often charged to see the nurse, this cost often means they only access nurses as a reactive process to a

health crisis and discourages people from seeking proactive interventions for health care.

1.5.1 Primary Health Care Nursing

The Primary Health Care Strategy (2001) has significant implications for the primary health care nursing workforce. Currently there is an uneven distribution of primary health care providers and primary health care nursing services. Many nurses are not in a position to determine the nature of the service that they provide or the outcomes for that service and for the people they serve (CNA, 2001.) Present models of primary health care nursing services are fragmented, inconsistently delivered, and not aligned to meeting communities' needs. With the development of PHOs a clear nursing service structure is needed to address integration and coordination of all nursing activities in the sector (Hughes, 2001).

There is a plethora of titles for nurses who work in primary health care and many of the titles are related to the nurses' contractual employment rather than their scope of practice. This has led to general confusion surrounding the roles of nurses in the community, adding to the fragmentation and inability to deliver comprehensive primary health care. The CNA (2001) suggested the term 'primary health care nurse' should be used by the sector in response to the Primary Health Care Strategy (2001) and argued that the umbrella title of primary health care nurse would allow nurses to become integrated in their approach to delivering primary health care. In addition post-graduate programmes could be developed focusing on developing nurses' knowledge base in primary health care.

To provide direction on the development of a national framework for primary health care nursing, the Ministry of Health established an expert nursing advisory group in 2001. The advisory group was given the mandate to review current models of practice, information systems, and the employment arrangements for primary health care nurses in NZ. The group was asked to develop a model of primary health care nursing to be

piloted, which will provide advice to nurses, PHOs, DHBs, and the Ministry of Health on future employment arrangements. (Hughes, 2001).

In 2003 a report to the Ministry of Health from the expert advisory group on primary health care nursing was published entitled *"Investing in Health: Whakatohutia to Oranga Tangata: A framework for activating primary health care in New Zealand"*. The report recommends the following definition of primary health care nurses:

> *Registered nurses with knowledge and expertise in primary health care practice. Primary health care nurses work autonomously and collaboratively to promote, improve, maintain and restore health. Primary health care nursing encompasses population health, health promotion, disease prevention, wellness care, first point of contact care and disease management across the lifespan. The setting and the ethnic and cultural grouping of the people determine models of practice. Partnership with people individuals, whanau, communities and populations, to achieve the shared goal of health for all, is central to primary health care nursing (Expert Advisory Group on Primary Health Care Nursing, 2003, p. 9.)*

The above definition refers to registered nurses working in the following categories; child health nurses (e.g. plunket, tamariki ora), district nursing, family planning/sexual health, occupational health, practice nurses, public health nurses, nurses working in health promotion / health education, disease management nurses (e.g. asthma and diabetes nurses), mobile Maori nurses, tele-health line nurses, rural nurses, community mental health nurses and school / educational nurses (Ministry of Health, 2002b, p. 45).

The *Investing in Health* report outlines the vision for primary health care nursing and the five goals to activate primary health care nursing in New Zealand. The framework vision is "to create the environment that enables

nurses to provide integrated comprehensive nursing care to individuals and population groups in NZ primary health care settings, and that strengthens the primary health care team towards improving health for all" (p. 9). The goals of the framework are: aligning nursing practice with community need, developing innovative models of nursing practice, nurses involved in governance of PHOs, clear accessible nursing leadership and recognised education and career development (Expert Advisory Group on Primary Health Care Nursing, 2003). These goals encompass the eight hallmarks of professional practice environment identified by the AACN (2002).

As already noted nurses need to have created an environment that enables them to provide integrated comprehensive nursing services. Baileff (2000) describes different models of integrated nursing teams and suggests that community nurses are seeking a more collaborative way of working together. Furthermore she states successful teams need to have leadership, a shared vision and effective communication channels, all of which are organisational attributes of the NWI-R. Allen, Clark, Toby, Smart and Moore (2001) describe an integrated approach to nursing care delivery which was implemented using participatory action methodology and defined integrated nursing team as "a team of practice-based nurses from different disciplines working together flexibly, supporting colleagues, maximising their skills and focusing on the health needs of the population" (p. 44). Identifying the present and desired organisational attributes that are important to public health nurses may help in developing an environment that will foster development of integrated nursing services in New Zealand.

1.6 Research Questions

The research questions for this study are:

1. Which organisational attributes of the nursing practice environment do public health nurses consider to be important (*ideal*) for providing quality care?
2. Are the organisational attributes the public health nurses identify as being important (*ideal*) to their professional practice different from the ones identified by the district nurses, and how do they compare to the US home health nurses and the US hospital nurses?
3. How do public health nurses rate their current (actual) nursing practice environment on the 48 attributes, and how do the actual ratings compare to the ideal ratings?
4. How do scores on the three previously identified NWI-R sub-scales (control over nursing practice, autonomy and nurse-physician relationships) compare to scores reported in previous research?
5. What other organisational attributes do public health nurses identify as being specific to the community setting?
6. What characteristics should a public health nursing service have to make it a "good place to practice nursing"?
7. How can a public health nursing service support nursing practice?
8. Given the current changes in the NZ health sector, and the development of PHOs, what is the public health nurses' preferred place of employment, DHB Public Health Unit, DHB PHO or Maori provider. What advantages and disadvantages do they see for each option?

1.7 Overview of the Thesis

This thesis is divided into six chapters. This chapter has introduced the background for this study and has discussed the term professional practice

environment, provided an overview of the NZ health sector including public health, public health nursing and the development of primary health care nursing. The literature review follows in Chapter 2. It presents an overview of a selected research completed on public health nursing to further expand on the varied role of public health nursing, followed by the Magnet studies and the history of the Nursing Work Index and the Nursing Work Index Revised. Three of the Magnet sub-scales (control over practice, autonomy and nurse-physician relationships) will be examined along with their relevance to primary health care nurses.

Chapter 3 describes the study methods. It presents the research methodology, details concerning participant selection are given, and the method for data collection and analysis of quantitative and qualitative data is outlined. Issues for ethical consideration are described as are the procedures for the information, consent, confidentially and use of results are detailed.

Both quantitative and qualitative survey techniques are used to identify and describe organisation attributes of public health nursing services that public health nurses consider important to their practice. It is acknowledged that the traditional layout for a thesis is that the results are presented in the result chapter then discussed in the discussion chapter; particularly for theses using a quantitative approach. While writing the thesis it proved challenging to write the results chapters combining quantitative and qualitative findings without simultaneously discussing them. A decision was made to embed discussion within the results chapters and to provide an overarching discussion of the implications of the findings in the final chapter. The last three chapters are presented as follows.

Chapter 4 presents and discusses the quantitative findings, using tables to aid interpretation and analysis to answer the first four research questions. The public health nurses perceptions of the importance of specific organisational attributes within their practice setting are identified and

compared to the NZ district nurses and the US. home health nurses. The results of the participants current practice environment are presented and compared to the public health nurse's ideal environment. The results reflect that the actual practice environment for public health nurses is far from ideal.

Chapter 5 presents and discusses the qualitative findings, using pie charts and tables to aid interpretation and analysis of the remaining four research questions. The 167 participants offered two hundred and twenty three suggestions of other attributes relevant for the community setting, which resulted in four categories, namely recognition of specialty practice, resources, networking and education/research. Six categories are presented to describe the characteristics and desired support of nurses employed by public health nursing service. These include leadership, orientation/education, support, recognition, quality and resources. The final question regarding preferred employment setting resulted in just over 60% of respondents preferring to be employed by the DHB – Provider arm, Public Health Unit.

Chapter 6 discusses the implications of the findings of this study, in particular relating them to the goals of the national framework for activating primary health care nursing in New Zealand. Implications for nursing practice and further research are explored along with the limitations of the study.

1.8 Summary

For public health nurses to deliver effective care their practice environment should demonstrate the five Expert Advisory Group on Primary Health Care Nursing (2003) goals and the eight AACN (2002) hallmarks outlined within this chapter. As already noted the AACN taskforce (2002) examined literature on work environments that supported professional nursing practice, this included the Magnet studies. Flynn, Carryer and Budge (in press) used the NWI-R questionnaire from

the Magnet studies found that over 92% of the items comprising the NWI-R were considered important to the practice of NZ district nurses and home care nurse in the US. This present study will contribute to information regarding another group of primary health care nurses (public health nurses) and their perception of the importance and presence of specific organisational attributes within their practice setting.

CHAPTER TWO: LITERATURE REVIEW

In the previous chapter the term professional practice environment was discussed and an overview of the NZ health sector was presented including public health, public health nursing and the development of primary health care nursing. The intent of the first section of this chapter is to present international and national literature on the work of public health nurses. None of the studies sourced focused on the professional practice environment of public health nurses, but they do provide an insight into the breadth and complexity of public health nurses work. The second section of this chapter investigates Magnet studies and the origins of the Nursing Work Index and the Nursing Work Index-Revised (NWI-R). The NWI-R tool has shown considerable benefit for advancing scientific enquiry into discovering how organisational structure affects outcomes of health services. The tool can inform organisational redesign initiatives that seek to improve quality of care and health outcomes (Aiken & Patrician, 2000).

Three of the Magnet sub-scales, which are identified as the core elements of a professional practice environment in the literature, (control over nursing practice, autonomy and nurse-physician relationships) will be further examined and supported by literature regarding primary health care nurses.

2.1 Public Health Nursing

Zerwekh (1991a) presented two spheres of public health nursing competency, namely 'family care giving' and 'nurse preserving'. She believes (1991b), that the purpose of public health nursing is to be available to the community as a whole and to collaborate with families to foster health. This she states is achieved, by public health nurses assisting families to take control of their own health decisions. This involves

listening to what the family wants and planning care from this point, even if the health choice is contrary to the belief of the nurse.

To provide an understanding of the personal practice of public health nurses in NZ, Green (1993), a public health nurse herself, completed a study of children within the context of their family. Green's findings are consistent with Zerwekh (1991b) and she suggested a framework for nursing practice and identified four categories, namely being accessible, framing practice, seeing the whole picture, and making and using the relationship. The interaction of the categories results in the integrating concept of enabling choice. Around the same time, Pybus (1993) completed an in-depth description of the work of three public health nurses with 15 stressed families and provided an insight into public health nursing practice in NZ. The overall aim of the study was to describe the services that public health nurses provided to stressed families with children. The description of public health nurses work was described as family focussed and directed towards three goals, namely "enforcing minimum standards of child care, in-depth treatment of particular health problems, and helping families achieve activities of everyday healthy life" (p. 97).

Gallagher (1997) described expert public health nursing practice in NZ using Heideggerian phenomenology as the research methodology. The outcome of Gallagher's research was the identification of four themes (in bold) and 11 sub – themes (in italics). The first theme is **delving beneath the surface** which recognised the finely tuned assessment skills used by nurses, the nurses *recognising that it is seldom simple,* as most situations were complex, and the nurse ensuring she was *seeing the full picture.* The second theme, **watchful journey,** identified the significance of the nurses forming *formal relationships* with the client leading care and the nurse developing *sustaining relationships over time* and *closing with care* which requires the nurse to have skilled clinical judgement. The third theme, **moving to the client's rhythm,** concerned the enhanced well being of clients and involved *coaching in harmony* and the importance of

focusing on the everyday and *valuing and supporting change.* The final theme, **coping with the dark side,** identified the knowledge and skills nurses needed to find meaning in their work but their focus was always *keeping the child at the centre of the web.* Central to the nurses' practice was *maintaining personal safety* which included *walking along an ethical path.*

Gallagher's research supports Pybus's (1993) early findings, although the aims of the two studies were different. Gallagher (1997) states "the congruence in findings support the possibility of developing a model of public health nursing practice that encompasses both a unique NZ perspective and an understanding of the continuum of practice development within this speciality" (p. 116).

In 1997 two further studies were completed in NZ regarding the practice of public health nurses. O'Sullivan (1997) used a single case study approach and examined in-depth the complex processes involved in delivering primary health care to adolescents and adults in a college setting in NZ. O'Sullivan identified three themes, namely maximising, which emphasises partnerships and networking skills, optimising, which concerns building of strengths and breaking down of barriers, and empowering. O'Sullivan suggests the last theme must occur for the first two themes to be effective.

Hinder (1997) conceptualised public health nurses work as 'accompanying'. Hinder viewed accompanying as public health nurses assisting families by supporting, sharing knowledge and escorting the families through the health process. Hinder (2000) completed an action research study on public health nurses in NZ to provide a process in which public health nurses could examine their current practice and extend their practice into a 'family centred' clinic. A 'portfolio' with criteria to define an advanced public health nurse practitioner was presented.

In NZ, public health nursing has been strongly identified with primary health care, health promotion philosophies and strategies of health and

wellness (Shaw, 1991). The NZ studies outlined identified primary health care as inherent in their work.

2.2 Magnet Hospital Studies

The American Academy of Nursing undertook a study of hospitals in the United States in the early 1980s during a national nursing shortage in America to identify organisational characteristics of hospitals that were able to recruit and retain nurses. One hundred and forty-five hospitals were examined, which resulted in the identification of 41 hospitals that not only retained and recruited nurses successfully, but also reported high quality care was given. These hospitals were identified as 'Magnet hospitals' (McClure, Poulin, Sovie, & Wandelt, 1983). This has resulted in a body of literature, known as the "Magnet" phenomenon. This literature suggests that modifiable organizational attributes that reflect a professional model of nursing organization are important determinants of both patient and nurse outcomes. The literature has made an outstanding contribution to nursing knowledge by identifying those features of hospitals that attract nurses, promote excellence in patient care, and achieve superior patient outcomes (Aiken, Havens, & Sloane, 2000; Havens & Aiken, 1999; Scott, Sochalski, & Aiken, 1999). These attributes have been measured by the Nursing Work Index (NWI) (Kramer & Hafner, 1989) and the Nursing Work Index-Revised (NWI-R) (Aiken & Patrician, 2000) designed for hospital settings.

The NWI-R and the use of survey research techniques to measure organisational attributes of hospitals empirically hold considerable promise for advancing scientific enquiry into discovering how organisational structure affects outcomes of health services. The tool can inform organisational redesign initiatives that seek to improve quality of care and health outcomes (Aiken & Patrician, 2000).

Unfortunately, the empirical literature regarding the effects of organization on outcomes has been limited to the acute care setting, with

the exception of the Flynn, Carryer and Budge (in press) study. The purpose of this section of the literature review is to examine research that has used the Nursing Work Index (NWI) and the Nursing Work Index Revised (NWI-R) as a tool for measuring the professional environment created by organizations.

Nursing research articles that reported on findings of organisational attributes using the NWI or NWI-R were reviewed from 1989 to 2003. The criteria used to select the studies included that they were research based, explained the history of the NWI and NWI-R and contained detailed description on any modifications to the tool. Studies that focussed on the use of other tools such as the Maslach Burnout Inventory that did not define the NWI or NWI-R or give explanations of the results were excluded. The selected studies are presented in a table format under the headings of author/s, year, setting, purpose, subjects, research design and method, results and conclusion (Appendix A).

2.3 Development of the Original Nursing Work Index

In a follow-up to the Magnet hospital research of the early 1980s (McClure, Poulin, Sovie, & Wandelt, 1983), Kramer and Hafner (1989) developed the NWI as a tool to measure hospitals nurses' job satisfaction. Kramer and Hafner derived the 65 items of the NWI from characteristics of the original Magnet hospitals and from an extensive review of job satisfaction and work value literature published between 1962 and 1986. In addition, three of the four persons who conducted the original Magnet study critiqued and assessed the NWI for completeness and content validity. The purpose of developing the tool was to ascertain the extent to which nurses, at different levels within the nursing department and in different types of hospitals, reported a common, shared value system and the relationship of congruence in that value system to staff nurse job satisfaction and perception of an environment conducive to quality nursing care. The NWI was designed to measure four variables namely

work value related to staff nurse job satisfaction, perceived productivity, staff nurse job satisfaction and staff nurse perception of an environment conducive to quality nursing care (Refer to Appendix A:Table 1 for further details).

Kramer and Hafner (1989) claimed the NWI to be an all inclusive list of factors bearing on job satisfaction and on perceptions of an environment conducive to quality nursing care. When completing the NWI, nurse respondents were asked to indicate, on a 4-point likert scale their level of agreement with the statements, this is important to my job satisfaction, this is important to my being able to give quality patient care and this factor is present in my current job situation. Since this study, the NWI has been revised and used extensively by a team of researchers from the University of Pennsylvania examining relationships in the hospital organizations including nurse work environments and nurse staffing, and nurse and patient outcomes (Estabrooks et al., 2002).

2.4 Nursing Work Index Revised Development

Aiken and Patrician (2000) developed a Revised Nursing Work Index (Appendix A:Table 2). The purpose of the study was to report on the development and utility of the Revised Working Index (NWI-R) in measuring characteristics of professional practice environments. Aiken and Patrician stated the "NWI had the potential to measure the "presence" of certain organizational traits rather than nurses' job satisfaction or perceived quality of care" (p. 148).

The NWI items were reviewed and 55 of the original 65 items were retained, with one slightly modified and one added. Items were used to develop sub-scales to measure three of the organisational attributes noted in the literature as characterizing an environment supportive of professional nursing practice. Five items were used to develop the sub-scale autonomy, seven items for the sub-scale control over the work environment, and three for the sub-scale on relationships with physicians.

A fourth sub-scale was created from ten items in the mentioned three sub-scales to measure organisational support for caregivers (Aiken & Patrician, 2000).

Aiken and Patrician (2000) state the NWI was used in a way different from originally intended, as the instrument was not used to measure the characteristics of nurses, rather the data obtained by nurses was used to depict traits of a hospital or a unit in a hospital. Hence, the basic design of the NWI was redesigned to create the NWI-R and the two value statements were eliminated, "this is important to my job satisfaction" and "this is important to my being able to give quality patient care." The presence statement "this factor is present in my current job situation," was retained."

The NWI-R was firstly used in a study of Medicare mortality rates for 39 original Magnet hospitals and 195 matched control hospitals. The NWI-R was then used in a 20-hospital national auto immune deficiency syndrome (AIDS) care study with matched control hospitals and internal control units. The next comparison was to Magnet hospitals. These studies are not included in this literature review, as publications did not report specifically on the use and results of the NWI-R.

The Aiken and Patrician (2000) study reported on 40 units caring for persons with AIDS. Twenty hospitals were involved in the sample, ten of the hospitals provided AIDS care in dedicated AIDS units and in general medical units. The remaining ten hospitals were selected through a matching procedure, three of the matched control hospitals were Magnet hospitals. The nurses completed the NWI-R in addition to other measures. The purpose of the study was to determine whether there was a difference in patient, nurse, and organisational outcomes based on the type of unit (dedicated versus scattered-bed) on type of hospital (Magnet versus non-Magnet) and the explanation of such differences. It was hypothesized that presence of organisational traits would be associated with better nurse, patient and organisational outcomes. The NWI-R was found to be a sound

instrument and has been used in multiple studies for measuring hospital organisational attributes. It has been found to capture organizational attributes that characterize professional nursing practice environments. In addition the NWI-R performs well in identifying manipulatable aspects of organizations important to good patient outcomes and has demonstrated that nurses are appropriate informants of the organisational features important in clinical care.

In order to more fully understand the influence of both nursing staff and the nursing practice environment on patient outcomes Sochalski, Estabrooks and Humphrey (1999) completed a study that reports on the international consortium formed to study the effects of restructuring on inpatient nursing care and patient outcomes across an array of settings during the industry-wide health sector reforms in the United States, Canada and Europe (Appendix A: Table 3). The authors wanted to determine if it was the professional nursing practice environment or another unspecified feature of the hospital that established an important link between Magnet hospitals and better patient outcomes. The study utilizes the NWI-R and discusses the process used to assess the face validity and applicability of the NWI-R. The authors reported on the use of focus groups and a pilot test survey that were used to review the NWI-R instrument. This resulted in minor changes to the NWI-R.

The preliminary results of the above study were published by Aiken, et al. (2001) (Appendix A:Table 4). These were based on responses from 43,329 nurses in Alberta, British Columbia, Ontario, England, Germany, Scotland and Pennsylvania. The results identified were under the headings of job satisfaction, burnout, and intent to leave; changes in workloads and managerial support; structure of nurses work; quality of care and adverse events and work climate in hospitals. Only 30–40% of nurses reported that there were enough registered nurses to provide high quality care. Fewer than half the nurses responded that management in their hospitals is responsive to their concerns, provides opportunities for nurses to participate in decision making, and acknowledges nurses contribution to

patient care. These findings confirmed Kramer and Hafner's (1989) study that responsiveness from management is more important than nurses' job satisfaction and the environment being conducive to quality nursing care.

The results of the Canadian context of the Nursing Staffing and Patients Outcomes International study were published by Estabrooks, et al. (2002) (Appendix A: Table 5). The data provided positive results in relation to Aiken and Patrician's (2000) three conceptually derived sub-scales of the NWI-R. The data indicated that the sub-scales were reliable and also confirmed the assumption made by Aiken and Patrician (2000) that the variance between hospitals would be greater than variance within hospitals. These findings have further validated the use of NWI-R. Furthermore the authors proposed an alternative one-factor solution to measure the practice environment of registered nurses, called the Practice Environment Index as the NWI-R imposes a high respondent burden and requires significant resources to obtain complete data.

The preliminary Pennsylvania results of the Nursing Staffing and Patients Outcomes International Study (Appendix A: Table 6) indicated that hospitals need to take a critical assessment of the role of staffing, the organization of nursing care and the quality of care by utilizing more comprehensive measurements such as the NWI-R and not to rely solely on the American Hospital Association's annual survey for measuring organisational characteristics (Sochalski, 2001). The Ontario results of the same study demonstrated that nurses in teaching hospitals had the highest scores for the NWI-R sub-scales. However teaching hospitals also had significantly higher rates of missed days of work due to illness in the preceding three months, as well as tending towards the lowest scores on the other health outcomes examined (Shamian, Kerr, Spence Laschinger, & Thomson, 2001). The authors suggest that it is possible that potential mediating effects of a positive work environment can be overshadowed when the workload is too heavy. The NWI-R control of practice sub-scale, perhaps the core of the NWI-R measure, did have a relatively consistent and positive effect on the health outcomes examined once the proportion

of full-time nurses was accounted for. These findings raise important questions in relation to the NWI-R sub-scales and the reporting of heavy workloads.

The US and international nurses' value of organisational attributes that comprise the elements of professional nursing practice, and whether the absence of these attributes is associated with high levels of burnout in both US and international nurses, was reported by Flynn and Aiken (2002) (Appendix A: Table 8). Nursing values related to the professional practice environment were measured using the NWI-R. Three sub-scales were established (a) importance of collectivism, consisting of five items about team work and co-operation, (b) importance of hierarchy, consisting of three items about strong and visible nursing leadership and (c) importance of ambiguity reduction, consisting of seven items about clarity, standardization, and uniformity of work practices. The findings challenged the common opinion that internationally, nurses hold values inconsistent with professional practice models as defined in the US context. However, the findings do suggest that high levels of burnout occur for both groups if a professional practice environment is absent.

