CAREERING INTO THE FUTURE: NURSES’ OPINIONS OF THE PROFESSIONAL DEVELOPMENT AND RECOGNITION PROGRAMME

by

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ABSTRACT

Background: The Professional Development and Recognition Programme (PDRP) is a national model of nursing career progression in New Zealand (NZ), based on the Benner “Novice to Expert” model (1984). To progress on the PDRP a nurse presents a professional portfolio containing evidence of performance, professional development, and involvement in quality and education for assessment against standards based on the Competencies for Registered Nurses (National PDRP Working Party, 2005). New Zealand District Health Boards (DHBs) all have PDRPs accredited by the Nursing Council of New Zealand (NCNZ) as a measure of competence under the Health Practitioners Competency Assurance Act (HPCA Act, 2003, NCNZ 2009). The PDRP is also recognised in the national wage and conditions agreement, where special leave and financial entitlements are given to Proficient and Expert nurses (DHBs/NZNO, 2007). Nursing PDRP participation rates have been low and this has been attributed to nationally diverse processes and excessive documentation (PDRP Evidential Requirements Working Party, 2009).

Aim: This research was conducted to ascertain what nurses knew about the PDRP and what nurses’ opinions were, of the programme. Ideas were sought in order to shape the programme and improve participation in the future.

Method: This mixed-method cross-sectional survey was undertaken in late 2008 at a large DHB. A random sample of 20% of the 1128 nurses were selected to receive a written questionnaire and 42% were completed and returned (n=95). The questionnaire contained four sections: a knowledge quiz to assess what nurses knew about the development, process and quality measures of the PDRP; a series of Likert scales to assess attitudes towards the PDRP; a section for comments and ideas; and a short demographic assessment, including nursing qualifications and PDRP Level. The tool had previously been validated in two New Zealand studies (Carryer, Budge, & Russell, 2002; Carryer, Russell, & Budge, 2007).

Results: Many nurses did not know the origins of the PDRP and while a majority understood the process, three-quarters of respondents agreed there should be more support to complete a portfolio. Younger, tertiary-trained nurses were more likely to progress on the PDRP than those with more years of nursing experience and fewer formal qualifications. Participants displayed modestly positive attitudes towards the PDRP and 62% of those who had presented portfolios for progression (n=52) agreed that the process was worthwhile. Over a quarter of participants stated that the PDRP process involved excessive written documentation and half of participants...
felt that there were too many barriers to PDRP participation, such as time, workloads and limited academic skills. There was, however, widespread support for individual professional accountability and a desire for learning opportunities.

**Conclusion**: Nurses would like greater support to participate in the PDRP, but not at the expense of nursing care delivery or family life. Streamlining the process and building closer links between the PDRP, postgraduate education, and clinical care would increase the relevance for nurses working clinically. Attention to these features may increase participation in the PDRP and promote nursing career development in the future.

**Keywords**: Professional development, careers, barriers, recruitment and retention
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GLOSSARY

AfC- Agenda for Change. A programme to restructure the pay, terms and conditions in the United Kingdom (UK) National Health System (NHS).

CCP- Clinical Career Pathway. Previous term for the New Zealand Nursing career structure now superseded by the PDRP.

Clinical Ladder- A model of nursing career progression primarily used in the United States of America (USA).

CPD- Continuing Professional Development

CPE- Continuing Professional Education

DHB- District Health Board. Regional provider of public health care in New Zealand.

EN- Enrolled Nurse. A second level nurse who has undertaken a 12-18 month training and works under the direction of a Registered Nurse. This training was phased out, in New Zealand, in 1993.

KSF- Knowledge and Skills Framework. A competence framework for career progression within the United Kingdom’s National Health Service as part of the AfC.

HPCA ACT- The Heath Practitioners Competency Assurance Act (2003). A legislative framework whereby health professionals are required to provide evidence of competence as a measure to safeguard the public.

LR- Lead Researcher

MECA- Multi-Employer Collective Agreement. The national nurses’ wage and conditions agreement between New Zealand DHBs.

NCNZ- Nursing Council of New Zealand. The body governing nurses in New Zealand.

NZNO- New Zealand Nurses Organisation. The largest trade union providing professional support to nurses.

PDRP- Professional Development and Recognition Programme. A nationally recognised programme of career development for nurses in New Zealand.

Professional portfolio- Document providing evidence of a nurse’s professional development, including records of clinical hours, ongoing education and assessment against nursing competencies or a job outline.

RN- Registered Nurse.

Staff Nurse- An organisational position of a Registered Nurse who has completed a 3 year training programme and may have a Diploma of Nursing or a Bachelors Degree.
CHAPTER 1. INTRODUCTION

Background

Following international trends of the 80’s, a New Zealand career pathway was developed, by nurses, to enable clinical skills to be recognised. It was hoped that this initiative would keep expert nurses involved in direct patient care, as opposed to assuming roles in management or education (Trim, 1998). This career pathway has evolved into the PDRP; a nationally recognised process of clinical career progression for which DHBs and major private providers have developed individual processes (National PDRP Working Party, 2005).

The Health Practitioners Competency Assurance Act (HPCA Act, 2003) requires nurses to provide proof of competence within a scope of practice in order to maintain registration with the Nursing Council of New Zealand (NCNZ). The NCNZ has now accredited PDRPs as providing evidence of the competence of nurses, for all New Zealand DHBs and some private providers (NCNZ, 2009). Nurses on these PDRPs are exempt from a NCNZ competence audit under the HPCA Act. The PDRP is also recognised in the Multiemployer Collective Agreement (MECA), the national wage and conditions agreement for nurses, where financial and study leave allowances are specified for nurses who progress on the programme (DHBs/NZNO, 2007).

In most instances the levels within PDRPs are based on Benner’s (1984) work around the progression of nurses “from Novice to Expert”. This model places nurses at one of 4 levels of development: Beginning Practitioner; Competent or Confident, Proficient, and Expert or Leadership. For DHBs it is desirable for skilled and experienced nurses to be recognised as Proficient or Expert on a PDRP, as a quantitative measure of the quality of nursing care provided. Nurses are required to submit a portfolio to be assessed at Competent level although progression beyond this level is voluntary (DHBs/NZNO, 2007). In 2007 the study hospital aimed for 50-60% of nurses to be either Proficient or Expert, yet at the time, this number was thought to be approximately 35% with slow increases (Chalmers, 2007).

Despite the PDRP being in place at the study hospital for over five years, it is not known why nurses have been reluctant to participate, especially in the light of the recent allowances negotiated into the MECA (DHBs/NZNO, 2007). The aims of this study, therefore, were to generate baseline data on nursing knowledge and attitudes towards the PDRP in a New Zealand
hospital, and to examine the barriers to participation in the PDRP. The overarching purpose of the study was to explore how nurses can be supported to participate in the PDRP in the future.

**Research questions**

The research questions for this study were:
- What do nurses know about the PDRP?
- What are nurses’ opinions of the PDRP?

**Structure of this thesis:**

**Chapter 2. Literature Review**

Chapter two describes the search strategy and the resulting literature on nursing career development. The review begins with the development of the PDRP in New Zealand and the theoretical framework upon which the PDRP is based. International models of career development are also examined in order to evaluate current literature in comparison to the New Zealand model. Nursing attitudes to career progression pathways are examined, along with the barriers nurses face when undertaking career progression and continuing education. The influence of career development programmes on recruitment and retention and the provision of quality of care are also considered. Finally, some key pieces of research on life-long learning are reviewed, in order to consider individual accountability within professional development frameworks.