To permit researchers to discern the contribution of the practice environment to nurse and patient outcomes a practice environment scale from the NWI was developed. Forty-eight items from the original NWI were selected because they met the definition of the nursing practice environment. Five sub-scales were identified. The first two sub-scales reflect the hospital wide environment, nurse participation in hospital affairs and nursing foundations for quality of care. The other three sub scales are unit specific, relating to nurse manager ability, staffing and resource adequacy and collegial nurse-physician relations. The derived sub-scales show substantive coherence, multilevel range in hospital contexts, internal consistency, aggregate reliability, and generality to contemporary practice, affirming their conceptual and empirical foundations (Lake, 2002) (Appendix A: Table 9)

Aiken, Havens, and Sloane (2000) compared successful applicants with reputable Magnet hospitals (Appendix A: Table 10). Seven American Nurses Credentialing Center (ANCC) Magnet hospitals were compared with thirteen original Magnet hospitals. Nurses on medical-surgical units at all institutions were invited to complete a 15 page self-administered survey. The organisational attributes of the work setting were again measured by the NWI-R. Two of the sub-scales of the NWI-R, nurse autonomy and nurses control over their practice environment, were higher in the ANCC than the original Magnet hospitals and the quality of nurses relations with physicians were similar in both groups.

The items most frequently chosen from the NWI and NWI-R by more than 4,0000 staff nurses over a 17 year period were considered by Kramer and Schmalenberg (2002) to develop eight essentials of Magnetism. (Appendix A: Table 11). Participants were asked to select a number from one to ten that best represented the competence of co-workers, the quality of care given on the unit and their own personal job satisfaction. From this, eight essentials were derived, these being working with other nurses who are clinically competent, good nurse-physician relationships and communication, nurse autonomy and accountability, supportive nurse manager-supervisor; control over nursing practice and practice environment, support for in-service education and continuing education, adequate nursing staff and concern for the patient. To replicate and duplicate the conditions fostering Magnetism, essential variables relating to both process and outcome must be identified.

The difference in job satisfaction of nurses in Magnet and non Magnet hospitals and the influence of nurse executive leadership was reported by Upenieks (2002). The participants were a convenience sample of 305 clinical nurses and 16 nurse leaders from two Magnet hospitals and two comparable non-Magnet hospitals. The clinical nurses completed the NWI-R. Upenieks created three additional sub-scales, self-governance, organisational structure and educational opportunities (Appendix A: Table 12). The nurse leaders were interviewed with the use of a core set of

questions as a guide. A matrix system was created to display the nurse leaders answers to interview questions in relation to the NWI-R scores. The results indicted the higher job satisfaction scores were linked to high visibility and responsiveness of nurse leaders, clinical nurse autonomy in decision making and support of a professional nursing culture.

The NWI-R has been reported in many studies across countries, including two studies in NZ. The methodology for the first of these reported in NZ was adapted from the International Hospital Outcomes study to examine the results of hospital restructuring in NZ over the period 1988 to 2001 (Finlayson & Gower, 2002b) (Appendix A: Table 13). Finlayson and Gower adapted the NWI-R in relation to the language and terminology used to ensure compatibility in NZ. The results were presented at a College of Nurses Aotearoa Conference in 2002 (Appendix A: Table 14). Analysis included 4603 useable questionnaires, representing 27% of registered and enrolled nurses working in NZ hospitals. Analysis was undertaken at both national and individual hospital level. The analysis focused on items from the NWI-R and other items indicative of nurses outcomes or behaviour. Items from the NWI-R were used to construct sub-scales of interest. A number of items relating to each of the Magnet hospital features have been combined to give an indication of autonomy, nurse control over the patient care environment, organisational support and relationships between nurses and physicians. These have been calculated by combining the scores given to each question, rather than percentage as used in the Aiken and Patrician (2000) study. Nurses were concerned about the low level of institutional support in delivering high standards of nursing care.

The second NZ study examined the nursing situation in a NZ hospital to see whether aspects of the work environment are associated with health status (Budge, Carryer & Wood, 2003) (Appendix A: Table 15). The nurses completed the NWI-R as well as a health survey. The results indicated that the NZ hospital environment was characterised by less autonomy but better nurse-physician relations than in US hospitals. In this current study the three sub-scales autonomy, control over practice

and nurse-physician relationships scores of the public health nurses environment will be compared to the Budge, Carryer and Wood (2003) NZ hospital study and to Aiken and Patrician (2000) study on Magnet and non-Magnet hospitals.

As demonstrated, the Magnet studies have focused on hospital based nurses across many countries. The hospital based nurses have been asked to rate their actual environment using the NWI-R tool. The aim of Flynn's study was to develop a pool of potential items for a home health version of the NWI-R. In order to develop a pool of items, Flynn has used the NWI-R to rate the importance of the attributes to nurses working in a US hospital and US home health nurses as opposed to asking the nurses to rate their actual environment. As noted, Carryer and Budge worked alongside Flynn in 2002 by collecting information regarding NZ district nurses' perceptions of the importance of specific organizational attributes within their practice setting. Over 92% of the items comprising the NWI-R were considered important to the practice of district nurses in New Zealand and home care nurses in the United States.

2.5 NWI-R Sub-scales

The purpose of this section of the literature review is to further examine the three most reported sub-scales of autonomy, control over nursing practice and nurse-physician relationship derived from the NWI-R, and their relevance to public health nurses. These three sub-scales are reported to be the core elements of the professional practice environment and the following sections describe the underlying concepts.

2.5.1 Autonomy

Five items make up the NWI-R autonomy sub-scale (Aiken & Patrician, 2000). These being "a supervisory staff that is supportive of nurses; nursing controls its own practice; freedom to make important patient care and work decisions; not being placed in a position of having to do things

that are against my nursing judgement; and a nurse manager backs up the nursing staff in decision making, even if the conflict is with a physician" (p.151).

In order to describe the findings of the above sub-scale it is important to understand the meaning of the word autonomy. Ballou (1998) identified the following six themes inherent in the concept of autonomy: self governance, decision making, competence, critical reflection, freedom and self control. However the themes do not empirically define what nurses mean when they say they do not have autonomy. Kennerly (2000) suggests that the environment, expectations and clarity of meaning are important elements of autonomy, and that autonomy is a prerequisite and not an outcome of shared governance. Furthermore, Kennerly (2000) suggests that "a pattern is emerging in the literature that supports the notion that a worker's perceived autonomy is indeed important to satisfaction with work and work environment, less clear are the effects of change in work environment on perceived autonomy" (p. 611).

Rafael (1999) undertook a feminist, post-modern oral history of 30 public health nurses between 1980 and 1996 during the changing face of public health nursing in Southern Ontario. The study reports public health nurses concern with gaps in service and role confusion created by changes to public health which has resulted in frequent feelings of powerlessness in their work. Ellefsen (2001) compared the experience of autonomy in health visiting work in Norway and Scotland. The findings demonstrated that public health nurses in Norway and Scotland did experience autonomy in their every day work. However their autonomy was conditional as it was dependent on their manager when it came to starting new things or wanting to change the way they worked.

According to Kramer and Schmalenberg (2003a) there is extensive confusion over what is meant by the concept of "autonomy" although autonomy is a highly desired behaviour which is related to nurse effectiveness, job satisfaction and retention. Kramer and Schmalenberg

suggest there are two dimensions of autonomy. Firstly autonomy which is rooted in the clinical art and secondly the autonomy of the profession, both which are measured with the same tools and used interchangeably. The purpose of Kramer and Schmalenberg's research was to empirically quantify nurse autonomy, identify staff nurses concept of autonomy and to determine the relationship between degree of autonomy and staff nurses ranking of quality care and job satisfaction. Two hundred and seventy nine nurses from fourteen Magnet hospitals were interviewed. The questions posed were "defining autonomy as the freedom to act on what you know, can you practice autonomy" and "give an example(s) of a typical situation that illustrates that you practice autonomously" (p.14).

The interviews resulted in the development of a 5 category ranked autonomy scale with the following categories: autonomous patient care (n=117); autonomous nursing action care (n=47); limited autonomy (n=35); unsanctioned autonomy (n=27) and no autonomous practice (n=44). The study results demonstrated a strong relationship between degree of autonomy and rankings of job satisfaction and quality of care.

2.5.2 Control Over The Practice Setting

Aiken and Patrician (2000) NWI-R control over the practice setting sub-scale includes seven items, these being; "adequate support services allow me to spend time with my patients, enough time and opportunity to discuss patient care problems with other nurses, enough registered nurses on staff to provide quality care, a nurse manager who is a good manager and leader, enough staff to get the work done, opportunity to work on a highly specialised unit and patient assignments foster continuity of care (p. 151).

According to Kramer and Schmalenberg (2003b) there is confusion as to the meaning of the concept control over practice. The definitions suggest that control over nursing practice is a combination of professional and clinical autonomy. Furthermore these authors suggest that control over

nursing practice is often used synonymously with shared governance, which is the structure that leads to the process outcome of control over nursing practice.

The goal of Kramer and Schmalenberg's research cited above was to identify what control over nursing practice means to staff nurses, and to empirically quantify control over practice by abstracting categories and dimensions from staff nurses descriptions of control over practice. In addition they sought to determine relationships between the rankings of control over practice and nurses rankings of job satisfaction and quality of care. Two hundred and seventy nurses from fourteen Magnet hospitals were interviewed and asked "to what extent do you have control over nursing practice" and "describe a situation that would illustrate that you have control over nursing practice" (p. 439). In addition, the Essentials of Magnetism consisting of 37 items of the NWI-R, was completed by the nurses, in the study.

From the data collected and analysed the concept of control over nursing practice occurred through a visible organisational framework such as shared governance. Four domains were identified, namely clinical, managerial, environmental and cultural. Five categories were established that make up the dimensions of control over nursing practice, these being a highly effective control structure (n=67), control with reservations (n=42), input but no control (n=55), refer to authority source (n=56), minimal or no control over practice (n=49).

One of the descriptions indicated that autonomy is different from control over nursing practice, in that "autonomy is individual decision making for a patient, control over nursing practice is group decision making about general nursing practice and policy issues that affects groups of patients" (Kramer & Schmalenberg, 2003b, p. 443). They conclude that it would be advantageous to nursing and to others outside nursing to "restrict the use of the word autonomy to the concept of clinical autonomy only (i.e., decision making beyond standard and routine nursing practice that

directly involves the clinical art" and that "the autonomy of nursing as a profession could also be included in the concept of control over nursing practice" (p. 448).

May, Phillips, Ferketich and Verran (2003) reported a joint venture between a research team at a Texas University and the county's health department. Their findings highlight the challenges encountered in the concept of control over practice in implementing a generalist model of public health nursing in a rural community. The different philosophical views on implementing care, the nature of nursing and the role of the public health nurses between the research team and the county health department in Texas resulted in subtle forces in the public health environment that inhibited the public health nurse generalist role. The research team reported on how the current philosophy of health care as a business had a detrimental effect on the role of public health nurses, and that categorical funding changed the role of public health nurse from generalist to specialist. The generalist model was designed to improve access, acceptability and outcomes of health services for a rural underserved population. The nursing interventions included "prevention, health promotion, health maintenance, risk reduction, community development, and coordination of care" (p. 253). Three intervention levels were identified, "personnel preventive nursing, organised indigenous care giving and community development" (p. 253).

The Texas county health department was responsible for the hiring and supervising of staff to implement the model and the development of policies and procedures. The challenges encountered were mostly related to the lack of public nurses control over their practice. Examples of this include issues around supplies. The county health department had difficulty with the concept of a one stop shop as they were accustomed to ordering only supplies for use by specialist nursing services, which made the philosophy of one visit by individual and family impossible to implement. Another example was hours of work. It was determined at the outset that the nurses were to control their own hours, determine when

and how to provide services and to focus on team building with their team and community. However, this caused major conflict because, if the nurse did not start her day at her place of work, or took time in lieu for attending an evening meeting, the other nurses employed by the health department complained that the generalist nurses were privileged. Furthermore, conflicts arose about control over practice and who supervised the nurses.

As noted in Chapter 2, public health nurses may be employed by PHOs in the future. May, et al. (2003) posed the question "if there are discrepancies in philosophy of care between nurses and employing agencies, are differences irreconcilable because of funding constraints, or can there be dialogue and willingness to change?" (p. 257). They go onto state "nurses can suggest changes in operational mechanisms for more congruence with professional practice....agencies may need to revise rules for professional roles" (p. 258).

2.5.3 Nurse-Physician Relationships

Aiken and Patrician (2000) NWI-R nurse-physician relationship sub-scale includes three items, these being "physicians and nurses have good working relationships, much teamwork between doctors and nurses and collaboration (joint practice) between nurses and physicians" (p.151).

According to Kramer and Schmalenberg (2003c) literature reports that nurses in Magnet hospitals have "good" nurse/physician relationships, however it was not apparent what nurses meant when they used the word "good". Kramer and Schmalenberg's suggest that "goodness" is often referred to in line with collaboration, mutual respect, good communication and concern for the patient. Two hundred and seventy nine nurses from fourteen Magnet hospitals were interviewed. The nurses were asked "what are the typical nurse/physician relationships like on your unit?" and were asked to describe examples of relationships with physicians. The findings showed that nurses used the same word to describe different relationships, with the dominant theme being power.

This theme was then used as the underlying variable and five categories were established that make up the dimensions of nurse/physician relationships. Category One – Collegial: this is described as excellent and the relationship is "equality based on different but equal power and knowledge" (p. 36). Category Two – Collaborative: in which nurses describe "mutuality but not equality of power" (p. 36). Category Three – Student-teacher: where either the nurse of physician act as the teacher, however the "power is unequal, but outcomes are beneficial" (p. 36). Category Four – Neutral: in which the relationship has unequal power with neutral outcomes (p. 36) Category Five - Negative: power is unequal and outcomes are negative" (p. 36).

Kramer and Schmalenberg (2003c) suggest that the five category scale differentiates collegial from collaborative and identified that collegial relationship is category one where the equality is based on different but equal power and knowledge. Furthermore, Kramer and Schmalenberg suggest three ways to develop the power base underlying collegial relationships, these being "plant and nurture the "equal but different" seed, to create a culture that values, expects, and rewards collegial nurse/physician relationships and foster, support and encourage educational program of all types (p. 38).

There have been few studies on the nurse-physician relationship in the community setting, however Marrone (2003) completed a sociological analysis of the nurse-physician relationship in home health care in New York. The results demonstrated that home health care nurses had a more primary care role with patients than hospital nurses, largely due to the physicians' distance from the patient. The home health nurse completes care plans in isolation from medical authority. The home health nurses' relationship with physicians appeared to meet Kramer and Schmalenberg's (2003c) category one scale, as the nurses described it as excellent and said that their knowledge was respected and valued by the physicians. The physicians viewed the nurses as specialised, expert nurses. Aiken, Haven and Sloane (2000) identified that nurse specialisation

allows nurses to demonstrate and communicate their knowledge of patient care.

These three sub-scales scores of the public health nurses' environment will be compared to the Budge, Carryer and Wood (2003) NZ hospital study and to Aiken and Patrician's (2003) study of Magnet and non-Magnet hospitals.

2.6 Summary

With the introduction of DHBs and the formation of PHOs, NZ has an opportunity to develop a clear nursing service structure to align the primary health care nursing workforce to improve the health of populations and communities and include integration and coordination of all nursing activities in the sector. The Magnet NZ vision is to develop nursing workforce environments to improve patient outcomes. The NWI-R has been examined as a tool for measuring the professional environment created by organizations. This tool may be valuable to measure not only hospital nurses professional environment but also that of nurses who work in the community setting. The NWI-R tool can inform organisational redesign initiatives that seek to improve quality of care and health outcomes (Aiken & Patrician, 2000).

This chapter presented a range of studies on the role of public health nurses, to provide an indication of the depth and breadth of public health nursing. The history of the NWI and NWI-R and an overview of three of the Magnet sub-scales, namely control over nursing practice, autonomy and nurse-physician relationships, were explored. The next chapter presents the research methodology, the participant selection process, and the method for data collection and analysis.

CHAPTER THREE: STUDY METHODS

The previous chapter provided an insight into the role of public health nurses and the history of the development and use of the organisational attribute tool used in the Magnet studies. This chapter presents the research methodology, the participant selection process, and the method for data collection and analysis for the present study. The issues for ethical consideration are described including the procedures for informed consent, confidentiality and the planned dissemination of results. This study replicates aspects of previous research done with NZ district nurses and American home health nurses, published by Flynn, Carryer & Budge (in press).

3.1 Research Methodology

According to Clark (1998, p. 1242), research methods can be "described, examined and categorised at different levels" with the most fundamental of these levels being philosophical. There are two major competing paradigms within the social sciences. Firstly, there is the quantitative research method which is based on the positivist and early natural paradigm. Experimental research and survey research are rooted in this approach, with the pursuit of objectivity and distance to reduce personal biases and enablement of generalisations of human action (Holloway & Wheeler, 1996). The second paradigm is qualitative, which is based on the interpretive paradigm. This paradigm is underpinned by an analysis of socially meaningful behaviour in a systematic way to understand how individuals interact with their social world (Davidson & Tolich, 1999). In other words, it attempts to provide an understanding of the world within its context.

This study is descriptive, using both quantitative and qualitative survey techniques to identify and describe those organizational attributes of public health nursing services which public health nurses consider important to their professional practice. According to Minichiello,

Sullivan, Greenwood and Axford (1999), descriptive research enables health care professionals to describe what exists in practice, to classify information for use in the discipline or discover new information.

3.2 Participant Selection

All public health nurses who have an annual practising certificate from the New Zealand Nursing Council (n=520) and who had identified that they were willing to be surveyed (n=382) were invited to participate. Given that prediction of possible response rates was impossible it seemed appropriate to offer all public health nurses who work in New Zealand the opportunity to participate, thereby minimising the risk of bias through sampling processes. The survey packages were posted on my behalf by the Nursing Council of New Zealand. One hundred and sixty seven surveys were returned for a response rate of 45.9%. The respondents consisted of public health nurses from nineteen of the twenty one DHB areas of which 5% were male and with an average age of 47 years. The demographic responses are presented in Chapter Four and compared to the New Zealand Nursing Council (2003) register of public health nurses.

3.2.1 Data Collection

The survey package included an information sheet, a survey questionnaire, blue and red pens and a reply-paid envelope. Participants were informed that the survey would take approximately 20 minutes to complete. Two weeks later a reminder letter was sent out and after a further two weeks a second survey package was mailed with a cover letter thanking those who had already returned the questionnaire and inviting others to complete a questionnaire if they still wished to be included. This procedure, based on Dillman (1991), was used by Flynn, Carryer and Budge (in press).

3.3 The Survey Questionnaire

The basis of the questionnaire was the NWI-R (Aiken & Patrician, 2000) which was used by Flynn, Carryer and Budge (in press). As noted in Chapter Two, Aiken and Patrician reviewed the Kramer and Hafner NWI (1989) and retained 55 of the original 65 attributes and developed sub-scales to measure three organisational traits. In order to assess the appropriateness of the NWI-R for the study participants, a small group of local public health nurses (n = 5) reviewed the NWI-R attributes and recommended firstly that the word patient be replaced by client and secondly that seven attributes be removed as they were considered too "hospital based" and not relevant to public health nurse practice. Based on this opinion I decided that retention of these attributes might deter public health nurses from completing the survey.

The following seven attributes were removed:

- Patients' doctors give high-quality medical care
- Nursing care is based on a nursing rather than medical model
- The care plan is accessible and up to date for all patients
- Patient assignments foster continuity of care (i.e.., the same nurse cares for the same patient from one visit to the next)
- Use of nursing diagnoses
- Floating, so that nursing staff is equalised among team or units
- Nursing care plans are verbally transmitted from nurse to nurse

This resulted in a list of 48 attributes. The NWI and NWI-R tool has usually been used as a tool to measure each aspect according to whether or not it is present in the participants' current job. However, one of the aims of the study carried out by Flynn, Carryer and Budge was to develop a pool of potential items for a home health version of the Revised Nursing Work Index (NWI-R). Hence, Flynn, Carryer and Budge did not request US home health nurses and NZ district nurses to rate their current working environment, but asked participants to identify and describe attributes of

home health agencies that home health nurses perceive as important to the support of their professional practice. For the purpose of this current study it was decided that it would be beneficial to ask public health nurses to rate both their ideal and actual working environment in order to enable a comparison of the two. The three sections of the questionnaire are described below.

Section 1 was a list of 48 attributes of a professional practice environment and respondents were asked to rate the extent to which they agree that they would like each attribute to be present in their practice setting (ideal) in that it is important to their practice as a public health nurse on a 4 point scale (1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree) the extent to which they agree each attribute is currently present in their practice setting (actual) on a 4 point scale (1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree).

There were spaces for comments at the end of section one for participants to specify and rate other attributes that were not covered by the previous questions. Participants were supplied with a red pen to record their ideal ratings and a blue pen to record their actual ratings.

Section 2 sought the public health nurses' opinions regarding characteristics of public health nursing services that they considered important. Three open-ended questions were included. LoBiondo-Wood and Haber (1998) state that unstructured response formats such as open ended questions allow important information which may not be elicited by fixed close-ended questions to surface. Two of the three open ended questions were taken from McClure, Poulin, Sovie and Wandelt's (1983) original study of Magnet hospitals, where they asked for participants' description of organisational attributes important to their professional practice. As outlined in Chapter One, the primary health care strategy and the implementation of PHOs are presenting public health nurses with a possible change of employment. Therefore the third question public health nurses were asked concerned their preferred employment option, and

choices given included District Health Board - Provider arm, District Health Board - Primary Health Organisation, or Maori provider. In addition they were asked to indicate the advantages and disadvantages of each option with respect to effective service provision.

Section 3 was a demographic section asking general questions about participants and their backgrounds. The questionnaire is provided in Appendix B.

3.4 Data Analysis

Both quantitative and qualitative survey techniques were used to identify and describe organizational attributes of public health nursing services which public health nurses consider important to the support of their professional practice. Three approaches are used to analyse the quantitative data from the Likert type scale responses. These included item analysis and scale analysis of the ideal ratings, the actual ratings and the difference between the ideal and actual ratings of each attribute. The Statistical Package for Social Science (SPPS) Version 12 was used to analyse the data.

3.4. 1 Quantitative Analysis

The actual attribute ratings were used to develop the three Magnet sub-scales of autonomy, nurse/physician relationship, and control. The control sub-scale has one attribute missing as it was deleted from the NWI-R, because it was considered not to be relevant to public health nurses. These sub-scales were created to measure three of the organisational attributes noted in the literature as characterizing an environment supportive of professional nursing practice (Aiken & Patrician, 2000). The internal consistency of the sub-scales, as indicated by Cronbach's alpha reliability coefficients, has been reported by Aiken et al. (2001) and Aiken and Patrician (2000). The results were autonomy 0.78 and 0.75, control 0.79 and 0.79, and nurse-physician relations 0.73 and 0.76 respectively. The

coefficients for this study were autonomy 0.73, control 0.78, and nurse-physician relationships 0.79.

During analysis two further sub-scales were conceptually derived from the NWI-R namely education and leadership. Education and leadership were not addressed in the literature review presented in Chapter Two, but they are recognised as two of the five goals documented in the framework for activating primary health care nursing in New Zealand (Expert Advisory Group on Primary Health Care Nursing, 2003) which was outlined in the introduction of this study.

There are six items which relate to orientation and education therefore the sub-scale was titled education. In addition, there are seven attributes which relate to aspects of nursing leadership therefore the second sub-scale was titled leadership. The actual items for each of these sub-scales are presented in the quantitative results section.

3.4. 2 Qualitative Analysis

A qualitative approach was taken with the responses to the open ended questions. The responses were subjected to content analysis to identify the ideas expressed. This technique is described by Miles and Huberman (1994) as a linguistic approach to data analysis which deals quantitatively with qualitative data by counting how often particular words, phrases or concepts occur. According to Edwards and Talbot (1994) content analysis is based on the assumption that analysis "of language in use can reveal meanings, priorities, understandings and ways of organising and seeing the world" (p.103). Moreover they go on to suggest that content analysis gives the best of both quantitative and qualitative analyses as you can present statistics and paint a picture of the categories by drawing upon quotations from the data collected. Utilising the framework presented by Edwards and Talbot, a number of data driven codes were systematically applied to the responses from the open-ended questions revealing a description of patterns. These patterns were developed into categories

and presented with the percentage of responses in each category and description with excerpts from the responses to the open ended questions.

3.5 Ethics

All 15 branches of the National Health Ethic Committee approved the previous national District Nursing study completed by Flynn, Carryer & Budge (in press). Manawatu Whanganui ethics committee gave approval on behalf of all human ethics committees to conduct this study, as the study was very similar to the project conducted with District Nurses nationally. The only difference is that the participants were to be public health nurses. Ethical approval was also obtained from Massey University Human Ethics Committee.

3.5.1 Cultural Safety

It was anticipated that some participants in the study would be Maori. Prior to commencement consultation occurred with Maori at Te Whare Rapuora (MidCentral Health Maori Health Unit) and written support was received. Anne McNicol, a public health nurse and Vice Chairperson of Te Runanaga New Zealand Nurses Organisation (NZNO), agreed to be a contact for Maori nurses and was willing to have her name and contact details supplied on the information sheet. This meant that participants could discuss any issues they might have with a Maori nurse rather than the principal investigator who is tauiwi. Anne McNicol was contacted by three participants to clarify if they were eligible to complete the questionnaire as they were no longer employed specifically as public health nurses.

3.5.2 Informed Consent

All participants were given a written information sheet about the nature of the study within the survey package. Completing and returning the survey form was taken to imply consent and a statement to that effect was included on the information sheet (Appendix C).

3.5.3 Confidentiality

While the name and address of participants in the survey was not collected, some demographic data was. All data collected from the study were stored in a locked cupboard/cabinet and on a password protected computer. Access to the data is only available to the principal investigator, and her research supervisors. It is anticipated that the data will be kept for up to five years and then destroyed.

3.5.4 Researcher-Participant Relationship

The principal investigator has worked within the district nursing scope of practice for nine years and is currently Chairperson of the District Nursing New Zealand Nurses Organisation Section. This primary health care nursing background was viewed as an advantage in that potential participants may be more willing to complete the questionnaire as the results were being analysed by a nurse working in primary health care.

3.5.5 Risks and Benefits

It was not anticipated that there would be any risks to the participants in the proposed study. They were advised on the information sheet to contact the principal investigator or research supervisors if they had any concerns or questions regarding the survey.

3.5.6 Dissemination of Results

It was made clear to all participants that the results were to be used for a master's thesis and that a summary of the findings would be provided to all public health nurses on the NCNZ register. In addition, those taking part were advised that a paper based on the thesis will be submitted for publication to a refereed journal and verbal presentations may be given at conferences or nursing symposiums.

3.6 Summary

This study was designed to identify and describe the organizational attributes of public health nursing services which public health nurses consider important to the support of their professional practice. A questionnaire with quantitative and qualitative sections was utilised to gather data. The results and discussion of the quantitative and qualitative data analysis are presented in Chapter Four and Chapter Five respectively.

CHAPTER FOUR: QUANTITATIVE RESULTS

The previous chapter presented the research methodology; the participant selection process, and the method for data collection and analysis was outlined. The issues for ethical consideration were described and the procedures for informed consent, confidentially and the planned dissemination of the results was presented. This chapter presents the demographic data followed by the quantitative findings and discussion of the first four research questions:

1. *Which organisational attributes of the nursing practice environment do public health nurses consider to be important (ideal) for providing quality care?*
2. *Are the organisational attributes the public health nurses identify as being important (ideal) to their professional practice different from the ones identified by the district nurses, and how do they compare to the US home health nurses and the US hospital nurses?*
3. *How do public health nurses rate their current (actual) nursing practice environment on the 48 attributes, and how do the actual ratings compare to the ideal ratings?*
4. *How do scores on the three previously identified NWI-R sub-scales (control over nursing practice, autonomy and nurse-physician relationships) compare to scores reported in previous research?*

4.1 Demographics

Of the 382 questionnaires sent through the New Zealand Nursing Council (NZNC) to the public health nurses, 18 were returned uncompleted as the recipients were not practicing as public health nurses and therefore did not meet the requirements. This left 364 potential participants. One hundred and sixty seven responses were received, making the response rate 45.9%. As noted in Chapter Three, participants were asked to provide demographic information about themselves. Most participants complied, however 11 people did not record their age and a small number (ranging

from 1-6) did not complete other parts of this section. The majority (95%) of the participants were female. Out of the fourteen male practicing public health nurses in New Zealand, as shown by the 2003 NZNC public health nurse register, nine responded.

The majority of participants were New Zealand non Maori (72.8%) followed by 11.7% European (born outside New Zealand), 4.3% Maori, 4.9% identified as being Maori and non Maori (resulting in an overall Maori response of 9.2%), 1.9% Pacific Island, 1.2% as New Zealand non Maori and Pacific Island, 0.6% as Asian and 2.5% as other.

The ethnicity of the 167 respondents was representative of the NZNC 2003 register of the ethnicity of the 536 public health nurses working in New Zealand. The register states that 71% of the New Zealand public health nurses are NZ European, 8.6% are European, 8.4% are NZ Maori and 12% are 'other'.

The ages of participants ranged from 21 to 67, the mean being 47.3 years. This is consistent with the average age of 45 years as identified by the NZNC public health nurse statistics (2003). The average years registered as a nurse was 23.6 years, the range was from 2 to 51 years. Eighty six percent of those who took part were currently working as public health nurses and over half (66.3%) were working full time. The average length of time worked as a public health nurse was 9.6 years and ranged from four months to 34 years. The response to the question regarding the participants' highest qualification indicated that 35.4% had a diploma, 40.4% a Bachelors degree, 3.7% a Masters degree and 21% had attained other qualifications. The 'other' included having an advanced diploma in nursing (n=6), post-graduate certificate (n=13), post-graduate diploma (n=13), working towards a bachelor of nursing (n=2), and working towards a masters degree (n=12).

Responses were received from participants in 19 of the 21 District Health Boards (n=165). Table 1 outlines the number of public health nurses

(n=536) in each DHB region according to the NZNC 2003 register, and the number in each region who responded to the survey. It is important to note that of the 536 public health nurses working in New Zealand only 364 were sent surveys.

Table 1.

Number and percentages of public health nurses in each DHB region according to 2003 NZNC statistics and participants' responses.

DHB		NZNC n (%)	Participant n (%)	Number of participants as a percentage of total number of PHNs in each DHB
Northland		31 (6.0)	14 (8.5)	45
Waitemata	Coded as Auckland NZNC	167 (33.1)	15 (9.1)	25
Auckland			16 (9.7)	
Counties-Manakau			10 (6.1)	
Bay of Plenty		38 (7.0)	13 (7.9)	34
Waikato	Coded as Waikato NZNC	50 (9.3)	17 (10.3)	36
Lakes			1 (0.6)	
Taranaki		12 (2.2)	5 (3.0)	42
Tairawhiti		10 (1.8)	6 (3.6)	60
Hawkes Bay		24 (4.4)	9 (5.5)	42
Whanganui	Coded as Manawatu/ Wanganui NZNC	36 (6.7)	4 (2.4)	44
MidCentral			12 (7.3)	
Wairarapa	Coded as Wellington NZNC	45 (7.4)	0	27
Capital & Coast			0	
Hutt			12 (7.3)	
Canterbury	Coded as Canterbury NZNC	47 (8.0)	5 (3.0)	13
South Canterbury			1 (0.6)	
West Coast		3 (0.5)	2 (1.2)	66
Nelson-Marlborough		13 (2.4)	9 (5.5)	69
Otago		24 (4.4)	8 (4.8)	33
Southland		9 (1.6)	3 (1.8)	33
Not identified		28 (5.2)	3 (1.8)	

According to the Nursing Council statistics the Auckland DHB (33%) has the highest numbers of public health nurses. Twenty five percent of the respondents came from the Auckland area which covers the Waitemata, Auckland and Counties-Manakau DHBs. The area with the next largest number of public health nurses is Waikato (9.3%), which covers Waikato

and Lakes DHB. Eleven percent of the survey participants indicated they were in the Waikato region, constituting 36% of the public health nurses who work in this area. Unfortunately there were no respondents from the Wairarapa DHB or the Capital and Coast DHB, however, with the Hutt Valley response of 7.3%, 27% of the public health nurses in the Wellington area participated in the study. The highest response came from Nelson-Marlborough, Tairawhiti and the West Coast DHBs and the lowest response came from the Canterbury DHB, however comparisons between regions are only meaningful if you consider the numbers as proportions. These demographic findings suggest that the sample of public health nurses is comparable to those registered with the New Zealand Nursing Council with respect to their age, ethnicity and geographic location.

The next sections present the findings concerning the first four research questions which involve the ratings of the nursing practice environment using the NWI-R.

4.2 NWI-R Results

In responding to the NWI-R questionnaire participants were asked to indicate the extent to which they agreed that they *would like each attribute to be present in their practice setting* (ideal) in that it is important to their practice as a public health nurse. Secondly they were asked about the extent to which they agreed that *each attribute is currently present in their practice setting* as a public health nurse (actual) on a 4 point scale (1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree). The items were reverse coded when entered into SPPS prior to working with them. The response frequencies for each attribute in the ideal and actual environment are presented in Appendix D and Appendix E.

4.2.1 Ideal Attribute Ratings

The first research question for this study concerned identification of these organisational attributes of the nursing practice environment which public health nurses considered important (ideal) for providing quality care. Flynn, Carryer and Budge (in press) proposed that if the combined 'strongly agree' or 'somewhat agree' (i.e percentage of agreement) included 75% of responses then that attribute could be considered important and relevant to the community setting. The same criterion was initially adopted in analysing the public health nurses' data. Combining the 'strongly agree' and the 'somewhat agree' responses showed that from 77.9% to 100% of public health nurses considered that all 48 organisational attributes were important to their professional practice.

In order to further investigate the relative importance of the attributes, the cut-off criterion was raised from 75% to 90% agreement. This adjustment identified only four attributes with percentage agreement below 90%. These were: use of a problem-orientated clinical record (77.9%); each nursing team, or unit, determines its own policies and procedures (83%); regular, permanently assigned registered nurses never float to another team (85.9%) and team nursing is the nursing delivery system (88.6%). These attributes were taken to be the least important (i.e. least endorsed) for public health nurses' professional practice. Further details and comparison with other studies are presented later in Table 3.

For the remaining attributes, the percentage agreement ranged from 93.4% – 100%, with fourteen receiving 100% agreement. These fourteen were considered the most highly endorsed attributes; making them the most important to public health nurses.

The second research question concerned a comparison between the attributes public health nurses identify as being important (ideal) to their professional practice and those identified by NZ district nurses, US. home health care nurses and US. hospital nurses. A range of sources was used,

Dr Linda Aiken's US hospital data which was part of a survey funded by a grant (RO1NR 0228), Dr Linda Flynn's home care data which was funded by a grant from the American Nurses Foundation and Dr Carryer and Dr Budge's district nurses data (L. Aiken, L. Flynn and C. Budge, personnel communication, January 21st, 2004).

In Table 2 the fourteen attributes receiving 100% agreement from the public health nurses are compared with the ratings of the other nursing samples provided by Aiken, Flynn and Budge.

Table 2.

Public health nurses most highly endorsed attributes compared to the NZ district nurses, US home health and US hospital nurses.

	Percentage Agreement			
Attributes	NZ Public Health Nurses	NZ District Nurses	US Home Health Nurses	US Hospital Nurses
Doctors and public health nurses have good working relationships	100	95.3	93.9	97.3
A good orientation program for newly employed nurses	100	99.7	93.3	97.3
A supervisory staff that is supportive of nurses	100	99.4	96.5	97.9
Active in-service/continuing education programs for nurses	100	99.4	95.0	97.7
A nurse manager who is a good manager and leader	100	97.8	94.8	98.3
Flexible or modified work schedules are available	100	95.3	94.8	95.9
Freedom to make important client care and work decisions	100	99.7	96.8	97.9
Praise and recognition for a job well done	100	99.5	92.3	97.3
Good working relationships with other departments	100	98.7	96.8	96.8
Working with nurses who are clinically competent	100	100	96.3	98.6
An active quality-assurance program	100	98.4	95.3	92.7
A preceptor programme for newly hired Registered Nurses	100	99.4	91.5	98.3
The office environment is pleasant, attractive, and comfortable	100	97.2	93.1	98.3
Registered Nurses actively participate in developing their work schedules (i.e., what days they work; days off, etc.)	100	94.9	92.5	96.2

Of the fourteen attributes that the public health nurses totally agreed with, only one of the attributes 'working with nurses who are clinically competent' received 100% agreement amongst the NZ district nurses. The NZ district nurses' percentage agreement with the remaining attributes in Table 2 was above 95%, with the exception of the attribute 'registered nurses actively participate in developing their work schedules', which was just below at 94.9%. However, the US home health nurses percentage agreement for five of the attributes was below 95%, these being; 'praise and recognition for a job well done, a preceptor programme for newly hired registered nurses, a good orientation programme for newly employed nurses, registered nurses actively participate in developing their work schedules and the office environment is pleasant, attractive and comfortable.' Only one attribute achieved less than 95% agreement from the US hospital nurses, this being 'an active quality assurance program', (92.7%).

Table 3 presents the four least endorsed attributes (those that received less than 90% agreement from the public health nurses) and compares them to the agreement percentages found amongst the other nursing samples.

Table 3.

Public health nurses' least endorsed attributes compared to the district nurses, US home health and hospital nurses.

	Percentage Agreement			
Attributes	**NZ Public Health Nurses**	**NZ District Nurses**	**US Home Health Nurses**	**US Hospital Nurses**
Use of problem-orientated clinical record	77.9	88.3	78.8	65.8
Each nursing team, or unit, determines its own policies and procedures	84.3	52.2	31.3	65.7
Regular, permanently assigned registered nurses never float to another team	85.9	77.3	56.3	42.2
Team nursing is the nursing delivery system	88.6	67.3	80.8	51.5

There was a greater range of difference in agreement between the several nursing groups when the least endorsed attributes are considered. For example only 31.3% of the home health nurses agreed with the importance of each nursing team, or unit, determining its own policies and procedures compared to 84.3% of the public health nurses. Similarly only 42.2% of hospital nurses agreed that regular permanently assigned registered nurses should never float to another team compared to 85.9% of the public health nurses. The diversity of response would appear to be linked to differences between the practice settings.

4.2.2 Actual Attribute Ratings and Comparison to Ideal Ratings

The third research question for this study concerned how public health nurses rated their current (actual) nursing practice environment on the 48 attributes, and how the actual ratings compared to the ideal ratings. In order to answer this question respondents were asked to identify which of the 48 attributes were present (actual) in their current environment. Again a 75% (combined 'somewhat agreed' and 'strongly agreed') cut off point was used to identify the most frequently endorsed and least endorsed attributes. Agreement ranged from 25.4% to 88.3% which was considerably low, only nine attributes were reported to be present in the practice environment by more than 75% and twelve were not present for over 50% of public health nurses. These results showing percentage agreements for the actual and ideal practice environment are presented in Table 4 and 5. The range for current practice agreement (25.4% - 88.3%) is much wider than that for ideal practice setting (77.9% - 100%).

Looking more closely at the table, Table 4 shows the nine attributes that were most frequently endorsed as being present in public health nurses' actual practice environments. In addition the corresponding ideal agreement percentages and the difference between the ideal and actual percentages appear.

Table 4.

Differences between reported presence (actual) and importance (ideal) for highly endorsed attributes.

	Percentage Agreement		
Attribute	**Actual**	**Ideal**	**Difference**
Registered nurses have the opportunity to serve on committees	88.3	99.4	11.1
Working with experienced nurses who "know" the service and community	83.0	98.7	15.7
Standardised policies, procedures, and ways of doing things	82.9	96.9	14.0
Freedom to make important client care and work decisions	82.9	100	17.1
Working with nurses who are clinically competent	82.8	100	17.2
Good relationships with other departments	77.8	100	22.2
Not being placed in a position of having to do things that are against my nursing judgment	77.2	99.4	22.2
An active quality-assurance program	75.6	100	24.4
Primary nursing as the nursing delivery system	75.6	93.4	17.8

Agreement with the nine attributes being present in the public health nurse actual environment in Table 4 ranged from 73% to 88%. All public health nurses considered four of these nine attributes were important to their professional practice, however only 76% to 83% of public health nurses agreed these four attributes were present in their actual environment. Two of the nine attributes that were rated above 75% were in relation to public health nurses working with experienced nurses who "know' the service and community, and working with nurses who are clinically competent. The range of difference between the nine most endorsed attributes was 11 to 24%. The attribute 'an active quality assurance program' had the highest difference score (24.4%).

In contrast Table 5 below presents the twelve attributes reported to be not present in more than 50% of public health nurses' actual practice environments. As previously, actual presence is then compared with agreed importance to practice.

Table 5.

Differences between reported presence (actual) and importance (ideal) for least endorsed attributes.

	Percentage Agreement		
Attributes	**Actual**	**Ideal**	**Difference**
A Director of Nursing who is highly visible and accessible to staff	25.4	98.7	73.3
A satisfactory salary	30.7	97.5	66.8
Enough registered nurses on staff to provide quality client care	34.2	99.4	65.2
Enough staff to get the work done	37.0	99.4	62.4
The contribution the nurses make to client care are publicly acknowledged	40.2	95.6	55.4
An administration that listens and responds to employee concerns	40.6	99.4	58.8
Nurse specialist who provide client care consultation	44.7	99.4	54.7
The Director of Nursing is equal in power and authority to other top-level executives	47.0	96.7	49.7
Much coordination between doctors and public health nurses	47.9	98.8	50.9
Opportunities for advancement	48.8	99.4	50.6
Team nursing is the nursing delivery system	49.1	88.6	39.5
Career development/clinical ladder opportunity	49.1	98.2	49.1

The most noteworthy finding in this table is the discrepancy between reported actual and ideal is the visibility and accessibility of the Director of Nursing. Respondents rate highly the importance of visibility and accessibility with respect to a Director of Nursing highly, however, only a quarter of participants agreed that this was the case in their current environment. In addition, just over half of the participants (53%) rated the power and authority of the Director of Nursing as being unequal to that of other top-level executives in their actual environment. The next two least endorsed attributes reported are related to salary and enough registered nurses to provide quality care. The attribute that was least endorsed as being important in the ideal environment, 'team nursing as the nursing delivery system' had the lowest difference (39.5%) between the ideal and actual ratings presented in Table 5.

Table 6 below shows the levels of agreement for presence of the other 27 attributes in the actual practice environment. The range of presence was between 41% - 74%, however the range between the actual and ideal environment was much wider (17 - 60%).

Table 6.

Differences between reported presence (actual) and importance (ideal) for remaining attributes

	Percentage Agreement		
Attributes	**Actual**	**Ideal**	**Difference**
Registered nurses are involved in the internal governance of the service (e.g., practice and policy committees)	74.0	99.3	25.3
Doctors and public health nurses have good working relationships	73.0	100	27.0
RNs actively participate in developing their work schedules (i.e. what days they work, days off etc)	73.3	100	26.7
The nursing staff is supported in pursuing degrees in nursing	71.6	98.1	26.5
Active in-service/continuing education programs for nurses	71.9	100	28.1
Flexible or modified work schedules are available	70.1	100	29.9
Opportunity to work on a speciality team	69.7	97.4	27.7
A preceptor programme for newly hired RNs	68.7	100	31.3
Nursing controls its own practice	66.0	99.4	33.4
A nurse manager who backs up the nursing staff in decision-making even when it is in conflict with the doctor	65.8	98.0	32.2
A clear philosophy of nursing pervades the service	64.8	98.7	33.9
A supervisory staff that is supportive of nurses	64.6	100	35.4
Regular, permanently assigned registered nurses never float to another team	62.4	85.9	23.5
Support for new and innovative ideas about client care	62.5	98.7	36.2
Each nursing team, or unit, determines its own policies and procedures	62.2	84.3	22.1
The office environment is pleasant, attractive, and comfortable	62.2	100	37.8
Collaboration between nurses and doctors	60.9	99.4	38.5
Use of problem-orientated clinical record	60.6	77.9	17.3

Attributes	Percentage Agreement Actual	Ideal	Difference
Opportunity for registered nurses to participate in policy decisions	59.7	98.8	39.1
Nurses actively participate in efforts to control costs	59.6	94.3	34.7
A nurse manager who is a good manager and leader	58.7	100	41.3
Praise and recognition for a job well done	57.1	100	42.9
Enough time and opportunity to discuss client care problems with other nurses	56.4	99.4	43.0
The nursing staff participate in selecting new supplies and equipment	56.4	96.1	39.7
A good orientation program for newly employed nurses	56.1	100	43.9
Nurse managers consult with registered nurses on daily problems and procedures	52.5	99.4	46.9
Adequate support service allow me to spend time with my clients	51.9	99.4	47.5

The three highest differences between the actual and ideal ratings relate to leadership, one being 'an administration that listens and responds to employee concerns', and the other 'nurse managers consult with registered nurses on daily problems and procedures." The third concerns time 'adequate support service allows me to spend time with my clients'. The findings demonstrate that leadership is not ideal in the public health nurses professional practice environment. This is further explored in Chapter Five and Chapter Six.

4.3 NWI-R Sub-Scales

Within the context of Magnet hospitals, the NWI-R three sub-scales are reported to be the core elements of the professional practice environment; the autonomy sub-scale consists of five attributes, the control over nursing practice sub-scale has seven attributes and that for nurse-physician relationships has three (Aiken & Patrician, 2000). In addition to the three referred to here, two further sub-scales, leadership and education, were conceptually derived from the NWI-R to measure two of the goals documented in the framework for activating primary health care nursing

in New Zealand (Expert Advisory Group on Primary Health Care Nursing, 2003) discussed in Chapter 1. These two goals are also encompassed within the American hallmarks of a professional practice environment 'promote executive-level nursing leadership' and 'maintain clinical advancement program based on education, certification, and advanced preparation' (American Association of Colleges of Nursing, 2002).

In order to answer the fourth research question regarding how scores on the sub-scales compare to scores reported in previous research the means, standard deviations and Cronbach's alphas of the autonomy and nurse-physician relationship NWI-R Magnet sub-scales are presented in Table 8 below. As already noted, one of the seven attributes that makes up the control over practice NWI-R sub-scale was removed from the NWI-R used to survey the public health nurses. Without this item, the mean, standard deviation and Cronbach's alpha are 14.7, 3.7 and .79 respectively. However, as one attribute was not included, the findings have not been compared to previous studies.

Table 7.

Means, standard deviations and Cronbach's alpha scores for selected sub-scales of this study and other studies.