**Chapter 3. Methods and Methodology**

This chapter describes the steps taken to gather and then analyse the data in this study. The background to the development of the questionnaire is explained and the pilot study is reviewed. The means of identifying the population is outlined and then the sampling framework and the questionnaire distribution process described. Finally, the methods of statistical analysis of the quantitative data are detailed along with the process used for the qualitative thematic analysis.
Chapter 4. Results

This chapter presents the survey findings. Initially, demographic characteristics of the cohort are described. Nursing knowledge levels about the PDRP are then measured for individual questions, and from participant total scores. Attitudes towards the PDRP are assessed using selected questions to form scales, along with conventional statistical tools, to examine whether knowledge, attitudes or participant characteristics may be related to PDRP participation. Participant comments are grouped into dominant themes which are then triangulated with the quantitative data to corroborate the findings and identify any further links.

Chapter 5. Discussion

The discussion considers the study results in relation to the work of other researchers, both in New Zealand and internationally, and how these conclusions contribute to the growing body of evidence on nursing career development. Nurses’ knowledge and attitudes towards the PDRP are compared with previous New Zealand studies and similar international models. The possible influence of the PDRP on recruitment and retention, and the delivery of quality nursing practice, is discussed. Suggestions are made about future development of the PDRP, encompassing ideas from the international models, in order to promote nursing participation. Strengths and weaknesses of the study are also identified and discussed in this section.

Chapter 6. Conclusion

This section summarises the major research findings and links with the study aims. The impact of this study is briefly reviewed, and the implications summarised. Suggestions are made for ongoing research in relation to the nursing workforce and the evolution of healthcare.
CHAPTER 2. REVIEW OF THE LITERATURE

Introduction

This chapter reviews the literature on the evolution of nursing career progression, as a basis for this research. The global and historical literature will be examined concerning barriers to career development, recruitment and retention implications, quality of care, and accountability for learning. All of these elements make up the foundations for this thesis, on the future of nursing careers.

Initially, the review of the literature examines the PDRP in New Zealand. The PDRP is a framework for career development for nurses with educational, clinical, and professional development strands, which the nurse presents as evidence in a Professional Portfolio. Nurses can progress through different levels of clinical recognition on the PDRP, from a Graduate, to an Expert nurse.

The New Zealand experience of the PDRP cannot be examined in isolation from the rest of the world. New Zealand has been following in the footsteps of international colleagues for decades, modelling an evolving PDRP on elements of other pioneers of career development. Therefore, this review of the literature examines the historical development of nursing careers internationally and then considers evaluation research on nursing career programmes. This review will also explore the motivations driving the development of career progression frameworks and whether the original aims of the latter have transpired.

This study also examined nursing attitudes to the PDRP, therefore this review of the literature assesses nursing attitudes towards career development, including the features which support or hinder career progression. Within this aspect of the literature review, personal accountability and the concept of lifelong learning are also briefly considered, in order to comprehensively set the scene for this thesis.
Search Strategy

The original review of the literature was undertaken in 2008. EBSCOhost® and Ovid databases including CINAHL and Medline were searched for English language publications using the keywords: career mobility, professional development, clinical ladder, and Knowledge and Skills Framework (KSF), combined with nursing. Further searches of New Zealand specific sources were undertaken, including the New Zealand Nurses Organisation (NZNO), Te Puna database, the Ministry of Health, and the Health and Disability Commissioner publications. The keywords for New Zealand sources were different to the original search due to unique local terminology. The key words for New Zealand sources were: nursing careers, career framework, Clinical Career Pathway (CCP) and PDRP. Literature was excluded if it was older than the year 2000, unless there was historical significance. Literature was also excluded if the main theme was unrelated to nursing career development and education.

The material from this primary literature search was stored on the End Note XI referencing programme, and also retained in hard copy. Documents were grouped under headings which were then used for sections in the review of the literature. After the literature was examined for relevance, a secondary search was undertaken using the reference lists of the most relevant articles. Articles were requested from the University Library if there was no electronic source, and there was no charge.

This original search culminated in 85 articles and research papers about nursing career structure development and the relationship with education, recruitment and retention, and quality. The literature spanned news articles in nursing union magazines through to formal research reports. Very little research pertained to nursing careers in New Zealand. An updated review of the literature was performed in 2009 in order to source recent material on the topic. The original search strategy was re-executed and citations of original articles were traced. The NZNO Library was searched for recent academic reports or unpublished literature. A further 16 relevant articles were located at this time, for inclusion in the literature review. This literature review uncovered a great deal of writing about nursing careers but a dearth of meaningful systematic research.
Globally, nursing careers have been undergoing great change. Since the 70s, the United States of America (US) have been instituting career development structures. More recently, on the other side of the world, the United Kingdom (UK) devised a new model in order to move nursing careers forward. Other countries, including New Zealand, have designed processes to recognise nurses clinically, and to measure competence, often based on these international frameworks. Numerous models have evolved and many claims have been made about the possible gains of nursing career structures.

The New Zealand Experience

The health care reforms of 1993 paved the way for structural reconfiguration of New Zealand hospital administration. Hospitals moved from being both the funders and providers of free public health care, to being contracted to provide care by one of four Regional Health Authorities. Claims were made, by the then National Government, of the potential for improved quality, efficiency and healthy competition in the provision of health care (Hornblow, 1997). In the seven years after these reforms, nursing numbers reduced by almost a third, largely affected by the decrease in Enrolled Nurse (EN) numbers as EN training was phased out in favour of a wholly Registered Nurse (RN) workforce (Hylton, 2005; McCloskey & Diers, 2005). Nursing leadership was questioned and career pathways were lost, amidst a shortage of skilled nurses and questions about patient safety in hospitals (Buchan, 1999; Health and Disability Commissioner, 1998; Ministerial Taskforce on Nursing, 1998).

At this time, the New Zealand Nurses Association (later the NZNO) proposed a nursing structure that included Nurse Consultants, Clinicians and Specialists, and two levels of RN, while debating the future of the Charge Nurse role (Laws, 1990). Hospitals in New Zealand began developing individual Clinical Career Pathways (CCPs) and in the late 90’s collaboration began to occur as a result of seminars led by the NZNO. Most programmes were based on Benner’s (1984) descriptions of nursing levels of practice (Novice, Competent, Proficient and Expert), although some programmes differed in the number of levels offered, and used slightly different terminology. The study DHB first launched a 4-level, Benner-based Nursing and Midwifery Career Pathway in 1998, this later became the PDRP (Capital & Coast DHB, 2001).

In 2004 (and updated in 2005), a national PDRP report was written by a group of nursing representatives, following a College of Nurses Aotearoa forum (National PDRP Working Party,
The purpose of the Working Party was to develop a national framework for PDRPs (the new term for the previous CCP) “to enable consistency of structure and process, transportability and transferability of [nursing] recognition” (National PDRP Working Party, p.5). The goals of PDRPs, according to this report, related to recognition of clinical skills and expertise, and retention of nurses. The national PDRP framework, the group developed, shows PDRP progression as parallel to formal education, professional development and competencies within the individual nurses’ Scope of Practice (see Figure 1).

Midwives chose not to participate in the PDRP at the time, and have since developed a separate framework of career development called the Quality and Leadership Programme (National PDRP Working Party, 2005).

The NCNZ has accredited individual PDRPs in almost all DHBs and major private hospitals, as meeting the requirements for nursing competence according to the Health
Practitioners Competence Assurance Act (HPCA Act, 2003; NCNZ, 2009). Nurses are exempt from NCNZ audit under the HPCA Act if they are part of an accredited PDRP (NCNZ, 2009).

In 2004, national DHBs and the NZNO negotiated a Multi-Employer Collective Agreement (MECA) for New Zealand nurses’ wages and conditions, and this was updated in 2007 (DHBs/NZNO, 2007). This MECA commits to the principles of the PDRP and prescribes salary allowances and professional development time for nurses participating in PDRPs. Also in 2007, a Ministry of Health and DHBNZ Workforce Group issued the document A Career Framework for the Health Workforce in New Zealand suggesting a structure for all health careers, as a way of coping with a shrinking workforce and an aging population with complex health needs (2007). This document was not intended to “supersede” existing professional career pathways, but instead “to incorporate them into the framework over time” (MOH/DHBNZ Workforce Group, 2007, p.3). The framework is similar to the PDRP, in that there are levels of development with similar titles, only there are 8 levels of career progression, from supervised roles, up to Advanced Expert or ‘strategic’ roles.