	Mean	S.D	Alpha	Study authors
Autonomy	14.3	2.8	0.73	Current study
	13.1	3.1	0.72	Budge, Carryer and Wood (2003)
	14.2	3.2	0.75	Aiken and Patrician (2000) Gen NM
	17.0	2.3		Aiken and Patrician (2000) Gen M
	15.1	2.9		Aiken and Patrician (2000) Sp NM
Nurse-	8.0	1.8	0.79	Current study
Physician	8.7	2.1	0.83	Budge, Carryer and Wood (2003)
Relationship	5.8	1.5	0.76	Aiken and Patrician (2000) Gen NM
	6.5	1.2		Aiken and Patrician (2000)Gen M
	6.2	1.4		Aiken and Patrician (2000) Sp NM

Gen M – General medical (scattered beds) unit Magnet hospital

Gen NM – General medical (scattered beds) unit non Magnet hospital

Sp NM – Specialised AIDS units non Magnet hospitalAs the autonomy sub-scale consists of six attributes the highest score possible is 20, and for the current study the mean score was 14.3 and the standard deviation was 2.8.

This is slightly higher than the mean of 13.1 (S.D=3) reported by Budge, Carryer and Wood (2003) in their New Zealand hospital based study. The mean score of 14.3 was very close to the 14.2 mean score obtained in Aiken and Patrician's (2000) study of non Magnet American hospitals and 0.8 lower than the specialised AIDS units. However the score is 2.8 below the Magnet hospitals.

The nurse-physician relationship sub-scale's highest possible score is 12, for this study the mean was 8.0 which is 0.7 below that found in the NZ hospital study, however it is considerably higher than those reported by the US authors.

4.3.1 Presence and importance of the NWI-R sub-scales

The purpose of this section is to further examine the public health nurse results of the three most reported sub-scales derived from the NWI-R (autonomy, control over nursing practice and nurse-physician relationships). In addition the results of the two newly derived sub-scales for this study (leadership and education) are further examined. An opportunity to examine these five sub-scales was presented from the two sets of data generated (ideal and actual) in response to the ratings of the attributes which make up these sub-scales. Consequently a difference score for each attribute within each sub-scale, and an overall difference score for each sub-scale will be presented. For example 98% of public health nurses reported that the attribute 'a nurse manager who backs up the nursing staff in decision making even when it is in conflict with the doctor' was important (ideal) to their practice However 65.8% reported this was present in their current (actual) practice. So the difference between the two was 32.2%. The 'difference score' for each attribute within a particular sub-scale was then averaged to provide a mean difference score for that sub-scale.

The development of mean difference scores for each sub-scale provides an indication of the degree of presence, or lack of presence of each sub-scale in some public health nurses practice. The sub-scale with the least presence is '*leadership*' which had a reported mean difference of 50.6%. This was followed by '*control over place*' with a mean difference of 44.4%. The '*nurse-physician relationships*' and the '*education*' mean difference were similar, 38.8% and 38.3% respectively. The sub-scale with the most presence was '*autonomy*', with a mean difference of 28.1%. The results of each sub-scale are presented below.

4.3.1.1 Autonomy Sub-Scale

The procedure explained in 4.3.1 was followed with respect to the autonomy sub-scale, results of which are given in Table 8.

Table 8.

The actual and ideal percentage agreements, the difference between agreements of each attribute that makes up the autonomy sub-scale and the overall mean difference (N = 148).

Attribute	% Agreement		Diff	Mean Diff
	Actual	Ideal		
A supervisory staff that is supportive of nurses	64.6	100	35.4	28.1%
Nursing controls its own practice	66.0	99.4	33.4	
Freedom to make important client care and work decisions	82.9	100	17.1	
Not being placed in a position of having to do things that are against my nursing judgement	77.2	99.4	22.2	
A nurse manager who backs up the nursing staff in decision-making even when it is in conflict with a doctor	65.8	98.0	32.2	

The range of the difference score of the five attributes was between 17.1% - 35.4%, with the mean difference score of 28.1%. The range of difference between the presence of the two attributes which were considered as being important by all respondents was 18.3%. Freedom to make important client care and work decisions was more present (82.9%) than the presence of supervisory staff that is supportive of nurses (64.6%). The

overall presence of the autonomy sub-scale was the most favoured of the five sub-scales presented in this study.

4.3.1.2 Control Over Practice Sub-scale

Table 9 presents the results of the control over practice sub-scale, which had the second least overall presence.

Table 9.

The actual and ideal percentage agreements, the difference between agreements of each attribute that makes up the control over practice sub-scale and the overall mean difference (N = 155)
(Note one attribute is missing as it was removed from the NWI-R).

Attribute	% of Agreement		Diff	Mean Diff
	Actual	Ideal		
Adequate support services allow me to spend more time with my clients	51.9	99.4	47.5	
Enough time and opportunity to discuss client care problems with other nurses	56.4	99.4	43.0	48.1%%
Opportunity to work on a speciality team	69.7	97.4	27.7	
Enough registered nurse on staff to provide quality client care	34.2	99.4	66.8	
A nurse manager who is a good manager and leader	58.7	100	41.3	
Enough staff to get the work done	37.0	99.4	62.4	

There was a greater range of difference in agreement between the ideal and actual practice environments of public health nurses when the control over practice sub-scale was considered compared to the autonomy sub-scale. In addition there was a wider range of difference between the percentage of agreement of the presence of the attribute, for example only 34% of public health nurses agreed to the presence of enough registered nurses on staff to provide quality care, compared to 70% of public health nurses who reported they had opportunities to work on speciality teams. The two least present attributes in this table concern the presence of enough staff, and the least present attribute in the autonomy sub-scale was also possibly in relation to the number of staff available to be supportive of nurses.

4.3.1.3 Nurse-Physician Relationship Sub-scale

The results of the last of the three most reported sub-scales in the literature are presented in Table 10.

Table 10.

The actual and ideal percentage agreements, the difference between agreements of each attribute that makes up the nurse-physician relationship sub-scale and the overall mean difference (N = 159)

Attribute	% of Agreement		Diff	Mean Diff
	Actual	Ideal		
Doctors and public health nurses have good working relationships	73.0	100	27.0	38.8%
Much coordination between doctors and public health nurses	47.9	98.8	50.9	
Collaboration between nurses and doctors	60.9	99.4	38.5	

Of the three attributes that measure the nurse-physician relationship sub-scale, 73% of public health nurses reported that doctors and public health nurses have good working relationships, however there was 100% agreement that this is important to their practice. Similarly the importance of coordination and collaboration between nurses and doctors had high levels of agreement from the respondents; however the presence of this was not the case for approximately half of the participants in their actual environment. This may be in relation to an infrastructure that does not support coordination between doctors and public health nurses, their physical location and their employment arrangements.

4.3.1.4 Leadership Sub-Scale

As previously indicated for the purpose of this study, two further sub-scales were conceptually derived from the NWI-R to measure two of the goals documented in the framework for activating primary health care nursing in NZ (Expert Advisory Group on Primary Health Care Nursing, 2003). These two goals are also two of the eight hallmarks of a professional nursing practice environment, these being to promote nursing executive leadership , and to maintain clinical advancement programme based on education, certification, and advanced preparation

(AACN, 2002). Based on these notions, seven attributes concerning leadership were grouped together. The seven attributes are presented below in Table 11 with the percentage of agreement that was said to be present in public health nurses' actual environments and the corresponding ideal agreement percentages. In addition the difference between the actual and ideal percentages and the overall mean difference appear. The possible score for this sub-scale was 28, the mean was 17.4 and the standard deviation was 4.59 and the Cronbach's alpha was 0.82.

Table 11.

The actual and ideal percentage agreements, the difference between agreements of each attribute that makes up the leadership sub-scale and the overall mean difference (N = 140).

Attribute	% of Agreement		Diff	Mean Diff
	Actual	Ideal		
A nurse manager who is a good manager and leader	58.7	100	41.3	
Praise and recognition for a job well done	57.1	100	42.9	
The director of nursing is equal in power and authority to other top-level executives	47.0	96.7	49.7	50.3%
A Director of Nursing who is highly visible and accessible to staff	25.4	98.7	73.3	
An administration that listens and responds to employee concerns	40.6	99.4	58.8	
A nurse manager who backs up the nursing staff in decision making even when it is conflict with the doctor	41.0	100	39.9	
Nurse managers consult with registered nurses on daily problems and procedures	52.5	99.4	46.9	

The mean difference score of these seven attributes was 50.3%, this indicates that only half of the public health nurses consider these attributes to be present in their current environment. Neither of the attributes relating to the Director of Nursing were rated favourably, only 25.4% of the respondents agreed to the presence of 'a Director of Nursing who is highly visible and accessible to staff', furthermore only 47% of the respondents agreed that the 'director of nursing is equal in power and authority to other top-level executives'. While there was full consensus about the importance of having 'a nurse manager who is a good manager and leader', only 58.7% of the respondents actually experienced having a nurse manager who is a good manager and leader. The overall mean

difference percentage of 50.3% for the leadership sub-scale clearly needs to be addressed and will be discussed in Chapters Five and Six.

4.3.1.5 Education Sub-scale

Education and career development is a goal for activating primary health care nursing within NZ (Expert Advisory Group on Primary Health Care Nursing, 2003). The sixth hallmark of the professional nursing practice environment (AACN, 2002) is to "demonstrate professional development support for nurses" (p. 6), examples include ensuring that professional continuing education opportunities are available and supported, and that preceptorships and organised orientation programmes are available. Based on these notions, six attributes concerning education were grouped together, resulting in a mean score of 16.1, a possible score of 24, a standard deviation of 3.87 and an acceptable level of internal consistency with a Cronbach's alpha of 0.81. The six attributes and their comparative data are presented below in Table 12.

Table 12.

The actual and ideal percentage agreements, the difference between agreements of each attribute that makes up the education sub-scale and the overall mean difference (N = 157)

Attribute	% of Agreement		Diff	Mean Diff
	Actual	Ideal		
A good orientation program for newly employed nurses	56.1	100	43.9	38.2%
Active in service/continuing education programs for nurses	71.9	100	28.1	
Career development/clinical ladder opportunity	49.1	98.2	49.1	
Opportunities for advancement	48.8	99.4	50.5	
The nursing staff is supported in pursuing degrees	71.6	98.1	26.5	
A preceptor program for newly hired RN's	68.7	100	31.3	

The mean difference score of the six education attributes was 38%. The attributes concerning orientation were not consistent, only 56.1% of public health nurses agreed to the attribute 'a good orientation program for newly employed nurses' was present in their current environment; however the public health nurses percentage of agreement was higher for

the attribute 'a preceptor program for newly hired RNs'. It is interesting to note that 72% of public health nurses agreed that they are supported in pursuing nursing degrees. This finding is consistent with the respondents' demographics concerning their highest qualification, as 40.4 % had bachelors degrees, and 3.7% a master degree. In addition 21% had or were working towards further qualifications.

4.4 Summary

The first section of this chapter presented the demographic findings (overall response rate was 46%), 9.2% of the responses were Maori, the average age of the participant was 47.3 years and the average length of time employed as public health nurses was 9.6 years. Responses were received from all DHBs except Capital Coast and Wairarapa. The second section presented quantitative findings relating to the first four research questions. These findings identified overall public health nurses considered all 48 attributes to be important to their practice, however far fewer were able to report them being present in the current work situation. These findings were further examined when considering the importance and presence of the sub-scales. The next chapter presents the results of the qualitative data analysis in order to answer the remaining four research questions.

CHAPTER FIVE: QUALITATIVE RESULTS

In the previous chapter the quantitative results relating to the first four research questions were presented. This chapter presents the qualitative results and discussion for the remaining four open-ended research questions:

5. *What other organisational attributes do public health nurses identify as being specific to the community setting?*
6. *What characteristics should a public health nursing service have to make it a "good place to practice nursing"?*
7. *How can a public health nursing service support nursing practice?*
8. *Given the current changes in the NZ health sector, and the development of PHOs, what is the public health nurses preferred place of employment, DHB Public Health Unit, DHB PHO or Maori provider. What advantages and disadvantages do they see for each option?*

In the fifth question embedded in the survey questionnaire, all participants were given the opportunity to identify any other attributes specific to the community setting, which they thought should be included given that the NWI-R measurement tool had only been widely used to measure organisational attributes of nurses in hospitals. The sixth and seventh questions concerned what characteristics and support mechanisms a public health nursing service should have in place to make the service a good place to practice nursing. The final question sought information about public health nurses preferred employment option.

Utilising the framework presented by Edwards and Talbot (1994) a number of data driven codes were systematically assigned to the responses from all four open ended questions, revealing a description of patterns which were then collated and categorised. Some responses were entered into more than one category, as they expressed more than one idea.

5.1 Organisational Attributes not Covered by the NWI-R

In response to the first open ended question (question 5) 223 suggestions of other attributes were provided. Twenty-one suggestions were discarded as they were either already part of the NWI-R or were not measurable attributes. This resulted in 201 suggestions. The categories with the number of responses are presented (Figure 1) followed by a brief overview of each category.

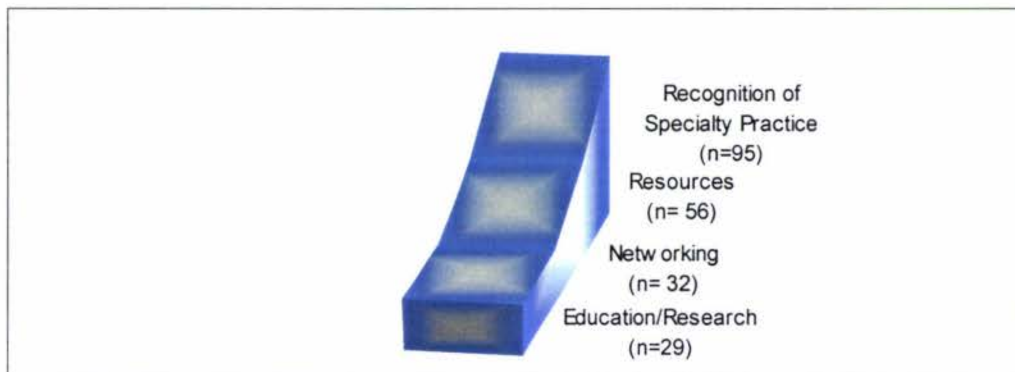

Figure 1.
Organisational attributes, not covered by the NWI-R, which public health nurses identify as being specific to the community setting

5.1.1 Recognition of Specialty Practice

The suggestions categorised under this heading included the desirability of public health nurses having input into Ministry of Health contracts and influencing public health nursing strategic direction. This was seen as a means of enabling consistency in public health nursing practice, through, for example, establishing national standards of practice and models of care. There were a number of frameworks suggested, including working within the Treaty of Waitangi principles, the Ottawa Charter, use of a health and wellness focus, a strengths based model, a health promoting framework for practice and family focussed health care.

Participants suggested that, in the current environment, community needs were not always addressed and the existing contracts were perceived as a

barrier to nurses' ability to be responsive to the needs of the community. Respondents emphasised the need for public health nurses and their managers to be aware of their community resources and community development opportunities.

A number of respondents were concerned about their image within the health sector. These concerns included the need for hospital services to understand the role of public health nurses in the community and for their own profession, and their employer to value public health nurses. Pay parity with other professional groups was seen as one means of acknowledging the value of the role. Some public health nurses felt their professional identity would be enhanced by having a higher profile in their community, but did not offer any suggestions how their profile could be raised.

5.1.2 Resources

A significant range of resource constraints that impacted on the work of public health nurses were identified by the respondents. This included the lack of access to and availability of a well run transport service, technical support and clerical support. In addition, the need for availability of cell phones, an adequate safety policy, horizontal violence procedure and training for dealing with aggression were identified as specific resource needs. Access to health promotion and health education resources were identified as inadequate. The requirement for relief time for nurses in isolated roles and for clinical supervision were also identified as resource needs.

5.1.3 Networking

This category acknowledged the need for nurse managers to allow public health nurses time to network effectively with a wide range of providers, including Maori and secondary care providers to develop improved relationships and collaboration in providing care.

5.1.4 Education/Research

The nurses stressed the value of availability of specialist post-graduate education in public health, and the need for financial support to attend conferences, post graduate education, and time to study. Suggestions were made regarding specific professional development in areas such as immunisations, specialised training in engaging with clients in the community and training in information technology. An emphasis was placed on the importance of research and for nurses to have the opportunity to work on collaborative research projects.

5.1.5 Suggested Organisational Attributes

Some valuable suggestions of organisational attributes that could be included in the NWI-R to measure the environment specific to public health nursing were made. From this, it is suggested that the following organisational attributes are added to the NWI-R:

- Specialty area of practice is well defined
- Adequate relevant safety resources are in place
- Meaningful clinical supervision is available
- Adequate time for effective networking is understood by the nurse manager/leader
- Nursing staff have a way of identifying the needs of their community
- Nursing research opportunities are available.

5.2 Characteristics of Public Health Nurse Services and Support of Nursing Practice

The sixth and seventh questions of the qualitative section of the survey elicited complementary data. The findings from these questions are presented in this section. The sixth research question was in relation to

characteristics of public health nursing services. This question asked respondents to list the three most important characteristics that a Public Health Nursing Service should have in place for the respondent to consider it as "a good place to practice". There were 445 responses and from this six categories were identified. Some of the responses were put into more than one category as they expressed more than one idea. The pie-chart below shows the six categories, the number of responses and the percentage in each category.

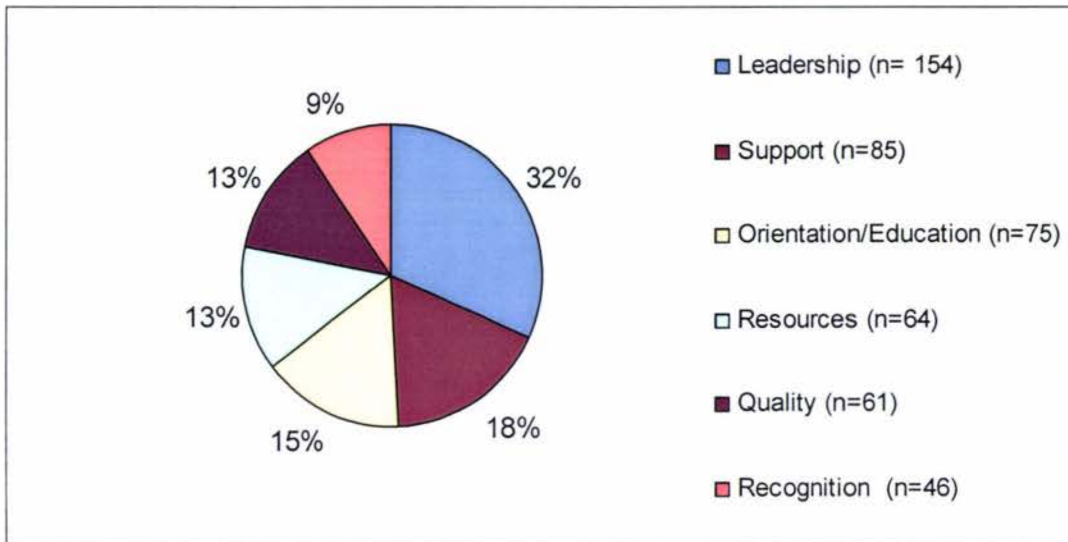

Figure 2.
Characteristics that make public health nursing services a "good place to practice nursing".

The seventh research question asked respondents to list the three most important ways a public health nursing service can support nursing practice. This resulted in 433 responses from which the same six categories were identified. The pie-chart below shows the six categories, the number of responses and the percentage in each category.

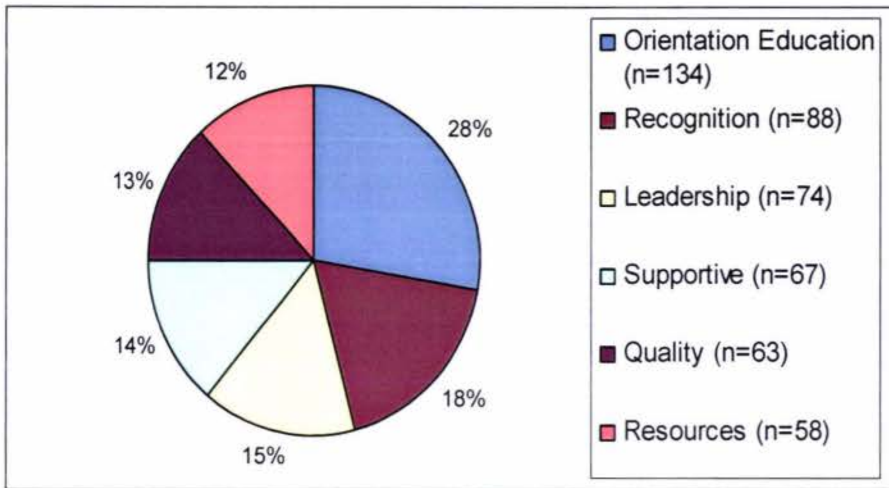

Figure 3.
How public health nursing services can support nursing practice

As demonstrated in Figure 2 and Figure 3, the content analysis for these questions resulted in the identification of the same six categories for each question with the same titles. Figure 4 presents the combined results of question six and seven.

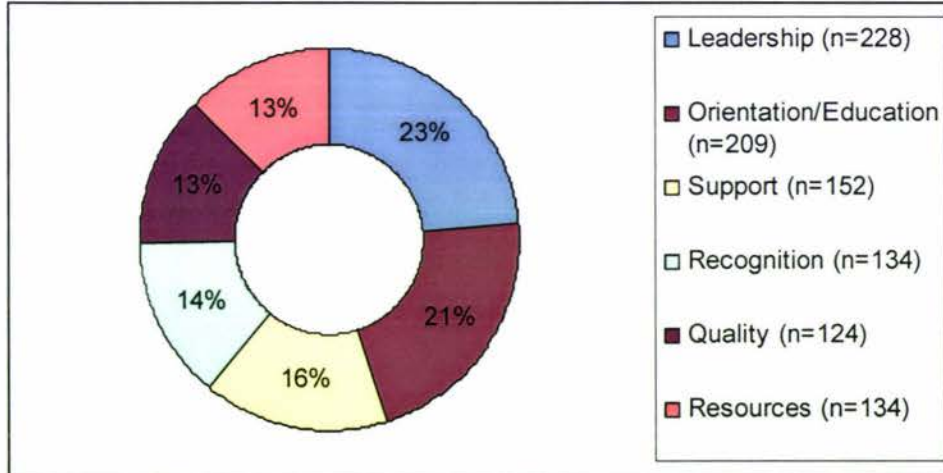

Figure 4.
Public health nursing services characteristics and support features categories.

Even though the titles of the categories are the same, the responses for the 'characteristics' and 'support' within some of the categories had a different focus. For example leadership was coded as a category for both open-ended questions. The leadership category regarding what characteristics of

a public health nursing service should have in place to provide a good service was described by public health nurses as; clear nursing leadership and nursing management that provided strong competent leadership, vision and support, while valuing nurses and involving them in strategy planning. However the leadership described in relation to how leadership can support nursing practice, was more focussed on the traits of the leaders themselves such as innovative leaders with good communication skills. To illustrate the responses to each open ended question a description of the category is provided using examples taken from the data of individual responses to the 'characteristics' and 'support' features identified by public health nurses.

5.2.1 Leadership Category

The leadership goal of the framework to activate primary health care nursing in NZ (Expert Advisory Group on Primary Health Care Nursing, 2003) states that:

> *primary health care nurses will have clear, accessible, integrated nursing leadership to encourage and promote change and facilitate the development of new roles and models of practice (p. 31).*

The third hallmark of the professional nursing practice environment (AACN, 2002) is to "promote executive nursing leadership," (p. 296) where nurse executives participate in the governing body and nursing leadership has the authority and accountability for nursing and patient care delivery.

When the two open ended question results were combined the category with the highest percent was leadership (23%). One hundred and fifty four responses regarding characteristics a public health nursing service should have in place for it to be a good service. These concerned the need to have in place clear nursing management/leadership that provides a strong

nursing vision and support. The importance of having a nurse as their manager was stressed by many of the respondents:

> *"It is crucial the manager has a nursing background"*.

> *"Need strong competent and experienced nursing management"*.

As already noted in Chapter One, the public health nurses have been subjected to constant restructuring both locally and nationally since the 1980s. Responses concerning having a nurse as their manager possibly reflect the results of the disestablishment of nursing leadership after the commencement of the health reform process and the replacement of nursing leaders by generic managers. As already noted, the majority of public health nurses are employed by DHB- Provider arm within Public Health Units. The respondents may not have strong nursing leadership within the Public Health Unit as they are generally led by non-nursing managers (A. Shaw, personal communication, June 3rd, 2004).

The suggestion that the manager should have a nursing background are congruent with the findings of the mean difference score of 50.3% of the presence and importance of the NWI-R leadership sub-scale presented in Chapter Four. The leadership sub-scale demonstrated all public health nurses agreed to the importance of having in place *'a nurse manager who is a good manager and leader'*, and a *'nurse manager who backs up the nursing staff in decision making even when it is in conflict with the doctor'*. However, only 58.7% and 44% respectively agreed these attributes were present in their actual practice environment. These results indicate some public health nurses did not having a nurse manager in place, or that their nurse manager they do have in place is not considered to be a "good manager and leader'.

A number of respondents were more specific in their response to the characteristic of public health nursing services and emphasised what were features of a 'good manager and leader'. Their emphasis was on the need

for nursing leadership that understood the specialty nature of primary health care nursing:

> *"Nursing leadership that supports public health innovative practice that addresses PRIMARY HEALTH CARE".*
>
> *"Nursing leadership has to have a true understanding of working in communities with a wellness focus".*
>
> "A *nurse leader, including a Director of Nursing who understands principles of primary health care and public health nursing work".*

The data suggests that public health nurses want nursing leadership but they also qualify the exact nature of the nursing leadership by noting that the leader must understand the principles of primary health care and public health nursing. The respondents in this study suggest that a nurse leader who is not based in the community is not able to provide effective leadership. This provides some insight to the reasons for the low score of the presence of the NWI-R attribute *'a director of nursing who is highly visible and accessible to staff'* (25.4%). As the majority of public health nurses are employed by DHB-Provider arms they do have access to a Director of Nursing. However, they may not access the Director of Nursing as they may not see that person as a credible leader for their particular area of practice. Furthermore if the public health nurses do not have a nurse leader, or do have a nurse leader with no established communication or reporting lines to the Director of Nursing the public health nursing issues may not be known by the Director of Nursing.

Fagin (2003) suggests that primary heath care nursing should not be viewed as one of nursings many specialities, as primary health care nursing is integral to the core of nursing and has been a predominant feature of nursing curriculum for at least twenty years. However the data suggests that public health nurses view primary health care nursing as a speciality.

Another aspect of leadership identified by the respondents concerned the need for public health nurses to be aware of the vision of their service and to be involved in the strategic direction of public health nursing services. This was seen as a way of valuing public health nurses:

> *"A nurse leader with a clear vision in which we all know "what we are here for", "who is our client group", and "what our contracts are".*

> *"A nurse leader, who values nurses, provides workplace incentives and more involvement in strategy planning".*

Other specific features of nursing leadership described by public health nurses concerned their desire for nursing leaders to have sound knowledge of the community and a leader who supported networking and flexible delivery of care through the development of relationships:

> *"Cooperative working understanding of the community".*

> *"Nurse leader who is able to interact with other community services and network effectively".*

> *"Public health nurses should be working to leading services to achieve outcomes that make a difference in their community".*

> *"A leader who understands the need to employ public health nurses in set areas to enable community participation, development of relationships, resource networks, services, knowledge of key people, as are all very necessary parts underpinning the many issues a public health nurse gets faced with".*

Seventy five responses were presented in relation to how leadership can support nursing practice. These responses were more focussed on the individual traits of nursing leaders considered necessary to be a 'good' nursing leader. Many of the respondents stressed the need for innovative leaders who were able to overcome barriers in providing innovative practice:

> *"Nursing leadership that supports public health innovative practice in primary health care".*

> *"A nurse leader who encourages innovation, allows flexibility and recognises and acknowledges achievements".*

The desire for innovation was also evident in the data concerning other specific organisational attributes for a community focussed NWI-R. The 'specialty practice' category expressed the perceived barriers to public health nurses ability to be responsive to the needs of the community. The characteristics of public health nursing service responses further emphasises the need for public health nursing leaders to know their community resources, community development opportunities, and foster innovation.

Public health nurses required leaders who are familiar with the community setting and the workloads:

> *"A leader who reviews workloads frequently and evaluates exactly what the public health nursing teams is doing. For example, at times when public health nurses feel overworked and struggle to cope with their workload, it has often been found that they have been over providing in certain areas i.e. doing too many health education sessions in schools, early childhood centres, or picking up personal health cases that could more appropriately be done by other health providers".*

The suggestion above illustrates the need for coordination of nursing services to meet the needs of the community, to ensure the best use of the nursing workforce resulting in less fragmentation and duplication of services. Baileff (2000) identified that integrated nursing teams and a more collaborative way of working together is required by community nurses. For integrated nursing teams to be effective, nursing leaders must have an understanding of the needs of the community and the nurses who contribute to the care of that community.

Furthermore a leader with good communication was viewed as being essential to the development of collaborative practice within a multi-disciplinary team and the wider health sector:

> *"A leader must have good communication/people skills to enhance working relationships at all levels"*

> *"A leader needs to enhance multi-disciplinary teams that work in an effective, collaborative way in the referral and management of cases".*

The final aspect stressed the importance of having a leader with the ability to communicate well and to be responsive to public health nurses:

> *"A leader who has excellent communication, encourages innovation and autonomous practice and is responsive to concerns, ideas and problems."*

This suggestion above is in line with one of the definitions sourced of a professional practice environment:

> *a set of workplace features that when present, enable nurses to demonstrate professional practices characterized by decision making autonomy, clarity of mission, and organisational responsiveness" (Estabrooks et al., 2002, p. 265).*

Public health nurses clearly want nursing leadership, but the majority of potential leadership currently arises from the provider arm setting. It is debatable that they would accept such leadership comfortably unless those people had the capacity and vision to facilitate the development and delivery of nursing services grounded in community need and addressing a population focus. There is also a certain degree of passivity in the responses. Public health nurses seem to suggest that leadership will come from somewhere else, rather than from within their own ranks. This may however be a result of the structures within which they work.

5.2.2 Orientation/Education Category

Education and career development is a goal for activating primary health care nursing within NZ (Expert Advisory Group on Primary Health Care Nursing, 2003). The goal is that "postgraduate education will support all levels of primary health care practice and be recognised in a national standardised career pathway for primary health care nurses" (p. 35). This goal is stressed in the category 'Orientation/Education' (21%). The characteristics described by public health nurses incorporated having access to professional development including in-service education, career pathways, attendance at conferences, and post-graduate education:

> *"Professional development programme to enable nurses to discover new knowledge and skills to apply in practice".*

> *"Support of advanced practice, development of specialties and provision of research/study opportunities".*

> *"Ongoing staff training/ development, both in workshop style and at degree/masters level".*

> *"An organisation with a culture that encourages and rewards professional development to progress the knowledge and practice of public health nursing".*

This culture within an organisation is present in some public health nurses environments, however the NWI-R education sub-scale findings demonstrate this is not always the case. The mean difference score of the NWI-R education sub-scale was 38%. One third of the respondents did not agree to the presence of the attributes *'active in-service/continuing education programs for nurses'* and *' nursing staff supported in pursing degrees.'*

Some of the respondents requested the provision of a thorough orientation programme which is regularly reviewed, is up to date and tailored to individual learning needs. When public health nurses considered the NWI-R attribute concerning orientation programmes being available for newly employed nurses only 56.1% of the respondents agreed that they were present. Some public health nurses were much more specific and desired a more formal approach to orientation:

> *"pre-requisite education and skills training for public health nurses before starting practice in the community that is uniform throughout NZ".*

A number of public health nurses considered characteristics of orientation further and recognised the need for preceptorship to be in place:

> *"increase staff to allow more nurses to act as preceptor buddies i.e. for new graduates/staff".*

The NWI-R findings showed that 68.7% of public heath nurses had a preceptor program for newly hired nurses in place. Preceptor programs are a requirement of one of the hallmarks of a professional nursing practice environment (AACN, 2002). Public health nurses required

continuing education opportunities, preceptorship and organised orientation programmes.

It is generally thought that staff turnover is low in the public health nursing workforce. This is supported anecdotally through experienced nurses and graduate nurses' frustration of not being able to transfer to the community due to lack of available positions in community settings. While there is no national data to support this view, the present study found nine years to be the average length of time respondents had worked as public health nurses which suggests a stable workforce. In this context, it is interesting to note the strong call for orientation to the role and the presence of preceptor programs.

One hundred and thirty four orientation/education responses were received on how a public health nursing service could support nursing practice. These suggestions tended to be focused on the perceived barriers relating to access issues and financial barriers to ongoing education and professional development. Several key barriers are outlined in the framework for activating primary heath care in NZ (Expert Advisory Group on Primary Health Care Nursing, 2003). The barriers include the lack of accessible post-graduate programs and the lack of organisational infrastructure. In-service education to support their practice was required by a number of respondents:

> *"Professional development regular, good quality and not thought of as luxury but investment in staff"*

> *"Regular opportunities to improve practice, for example appropriate education sessions".*

The other aspect related to the ability to access post graduate studies and the need for encouragement to complete research and reflect on practice:

"A positive and supportive professional environment with ongoing professional development opportunities and protected time for reflective practice and clinical supervision".

"Effective clinical supervision and clinical peer review sessions"

"Provision of time for journaling and peer discussion as part of work time".

The Primary Health Care Strategy (2001) states that "primary health care nursing will be crucial to the implementation of the strategy" (MoH, 2001, p.23). The 2001 Primary Health Care and Community Nursing Workforce Survey (Ministry of Health, 2003) demonstrated that the primary health care nursing workforce is fragile, characterised by an ageing workforce and barriers in access to professional development and education. In fact only four percent of primary health care nurses have completed a Bachelor of Nursing degree. The results of the 2001 survey demonstrate that much work is needed to underpin the primary heath care strategy with a strong dynamic community based and community focused nursing workforce. The respondents in this survey acknowledge the need for on-going professional development and education to support their practice.

5.2.3 Support Category

Public health nurses expressed their need to be collaborative while delivering population health and described the need for infrastructure support to assist them to develop comprehensive networks, in particular support from nurses and other health professionals:

"Supportive nursing staff who are willing to share experience and knowledge of work practices and community".

"Provide good support systems – social work/GP services who understand primary health care and public health issues".

Not only was the support from nurses' and other health professionals an important characteristic, the need for support from managers, and from their team were also highlighted:

> *"Strong team support from regional manager down to public health nursing team".*

The nurses stressed the need for a supportive team environment that facilitates collaboration. They wanted an environment that allowed time to build networks both formally and informally within the service, in the community and with other agencies:

> *"Opportunity to access and attend meetings/hui in community relative to practice".*

> *"Contact with colleagues regularly".*

> *"Supportive teamwork with good communication channels".*

The majority of public health nurses agreed (88.3%) to the presence of the NWI-R attribute *'Registered nurses have the opportunity to serve on committees'* in their practice environment. This finding is reassuring as it is crucial public health nurses are represented on committees within their communities. This is a way of developing collaborative relationships among members of the health care provider team and the wider community. These overall findings of this support category demonstrate the need for increased support mechanisms to be available within the public health nursing team.

5.2.4 Recognition Category

The fourth overall category identified was recognition (14%). The nurses wanted recognition of their ability to work autonomously within a team environment:

> *"Knowledge that community nursing practice is autonomous in practice"*

> *"That nurses have autonomy within well-defined scope of practice and are part of a team".*

These findings relating to autonomy were also reflected in the degree of presence of the NWI-R autonomy sub-scale mean difference score (28.1%). Sixty six percent of respondents agreed to the presence of the attribute *'nursing controls its own practice".* Kramer and Schmalenberg (2003), quantified the relationship between the degree of autonomy and nurses' ranking of quality care and job satisfaction. Their research resulted in a five category ranked autonomy scale. The findings of this study suggest public health nurses desire an environment that reflects the highest end of the Kramer and Schmalenberg's ranking scale, that is an environment that allows them to deliver autonomous care.

Clinical supervision was seen as one way of enabling public health nurses to deliver autonomous care. The support features of this 'recognition' category included effective clinical supervision as a must in practice:

> *"Due to the isolation that public health nurse generally work in when out in the community, there must be a peer review and some sort of clinical supervision. For the first year or two public health nurses often feel 'out of their depth: so daily supervision/support is vital for new public health nurse roles".*

> *"By providing appropriate clinical supervision and not just paying lip service"*

> *"Having structures in place i.e., effective clinical supervision that allows nurses to feel supported and valued while maintaining a safe, quality service to clients".*

Clinical supervision is a recurring theme within this study, and the finding that nurses value the provision of support through supervision is supported in the literature (Butterworth, Bishop & Carson, 1996; Fowler 1996). As there are a number of clinical supervision models available, Burrow (1995) suggests that clinical supervision must be well defined, as broad unbounded definitions have resulted in the empirical validation of clinical supervision in nursing being fraught with epistemological and conceptual problems.

The availability of clinical supervision to all nursing staff needs to be addressed by each District Health Board. District Health Boards have responsibility for providing health care to each region, and a professional practice environment for nurses. It is therefore timely that they assist clinical nursing areas to identify which model or approach would be of most benefit within their District.

Public health nurses also referred to another aspect of 'recognition' important to them in their practice. This referred to an attractive salary scale:

> *"Sensible national pay scales with adequate recognition for experience and qualifications*

> *"A pay rate that reflects the work being done".*

Similarly, remuneration that recognises qualifications and experience was emphasised:

"Offer good remuneration and incentives to ensure recruiting and retaining of best staff".

"Better pay – despite practicing autonomously and at advanced level, pay is appalling".

"Salary appropriate for experience and on par with overseas to be able to retain staff".

"Acknowledge nursing knowledge and academic qualifications through financial remuneration".

"Given credit for achievements – for example completion of nursing degree/masters, career pathways etc".

These remuneration suggestions are in line with the 'compensation and reward' strand, which is one of the five interrelated strands that makes up the Hoffart and Woods (1996) professional practice model noted in Chapter One. Recognition also included autonomous practice within a team environment, access to clinical supervision and remuneration that recognises public health nurses specialty, these features are all consistent with the hallmarks of a professional nursing practice environment (AACN, 2000).

5.2.5 Quality Category

Quality was the fifth overall category (13%) developed. The characteristics the nurses desired of a public health nursing service were in line with the Kramer and Schmalenberg (2003a) view that the autonomy of nursing as a profession should be included in the concept of control over nursing practice. Their suggestions included that the service had a clear philosophy, a model of practice, evidence based practice and access to clear policies, procedures guidelines and standards of practice:

"A strong philosophy guiding practice and health care delivery to clients and families".

"Primary health care focus with client centred, evidence based practice".

"Comprehensive policies/procedures, which are updated annually by the whole nursing team so that everyone has input and clear guidelines on best practice".

Quality with regard to supporting public health nurses' practice encompassed influencing the nursing service priorities and direction by being involved with setting the philosophy, model of care, outcome measures, policy, procedures and guidelines:

"Involvement in internal governance of the service i.e. feeling of ownership/participation".

"Enable participation in decision making regarding nursing service priorities and direction – a voice that is heard and respected".

"Involved with setting outcome measures to show the results of public health nursing input".

These findings are congruent with the 'specialty practice' category identified as one of the 'other attributes' to measure community settings. However they are not congruent with the NWI-R findings of the attribute '*Each nursing team, or unit, determines its own policies and procedures*'. Fifteen percent of the respondents stated this was not important to their practice as a public health nurse, and 38% reported this was not present in their current environment. It may be the that those who deemed it was not important to their practice were nurses who were affected by the

change of employer from the Department of Health to Area Health Board's noted in Chapter One. This change saw the previous centrally controlled decision making and national coordination from the Department of Health shredded, resulting in public health nursing services developing independently in every Area Health Board. This change along with the health reforms saw the erosion of the role of public health nurses (NZ Nurses Association, 1986).

The other feature identified was in relation to public health nurses having control over their hours of work:

> *"Allow flexible working hours".*

Flexible work hours was reported as a component of 'control over practice' in implementing a generalist model of public health nursing in a rural community (May, Phillips, Ferketich & Verran, 2003). This generalist model was designed to improve access, acceptability and outcomes of health services for a rural, underserved population. One of the barriers encountered by the public health nurses was the difficulty they had in determining their own hours of work.

Autonomy and control over practice were the key features of the quality category. These findings are consistent with the organisational attributes of the NWI-R (Aiken & Patrician, 2000).

5.2.6 Resources Category

The final overall category percentage was resources (13%). The characteristic desired by public health nurses concerned the need for adequate staffing to enable nurses to meet the needs of their communities:

> *"Workforce to reflect communities that they are serving".*

> *"Adequate staff to allow thorough and quality work with clients instead of 'band aid' work".*

The other component for this category was the availability of resources to enable public health nurses to carry out their work:

> *"Ready access to car and computer without having to share with other services".*

> *"A work car available each day, car pooling for a public health nurse is humiliating".*

> *"Provide enough resources to allow me to do the work e.g. dedicated car, mobile phone, extra equipment".*

> *"Provide staff with a computer which has email and internet access along with ability to establish data base system to help alleviate and save on any administration problems".*

Cleary some public health nurses are not well resourced to carry out their role, the resources mentioned in the responses are fundamental to their ability to deliver effective nursing services.

5.2.7 Summary of Categories

Six categories have been developed in response to the first two open ended questions. As noted in Chapter 3 these two questions were taken from McClure, Poulin, Sovie and Wandelt's (1983) original study of Magnet hospitals. The purpose of these questions was to elicit descriptions of organisational attributes important to public health nurses professional practice. Leadership and education were the two main areas identified followed by support, recognition, quality and resources. These findings will be further discussed in Chapter Six.

5.3 Employment setting preference

The last open ended question concerned public health nurses preferred employment setting. This question was posed in relation to the changes in the NZ health sector, and the development of Primary Health Organisations as outlined in Chapter One.

Of the 165 respondent's, 7.9 % did not respond to this question, the majority (61.2%) responded that they would prefer to be employed by the District Health Board – Provider Arm/Public Health Unit. This was followed by 28.5% who would prefer to be employed by the District Health Board - Primary Health Organisation. The remaining 2.4% stated they would prefer to be employed by a Maori provider.

According to the 2003 NZNC public health nurses register (n=536), 3.7% did not identify who employed them, 84% are employed by DHB public hospital or public community service, 5.7% by primary health care clinic/community service non public, half of which work in Auckland and the remainder in various locations. Maori health service providers employed 1.5% and 5.1% were employed by 'other' which included, Pacific health service provider, educational institution, government agency and self-employed.

This survey caught public health nurses at a time when their future placement was unclear. As noted previously MoH (2001) suggests that all primary health care nurses will become part of PHOs in the future. Conversely in November 2003 the Minister of Health stated in a Hansard record that:

> *no DHBs have indicated that they are considering or planning to discontinue any primary heath care nursing service. Waitemata, Auckland, Waikato, Tairawhiti, Whanganui, and Otago DHBs have indicated that they are considering or may consider how primary health care nursing services in their area will be*

configured in relation to primary health organisation. At this stage none of these DHBs have progressed beyond a consideration of how service may be provided in the future" (Hansard Record King, November, 2003).

Towards the end of 2004 there is no greater clarity about the positioning of public health nurses.

5.3.1 Employment setting advantages and disadvantages

In order to develop a sense of public health nurses' thoughts on employment settings, they were asked to indicate three advantages and three disadvantages of being employed by DHB – Provider Arm/Public Health Unit, DHB – PHO and Maori provider. All responses were coded according to their content and then collated into categories. This resulted in three categories for each advantage and disadvantage, except for the advantages of being employed by a DHB-PHO where four categories were collated. The overall numbers of responses for each option and the categories collated with the percentage of responses are provided in Table 13 below. This is followed by a description of the categories with examples taken from the data of individual response.

Table 13.

Number and categories of advantages and disadvantages given for each employment option

Employment Setting	Adv.[1] (n)	Categories Identified	(%)	Disadv.[2] (n)	Categories Identified	(%)
DHB Provider Arm – Public Health Unit	**279**	Established Autonomous practice Supportive team	(51%) (29%) (20%)	**199**	Location Limited nursing innovation Limited community voice	(37%) (35%) (28%)
DHB – Primary Health Organisation	**221**	Community focussed Improved relationships Integration of public health principles Improved nursing structure	(35%) (26%) (26%) (20%)	**203**	Medical dominance Loss of public health focus Change with unknown outcomes	(39%) (34%) (27%)
Maori Provider	**155**	Maori for Maori Improved access for Maori Improved outcomes for Maori	(41%) (34%) (34%)	**138**	Limited number of Maori staff Poor infrastructure Professional isolation	(41%) (33%) (26%)

[1] **Advantages**
[2] **Disadvantages**

As shown in Table 13 the category with the highest frequency was ***'established'***. The respondents suggested the advantages of being employed by a DHB Provider arm was the provision of a sound organisational structure with established systems in place. These systems included access to policy, procedures and guidelines to support practice and established networks both within the community and secondary care. This structure enabled them to be available to their community:

"Structures already in place for public health nurses".

"Service is available across the community and is responsive to community needs".

"Easier to establish networks within DHB and with the community networks".

"Policies, procedure, guidelines and standards of care are in place".