Even though CCPs and then the PDRP have been in place for well over a decade in some parts of New Zealand, participation rates are difficult to gauge with any real accuracy. Nationally, 43.7% of nurses have engaged in the PDRP (PDRP Evidential Requirements Working Party, 2009) and only 2 studies, conducted at the same DHB, have examined PDRP participation. These studies revealed 19.7% of nurses had submitted portfolios for PDRP assessment initially, and 5 years later, over 50% of nurses had developed portfolios for PDRP assessment (Carryer, Budge, & Russell, 2002; Carryer, Russell, & Budge, 2007). This research identified resistance from some nurses to participate in the PDRP, especially from older, hospital-trained nurses.

In 2007, a new Model of Care proposal was unveiled at the study DHB aiming for 50% of nurses in general areas and 60% of nurses in High Dependency areas to progress to Proficient or Expert on the PDRP (Chalmers, 2007). At this time, the number of Proficient or Expert nurses at this DHB, was estimated to be approximately 35%. Some clinical areas had no nurses above Competent, and a few areas celebrated a number of nurses at Proficient or Expert. It was not clear why the numbers participating in the PDRP, were generally quite low, except that anecdotally nurses were thought to find the process too complex. The participants in the two studies by Carryer et al. (2002; 2007) found the process was “excessively time consuming, unnecessarily ‘wordy’ and insufficiently directly linked to measuring clinical competence”
(Carryer et al., 2007, p. 10). These feelings may have been echoed at the study hospital and contributed to dwindling participation in the PDRP, but this was not known.

Despite New Zealand Government prioritisation of nursing workforce development, and recommendations to continue the momentum of the PDRP (MOH, 2002; DHBNZ Workforce Group, 2007; DHBNZ- Future Workforce, 2006), participation in the PDRP is limited. Other major issues highlighted in policy are the aging nursing workforce, an ethnic mix which is unrepresentative of the general population, and the changing health needs of New Zealanders (DHBNZ- Future Workforce, 2006). The paucity of research about nursing careers adds challenge to developing strategies for the future of nursing in NZ.

In summary, New Zealand hospitals have individual PDRPs, mostly based upon the “Novice to Expert” model (Benner, 1984). Almost all programmes are accredited by the NCNZ (2009) as recognition of competence for issue of annual practicing certificates under the HPCA ACT (2003). Nationally, approximately half of all nurses are on the PDRP, and low participation rates are thought to be due to complex processes and a lack of national equivalence (PDRP Evidential Requirements Working Party, 2009). Government policy promotes nursing career development yet there is very little research available. Guiding documents in New Zealand are: The Health Practitioners Competence Assurance Act (2003), The National Framework for Nursing PDRP and Designated Role Titles (National PDRP Working Party, 2005), and the Multiemployer Collective Agreement (DHBs/NZNO, 2007).

**The UK Experience**

In 2003 the Agenda for Change (AfC) was launched in the UK (DOH [UK], 2004). This plan for modernisation of the NHS was “the biggest overhaul of pay and terms and conditions across the NHS since its inception in 1948” (Gould, Berridge, & Kelly, 2007, p. 27). Instead of the old model of alphabetical grading, nurses now join all NHS employees (except doctors) on the Knowledge and Skills Framework (KSF). This process of annual development review against a job outline of core and specific dimensions, hoped to boost pay and improve career opportunities for nurses (Strachan-Bennett, 2006). This skills-based model, which applies to almost all UK health workers, closely resembles the Career Framework for the Health Workforce in New Zealand, published by the Ministry of Health and DHBNZ in 2007.

A deadline, of October 2006, saw a poor uptake of the KSF due to delays in developing job outlines, and completing developmental reviews (O'Dowd, 2007b). According to an English poll of NHS organisations, only 73% of nurses had a job outline and only 20% had received a developmental review at this time (O'Dowd, 2007a). Early in 2007, O'Dowd
(2007a) suggested that even fewer nurses in Scotland, Northern Ireland and Wales had received job outlines or developmental reviews. This slow progress was attributed to the time required to complete an inaugural developmental review, along with demands of restructuring and other organisational change (O'Dowd, 2007a). The KSF was re-launched late in 2007 in an effort to regain momentum for the stalling process (“Relaunch of NHS KSF”, 2007). Some apprehension was expressed by nurses, who felt they were working to maximum capacity and the demands of the KSF were too time-consuming (Bates, 2006; O'Dowd, 2007a). At the same time these sentiments were shared by nurses in the PDRP study (Carryer et al., 2007), on the other side of the globe.

Currently, progress with the KSF is reported to be fairly inconsistent. Some NHS Trusts are resisting implementation saying the process is bureaucratic and overly time consuming, while others welcome the process (Jebb, Scullion, Jeffs, & Tanton, 2009; Leatherbarrow, 2008; Snow, 2009). A recent Nursing Times report suggested that most NHS staff in Scotland have received annual KSF appraisals, two thirds of English nurses have had developmental reviews, while in Wales, 12% of nurses have received developmental review (Staines, 2009).

Serial education articles and news reports have featured in the Nursing Times and Nursing Standard in an effort to enhance KSF participation and report on implementation strategies (e.g. Benton, 2005; Crisp, 2005; Harding & Salmon, 2006). In a small study at one British University, McLean, Monger and Lally (2005) applied postgraduate intensive care course competencies (Scholes & Endacott, 2003) to the KSF, and found competencies and progress difficult to measure, a limitation also recognised by Gould, Berridge et al., (2007).

Neville (2006) also described mapping academic programmes to the KSF and found several benefits including improved planning for individual and NHS Trust goals, and increased staff satisfaction because programmes seemed more relevant to individual student and NHS Trust needs. Both McLean et al. (2005) and Neville (2006) felt the KSF could aid education providers to measure learning, while participants, in these reports, found the framework easy to use. Interestingly, the clinical example given by McLean et al. (2005), for assessing a ventilated patient, describes 4 levels of competency with specific prescribed examples of practice, almost paralleling a Benner’s (1984) “Novice to Expert” model, except that numeric titles are used. Also, documentation required in a KSF file (Douglass & Ruddle, 2009), appears very similar to a Professional Portfolio for the PDRP.

An attempt was made to evaluate the implementation of the AfC for the Kings Fund (a health care research organisation), in 2007 (Buchan & Evans). This report found: “There has
been little systematic SHA [Strategic Health Authority] or national-level monitoring or evaluation of the effects, so far, of what is the most expensive overhaul of the NHS pay system” (Buchan & Evans, 2007, p. 20). Instead, it seems, the UK Government has been monitoring participation in the AfC as opposed to measuring gains, and, according to this report, even nurse sensitive measures, such as recruitment and retention or sick leave rates, are not clearly attributable to the AfC implementation. A small evaluative study of an effective implementation of the KSF reported a need to streamline the process, allocate ‘protected time’ and to utilise a directive model of leadership to, in effect, force participation (Douglass & Ruddle, 2009). Of note, is that the clinical setting was a learning disability rehabilitation unit with 100 staff, and the study may not compare well to acute hospital settings with less predictable demands of care.

One criticism of the KSF is that it is not designed to meet the Nursing and Midwifery Council’s (NMC) requirements for regular revalidation of qualifications (Parish, 2007). The KSF is a career development tool not used outside the NHS or public sector of health care. According to Parish (2007), this leaves many nurses from the independent sector of healthcare, without a process to support the competencies required for 3-yearly renewal of registration with the NMC.

It is very early days for the UK when considering the restructuring of all NHS careers under the AfC. Six years on from the initial launch of the AfC, claims of vast possible improvements in the NHS are occurring, balanced against issues of low uptake and barriers to KSF participation (Oultram, 2009; Snow, 2009). Future evaluations will be essential in order to gain a complete picture of the UK experience of nursing career development.

The United States Experience

The US are undoubtedly the pioneers of nursing career development. Historically, Creighton is reported as writing about clinical promotion for nurses as early as 1964 (cited in Murray, 1993; Schmidt, Nelson, & Godfrey, 2003). Zimmer (1972) however, is generally recognised as the first to write about clinical ladders for nurses, after two national commissions had recommended a “system of clinical advancement” (Buchan, 1999; Krugman, Smith, & Goode, 2000). Zimmer proposed a 3-level numerical framework of Beginner, Intermediate, and Advanced practice, in an effort to describe developing “expertness” (1972, p. 23). Clinical ladders then developed in the US through the 80s until Benner almost became ‘the messiah’ of nursing career development (Murray, 1993; Shapiro, 1998).
Benner described different levels of nursing practice using the Dreyfus Model of Skills Acquisition, developed from a study of pilots and chess players (cited in Benner, 1982). These, now famous, levels of skill development were: Novice, Advanced Beginner, Competent, Proficient, and Expert (Benner). Exemplars demonstrating the different levels of nursing skill enriched and explained this early paper, and the book *From Novice to Expert: Excellence and Power in Clinical Nursing Practice*, followed 2 years later (Benner, 1984). Benner felt that it was no longer possible for nurses to be interchangeable between clinical settings because of increasing patient acuity, technological advances, and specialisation and therefore incentives were needed to keep nurses in the clinical setting (Benner, 1982). In the early article Benner writes: “Recognition, reward, and retention of the experienced nurse in positions of direct clinical practice-along with the documentation [sic] and adequate description of their practice-are the first steps in improving the quality of patient care” (1982, p. 407). Contrary to some authors’ beliefs (Schmidt et al., 2003), Benner stressed the importance of career ladders to recognise clinical expertise, very early on.

Throughout the 90’s clinical ladders continued to proliferate in the US, often using Benner’s (1984) “Novice to Expert” framework (e.g. Krugman et al., 2000; Pettno, 1998). In a review of the literature, Shapiro (1998) went so far as to hail the Benner model as flexible and enduring, and suggested this was the best clinical ladder to improve productivity and retention of nurses. No other models of career development were contrasted in this review, possibly because only “Novice to Expert” models existed, at this time. Creative acronyms for these clinical ladders strongly suggested career progression: e.g. SOARn (Supplying Opportunities for Advancement of the RN); RISE (RNs in Search of Excellence) programme; CARE (Career Advancement for RN Excellence); and ADVANCE (Achievements Demonstrating Versatile Accomplishments in Nursing Clinical Excellence), (Drenkard & Swartwout, 2005; Forrest & King-Jones, 2008; Fusilero et al., 2008; Knowles, 2008). Most of these programmes are based on presentation of a professional portfolio to a committee or peers, aiming to showcase nursing excellence, leadership and innovation.

Only one hospital appears to have moved away from Benner around the year 2000, after difficulties with objective measurement of the Expert level of performance and because it was felt that Novice and Advanced Beginner titles could deter clinical ladder participants (Schmidt et al., 2003). This unique clinical ladder model is based on Carper’s (1978) “Patterns of Knowing” and uses the four domains of empirical knowledge, personal knowledge, aesthetic knowledge and ethical knowledge, to specify the evidence nurses must provide to advance on a
4-level programme. Schmidt et al. (2003), report strong interest in this model but formal evaluation of this unique model was not found at the time of writing this thesis.

More recently, a few hospitals have developed a point’s-based model of nursing career advancement in an attempt to streamline processes (e.g. Brenner, Dambaugh, Hill, Roberts, & Vollers, 2008; Nelson & Cook, 2008). Points are gained for formal educational qualifications, professional development hours, evidence of leadership, teaching, and quality projects. The “Novice to Expert” (Benner, 1984), continuum or a numerical ladder model is ascended, according to the points achieved. These points-based structures recognise formal education and align with organisational goals, as a clear and easily quantifiable measurement tool. These new tools appear to be enhancing participation, but formal evaluation is yet to be undertaken.

The development of clinical ladders in the US mirrors the New Zealand experience, where hospitals and regions have developed individual processes. In the early 90s one survey of 543 US hospitals found that 44% had career ladders in place, and a further 44% planned to have a ladder in place, within the year (Murray, 1993). Surprisingly, after such a long history with clinical ladders, a review of the literature reveals very little recent evaluative research from the US. Over time, some hospitals have evaluated and updated clinical ladders to streamline processes (Drenkard & Swartwout, 2005; Goodrich & Ward, 2004; Schoessler et al., 2005). Others have created whole new frameworks with different theoretical or organisational structures (Erickson, Daniels, Smith, & Vega-Barachowitz, 2008; Schmidt et al., 2003). The universal goal has been to increase participation in clinical career development programmes, often in changing health care structures.

The actual numbers of nurses climbing clinical ladders in the US is not clear. Schoessler et al. reported a “modestly successful” ladder where 100 (12.5%) of the 800 eligible nurses participated in the programme (2005, p. 196), while Drenkard and Swartwout (2005) reported similar statistics. Krugman et al. (2000) found that approximately 15% of nurses at a University Hospital chose to progress beyond Competent although actual numbers are not given. Schmidt et al. (2003) trialled a new model as their previous one had “ceased to be functional” due to organisational change and it is reasonable to assume that participation was very low.

Another paper revealed that even when significant evaluation and modification to a clinical ladder was instituted, nursing progression beyond Competent only increased from 9% in 16% (Ward & Goodrich, 2007). A programme which appeared to have particularly high levels of participation, where half of the staff were RN3 or 4 Level, reported that nurses are appointed according to experience and leadership skills (Mathias, 2008). This article describes how an
Operating Theatre does not need to employ Head Nurses or Educators because these responsibilities are covered by the advanced nurses thus rendering the programme economical. This particular model seemed to be more of an employment model, than one of career progression, and reported the main benefits of progression were to provide “recognition and a break from everyday scrubbing and circulating” (Mathias, 2008, p. 13).

Empirical evidence is lacking in relation to nursing career progression in the US. The research suggests that a maximum of 16% of nurses have progressed to Proficient or Expert on clinical ladders requiring voluntary progression. This indicates that more than 80% of US nurses are at a Novice or Competent level. It is not known whether this data is a true reflection of skill levels or merely the numbers of nurses progressing on clinical ladder programmes. Unfortunately, most of the US literature is surprisingly limited in reporting on clinical ladder progression rates, and it is difficult to see a true picture.

**Other International models**

Taiwan, Norway, The Republic of Ireland and Australia have all published papers on clinical ladders and professional development programmes (e.g. Bjork, Hansen, Samdal, Torstad & Hamilton, 2007; Hsu, Chen, Lee, Chen & Lai, 2005; Koch, 1990; MacLellan, 2007; Torstad & Bjork, 2007). Collectively, these papers cite improved quality of care as one of the main purposes of clinical ladders. The Norwegian structure was instituted by the Norwegian Nurses Association and allows health care providers to develop individual strategies to meet national criteria for nurses to be accredited as a Clinical Specialist in Nursing (Bjork, Samdal, Hansen, Torstad, & Hamilton, 2007). Advancement criteria include education and experience based measures, with no cited links to developmental theory.

One small study from Taiwan is unclear about the clinical ladder model used, except that there are 4 levels of classification and there are relatively few level 4 nurses in comparison to lower levels (Hsu et al., 2005). The Irish model is a new structural framework including new job titles for advanced practice positions, and does not seem to relate to career development at the level of Staff Nurse (MacLellan, 2007).