'Autonomous practice' was identified as another advantage. Some respondents strongly indicated they felt their practice was relatively autonomous and that they were able to collaborate more effectively with providers when not controlled by them. They were also able to respond to any public health outbreaks more effectively: When asked the question "what are three advantages of being employed by a DHB-Provider Arm/Public Health Unit?" the following types of responses were received:

> *"Not being tied into policy of PHO".*

> *"Collaborate better with other providers when not controlled by them"*

> *"Allows collaboration with PHO, but critical mass episodes can still be handled".*

> *"Autonomy to do one's work"*

> *"Workforce not at GP's whim".*

In relation to being part of a **'supportive team'**, the following comments were made:

> *"Ability to work with other staff who understand the principles of public health and health promotion".*

> *"Work alongside health promotion officers and health promoters".*

> *"Can practice in a safe supportive environment – we think the same".*

Although the respondents viewed the advantages of being employed by a DHB-Provider Arm as being part of an established organisation, having autonomy in their practice and being part of a supportive team, they also

identified some disadvantages. These included the ***'location'***, having **'limited nursing innovation'** and ***'limited nursing voice'***. With regard to location, public health nurses saw the principal focus of DHBs to be on hospitals, and expressed concerns about funding:

> *"Restricted by illness focus of DHBs in area such as CAPEX funding"*
>
> *"Public health nursing gets caught up with the financial problems of DHBs".*
>
> *"Sometimes wonder if public health nursing subsidises other areas".*

The other feature of the location was regarding building of relationships, in particular with other primary health care nurses:

> *"Relationship building with community providers can be difficult"*
>
> *"Sometimes a lack of liaison/coordination with other nurses working in the same primary health setting"*
>
> *"Separation from other primary providers e.g. Plunket".*

Building of relationships with other primary heath care nurses was further emphasised within the ***'limited nursing innovation'*** category. Within this category, public health nurses viewed that nursing leadership was restricted and innovative or new nursing practice was limited by contracts with the DHB provider arm. With their relationships with other primary health care nurses not being as integrated as they desired, the respondents felt they did not have the opportunity to be part of primary health care nursing achievements:

> *"Very limited by contracts".*

> *"Nurse leaders unwilling to go for new contracts".*

> *"Less opportunity to be innovative".*

> *"Miss out on primary health care nursing achievements".*

The final disadvantage considered was '***limited community voice***.' The concern in this category was in relation to community not having input into their service:

> *"Little room for the community to have much voice".*

> *"Community voice limited".*

Community involvement was the most favoured category of being employed by a DHB-PHO. In the category '***community focussed***', public health nurses saw that a clear advantage of being employed by a DHB-PHO was communities being involved with the delivery of their service:

> *"Community have a say in what they need".*

> *"Pull community together".*

> *"Community focus on local community needs".*

In the category '***improved relationships***' advantages of being employed by a PHO included strengthened relationships and collaboration with doctors and other primary health care professionals:

> *"Improved doctor/nurse relationships, cooperation and teamwork".*

"Easier to work alongside other primary health care professionals" and "collaboration with like minded professionals".

Public health nurses saw PHOs as an opportunity to impart their knowledge and influence wellness focussed care, health promotion and health education through the ***'integration of public health principles'***.

"Assist with wellness focused health care".

"Public health issues recognised and acted upon".

"Can be involved in educating other primary health care nurses health promotion and health education"

"Opportunity to introduce public health model".

The final category identified was ***'improved nursing structure'*** in which public health nurses saw that there was potential for more nursing influence within a PHO:

"opportunity for nurses to be involved in service direction and to develop innovative pathways for all nurses including Nurse Practitioners working in primary health care".

"Strong nursing presence at PHO executive level"

"Opportunity for nurses to be leaders and decision makers about types of services and control over nurses practice ".

In contrast, the responses to the disadvantages of being employed by a PHO raised concerns about the potential for ***'medical dominance'*** A

high number of respondents were concerned that PHOs either are, or would be, GP led and controlled:

> *"Nurse handmaiden possibility".*

> *"Too influenced by medical model".*

> *"GPs hold key and power".*

> *"Inexperienced nurse may feel need to be Dr led".*

Furthermore there was trepidation that working in a medical model would result in a loss of public health nursing autonomy:

> *"Different philosophies, we would lose our ability to have autonomy".*

> *"Doctors would take away our autonomy; they would want to control our practice".*

The next category was ***'loss of public health focus'***. Although some respondents were excited about their ability to influence the principles of public health within a PHO, there was also a level of anxiety expressed about public health principles not being integrated and/or valued in PHOs and that personal health issues would take over the public health focus:

> *"Risk of personal health overtaking public health focus", "prevention can disappear".*

> *"Easy to have sick as focus".*

> *"Unsure that PHO would recognise special nature of public health nursing" "tasks and treatments prioritised too highly, resulting in less health promotion".*

The other aspect to the loss of a public health focus was recognised as an advantage of being employed by a DHB-Provider Arm, in that public health nurses may not be able to respond to public health emergencies:

> *"Possible loss of skills to deal with public health issues i.e. disease outbreaks if public health nurses become more general rather that specialist"*
>
> *"No ability for mass response to public health emergencies"*
>
> *"Could loose cohesiveness regionally i.e. ability to respond to regional need e.g. epidemic".*

The final category was ***'change with unknown outcomes'***. As previously noted, public health nurses have been through significant change, which has lead to erosion of their role. The respondents were concerned that more change for public health nursing would be difficult, especially when the outcomes of the change were not clear:

> *"Change from central system to PHO would be difficult for many public health nurses".*
>
> *"Lots of change and disruption is never easy".*
>
> *"Yet more change – more public health nurses lost each change".*
>
> *"PHOs in transition", "untested" and "query have a measured approach".*

This survey was conducted when PHOs were first being established as the vehicle for delivering the primary health care strategy. The respondents noted some positive reasons for public health nurses being employed by

PHOs and some key concerns in relation to the integration of public health and personal health.

The advantages of being employed by a Maori provider clearly concerned the benefits of providing culturally appropriate services for Maori. The three categories collated were ***'Maori for Maori', 'improved access for Maori"*** and ***'improved outcomes for Maori'.***

> *"Ideal for tangata whenua", "Iwi provider for local Iwi", "culturally appropriate service to Maori"* and *"by Maori for Maori with Maori cultural approach".*
>
> *"Kaupapa acceptable to clients", "may have access to hard to reach clients"*
>
> *"Easier access to kai awhina to help break down client nurse barriers".*
>
> *"Opportunity to improve child infant health stats".*
>
> *"Provide primary health care which will hopefully improve Maori health stats".*
>
> *"Opportunities to make a difference to health outcomes in specialty teams".*
>
> *"Contribute to those inequalities in health care for Maori".*

However some disadvantages of being employed by a Maori provider were also suggested. The disadvantages were around limited resources, mostly with regard to the reality of ***'limited number of Maori staff'***. The disadvantages in this category were directly related to the number of Maori health professionals, with respondents noting that there are not

enough Maori nurses and other Maori health professional personnel to manage services:

> *"Lack of professional numbers".*

> *"Limited pool of Maori employee".*

> *"Shortage of experienced, well trained Maori staff".*

> *"Maori managers appointed usually have no health background".*

Having limited resources also meant there was a ***'poor infrastructure'***. The responses suggested that the Maori provider infrastructure does not support service and nurse development:

> *"Support system for qualified staff is limited", "no career pathways for nurses" "lack of accountability and credibility"*

> *"Lack of administration and professional support".*

The final category was ***'professional isolation'***. The disadvantage in this category was that public health nurses would be clinically isolated if only working with a small number of health professionals:

> *"Isolation from peers", "not working with other public health workforce", "could be isolated from other providers/networks"*

> *"may not interact with other primary health care professionals".*

The key messages when considering the advantages and disadvantages of employment setting of public health nurses are the nurses desire to have their specialty recognised within a professional nursing practice environment that allows them to practice autonomously with the presence

of nursing leadership enabling them to meet the needs of their communities.

5.4 Summary

This chapter presented the qualitative results from the survey findings. Edwards and Talbot's (1994) framework was used to analyse the answers to the open ended questions. A number of data driven codes were systematically assigned to the responses to reveal patterns. Six categories were identified from the results of the respondent's identification of other attributes. The characteristics and support mechanisms a public health nursing service should have in place to make the service a good place to practice nursing were included in these six categories. This was followed by the identification of public health nurses preferred employment option. The next chapter presents a summary of the study's findings followed by a discussion with reference to the literature.

CHAPTER SIX: DISCUSSION AND CONCLUSION

In the previous chapter the qualitative findings of the study along with reference to the quantitative data and to the literature completed the data presentation. In this chapter the main findings are discussed in relation to the literature, the implications for nursing practice and further research are explored along with the limitations of the study.

The purpose of this study was to identify whether the professional nursing practice environment public health nurses desired was different from that favoured by other nurses and from their actual environment. Public health nurses were asked to identify the organisational attributes they considered important to their professional practice and state organisational attributes which were present in their actual practice.

6.1 Summary of Findings Relating to Ideal Professional Practice Environment

It is well known that primary health care nurses require a knowledge and skill set which is qualitatively different from that required for the management of illness and injury. One of the necessary skills is the ability to work with communities and individuals to improve people's health. Key principles underpinning primary health care nurses' knowledge include equity, access, empowerment, self-determinism, and inter-sectoral collaboration (McMurray, 1999).

Even though primary health care nursing is integral to the core of nursing (Fagin, 2003), and has been a predominant feature of nursing curriculum for at least twenty years, it has developed as a specialty within nursing with many different roles and titles which are mostly aligned to employer and contract focus rather than to the community or individual need. With the development of many different roles in the primary context and the actual practice environment being so diverse it is difficult to know what support is in place for primary health care nurses' professional practice,

more specifically what organisational attributes contribute to improved outcomes for nurses and for patients.

The 'Magnet' literature has determined the organisational attributes that need to be present within hospital settings to improve nurse and patient outcomes. As public health nursing is viewed as a specialty within the primary context it could and often is assumed that their practice environment needs, as a professional group of nurses, are very different from the needs of nurses who work within hospitals.

The exploration of the organisational attributes public health nurses consider important (ideal) to their professional practice in NZ has produced findings relevant to the validation of the NWI-R in NZ community settings. It was found that all 48 attributes were considered important when the 75% agreement criterion was used. However for the district nurses in Flynn, Carryer and Budge's (in press) study the percentage of agreement was below 75% for three of the attributes, one of those attributes was removed from this survey as was considered to be irrelevant to public health nurses namely "*nursing care plans are verbally transmitted from nurse to nurse*', the other two attributes '*regular, permanently assigned staff never float to another team*' and '*each nursing team or unit determines its own polices and procedures*' were two of the four public health nurses least endorsed attributes, (85.9% and 85.3% respectively).

The respondents suggested other organisational attributes which are specific to the community setting, from which four categories were identified. These included recognition of specialty practice, resources, networking and education/research.

Some of the public health nurses' suggestions were similar to those suggested by the NZ district nurses (Flynn, Carryer and Budge, in press). The district nurses made 110 suggestions which resulted in five themes,

namely support, safety, resources, acknowledgment of district nursing as a specialist area, time and service collaboration.

Based on the public health nurses' suggestions, the following six attributes could be added to a community specific NWI-R:

- *Specialty area of practice is well defined*
- *Adequate relevant safety resources are in place*
- *Meaningful clinical supervision is available*
- *Adequate time for effective networking is understood by the nurse manager/leader*
- *Nursing staff have a way of identifying the needs of their community*
- *Nursing research opportunities are available.*

These findings support the importance and appropriateness of the organisational attributes in community settings and support Flynn, Carryer and Budge's (in press) findings that the NWI-R appears to be a sound instrument that is applicable in NZ and "represents core organisational attributes that are highly valued by nurses across practice settings and across countries" (Carryer, Budge & Flynn, 2003 p. 9-10).

6.2 Implications for Practice

The actual presence of organisational attributes in the community setting was found to be very different from the organisational attributes considered important by public health nurse participants. The presence of the 48 attributes ratings ranged from 25.4% to 88.3%. Nine of the attributes were rated above 75% and twelve were rated below 50%. The data clearly demonstrated that the professional nursing practice environment for the respondents was far from ideal.

The key areas of concern identified were in relation to nursing leadership, salary, career development, coordination between doctors and nurses and

enough registered nurses on staff to provide quality care. These findings and those relating to the presence and importance of the sub-scales autonomy, control over practice, nurse-physician, leadership and education derived from the NWI-R were presented in Chapter Five.

The implementation of the Primary Health Care Strategy (2001) requires health professionals to be working more collaboratively. In order to discuss the findings of the actual practice environment and the respondents perceived advantages and disadvantages of the employment options the following discussion is in three sections; aligning nursing practice with community need, improved nursing structures and integrated relationships. The relevance of the first two sections is their congruence with the goals for the development of primary health care nursing as expressed in the national framework (Expert Advisory Group on Primary Health Care Nursing, 2003). The third section, integrated relationships, is critical in meeting the health needs of communities which in itself is an underlying goal of the national framework .

6.2.1 Aligning Nursing Practice with Community Need

The national framework for activating primary health care nursing suggests that service delivery patterns should support nurses to incorporate personal and population health strategies to meet the needs of community. Ironically the health reforms of the 1990s resulted in quite the opposite impact on the public health nursing workforce. The split in funding between personal health and population health and the contracting out of public health service fragmented the public health nursing workforce and resulted in variation in the delivery of public health nursing services. Public health nurses have repeatedly said within the study that the current contracts they work within are a barrier to meeting the needs of the community.

One advantage of being employed by a PHO suggested by public health nurses was the ability to be more responsive to the needs of the community. The respondents suggested that PHOs would have a focus on the community, improving relationships and the development of an improved nursing structure. These suggestions could potentially overcome their barrier in aligning nursing practice with community need. However in July 2004 63 PHOs are established (MoH, 2004), many of them without nursing representation on the governing boards and little change to the delivery of nursing services (Carryer, 2004).

It could be argued that public health nurses would be better to remain as a more collective identity within Public Health Units, enabling them to continue to respond more readily to any public health outbreaks, and to some of the population health needs of the community. However public health nurses have indicated they wish to become more integrated with other primary health care nurses and health professionals. This needs to be done on a more formal basis to overcome barriers to integrated working, one way of addressing this would be through the establishment of primary health care teams which include all health professionals that contribute to the care of the PHOs enrolled populations.

6.2.2 Nursing Structures

Effective nursing leadership and governance are required in a changing primary health care sector to ensure that nurses contribute to improving health outcomes (Expert Advisory Group on Primary Health Care Nursing, 2003). Public health nurses in this study suggested an advantage of being employed by PHOs would be *improved nursing structures,* however, to date nurses have not been engaged to the same extent as GPs in PHO development. The features of this category included suggestions that there would be strong nursing presence at PHO executive level and the PHO was seen as an opportunity for nurses to be leaders, decision makers about types of services and ultimately have control over their practice.

Unfortunately these advantages are not consistently featuring as PHOs are being developed. One of the barriers for this is related to the lack of representation of nursing on governance boards of PHOs or presence of nursing leadership within PHOs.

The respondents have demonstrated their support for the vision and goals of the framework for activating primary health care nursing (Expert Advisory Group on Primary Health Care Nursing, 2003) through their response to what characteristics a public health nursing service should have in place to support their practice. Two of the goals, namely leadership and governance, are in relation to the barriers indicated for having a clear nursing structure within PHOs.

Carryer (2004) suggests, that the only way to overcome these barriers is for funding streams to purchase nursing services directly within PHOs, resulting in improved outcomes for the enrolled populations:

> *We do not have time to wait for evolutionary processes to allow a vibrant nursing workforce to deliver effective nursing services aligned with community need. Some level of revolution is needed to remove existing barriers and behaviours before the existing primary health care nursing workforce retires (p. 9).*

The Investing in Health, (2003) document suggests that all DHBs must have a Director of Primary Health Care Nursing who is able to engage local nurses in leadership development and decision making processes. The presence of nursing leaders at DHB level is paramount across the primary health care setting. Nursing leadership is not only required at DHB level but also at management level of nursing services to provide an infrastructure to enable all primary health care nurses to participate in decision making at all levels of the health sector.

The Primary Health Care Strategy (2001) vision concerns primary health care services focussed on better health for a population. The strategy

identifies six key directions for achieving the vision, one of these being the development of the primary health care workforce. As the structures of primary health care change so must the nurses within those structures. Humphries (1999) argues that one of the major shortcomings of nurses is their lack of self-belief and that nurses need to relinquish learned subservience and replace it with clarity and vision. The framework for activating primary health care in NZ (Expert Advisory Group on Primary Health Care Nursing, 2003) offers primary health care nurses a model for clarity and vision. The respondents in this study described the need for nursing leadership at every level of the health sector to provide professional clarity and direction, co-ordinate the professional and strategic management of nursing, contribute to governing boards, to develop and motivate nurses, ensure effective succession planning and most importantly support innovative practice.

6.2.3 Integrated Relationships

Historical patterns of primary health care have not always provided the best service delivery; services have often evolved as a result of a mix of organisational and environmental factors, or funding and employment arrangements. One of the key directions of the primary health care strategy is for improved co-ordination of care across services according to the needs of the community rather than the needs of providers.

The identification of organisational attributes that are important to public health nurses may help in developing an environment that will foster development of integrated ways of working if primary health care teams were established to care for the enrolled populations of PHOs in New Zealand. A term that has been coined to describe the process by which teams maximise their success and over come barriers to integrated working is reflexivity. "Reflexivity involves members of the team standing back and critically examining themselves, their process and their performance to communicate about issues, and to make appropriate changes" (West, 1999, p.14).

The results of the presence and importance of the sub-scales derived from the NWI-R provides valuable data for public health nurses and their teams to consider in making appropriate changes. Clearly the presence of control over practice and autonomy needs to be increased. The sub-scale which measures the Nurse-Physician relationships produced some interesting results which need to be considered when developing integrated relationships and ways of working. Of the three attributes that measure the nurse-physician relationship sub-scale, 73% of public health nurses reported that doctors and public health nurses have good working relationships, however there was 100% agreement that this is important to their practice. Similarly the importance of the presence of coordination and collaboration between nurses and doctors had high levels of agreement from the public health nurses. Scores for the actual presence were in fact low at 47.9% and 60.9% respectively.

Budge, Carryer and Wood's (2003) ratings for the nurse-physician sub-scale were higher than the American hospital study, and they suggest it was difficult to explain this, however stated "we can speculate that it may be a feature of the less formal means of relating between health professionals that generally characterise the NZ workforce" (p. 266). This may also explain why the public health nurses score was higher than the American hospital study. Aiken, Haven and Sloane (2000) identified that nurse specialisations allow nurses to demonstrate and communicate their knowledge of patient care, and as public health nursing is a nursing specialty this may also be a factor contributing to the higher score. Furthermore the public health nurses, like the home health nurses, have a more primary health care role with patients than hospital nurses largely due to the physician's distance from the patient (Marrone, 2003).

Seventy three percent of nurses in this study reported they have a good relationship with doctors and this relationship was further expanded when they considered the advantages of being employed by DHB-Provider Arm Public Health Unit. These advantages suggested their relationships with doctors were good, because they were not controlled by them.

Furthermore when they considered the disadvantages of being employed by the DHB-PHO the main area of concern was about being dominated by the doctors. There were a high number of respondents who were concerned that PHOs either are, or would be, GP led and controlled. In contrast one of the categories collated, concerning the advantages of being employed by the PHO was *'improved relationships'*. This category included the ability to strengthen relationships and collaboration with other primary health care professionals, including improving doctor/nurse relationships.

A critical feature of 'Magnetism' is that nurses have "good" nurse/physician relationships. Kramer and Schmalenberg (2003c) suggest that "goodness" includes collaboration, mutual respect, good communication and concern for the patient. Furthermore they suggested a five category scale which differentiates collegial from collaborative and identified the collegial relationship as the highest category where the equality is based on different but equal power and knowledge.

A collegial relationship between doctors and public health nurses should be fostered regardless of the employment setting of public health nurses as a means of improving patient outcomes. PHOs were viewed by the respondents as a way of developing collegial relationships based on equal power. However, to date PHO development has mostly only engaged the GP; in some areas practice nurses have been involved but are often not fully involved with the development because they have no financial investment in the GP's private business. As public health nurses are predominantly employed by the provider arm they have generally been excluded from the development of PHOs (Carryer, 2004). This makes the integration of personal and population health difficult, which is unfortunate as there was a degree of anticipation and excitement expressed by some public health nurses about them being able to influence the development of public health nursing principles, wellness focussed care, health promotion and health education within PHOs. However, some public health nurses were not as optimistic and expressed concerns about

personal health issues subsuming a public health focus if they were employed by a PHO.

6.3 Implications for Further Research

This study has demonstrated the validity of the NWI-R for use in a NZ community setting. The findings contribute to information regarding a group of primary health care nurses' (public health nurses) perceptions of the importance of specific organisational attributes within their practice setting. These findings endorse those of Flynn, Carryer and Budge (in press). This is to say there is a core of conditions which foster effective professional nursing practice which operate irrespective of specific context. Further research is required on other NZ primary health care nurses' perceptions of the importance of specific organisational attributes within their practice setting to determine if the NWI-R tool is applicable to primary health care nurses who are not predominantly employed by the DHB-Provider Arm. As this tool can inform an organisational redesign initiative that seeks to improve quality of care and health outcomes (Aiken & Patrician 2000), it could be used by PHOs to guide them in developing professional nursing practice environments.

The findings relating to actual presence of specific organisational attributes within the public health nursing area of practice identified some significant gaps, there by, informing public health nurses and their employers about what is needed to develop a genuinely professional nursing practice environment. Further research is required to determine the means by which public health nurses and their employers can bring the actual and ideal closer together.

6.4 Limitations of this study

This study is an important step in understanding the organisational attributes of a professional nursing practice environment primary health care nurses consider to be important to their practice, however, there are a number of limitations that should be noted. Seven attributes were removed from the NWI-R because they were considered too "hospital based" and not relevant to public health nurse practice by a small group of public health nurses (n=5). However the attribute that '*nursing care is based on a nursing rather than medical model*' is one of the attributes that makes up the 'control over practice' sub-scale, making the constitution of the sub-scale different, and consequently non comparable, to previous findings.

The timing of the open-ended question concerning the public health nurses preferred employment setting was not optimal, due to only two PHOs being in existence when the respondents completed the survey. Of the respondents 61% stated they would prefer to be employed by DHB – Provider arm Public Health Unit, 28.5% in a DHB-PHO, 2.4% by a Maori Provider. If this study was to be repeated now public health nurses preference of employment setting may be quite different depending on their experience of the establishment of PHOs within their DHB region. Similarly the respondents' views of the advantages and disadvantages may be different.

Content analysis revealed other attributes public health nurses consider to be important to them, and the characteristics and support features of public health nursing services. It would be useful to further explore the categories with the responses, especially the suggestions made concerning leadership and education, as they are two of the goals in the framework to activate primary health care nursing in NZ (Expert Advisory Group on Primary Health Care Nursing, 2003).

6.5 Concluding Statement

Nurses have written and spoken for years about the need to improve primary health care services and they have long seen the development of nursing itself as central to successful service delivery. There is a general agreement that professional nursing practice environments are essential to develop nursing (Estabrooks et al. 2002; Sleutel 2000; Hoffart & Woods 1996 & AACN 2002). This research was undertaken in the context of developing one area of nursing, namely the work undertaken by public health nurses in NZ. The specific purpose of the study was to see if the professional nursing practice environment desired by public health nurses in NZ was substantially different from other nurses in NZ and/or overseas. Surprisingly congruence was found with respect to what is considered ideal with NZ district nurses and American home health and hospital nurses. However significant gaps were exposed when the respondents reported on their actual professional nursing practice environment which public health nurses and their employers need to address.

The relevance of the NWI-R tool to measure organisational attributes in the community setting has been established through this study and that previously conducted with NZ district nurses and US home health nurses. The NWI-R tool, therefore, has significant promise as a beneficial tool for developing a Magnet philosophy across DHB settings. This innovation could be expected to improve the health of New Zealanders by developing nursing workforce professional practice environments in community based settings.

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APPENDICES

Appendix A Summary Table of Magnet Literature Reviewed

Appendix B Study Questionnaire

Appendix C Study Information Sheet

Appendix D Response Frequencies for each Attribute – Actual Environment

Appendix E Response Frequencies for each Attribute – Ideal Environment

Appendix A: Summary Table of "Magnet" Literature Reviewed

1. Shared Values: Impact On Staff Nurse Job Satisfaction And Perceived Productivity 1989

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Marlene Kramer Laurin Harper 1989 **SETTING** USA	To ascertain the extent to which nurses, at different levels within nursing department, in different types of hospitals, reported a common, shared value system, and the relationship of congruence in that value system to staff nurse job satisfaction and perception of an environment conducive to quality nursing care	24 hospitals The internal system - how the group interacts towards one another consists of four primary sub groups, being Staff Nurses, Head Nurses, Clinical Experts and Top Management. Subjects: 58% of the head nurse (HN) 65% of clinical experts (CE) 66% of the top management (TM) 25% random sample of staff nurses (SN) full and part time The study focused on the functioning and elaboration of behavior within this internal system and the relationship and influence of the HN, CE and TM on the SN sub-group. **It was hypothesized that**: ▪ (a) SN-HN would have the greatest congruence in work values (positive statements), followed by SN-CE and by SN-TM ▪ (b)There would be differences in degree of congruence in work values among the members of the nursing departments of different types of hospitals ▪ (c)The greater the congruence in work values, the higher the nurse job satisfaction and perceived productivity scores	The research reported is part of a larger follow-up study of Magnet Hospitals A one third sample of the 41 magnet hospitals was drawn (N = 16) Type of control was used as the major determinant of a hospitals external system. 8 extra hospitals were selected on the same criteria for the established Magnet hospitals these being the hospital was a good place to work and gave good nursing care. Questionnaire, interview and observation notes were used **Instrument:** The Nursing Work Index (NWI) is an investigator developed tool that has 65 items and uses a 4 point Likert scale. The NWI was developed directly from the findings associated with early research on magnet hospitals and from an extensive review of Job satisfaction and work value instruments found in the literature between 1962 and 1986. Three of the four persons who conducted the original Magnet study critiqued and assessed the NWI for completeness and content validity. The NWI was designed to	The primary unit of analyses in this study was hospital. Mean scores for all four sub-groups were calculated for the JSV, PPV, JS and PP scales. Congruence scores were calculated for the JSV and PPV variables by subtracting the HN, CE and TM mean score from the SN mean score for that hospital. A two way ANOVA indicated that TMs, CEs and HNs did not hold the same job values of SNs as SNs held for them selves. Results of a Tukey's range test showed that that TMs, HNs and CE's held significantly higher work values for the SN than the SN's held for themselves **Hypothesized results:** ▪ (a)Data did not support, mean scores of CEs and SNs were closer than any other combination ▪ (b)Was not adequately tested as hospitals were regrouped, as all significant differences by type were due to medical centers. When the magnet hospital medical centers were removed results indicated no significant differences. The 24 hospitals were regrouped for further analysis based on the JS and PP scores ▪ (c) Was not supported by the data it was found the more similar the value system among members of the nursing department the more job dissatisfied were the nurses and the more they perceived the environment as not being conducive to producing high quality care

measure four variables:

- Work value related to SN job satisfactions (JSV)
- Perceived productivity (PPV)
- SN job satisfaction (JS)
- SN perception of an environment conducive to quality nursing care (PP)

The NWI was an all-inclusive list of factors having bearing on JS and PP. When the respondent judges factors important they became job values.
For each of the NWI items were asked to respond to three statements:

- This is important to my job satisfaction (JSV)
- This is important to my being able to give quality patient care (PPV)
- This factor is present in my current job situation (JS)

JS and PP scores were computed by adding the JSV and PPV scores to the presence scores.

Criterion Validity:
The mean JS scores for hospitals were correlated highly with turnover rates - the higher the JS scores the lower the turnover rate Within hospitals the JS and PPV correlated highly with one another - suggest that nurses derive satisfaction from their ability to provide high quality care

CONCLUSION

Analysis of interview and observation notes and review of nurse comments on the NWI answer sheets suggested explanations for the negative findings of this study.

- (a)It was found that the HN role in these hospitals had changed from patient care coordinator to unit department head, and the SN role had changed from team leader and coordinator of care to that of a patient care manager. With the changes in roles came new value systems. The SN and CE had increase interaction and shared similar value system and possibly similar power structure that being knowledge power rather than positional power.
- (c)Possible explanation identified was the format of the NWI did not permit expression of sufficient intensity in values.

This study has highlighted the importance of finding out what is really important to the staff and responding to this, because if staff do not believe something is important for JS and PP it will not become so merely by HN's, CE's and TM's thinking it should be.
The article concludes by stating "that the best possible explanation for the inverse findings is that value congruence is not as important as SN's JS and PP is responsiveness from management."

2. Measuring Organisational Traits of Hospitals: The Revised Nursing Work Index 2000

AUTHOR(S), YEAR,

Linda Aiken
Patricia Patrician
(2000)

SETTING

USA

PURPOSE

To report on the development and utility of the Revised Working index (NWI -R) in measuring characteristics of professional practice environments

The purpose of the study was to determine whether there was a difference in patient, nurse, and organisational outcomes based on the type of unit (dedicated versus scattered-bed) of type of hospital (magnet versus non-magnet) and the explanation of such differences.
It was hypothesized that presence of organisational traits would have better nurse, patient and organisational outcomes.

SUBJECTS

40 AIDS units in 20 hospitals
10 of the hospitals provided AIDS care in both dedicated AIDS units and general medical units
The remaining 10 were selected through a matching procedure (Three of the matched control hospitals were magnet hospitals)

Nurses were recruited into the study if they worked 16 hours per week in the study unit.

The nurses completed the NWI-R in addition to other measures

RESEARCH DESIGN AND METHOD

This research has taken the NWI developed by Kramer and Hafner (1989) as the tool contained a comprehensive list of items that could provide the basis for the development of a new instrument to measure aspects of a professional nursing practice environment. The items were reviewed and 55 of the original 65 were retained, one was slightly modified and one was added.
Items were used to develop Subscales to measure three of the organisational attributes noted in the literature as characterizing an environment supportive of professional nursing practice:Five items were used to develop the subscale autonomy, seven items for the subscale control over the work environment, and three for the subscale on relationships with physicians.
A fourth subscale was created from 10 items in the mentioned 3 subscales to measure organisational support for caregivers
The two value statements were eliminated

- This is important to my job satisfaction
- This is important to my being able to give quality patient care

And the presence statement was retained

- This factor is present in my current job situation

RESULTS

A response rate of 86% was attained. Response rates per unit ranged from 73% to 100%. Cronbach's alpha was 0.96 for the entire NWI-R, with aggregated subscale alphas of 0.84 to 0.91. Validity of the NWI-R was demonstrated by the origin of the instrument, its ability to differentiate nurses who worked within a professional practice environment from those who did not, and its ability to explain differences in nurse burnout.

The NWI-R performs well in identifying manipulatable aspects of organisations important to good patient outcomes. In addition has shown that nurses are appropriate informants of the organisational features important in clinical care.

CONCLUSION

The NWI-R has been found to be a sound instrument as has been used in multiple studies for measuring hospital organisational attributes and has been found to capture organizational attributes that characterize professional nursing practice environments. The authors suggest that further investigations may use survey research techniques to study samples of nurses derived independently of their employing hospitals.

3.

Nurse Staffing and Patient Outcomes: Evolution of an International Study 2001

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Julie Sochalski Carole A. Estabrooks Charles Humphrey (2001) **Setting** Alberta British Columbia England Germany Ontario Scotland United States	International consortium formed to study the effects of restructuring on inpatient nursing care and patient outcomes across an array of settings during the industry-wide health sector reforms in the United States, Canada and Europe The study seeks to understand more fully the influence of both nursing staff and the nursing practice environment on patient outcomes. Aiken et al (1994) study established an important link between magnet hospitals and better patient outcomes, but did not answer the question was it the professional nursing practice environment or another unspecified feature of the hospital.	Hospital (H) and Staff Nurse (N) study examples Alberta H-109 N-6,558 British Colum H-97 N-2,838 England H-32 N-5,006 Germany H-30 N-4,000 Ontario H-209 N-8,778 Scotland H-27 N-5,238 United States H-210 N-14.145	The theoretical framework was drawn from the fields of nursing, sociology and organisational theory and articulates the role that the organization of nursing care plays in effecting patient outcomes The study model defines the organization of nursing care as compromising two elements: nurse staffing levels and attributes of the nursing practice environment. Used the 1. R-NWI 2.Maslach Burnout Inventory 3. Reported incidence of needle-stick injuries, risk factors to assess workplace safety 4. a series of questions describing the workload on a particular shift 5. questions about work experience and level of expertise To assess the face validity and applicability of the survey instruments focus groups and a pilot test survey were used to review the instruments. This resulted in minor changes to the R-NWI.	Primary data collection with the nurse survey is completed in six of the seven sites **CONCLUSION** This international study and its resulting collaborations have stimulated a systematic study of the influence of nursing on patient outcomes. This is because of the availability of such a rich data source with which to do so. The authors hope this study will lead to further international partnerships.

4. Nurses' Report on Hospital Care in Five Countries 2001

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Linda Aiken Sean Clarke Douglas Sloane Julie Sochalski Reinhard Busse Heather Clarke Phyllis Giovannetti Jennifer Hunt Anne Marie Rafferty Judith Shamian 2001 **Setting** Untied States Canada England Scotland Germany	Paper provides preliminary results from the Nurse Staffing and Patient Outcomes: Evolution of an International Study	The sample consists of 43,329 nurses from; Alberta, British Columbia and Ontario (17,450) England (5,006) Germany (2,681) Scotland (4,721) United States - Pennsylvania (13,471)	As indicated in Nurse Staffing and Patient Outcomes: Evolution of an International Study **RESULTS** **Work climate in hospitals:** Discontent among hospital nurses was high – however the nurses surveyed did not perceive all aspects of their hospital practice as unsatisfactory. A vast majority believed that they work with physicians who provide high quality care and with nurses who are clinically competent. Nurse-physician relationships do not appear to be as problematic as popular opinion suggests. Only 30 –40 % of nurses reported that there were enough registered nurses to provide high quality care Fewer than half the nurses responded that management in their hospitals is responsive to their concerns, provides opportunities for nurses to participate in decision making, and acknowledging nurses' contribution to patient care.	**Job satisfaction, burnout, and intent to leave:** High proportions of nurses in all countries excluding Germany were dissatisfied with their jobs **Changes in workloads and managerial support**: Nurses have responsibility for more patients and also have to take on more responsibility for managing services and personnel and the unit level due to restructuring and the removal of nurse managers. **Structure of nurses work**: In each country nurses reported they spent time performing non nursing duties. **Quality of care and adverse events:** One in nine in Germany, and one in three rated the quality of nursing care as excellent. In Canada only one third of the nurses were confident that patients were adequately prepared for discharge home. **CONCLUSION** Previous research has already established the hospital working conditions and the adequacy of nursing staff are important predictors of variation in hospital patient outcomes. There is reason to believe that the problems in work design and workforce management that are reflected in the responses of the 43,000 nurses in this study contribute to uneven quality of care, medical errors, and adverse patient outcomes.

5. Measuring the Hospital Practice Environment: A Canadian Context 2002

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Carole A. Estabrooks Anne E Tourangeau Charles K. Humphrey Kathryn L. Hesketh Phyllis Giovannetti Donna Thomson Jennifer Wong Sonia Acron Heather Clarke Judith Shamian 2002 **Setting** Canada	Report on the findings of Canadian Nurse Staffing and Patient Outcomes: Evolution of an International Study The primary purpose of this study is to document the psychometric properties of the NWI-R as a measure of attributes of the nursing practice environment in the context of a large Canadian sample of Registered Nurses. Secondary purpose 1. Proposing an alternative one-factor solution found to work in the Canadian context 2. Assessing the reliability of the three conceptually derived subscales reported by Aiken and Patrician (2000) 3. Testing the assumption in Aiken and Patrician (2000) model that variance between hospitals would be greater than variance within hospitals.	17,965 nurses representing 415 acute care hospitals	As indicated in Nurse Staffing and Patient Outcomes: Evolution of an International Study 14 page survey a) employment characteristics b) NWI-R c) Maslach Burnout Inventory d) Job characteristics such as job and career satisfaction, intent to leave and quality of care items e) Characteristics of the last shift worked f) Demographic questions g) Province specific questions	1.Proposing an alternative one-factor solution found to work in the Canadian context *Data indicated that a single-factor index is a unified measure of the practice environment of registered nurses in the Canadian environments.* 2. Assessing the reliability of the three conceptually derived subscales reported by Aiken and Patrician (2000) *Data indicated that the subscales were reliable in the Canadian data.* Testing the assumption in Aiken and Patrician (2000) model that variance between hospitals would be greater than variance within hospitals *Data confirmed this assumption* **CONCLUSION** The authors proposes that the NWI-R imposes a high respondent burden and requires significant resources to obtain complete data and the shorter Practice Environment Index provides a more efficient tool with which to access practice environments. For the work reported the author urge ongoing assessment of the NWI-R and its derivatives.

6. Quality of Care, Nurse Staffing, and Patient Outcomes 2001

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Julie Sochalski 2001 **Setting** Pennsylvania	Preliminary results of US Nurse Staffing and Patient Outcomes: Evolution of an International Study	210 adult acute care hospitals 80,500 nurses	As indicated in Nurse Staffing and Patient Outcomes: Evolution of an International Study	Higher patient loads and sicker patients have placed increasing pressure on nursings' efforts to deliver high quality, safe patient care and to monitor critical changes in patient's conditions. One out of every five nurses reported that the quality of nursing care in their unit during the last shift was fair or poor. 41% of the nurses reported being moderately of very dissatisfied with their job. **CONCLUSION** A critical assessment of the role of staffing and the organization of nursing care in the quality of patient care is warranted and clearly overdue. The measure mostly relied upon is the American Hospital Association (AHA) annual survey for measuring organizational characteristics of hospitals including nursing staff only provides a single measure for the entire hospital and does not adequately distinguish the difference between inpatient and outpatient nursing care. Staffing measures that can parcel out inpatient nurse staffing and capture its variability throughout the hospital are essential in this endeavor.

7.

A Hospital-Level Analysis of the Work Environment and Workforce Health Indicators for Registered Nurses in Ontario's Acute-Care Hospitals (2001)

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Judith Shamin Michael Steven Kerr Heather K. Spence Laschinger Donna Thomson 2001 **Setting** Ontario	Report on the findings of Ontario's Nurse Staffing and Patient Outcomes: Evolution of an International Study	Community hospitals – 95 Small hospitals – 49 Teaching hospitals - 16 6,188 nurses	As indicated in Nurse Staffing and Patient Outcomes: Evolution of an International Study Also used additional measures concerning the health profile of nurses	Nurses in teaching hospitals report the highest scores for the NWI-R subscales – teaching hospitals also had statistically significantly higher rates of missed days of work due to illness in the preceding 3 months, as well as tending towards the lowest scores on the other health outcomes examined. There is a consistent indication that full-time nurses experience more sickness, burnout and job dissatisfaction than part-time nurses. It is possible that full time work is a stronger predicator of illness than overall professional working conditions such as NWI-R subscales. It is also possible that potential mediating effects of a positive work environment can be overshadowed when the workload is too heavy. This hypothesis is supported by the multivariate analyses which indicate that the NWI-R control of practice subscale, perhaps the core of the NWI-R measure, did have a relatively consistent and positive effect on the health outcomes examined once the proportion of full-time nurses was accounted for. For burnout and general health, control over practice was the hospital variable with the strongest association with health. **CONCLUSION** The findings of this study raise important questions and shed light on some of the likely factors in nurses' health in Ontario acute-care hospitals. One would expect, based on the literature, the hospitals with greater autonomy, better control over practice on the part of the nurses, and better nurse-physician relationships would show better overall health indicated. Preliminary analysis of the date support this at the individual nurse level, however findings at the hospital level present a more complex picture.

8. Does International Nurse Recruitment Influence Practice Values In U.S. Hospitals? 2002

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Linda Flynn Linda Aiken 2002 **Setting** USA	To determine if both U.S and international nurses place high value on organizational attributes that comprises the elements of professional nursing practice and if the absence of theses attributes is associated with high level of burnout in both U.S and international nurses	799 nurses, 547 were born in the U.S and 253 were from 34 other countries	A secondary analysis of survey data was conducted with data collected in 1991 from 40 inpatient care units in 20 hospitals located in 11 U.S. cities. The generic concepts collected by this data have been shown by previous work to be remarkably salient and stable over time. (Aiken, Clarke, & Sloane, 2000) Culture of origin was coded according to Hofstede's classification system. Nursing values related to the professional practice environment were measured using the Nursing Work Index - three item subsets were established (a) Importance of Collectivism, consisting of 5 items about team work and cooperation, (b) importance of hierarchy, consisting of 3 items about strong and visible nursing leadership and (c) Importance of ambiguity reduction, consisting of 7 items about clarity, standardization, and uniformity of work practices. The burnout was measured using the Maslach Burnout Inventory. Analysis of variance and least-squares regression procedures were used to test hypotheses.	Professional practice environment value: No significant differences were found between U.S. and international nurses in how they valued However a professional practice environment has significant inverse effect on job-related burnout on both U.S. and international nurses. **CONCLUSION** Findings challenge a common opinion that international nurses hold values inconsistent with professional practice models as defined in the U.S. context. Absence of professional practice environment will produce high levels of burnout in both U.S. and international nurses. The findings reinforce the need for organisational attributes must be congruent with a professional nursing practice environment.

9. Development of the Practice Environment Scale of the Nursing Work Index (2002)

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Eileen T. Lake 2002 **Setting** USA	To develop a practice environment scale (PES) from the NWI to permit researchers to discern the contribution of the practice environment to nurse and patient outcomes. In addition enable mangers to compare their hospital scores to the reference values, and to target aspects of their nurses' practice environment that need improvement, and gauge the nature and extent of improvements. Objectives ▪ to develop a parsimonious, psychometrically sound scale with empirically derived subscales ▪ to provide reference values for the original magnet hospital from which the NWI was developed ▪ to develop a composite measure in addition to subscales representing domains of the nursing practice environment	Two samples used Sample 1 from Kramer and Hafner (1989) study Sample 2 from Aiken et al (2001) study	The scale development and evaluation proceeded in five stages, the first involving the NWI item set, the second through fourth stages involving the first sample and the last stage involving the second sample. Of the 65 NWI items, 48 were selected because they meet the definition of the nursing practice environment. Exploratory factor analysis of the original NWI data (sample 1) produced a five-subscale structure. This structure was found to have good psychometric properties, and was confirmed using recent NWI data from sample 2.	Five sub-scales were identified. The first two sub-scales reflect the hospital wide environment ▪ Nurse participation in hospital affairs ▪ Nursing foundations for quality of care The other three are unit specific ▪ Nurse manager ability, leadership and support of nurses ▪ Staffing and resource adequacy ▪ Collegial nurse-physician relations **CONCLUSION** The derived subscales show substantive coherence, multilevel range in hospital contexts, internal consistency, aggregate reliability, and generality to contemporary practice, affirming their conceptual and empirical foundations. The measures could be used to study how the practice environment influences nurse and patient outcomes

10. The Magnet Nursing Services Recognition Program: A comparison of successful applicants with reputational magnet hospitals. 2000

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Linda Aiken Donna Havens Douglas Sloane 2000 **Setting** USA	The purpose of this study was to examine whether American Nurses Credentialing Center (ANCC)-recognized magnet hospitals as the same organisational attributes responsible for excellent nursing care as the original magnet hospitals did and whether they have high rates of nurse satisfaction and the same quality of care (as assessed by nurses) and thus offering evidence that the good outcomes shown to exist in the original magnet hospitals can be expected to exist in those selected through the newer ANCC Magnet Nursing Service Recognition Program.	Seven ANCC magnet hospitals were compared with thirteen original magnet hospital Nurses on medical-surgical units at all institutions were invited to complete a 15 page self-administered survey.	Self-administered survey included 1. Job characteristics, including hours worked, workload, supervisory responsibilities, non-nursing duties 2. Job outlook , including job satisfaction, intent to leave, and perceptions of job security and job market 3. Organisational attributes of the work setting measured by the NWI-R 4. Job related feelings measured by the Maslach Burnout Inventory 5. Occupational exposures to blood 6. Demographic and educational characteristics **CONCLUSION** The ANCC magnet hospital designation process successfully identifies hospitals that provide practice environments that were as good as or better than those at the original magnet hospitals in terms of professional nursing practice and the quality of nursing care.	**Nurses education and experience:** Generally both groups of magnet hospitals has a registered nurse workforce with significantly higher educational preparation than non-magnet hospitals **Nurse staffing:** ANCC magnet hospitals had a significant higher ratio of registered nurses to patients than did the original magnet hospitals **Clinical practice environment:** Nurses at ANCC and original magnet hospitals differed in their appraisals of other aspects of their practice environment. Two of the subscales of the NWI-R, nurse autonomy and nurses' control over their practice environment, were higher in the ANCC than the original magnet hospitals and the quality of nurses relations with physicians were similar in both groups. **Burnout and job satisfaction:** Nurses in the ANCC were less burnout however reported being more dissatisfied than the original magnet hospitals. **Quality of care:** 43% of ANCC nurses versus 21% of original magnet hospitals reported that the quality of care delivered to their patients were excellent.

11.

Staff Nurses Identify Essentials of Magnetism 2002

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Marlene Kramer Claudia Schmalenberg 2002 **Setting** USA	1. To update the variables staff nurses in magnet hospitals today consider most important for nursing effectiveness in giving high quality care. 2. To define what staff nurses mean by good nurse-physician relationships, control over nursing practice and autonomy 3. To quantify the preceding three variables empirically 4. To ascertain the degree of relationship between these variables and nurse job satisfaction, effectiveness, and competence of coworkers 5. To identify degree of value congruence among staff nurses, nurse managers, and chief nurse executives	Fourteen magnet hospitals from the three groups known to exist in August of 2000 were visited between September 2000 and March 2001 In each hospital twenty staff nurses volunteered for the interview study on the basis of meeting three criteria 1. Reasonable satisfied with their job 2. felt they gave good nursing care 3. and considered "successful employees" as defined by average of better performance evaluations 279 Staff nurses 46 Clinical directors 72 Nurse Managers	Tape recorded interviews were held with each nurse, interviews consisted of 1. Short response questions regarding length of employment, nurse-patient ratio on their unit, and care delivery system 2. Eight open ended questions on the topics of attraction and retention, job satisfaction, nursing effectiveness in giving quality nursing care, impact of shorter length of stay on quality care, adequacy of staffing and impact on quality care, nurse-physician relationships, control over nursing practice, and autonomy. NWI-R 37 items most frequently chosen by more than 4,0000 staff nurses over a 17 year period were used – the list was called the "Essentials of Magnetism". Participants were asked to select a number from 1 to 10 that best represented 1. The competence of co-workers 2. the quality of care given on the unit 3. Their own personal job satisfaction	Constant comparative analysis and thematic categorical analysis were used for responses to the open-ended questions on nurse-physician relationships, autonomy and control over practice. Sperman Rho correlation coefficients, corrected fro ties, were used to determine significance of relationship between the categories of nurse-physician relationships, control over practice, autonomy and the 10 point rating scales. Eight essentials to giving quality care are the themes around which results from the 2001 study and synthesis of material from other studies can be organized. 1. Working with other nurses who are clinically competent 2. Good nurse-physician relationships and communication 3. Nurse autonomy and accountability 4. Supportive nurse manager-supervisor 5. Control over nursing practice and practice environment 6. Support for education in-service, continuing education, etc.) 7. Adequate nursing staff 8. Concern for the patient is paramount **CONCLUSION** To replicate and duplicate the conditions fostering magnetism, essential variables – both process and outcome most be identified Eight variables have been identified by nurses as essentials to providing quality care.