Despite being dated, an Australian research paper is sufficiently large to warrant mention. The study involved a third of the nurses in South Australia (n=5000) demanding a new career structure (Koch, 1990). During the trial of a new career framework, the writings of Benner (1984) were found and the trial structure was merged with Benner’s (1984) framework. Unfortunately, evaluative research has not been uncovered to describe Australian career models following the changes instituted at the time of Koch’s (1990) study.
It is clear that globally, career paths for nurses are varied. There is also an expectation, in many parts of the first world, that nurses have a clinical model of career progression, either a clinical ladder in the US, a PDRP in New Zealand, or the KSF in the UK. Most models in the US and New Zealand are based on a Benner (1984) “Novice to Expert” model, while the UK and Norway have aimed for a more ‘skills-based’ or organisational model. Universally, there have been many reasons for instituting career paths, however the usual goals have been recognition of nursing expertise, improved quality of care, and enhancement of the retention of skilled nurses.

**Attitudes to career development**

The variability of international models of career development renders comparison between models, a challenge. Some common threads can, however, be drawn from the research that has examined nursing attitudes to career progression pathways. Gould, Berridge, et al. report that the “AfC has been positively received by nurses in the early implementation sites and by the profession as a whole…” (2007, p. 28). Although there are a few positive articles about the KSF supporting these findings (Neville, 2006; O'Dowd, 2007a), there is a distinct undercurrent of resistance to this model of career progression from both nurses and organisations (e.g. O'Dowd, 2007b; Snow, 2009; Strachan-Bennett, 2006). Bates suggests, in a magazine article, that nurses are already giving 100% and the KSF portfolio development “homework” is onerous while regular appraisals are impossible with the clinical load (2006, p31). The delays in launching the KSF in the UK, and low participation rates in some areas, suggests that there is resistance, or difficulty instituting the model, or both. No UK studies were found to have measured nurses understanding of, or attitudes towards the KSF.

In New Zealand, letters to nursing Editors reveal a picture of positive attitudes towards the PDRP (Johnson, 2008; O'Brien, 2003). The research, however, has not been quite as rosy. Carryer et al. (2002; 2007) found nurses in two surveys, at a large DHB (n=239 & n=427), resented the need to spend personal time on developing a professional portfolio, and questioned the relevance to clinical competence. “Such views [of resentment] were strongly voiced in 2001 and have not diminished in 2006” (2007, p. 11). Despite these comments, 77% of the nurses who had developed portfolios in the 2002 study, thought the process was personally worthwhile, and by the second survey, the numbers progressing on the PDRP had gone from
19.7% to 53.4% (Carryer et al., 2002; 2007). During the intervening 5 years between these two studies, the MECA awarded study days for nurses to develop a professional portfolio: 1 day for Proficient, and 2 days for Expert nurses (DHBs/NZNO, 2007). Carryer et al. (2007) reported that the mindset changed at the study DHB, and became one of expectation that nurses participate in the PDRP.

In the US, Goodrich and Ward have evaluated a clinical advancement programme twice to establish why there was inactivity in the process initially, and whether changes to the programme might increase participation (2004; Ward & Goodrich, 2007). At the time of the original study in 2000, of 1000 nurses, only 8% of 1000 nurses were practicing at Level III and 1% at Level IV on a decade-old four-level Benner-based clinical ladder (Goodrich & Ward, 2004). Unfortunately, the response rate for the surveys was low (28% in 2000 and 18.3% in 2004) with the latter also experiencing high levels of incomplete data (Goodrich & Ward, 2004; Ward & Goodrich, 2007). Although there were limitations in data collection, both of these studies found nurses thought advancement was overly time-consuming, and that a change in practice was not necessarily visible in those who had advanced. Like the New Zealand studies (Carryer et al., 2002; 2007), most respondents thought the process was still worthwhile, because it “provided them with a sense of accomplishment and professional satisfaction about their work and their career choice…” (Ward & Goodrich, 2007, p. 171).

Knowledge levels about the clinical advancement process were found to be deficient amongst nurses in several studies (Carryer et al., 2007; Fusilero et al., 2008; Ward & Goodrich, 2007). These authors all noted the need for good quality education in order for nurses to participate in PDRPs or clinical ladders. Carryer et al. pointed out the challenge of “how to impart information to an essentially resistant audience” (2002, p. 28) and suggested engaging nurses who have completed a portfolio, as support for groups working on progression. This suggestion was supported by Ward and Goodrich (2007) who found nurses thought the best information was gleaned from nurses who had progressed, as opposed to a comprehensive manual on each unit and on the intranet. A “clinical ladder club”, trialled in the US, also found shared experiences helped participants identify material for exemplars (Winslow & Blankenship, 2007, p181).

This thesis examines the knowledge levels of nurses at a New Zealand DHB because nurses need to understand the process of the PDRP in order to participate. A clearer understanding of any knowledge deficits will enable appropriate education for evolution of the PDRP in order to enhance participation, in the future.
Barriers to education

The National Framework for Nursing PDRPs in New Zealand is based on a “Novice to Expert” Model (Benner, 1984; National PDRP Working Party, 2005). In this model there are four ascending parallel paths to PDRP progression (see Figure 1). Professional development activities (described as planned, focussed knowledge and skills activities), education options (primarily focussing on formal postgraduate qualifications), and NCNZ competencies, correspond to the Novice to Expert levels on the PDRP. This framework reveals that education is not necessarily career progression, and career progression is not education, yet the two are intrinsically entwined, almost co-dependently.

The NCNZ defined continuing professional education as: “Any learning activity which enhances the provision of nursing services through effective practice and performance, brought about by development of the Registered Nurse’s knowledge, attitudes, skills and judgement.” (2001, p. 28). Professional education, professional development, or continuing education, all fit into the broader description of nursing education. Education, both formal and as professional development, provides the foundation for the PDRP. Therefore, any barriers to education or professional development become barriers to career progression.

Family Life

Several themes emerge in the literature when examining barriers to education and professional development of nurses. Many of these themes relate to the lifestyles of nurses and the fact that juggling of home and work is continuous and challenging (e.g. Delaney & Piscopo, 2004; Gould, Drey, & Berridge, 2007; Hughes, 2005; Shermont, Krepcio, & Murphy, 2009). It could even be argued that family commitment or home-life is the prime impediment for nurses intent on career progression.

Over half of the participants interviewed in a large qualitative study (n=89), by Dowswell, Bradshaw and Hewison (2000), said family life had suffered as a result of courses of study. Lack of time for families was also frequently mentioned in focus groups in a small Taiwanese study of Public Health Nurses interviewed about continuing education needs (Chang, Tseng, Hsiao, & Wang, 2003). Juggling work, life and continuing professional development, was also an issue for participants in a survey of nurses at three British NHS trusts (Gould, Drey et al., 2007). Family commitments were the most frequent issue for nurses not participating in the ‘CARE’ clinical advancement programme in the US (Fusilero et al., 2008).
Brown (2008) describes the sacrifice of time with family while undertaking postgraduate study, stating she felt “cheated” of precious family time in her children’s formative years (Brown, 2008, p. 19). A typical comment in a qualitative study, by Hughes, summarises much of the research: “You get home, you’re so tired. I’ve got a little girl and I’d like to spend time with her. The last thing I want to do is read nursing journals when I get home...” (2005, p. 45). The authors of a recent US study had new-found awareness of these sorts of obligations which may affect nurses’ career aspirations (Shermont et al., 2009). Rather than assumed apathy for career advancement, this study identified that in most cases, numerous competing factors led to nursing career stagnation, including family issues.