12. Assessing differences in job satisfaction of nurses in magnet and nonmagnet hospitals (2002)

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Valda V. Upenicks 2002 **Setting** Washington	To examine the difference between clinical nurses employed at magnet and nonmagnet hospital and their perception of job satisfaction as it relates to organisational characteristics. And to gain an understanding of the nurse leaders' perception of the value of his/her role in today's settings,	305 clinical nurses employed at magnet versus nonmagnet hospital.	The aim of this inquiry was both explanatory and comprehension. The NWI-R was used and content analysis was employed to understand the perception of the roles of the 16 interviewed leaders. The three most reported magnet sub-scales were used and 3 additional sub-scale were designed called, self-governance, organisational structure and educational opportunities. Triangulation was applied to achieve a more complete understanding of the inclusive concept of job satisfaction and their impact of the nurses leader's role on this perception, and more precise explanation of differences in job satisfaction scores among clinical nurses at magnet and non-magnet were obtained.	Results suggest that clinical nurses had more autonomy and control over their practice compared to non-magnet hospital. The difference in job satisfaction scores were linked to greater visibility and responsiveness by magnet nurse leaders; better support of clinical nurse autonomous decision-making by magnet nurse leaders; and greater support of a professional nursing climate at magnet hospital as evidenced by adequate staffing levels.

13. Hospital Restructuring: Identifying the Impact On Patients And Nurses. 2002

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Mary Finlayson Suzanne Gower 2002 **Setting** New Zealand	Aims of the study 1. To examine hospital outcomes over a period of major change in the health sector 2. To examine the relationship between hospital staffing and both patient and nurse outcomes 3. To investigate whether improved outcomes are linked with particular organisational features in nurse staffing	24 of 32 invited hospitals agreed to participate	Study uses a methodology adapted from that of the International Hospital Outcomes study to examine the results of hospital restructuring in NZ over the period 1988 – 2001. 3 strands 1. Mapping of hospital restructuring 2. Identification of a range of patient outcomes 3. Survey of NZ hospital nurses Survey used: ❑ NWI-R ❑ Maslach Burnout Inventory ❑ Nurse report of exposure to blood survey ❑ General demographic and workplace information ❑ Questions on the care of Maori in hospitals	This research will provide empirical data on the effects experienced by nurses and patients of the continual restructuring of hospitals in NZ.

14. We Are Able and Artful, But We Are Tired: Results From the Survey of NZ Hospital Nurses 2002

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Mary Finlayson Suzanne Gower 2002 **Setting** New Zealand	As in Hospital Restructuring: Identifying the Impact On Patients And Nurses.	24 hospitals 1600 nurses Enrolled and Registered Nurses (some part time) 4882 surveys were returned giving a 37% response rate Individual hospitals varied between 29 and 48%.	As in Hospital Restructuring: Identifying the Impact On Patients And Nurses. **CONCLUSION** Survey indicates some very positive aspects of hospital nursing in NZ, as well as areas for improvement The respondents clearly indicated that they and their colleagues are able nurses, giving high quality nursing care to their patients, supported by skilled doctors. However the level of institutional support provided is inadequate.	Analysis includes 4603 useable questionnaires, representing 27% of registered and enrolled nurses working in NZ hospitals. Analysis has been undertaken at two levels, national level and individual hospital level. The analysis in this paper focuses on items from the NWI-R and other items indicative of nurses outcomes or behavior. Items from the NWI-R were used to construct subscales of interest. A number of items relating to each of the magnet hospital features have been combined to give an indication of autonomy, nurse control over the patient care environment, organisational support and relationships between nurses and physicians. Theses have been calculated by combing the scores given to each question, rather then percentage used in the Aiken and Patrician (2000) study. Findings from the survey indicate that NZ hospital nurses consider that they have good working relationships with clinically competent colleagues in nursing, medicine and other health professions. They also perceive that hospital patients get a high standard of care, many nurses reported enjoying their work, others indicate lower levels of job satisfaction and significant levels of work related stress. Nurses perceive that while the organisation they work for expect high standards of nursing care, institutional support for nursing is relatively low.

15. Health correlates of autonomy, control and professional relationships in the nursing work environment (2003)

AUTHOR(S), YEAR,	PURPOSE	SUBJECTS	RESEARCH DESIGN AND METHOD	RESULTS
Claire Budge Jenny Carryer Sue Wood 2003 **Setting** New Zealand	To investigate nurses' perceptions of autonomy, control over practice and nurse-physicians relationships in a NZ hospital in order to compare them to US hospitals. And to examine the NZ nursing situation and to see whether aspects of the work environment are associated with health status	359 nurses were invited to participate, in a general hospital, 225 Registered Nurses responded making the response rate 62.6%.	Participants completed the NWI-R and Medical Outcomes Study and the 36-Item Short Form Health Survey.	The results were comparable with non-magnet US hospitals except for the nurse-physician relationship sub-scale which was rated more highly. This is not congruent with US findings as low levels of control over practice and autonomy do not usually mean high level of nurse-physician relationships. CONCLUSION This study demonstrated the importance of professional practice environments for nurses themselves.

Appendix B: Study Questionnaire

A. Section I.

Please note this section requires you to answer each question twice
Please find enclosed a complementary blue pen and red pen for you to use
Completion and return of this survey questionnaire implies consent to take part in the study

Firstly please indicate the extent to which you agree that the following items are currently present ***(actual)*** in your practice as a public health nurse (circle the appropriate number using the **blue** pen)

Secondly please indicate the extent to which you agree that you would like the following items to be present ***(ideal)*** in your practice as a public health nurse (circle the appropriate number using the **red** pe

Actual (blue) Ideal (red) in your practice as a public health nurse

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongl Disagre
1. Adequate support services allow me to spend more time with my clients.	1	2	3	4
2. Doctors and public health nurses have good working relationships.	1	2	3	4
3. A good orientation program for newly employed nurses.	1	2	3	4
4. A supervisory staff that is supportive of nurses.	1	2	3	4
5. A satisfactory salary.	1	2	3	4
6. Nursing controls its own practice.	1	2	3	4
7. Active in-service/continuing education programs for nurses.	1	2	3	4
8. Career development/clinical ladder opportunity.	1	2	3	4
9. Opportunity for registered nurses to participate in policy decisions.	1	2	3	4
10. Support for new and innovative ideas about client care.	1	2	3	4
11. Enough time and opportunity to discuss client care problems with other nurses.	1	2	3	4
12. Enough registered nurses on staff to provide quality client care.	1	2	3	4
13. A nurse manager who is a good manager and leader.	1	2	3	4
14. A Director of Nursing who is highly visible and accessible to staff.	1	2	3	4
15. Flexible or modified work schedules are available.	1	2	3	4
16. Enough staff to get the work done.	1	2	3	4

Please remember to answer each question twice, even if your actual and ideal are the same circle the same answer once with the blue pen and once with the red pen

Actual (blue) Ideal (red) in your practice as a public health nurse

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongl[y] Disagre[e]
17. Freedom to make important client care and work decisions.	1	2	3	4
18. Praise and recognition for a job well done.	1	2	3	4
19. Nurse specialists who provide client care consultation.	1	2	3	4
20. Team nursing as the nursing delivery system.	1	2	3	4
21. Primary nursing as the nursing delivery system.	1	2	3	4
22. Good relationships with other departments	1	2	3	4
23. Not being placed in a position of having to do things that are against my nursing judgment.	1	2	3	4
24. The Director of Nursing is equal in power and authority to other top-level executives.	1	2	3	4
25. Much coordination between doctors and public health nurses	1	2	3	4
26. Opportunities for advancement.	1	2	3	4
27. The nursing staff is supported in pursuing degrees in nursing.	1	2	3	4
28. A clear philosophy of nursing pervades the service.	1	2	3	4
29. Nurses actively participate in efforts to control costs.	1	2	3	4
30. Working with nurses who are clinically competent.	1	2	3	4
31. The nursing staff participate in selecting new supplies & equipment.	1	2	3	4
32. A nurse manager who backs up the nursing staff in decision-making even when it is in conflict with a doctor.	1	2	3	4
33. An administration that listens and responds to employee concerns.	1	2	3	4
34. An active quality-assurance program.	1	2	3	4
35. Registered nurses are involved in the internal governance of the service (e.g., practice and policy committees)	1	2	3	4
36. Collaboration between nurses and doctors.	1	2	3	4
37. A preceptor program for newly hired RNs.	1	2	3	4

Please remember to answer each question twice, even if your actual and ideal are the same circle the same answer once with the blue pen and once with the red pen

Actual (blue) Ideal (red) in your practice as a public health nurse

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
38. Registered nurses have the opportunity to serve on committees.	1	2	3	4
39. The contributions that nurses make to client care are publicly acknowledged.	1	2	3	4
40. Nurse managers consult with registered nurses on daily problems and procedures.	1	2	3	4
41. The office environment is pleasant, attractive, and comfortable.	1	2	3	4
42. Opportunity to work on a specialty team.	1	2	3	4
43. Regular, permanently assigned registered nurses never float to another team	1	2	3	4
44. Registered nurses actively participate in developing their work schedules (i.e. what days they work; days off, etc.).	1	2	3	4
45. Standardized policies, procedures, and ways of doing things.	1	2	3	4
46. Each nursing team, or unit, determines its own policies and procedures.	1	2	3	4
47. Use of problem-oriented clinical record.	1	2	3	4
48. Working with experienced nurses who "know" the service and community.	1	2	3	4

Given this measurement tool has been used widely to measure organisational attributes of nurses in the acute care setting there may be other attributes specific to the community setting that you wish to add and rate. If so, please specify them in the spaces provided and rate them twice as before

Other (specify)____________________	1	2	3	4
Other (specify)____________________	1	2	3	4
Other (specify)____________________	1	2	3	4
Other (specify)____________________	1	2	3	4
Other (specify)____________________	1	2	3	4

Please remember to answer each question twice, even if your actual and ideal are the same circle the same answer once with the blue pen and once with the red pen

B. Section II.
This section seeks your opinion regarding characteristics of Public Health Nursing Services that you consider important regardless of employment setting.

A. Please list the 3 most important characteristics a **Public Health Nursing Service** should have in order for you to consider it as "a good place to practice nursing".

1.

2.

3.

B. Please list the 3 most important ways in which a **Public Health Nursing Service** can support your nursing practice.

1.

2.

3.

B. Section II. (continued)

- Public health nurses have a range of employment settings and various funding mechanisms. Given the current changes in the health sector and the implementation of Primary Health Organisations (PHOs) it is envisaged that public health nurses may become part of PHOs.

Please indicate which of the following options you would prefer:

Employed by	Tick
DHB – Provider Arm/Public Health Unit	
DHB - PHO	
Maori provider	

Please indicate three advantages and three disadvantages of each option.

DHB – Provider Arm/Public Health Unit

Advantages	Disadvantages
1.	1.
2.	2.
3.	3.

DHB – Primary Health Organisation (PHO)

Advantages	Disadvantages
1.	1.
2.	2.
3.	3.

Maori provider

Advantages	Disadvantages
1.	1.
2.	2.
3.	3.

SECTION III. DEMOGRAPHICS:
This section asks general questions about you and your background.

1. What is your sex? ___Female ___Male

2. What is your age? _________

3. What is your ethnicity? ___NZ non Maori
___Maori
___Pacific Island
___European (born outside New Zealand)
___ Asian
___Other (specify)_________________

2. In which DHB region do you currently work (please tick)

DHB region	Tick	DHB region	Tick	DHB region	Tick
Northland		Taranaki		Hutt	
Waitemata		Tairawhiti		Canterbury	
Auckland		Hawkes Bay		West Coast	
Counties Manukau		Whanganui		Nelson Malborough	
Bay of Plenty		MidCentral		South Canterbury	
Waikato		Wairarapa		Otago	
Lakes		Capital & Coast		Southland	

5. In what year were you first licensed as a Registered Nurse? _________

6. Are you currently working as a public health nurse? ___YES ___NO

7. How long have you worked (or how long did you work) as a public health nurse? _________

8. Which of the following best describes your current employment status?
___Full time
___Part time
___Casual
___Not working

9. What is the highest nursing qualification you hold?
___Diploma ___Bachelors degree
___Masters degree___Other (specify)______________________________

Many thanks for your participation. Please return the questionnaire in the envelope provided. You do not need to use a stamp.

Appendix C: Study Information Sheet

PROFESSIONAL PRACTICE ATTRIBUTES WITHIN PUBLIC HEALTH NURSING

Information Sheet

Principal Investigator

Chiquita Hansen
Clinical Nurse Specialist – Community
MidCentral Health

Research Supervisors

Jenny Carryer
Professor of Nursing
MidCentral Health
Claire Budge
Research Associate
MidCentral Health

You are invited to take part in a study to identify the organisational attributes public health nurses consider important to their professional practice. As the researcher (Principal Investigator) this study is a fulfilment of my Massey University degree. Your participation is entirely voluntary (your choice). If you would like to take part you will be required to complete the enclosed questionnaire and return it in the post-paid envelope as soon as possible.

The questionnaire includes the Nursing Work Index-Revised (NWI-R) which is a tool that has been widely used internationally and nationally to measure the organisational attributes of hospital settings. The wording in the tool has been adapted to the community setting to assist in the development of a NWI to measure the organisational attributes of public health nursing services.

What is the aim of the study?

In America Dr Linda Flynn is currently studying home health agencies to develop a pool of potential items for a home health version of the Nursing Work Index Revised (NWI-R). The aim of Dr Flynn's study is to identify and describe attributes of home health agencies that home health nurses perceive as important to the support of their professional practice. Dr Flynn has invited Dr Jenny Carryer and Dr Claire Budge both of MidCentral Health to be part of this study and they are in the process of collecting data on District Nurses in New Zealand. The study you are invited to join with will add to this data by surveying all public health nurses and identify the organisational attributes public health nurses consider important to their professional practice. As well as identifying the ideal attributes, you will be asked to rate your current organisation.

Who will the study involve?

All 382 public health nurses who identified in the Nursing Council of New Zealand Workforce Data Survey 2002/2003 (survey that each nurse completes when applying for a new practicing certificate) that they work as a public health nurse and have agreed to being involved in surveys. The Nursing Council of New Zealand is coordinating the mail out of the survey to protect the confidentiality of nurses names and addresses.

What would I have to do?

If you chose to take part you will need to complete the enclosed questionnaire and return it in the supplied post paid envelope as soon as possible. It should take no longer than 15 –20 minutes to complete. Completing and returning the survey form implies your consent to this study. You have the right to decline to answer any particular questions.

What are the benefits in my taking part?

By taking part you may help guide District Health Boards developing professional public health nursing practice environments within the provider arm/Public Health Units or Primary Health Organisations. The gap between the ideal and the actual organisational attributes may provide valuable information in shaping service models to improve the effectiveness of public health nurses in the new primary health care environment..

What are the risks in taking part?

It is not anticipated that there will be any risks resulting from your participation in this study. However, if you are concerned at any stage throughout the study please contact the principal investigator, Chiquita Hansen.

What will happen to the information I provide?

This study forms part of a University degree a research report/thesis will be submitted to Massey University. A paper on the thesis may be published in nursing journals and verbal presentations may be given at conferences or nursing symposiums. No material which could personally identify you will be used in any reports on the study. The Nursing Council will post a summary of the findings to you on behalf of the principal investigator.

If you would like to discuss the outcomes of the study the principal investigator will be happy to talk to you. Only the principal investigator and her supervisors will have access to the questionnaires, which will be kept in a locked filing cabinet for the duration of the study and for 5 subsequent years.

Where can I get more information about this study?

You are welcome to contact the principal investigator Chiquita Hansen by phoning [redacted] if you have any questions, or would like to discuss your participation in this study. If you would prefer to discuss the study with a Maori nurse, please contact Anne (Nuki) McNicol Public Health Nurse and Vice Chairperson of Te Runanga NZNO (phone [redacted] email [redacted] If you have any queries or concerns regarding your rights as a participant in this study you may wish to contact your professional organisation.

This project has been reviewed and approved by the Massey University Human Ethics Committee, PN Protocol 03/90. If you have any concerns about the conduct of this research, please contact Professor Sylvia V Rumball, Chair, Massey University Campus Human Ethics Committee: Palmerston North, telephone 06 350 5249, email S.V.Rumball@massey.ac.nz. In addition this study has been approved by the Manawatu/Whanganui Ethic Committee on behalf of all 15 ethic committees in New Zealand

Please feel free to contact the principal investigator or research supervisors if you have any questions about this study

Appendix D

Response Frequencies for each Attribute Actual – Environment

48 ACTUAL ATTRIBUTES	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
1. Adequate support services allow me to spend more time with my clients	11	73	57	21
2. Doctors and public health nurses have good working relationships	21	98	42	2
3. A good orientation programme for newly employed nurses	32	60	46	26
4. A supervisory staff that is supportive of nurses	31	73	43	14
5. A satisfactory salary	9	41	63	50
6. Nursing controls its own practice	19	88	45	10
7. Active inservice/continuing education programmes for nurses	44	74	32	14
8. Career development / clinical ladder opportunity	15	65	56	27
9. Opportunity for registered nurses to participate in policy decisions	12	86	47	19
10. Support for new and innovative ideas about client care	11	91	46	15
11. Enough time and opportunity to discuss client care problems with other nurses	18	74	54	17
12. Enough registered nurses on staff to provide quality client care	8	48	67	41
13. A nurse manager who is a good manager and leader	41	53	32	34
14. A Director of Nursing who is highly visible and accessible to staff	11	30	65	55
15. Flexible or modified work schedules are available	29	86	33	16
16. Enough staff to get the work done	7	53	55	47
17. Freedom to make important client care and work decisions	44	92	25	3
18. Praise and recognition for a job well done	26	66	43	26
19. Nurse specialists who provide client care consultation	20	52	53	36
20. Team nursing as the nursing delivery system	19	57	58	21
21. Primary nursing as the nursing delivery system	39	79	29	9
22. Good relationships with other departments	33	93	36	0

48 ACTUAL ATTRIBUTES	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
23. Not being placed in a position of having to do things that are against my nursing judgment	41	84	28	9
24. The Director of Nursing is equal in power and authority to other top-level executives	15	56	56	24
25. Much coordination between doctors and public health nurses	12	66	66	19
26. Opportunities for advancement	15	64	61	22
27. The nursing staff is supported in pursuing degrees in nursing	43	73	32	14
28. A clear philosophy of nursing pervades the services	25	80	44	13
29. Nurses actively participate in efforts to control costs	19	77	51	14
30. Working with nurses who are clinically competent	50	85	24	4
31. The nursing staff participate in selecting new supplies and equipment	26	63	54	15
32. A nurse manager who backs up the nursing staff in decision-making even when it is in conflict with a doctor	37	65	37	16
33. An administration that listens and responds to employee concerns	17	48	68	27
34. An active quality-assurance programme	48	76	36	4
35. Registered nurses are involved in the internal governance of the service (e.g. practice and policy committees)	37	83	31	11
36. Collaboration between nurses and doctors	17	81	59	4
37. A preceptor programme for newly hired RNs	42	70	34	17
38. Registered nurses have the opportunity to serve on committees	59	85	17	2
39. The contributions that nurses make to client care are publicly acknowledged	15	50	66	31
40. Nurse managers consult with registered nurses on daily problems and procedures	27	57	49	27
41. The office environment is pleasant, attractive, and comfortable	37	65	39	23
42. Opportunity to work on a speciality team	31	82	34	15

48 ACTUAL ATTRIBUTES	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
43. Regular, permanently assigned registered nurses never float to another team	41	52	35	21
44. Registered nurses actively participate in developing their work schedules (i.e. what days they work; days off; etc)	48	67	31	11
45. Standardized policies, procedures, and ways of doing things	56	79	19	9
46. Each nursing team, or unit, determines its own policies and procedures	36	64	46	15
47. Use of problem-oriented clinical record	20	72	35	25
48. Working with experienced nurses who "know" the service and community	69	67	25	3

Appendix E

Response Frequencies for each Attribute – Ideal Environment

48 IDEAL ATTRIBUTES	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
1. Adequate support services allow me to spend more time with my clients	135	24	1	0
2. Doctors and public health nurses have good working relationships	129	30	0	0
3. A good orientation programme for newly employed nurses	152	7	0	0
4. A supervisory staff that is supportive of nurses	147	11	0	0
5. A satisfactory salary	146	11	1	3
6. Nursing controls its own practice	159	121	37	1
7. Active inservice/continuing education programmes for nurses	150	9	0	0
8. Career development / clinical ladder opportunity	126	31	3	0
9. Opportunity for registered nurses to participate in policy decisions	127	31	2	0
10. Support for new and innovative ideas about client care	133	25	2	0
11. Enough time and opportunity to discuss client care problems with other nurses	136	21	1	0
12. Enough registered nurses on staff to provide quality client care	146	14	1	0
13. A nurse manager who is a good manager and leader	150	10	0	0
14. A Director of Nursing who is highly visible and accessible to staff	119	36	1	1
15. Flexible or modified work schedules are available	121	38	0	0
16. Enough staff to get the work done	149	10	1	0
17. Freedom to make important client care and work decisions	119	36	0	0
18. Praise and recognition for a job well done	126	32	0	0
19. Nurse specialists who provide client care consultation	116	39	1	0
20. Team nursing as the nursing delivery system	71	61	8	9
21. Primary nursing as the nursing delivery system	95	47	8	2
22. Good relationships with other departments	134	24	0	0

48 IDEAL ATTRIBUTES	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
23. Not being placed in a position of having to do things that are against my nursing judgment	135	20	3	1
24. The Director of Nursing is equal in power and authority to other top-level executives	125	18	4	1
25. Much coordination between doctors and public health nurses	118	37	2	0
26. Opportunities for advancement	124	33	1	0
27. The nursing staff is supported in pursuing degrees in nursing	126	30	3	0
28. A clear philosophy of nursing pervades the services	129	28	2	0
29. Nurses actively participate in efforts to control costs	81	67	7	2
30. Working with nurses who are clinically competent	141	18	0	0
31. The nursing staff participate in selecting new supplies and equipment	104	44	4	2
32. A nurse manager who backs up the nursing staff in decision-making even when it is in conflict with a doctor	119	28	3	0
33. An administration that listens and responds to employee concerns	143	14	1	0
34. An active quality-assurance programme	130	28	0	0
35. Registered nurses are involved in the internal governance of the service (e.g. practice and policy committees)	135	22	1	0
36. Collaboration between nurses and doctors	125	31	1	0
37. A preceptor programme for newly hired RNs	143	14	0	0
38. Registered nurses have the opportunity to serve on committees	117	40	1	0
39. The contributions that nurses make to client care are publicly acknowledged	100	51	5	2
40. Nurse managers consult with registered nurses on daily problems and procedures	96	51	8	1
41. The office environment is pleasant, attractive, and comfortable	130	28	0	0
42. Opportunity to work on a speciality team	110	42	4	0

48 IDEAL ATTRIBUTES	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
43. Regular, permanently assigned registered nurses never float to another team	**72**	**50**	**10**	**10**
44. Registered nurses actively participate in developing their work schedules (i.e. what days they work; days off; etc)	**149**	**45**	**0**	**0**
45. Standardized policies, procedures, and ways of doing things	**116**	**38**	**4**	**1**
46. Each nursing team, or unit, determines its own policies and procedures	**77**	**52**	**20**	**4**
47. Use of problem-oriented clinical record	**64**	**52**	**18**	**15**
48. Working with experienced nurses who "know" the service and community	**127**	**27**	**2**	**0**