Contrary to much of the literature, home-life did not feature largely in a study by Penz et al. (2007), who undertook a national survey of 2838 rural Registered Nurses in Canada. Of the two-thirds of respondents who perceived barriers to continuing education, in this study, only 9% of this group responded that family time or personal life was a barrier in an open-ended question. A further 5% wrote the word ‘time’ as a barrier but did not place the word in context, leaving researchers unable to be sure whether this comment related to family life or not.

An Australian study found even fewer nurses surveyed (2% of 391), cited family commitments as a barrier to completing a post-graduate diploma (Johnson & Copnell, 2002). The questionnaire in this study of 391 nurses, did not list ‘family commitments’ in a set list of answers and required respondents to add in this item. A small longitudinal study, also in Australia (Pelletier, Donaghue, and Duffield, 2005), suggested that nurses’ personal situation has become less of a barrier to career advancement since 1995, when the study began, and surmised that more flexible hours and improved childcare opportunities may be responsible. It may be that Australian nurses do not find family commitments a barrier to education or career development due to social structures or support systems available.

When considering barriers to nursing education or career progression, face-to-face data collection methods reported disruption to family-life as a greater issue than in written surveys. This may be due to the absence of family-life as a specified answer in written surveys or enhanced information gathering from open ended question techniques. These qualitative studies identified common themes and therefore the actual numbers of responses on each theme cannot be measured.

Time

Nurses often report that competing priorities for personal time are a barrier to accessing professional development and education (Brinkman & Wilson-Salt, 2008; Fusilero et al., 2008;
Penz et al., 2007; Shermont et al., 2009). Gould, Drey, et al. even reported “the area singled out for the most frequent and bitter criticism was the amount of their own time which individuals felt they were expected to contribute towards CPD...” (2007, p. 607). Some studies report that nurses do not want to pursue professional development in their own time (Carryer et al., 2002; Carryer et al., 2007; Delaney & Piscopo, 2004), and it is reassuring that the NZ MECA now allocates a small amount of time to PDRP development.

Munro has described a ‘charity paradigm’ where the professional development of nurses is encouraged by organisations, at significant personal cost to employees, while there is limited organisational support and subsequent value placed on the individual’s learning (2008, p. 958). This author suggests that employers should improve assistance for continuing education and link individual learning goals with those of the organisations, in order to increase the relevance of professional development.

**Money**

The costs in time are matched by financial costs. Funding issues are frequently cited as a barrier to nurses undertaking education (e.g. Johnson & Copnell, 2002; Spence, 2004; Vought-O'Sullivan, Meehan, Havice, & Pruitt, 2006). Nurses have identified institutional barriers, where managers or organisations are the ‘gatekeepers’ of educational opportunity (Aoki & Davies, 2002; Morris & Turnbull, 2007), or a lack of staffing precluding release time (e.g. Gould, Berridge et al., 2007; Penz et al., 2007; Rolls, 2005). Personal financial limitations and the high cost of continuing education is widely reported as an issue for nurses undertaking formal study (e.g. Chang et al., 2003; Delaney & Piscopo, 2004; Spence, 2004). One study found that the combination of salary loss and course fees were a barrier for almost 90% of study participants (n=391), rather than each factor in isolation (Johnson & Copnell, 2002).

Many nurses expect employers to ‘foot the cost’ of education or professional development. Over three-quarters of the 239 participants in the study by Carryer et al. (2002) felt there should be some paid time for professional portfolio development and 96% of nurses in a British exploratory study (n=89), thought the employer should pay some, if not all the costs of nursing courses (Dowswell et al., 2000). Perhaps surprisingly, the nurses in the latter study were participating in courses where over half (58%) were fully employer funded and a further quarter (24%) were partially employer funded.
Age

A number of studies reported advancing age as a deterrent to nursing education. This is because career development is reported as irrelevant to some nurses nearing the end of their careers (Aoki & Davies, 2002; Chang et al., 2003; Delaney & Piscopo, 2004). Certainly CARRYER et al. found studies on the PDRP “identified the greatest resistance as coming from older and hospital trained nurses who continue to express considerable resentment towards the process of competency review” (2007, p. 12, 13). The nurses in this study, felt experience guaranteed competence and portfolio development did not add credibility to practice. Advancing age as an educational or career deterrent is a significant issue in New Zealand due to an aging workforce and predictions of future nursing shortages (Buchan & North, 2008; Chalmers, 2007).

Perhaps surprisingly, Brinkman and Wilson-Salt (2008) did not find advancing age as a barrier to professional development in a recent survey of 720 New Zealand nurses. Despite the average age of respondents being 46 (and older than the general nursing workforce), age was not seen as an issue, while time, money and clinical demands were.

Rosters and Staffing

Direct patient care takes priority over nursing development or education. Staffing, rosters or clinical demands, appear repeatedly throughout the literature as barriers to education (e.g. Chang et al., 2003; Gould, Drey et al., 2007; Penz et al., 2007). Some nurses see their role as indispensable in the day-to-day clinical setting and this limits access to educational opportunities (Gould, Drey et al., 2007). Other nurses are unable to utilise time given for professional development due to the priority of clinical demands (CARRYER et al., 2007) or hours of work (Brinkman & Wilson- Salt, 2008). Although somewhat dated now, a large British study by Barriball and While (1996), found that nurses working part-time, or permanent night or evening shifts, received less education than those on day shifts. This inequity of education has been supported by several studies since (Aoki & Davies, 2002; Lane, 1999; Nolan, Owen, Curran, & Venables, 2000). In essence, these studies show that nurses, who have progressed on a career ladder, are able to access more education than those who are junior, older, part-time or night shift workers. In the literature, it is very clear that nursing care takes precedence over nurses’ care.

Barriers to education and development for nurses are varied and this review summarises only the main points. Many other issues have been reported, depending on where nurses work,
both nationally and clinically, and the type of career structure nurses work within. It can be seen that education and professional development form the foundations of the PDRP yet the literature suggests that barriers to education can impact on nurses’ participation in career development. This thesis may identify whether barriers to education become barriers to career progression on the PDRP.

**Recruitment and Retention**

Career development programmes for nurses arose out of a need to reward clinically skilled nurses and keep them ‘at the bedside’. Historically, management have hailed these programmes as a tool for nursing recruitment and retention (Buchan, 1999). Now that clinical ladders have been in place in the US for decades, and PDRPs (previously CCPs) in New Zealand since the late 80’s, it should be possible to find out whether career development programmes, really do enhance nursing recruitment and retention.

There is surprisingly little evidence available to quantify recruitment and retention gains from nursing career progression programmes. New Zealand DHBs found improvements in recruitment and retention of nurses following the MECA in 2004 (Buchan & North, 2008). The MECA awarded nurses time for PDRP portfolio development and also granted nurses a significant pay rise and other initiatives. Therefore it is not known whether the improved conditions, such as support for the PDRP, or simply the wage gains, led to a reduction in staff shortages.

Interestingly, North et al. (2007) do not mention the PDRP in a report on recruitment and retention on the Council of Nurses Aotearoa website. For this report, which was part of an international study, Directors of Nursing (or their equivalent) were asked for information on staff turnover, policy, recruitment, and retention initiatives. Turnover was viewed as an almost universal issue, of greater significance in the larger cities. Senior Nurses described recruitment initiatives such as new graduate programmes, overseas recruitment and postgraduate educational support, yet there is no reference to PDRPs. Of the three DHBs (of 21) who reported on nurses’ reasons for leaving, better career prospects were seen as one of the main attractions of a new job. The absence of any mention of the PDRP implies that Directors of Nursing may not view the PDRP as a recruitment and retention initiative, nor as a tool to enhance the careers of nurses.
In the US, real evidence of the impact of clinical ladders on nursing recruitment and retention is equally scarce. Whilst Ward and Goodrich (2007) found that a clinical advancement programme was reported to be worthwhile, the programme was not seen as an important factor in nurses remaining employed at the hospital. A third of the 176 respondents in this study reported that they would not seek a job in a hospital without a clinical advancement programme. This finding suggests that clinical ladders could be important for recruitment but not retention of nurses.

In terms of recruitment and retention, Drenkard and Swartwout (2005), and later Mathias (2008) both reported merit in clinical ladders in a group of Virginian hospitals. The same statistics are reported in both papers, where turnover was 5.2% for nurses on the clinical ladder compared with 14.1% for the overall population of approximately 2500 nurses, spread over 5 hospitals and supporting facilities. Mathias reports that a Service Director suggested that a clinical ladder not only aids recruitment and retention, but is also a “cost-effective” management tool because advanced nurses are able to cover senior responsibilities, negating the need to hire leadership roles such as clinical specialists, supervisors and educators (2008, p.13).

The rise of the American Nurses Association Credentialing Centre Magnet Recognition Programme, has added weight to the belief that nursing career development aids recruitment and retention. The 14 ‘Forces of Magnetism’ quantify the characteristics of organisations best able to recruit and retain nurses and deliver excellence in nursing practice (American Nurses Credentialing Centre, 2010). Some aspects of these Magnet foundations relate to professional development and educational opportunities and the provision of sufficient resources for nurses to utilise these opportunities. Many other ‘Forces of Magnetism’ exist within Magnet organisations such as structural, human resource and systems elements therefore, it is hard to say professional development is the key to recruitment and retention within Magnet Hospitals. Undoubtedly, professional development and nursing education form part of the picture, but again, these aspects are only a small part of ‘magnetic attraction’ (ANCC, 2010).

The Magnet movement may have played a part in a study by, Brenner et al. (2008). The clinical ladder in an American teaching hospital was thought to have enhanced retention because vacancies dropped from 22% in 2002, to 1.6% in 2006, after modification of the system. This hospital was, however, concurrently applying for Magnet status and the clinical ladder modifications were arguably part of the Magnet ethos and wider organisational development thus contributing to staff retention.
In a large international literature review examining nursing turnover (Hayes et al., 2006), there was support for the proposal that career development opportunities contribute to job satisfaction and therefore recruitment and retention of nurses. An earlier survey by Shields and Ward (2001), of 9621 nurses in the UK, also found that lack of career advancement opportunity was the most significant measure of career dissatisfaction in nurses, and may even supersede wage improvements for power to retain nurses. Mathias (2008), however, suggested it is the additional remuneration associated with the clinical ladder, which actually retains the nurses. Certainly, in New Zealand, it is likely that the recent ‘pay jolt’ in the MECA has contributed to increased recruitment and retention of nurses, more so than the PDRP or conditions (Buchan & North, 2008).

Further research is needed to ascertain whether nurses value professional development in New Zealand, as this may also be a major contributing factor in the current issues of recruitment and retention. A study to examine nursing attitudes towards the PDRP could have implications for the current nursing shortage and future human resource planning.

**Quality of Care**

The prevailing assumption, throughout the literature, is that career progression for nurses equates to enhanced quality of care for patients (e.g, Leatherbarrow, 2008). Although this is quite sensible, there is very little hard evidence that this is true. Some measurable quality aspects such as needle stick injuries, morbidity, mortality, and staff turnover have been examined in relation to the ANA’s Magnet Recognition Programme. Smith (2007) found these specific measures were reduced in Magnet Hospitals when compared with Non-Magnet hospitals. Career development is, however, only one aspect of Magnet status and this means these measures of quality may not relate directly to nursing development.

The NHS in the UK has recently produced a series of “a new generation” of Quality Indicators based on clinical measures, treatment standards, and patient experience surveys (The Information Centre for Health and Social Care- NHS, 2008). Workers are encouraged to participate and offer suggestions on-line after original consultation to develop the indicators. Professor Lord Darzi, the Health Minister, has said: “[quality measures] will help improve the entire patient experience by delivering safer and more effective care” (DOH [UK], 2008). Whilst the indicators are clear measures of patient outcomes, only one of the over 200
indicators, measures the professional development or education of health workers (The Information Centre for Health and Social Care- NHS, 2008; CV16: Development of continuing education programmes on stroke units for qualified and unqualified staff).

Several other authors have attempted to measure the quality of nursing care. There is, however, a distinct absence of quantitative research available and one review found there was no universal means of measuring the quality of nurses’ clinical performance (Robb, Fleming, & Dietert, 2002). Quality has, however, been linked to staffing levels or organisational structures, and educational opportunities, in the few studies available.

The impact of staffing levels on the quality of care was examined in a large multi-centre international study where nurses reported that poor staffing led to poor quality care (Aitken, Clarke, & Sloane, 2002). Skill mix, nursing experience or education levels did not appear to be a consideration of this study of Registered Nurses (or the equivalent role). Skill mix is an important feature of hospital care in New Zealand, where Registered Nurses are not considered equal when rostering nursing cover. PDRP levels and experience are normally carefully managed in order to maintain safe patient care.

Others have examined nursing development or education as an influence on quality nursing care. In several studies, nurses report that better education enhances clinical care (Cheeseman, 2009; Joyce & Cowman, 2007; Torstad & Bjork, 2007). Torstad and Bjork (2007) found that nurses who had completed a 5-year programme in Norway to become Clinical Specialists, were more confident and enthusiastic. In this study, the patients commented on the advanced competence of these nurses, which is arguably the real measure of quality. Most nurses in a small US study also supported the need for continuing education in order to maintain quality of care (Cheeseman, 2009), and almost all nurses in an Irish study concurred (Joyce & Cowman, 2007). The limitations of these studies are summed up by Joyce and Cowman, who wrote: “The ultimate outcome of CPD [Continuing Professional Development] must be improved health care. Unfortunately, the link between better education for practitioners and better health for all is not straight forward” (2007, p. 632).

In summary, there is insufficient empirical evidence to support that the quality of care is either enhanced or diminished by nursing career development. Subjective and qualitative evidence suggests that nursing career development improves the quality of patient care, yet the measurement is challenging. Since the PDRP is a measure of competence (National PDRP Working Party, 2005) rather than a measure of quality of nursing care, this thesis is limited to examining nurses’ attitudes towards career development and does not measure quality of care.
This study may, however, shed some light on whether nurses think that the PDRP impacts on the delivery of quality care, as seen in several studies overseas.

**Lifelong Learning**

The concept of ‘lifelong learning’ arises frequently in the nursing literature. Lifelong learning has also become a widely used example of educational jargon written into government documents around the world (Australian Govt., 2003; Scottish Govt., 2003). Definitions of lifelong learning are inconsistent and complex, and in some cases refer to any study after conventional schooling, including life experience and training in the workplace. In the nursing literature however, lifelong learning appears to relate more to a commitment to continuous education, training and clinical enquiry, throughout a nurse’s career (NMC [UK], 2002).

The complexity of lifelong learning becomes apparent when examining the literature. Some authors describe ongoing opportunities and expectations, from training and development, almost as if imposed upon workers (Joyce & Cowman, 2007; Neville, 2006). Others describe the development of an eagerness to learn continuously and stress the need for personal accountability (Teunissen & Dornan, 2008). Others examine Continuing Professional Development and equate this to the concept of lifelong learning (Gould, Drey et al., 2007). In New Zealand, the national PDRP framework document does not promote lifelong learning specifically, but many of the principles relate to support of ongoing professional development and the maintenance of documentation as evidence of continued competence (National PDRP Working Party, 2005). The NCNZ Competencies for registered nurses, while not mentioning lifelong learning, expect nurses to maintain their own professional development including currency of practice and the application of “relevant research” to policies and guidelines (2007, p. 19). These competencies could be included under the broad umbrella of lifelong learning.

After finding the concept of lifelong learning was frequently used in nursing literature, Gopee (2005) questioned whether nurses even understood the concept and set about attempting to define the topic. Using a qualitative methodology consisting of interviews and focus groups with nurses, Gopee constructed a conceptual framework where the interaction between “organisational factors, socio-political factors and individual factors” are described as jointly contributing to “the lifelong learning nurse” (Gopee, 2005, p. 763). Gopee identified key
components of each facet of the model, such as time and release from duty, as organisational factors or the characteristics of nurses as lifelong learners as individual factors.

The ‘organisational factors’ which may contribute to learning were examined by Joyce and Cowman (2007), who explored the reasons why nurses participate in post-registration education. This survey of 243 nurses, undertaking specific courses, revealed that most nurses (over 98%) took part because of the perceived promotion or clinical advancement opportunities. Over 85% of participants also cited a desire to boost self-confidence and gain intellectual stimulation, which could be interpreted as ‘individual factors’ contributing to a desire for lifelong learning, although an undercurrent of imposed learning permeates Joyce and Cowman’s (2007) study.

‘Individual factors’ are seen as fundamental to Teunissen and Dornan (2008) in their prescriptive practice-based article directed at junior medical staff. These authors describe lifelong learning as a process of continual self scrutiny and goal setting, recommending a learning portfolio as tool to record development. Organisational support barely features in this paper where lifelong learning is described as “striking the right balance between confidence and doubt” (Teunissen & Dornan, 2008, p. 669). Practitioners are encouraged to seek evidence upon which to base practice and are advised to obtain quality feedback measured against specific goals. To Teunissen and Dornan the lifelong learner is clearly self-directed and individually accountable for seeking learning opportunities (2008).

A review of the paucity of relevant literature does not completely clarify the concept of lifelong learning. This is a slippery concept of varying definitions with diverse features and implications. The barriers to education and professional development previously identified in this review of the literature fit with Gopee’s (2005) model of multi-factorial influences on lifelong learning. The organisational and socio-political factors, as part of this three-pronged model, are seen in the PDRP framework (National PDRP Working Party, 2005). The third, ‘individual factor’ is encompassed by the NCNZ competencies where nurses are expected to “take responsibility for one’s own professional development...” (2007, p. 14).

Sometimes lifelong learning is seen as purely an organisational responsibility, and other times it is placed back in the hands of the nurse- sometimes imposed and sometimes welcomed. Some nurses thrive on accountability for their own continuous learning, while others would rather concentrate on their lives whilst receiving teaching. It is almost a simple dichotomy where some nurses expect to be taught and others want to learn.
Summary

So why is this research important? The review of the literature is long and complex and revealed many more questions than answers. The gaps in nursing knowledge about career development appeared to be more like chasms. The implications for recruitment and retention, quality care, and nursing in the future however, rendered this small research project an ideal starting point.

The history of the PDRP is important because the framework was originally developed by nurses, for nurses. It is not known whether nurses know this fact, and indeed whether this would make a difference to participation rates. This long history of career development, both nationally and internationally, means that processes are now fragmented globally, and it is difficult to transfer qualifications and measures of experience between countries. The development of the national PDRP framework in New Zealand has resulted in the numerous different models sharing an essentially consistent structure, with primarily generic terminology and standards.

It is not clear how many nurses choose to progress on the PDRP either locally or nationally. Approximately half of all nurses are engaged in the PDRP in NZ (PDRP Evidential Requirements Working Party, 2009), however, there is no data about the profile of PDRP levels. In early 2008 it was estimated that 35% of nurses at the study DHB had progressed to Proficient or Expert however there was no accurate measure. It was also not known which nurses chose to progress on the PDRP. The research suggested that nursing development is limited by multifaceted barriers however structural differences around the world, make it difficult to draw true comparisons to the New Zealand experience. Carryer et al. (2002; 2007), found that older nurses, who were not tertiary-trained, were the most resistant to participation in the PDRP. It is not known whether this is a national problem or indeed a wider issue because there is a paucity of meaningful systematic research on nursing career development anywhere in the world. No one really understands why some nurses participate in professional development, while others prefer not to, even in the light of legislation such as the HPCA Act (2003).

According to the literature, New Zealand could be ‘leading the way’ with higher levels of participation in the PDRP compared with career paths in other countries. Unfortunately, since the US is the only country to have produced several studies on clinical ladder uptake, and the New Zealand numbers are anecdotal, it is hard to formulate conclusions which can be generalised. There is even insufficient published evidence to compare DHBs within NZ.

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However, as a baseline study, it is possible to look at the current status of nursing careers at the study DHB to support evolution of the PDRP in the future.

The presence of a career structure is seen by some as a significant element of nursing recruitment and retention. The literature is divided about whether career development enhances recruitment and retention, or vice versa. The MECA (DHBs/NZNO, 2007) enhanced recruitment and retention in New Zealand (Buchan & North, 2008), but it is not possible to say whether nurse numbers were increased by the career and education opportunities or the general pay increase. This thesis explores nurses’ attitudes to the PDRP and may provide answers about how important a career structure really is.

The concept of lifelong learning was the final element in this literature review, and it was found that this commonly used term is challenging to define. Lifelong learning ties closely to accountability and enthusiasm for learning and links to all the aspects covered in this literature review. This study investigates nursing opinion on individual and employer accountability for professional development, a relevant topic considering the NCNZ expects nurses to be responsible for their own learning and to remain aware of current literature (NCNZ, 2007).

This study is significant to nursing because much of the data has never been collected at the study DHB before, and from an international perspective, there is very little nursing career data available anywhere. The PDRP has been evolving for years without wide formal review by the nurses who participate. In order for nurses to participate in the future, they need to feel involved, and the best way to help nurses to feel involved, is to ask for their ideas and opinions, and then listen.
CHAPTER 3. METHODS

Introduction

This chapter describes the research methods of this study covering the research design, data collection, ethical considerations, the pilot study, the sampling framework and data analysis. The research was conducted over two years, and required consultation with a number of different people, both within the study DHB, and in other DHBs. The purpose of the study was to find out what nurses knew about the PDRP, a programme of career progression for nurses. The study also examined nurses’ attitudes towards the PDRP, and how nurses’ suggestions could be used in the evolution of the programme at the study hospital. It was hoped to generate base-line data evaluating the PDRP process, and perhaps to find new ways to support nurses to participate in the PDRP in the future.

Research Design

Mixed-methodology

The research design chosen for this study was a cross-sectional survey using a self-administered questionnaire (SAQ). A SAQ is when the participant completes the instrument independently, and in this case a printed SAQ was used. The questionnaire was originally developed for two PDRP studies at another New Zealand DHB (Carryer, Budge, & Russell, 2002; 2007). This tool examined nurses’ knowledge and attitudes towards the PDRP using multiple-choice questions and Likert scales, and also asked for ideas or comments about the PDRP. The multiple-choice questions and the Likert scales formed the quantitative aspect of the study, while the section asking for ideas and comments, generated qualitative data.

This descriptive research design used simultaneous triangulation of the qualitative and quantitative data. A mixed-method approach, such as this, can enhance the validity of the study because participants have the opportunity to corroborate or refute the quantitative findings, within the qualitative data. The richness of qualitative data can add to the depth of the
study, supplementing the quantitative findings, and “avoiding the limitations of a single [research] approach” (Polit & Beck, 2004, p. 274). It was also hoped that any narratives in the qualitative data might add interest for readers.

**Cross-sectional design**

A cross-sectional survey methodology was chosen for this study for a number of reasons. A cross-sectional survey is a ‘snap-shot in time’, which provides baseline data for the ongoing evolution of the PDRP process and future planning. This ‘snap-shot’ could also provide data for further replication studies in the future, to assess the effectiveness of any future changes to the PDRP process. Other merits of this survey design are that a questionnaire is a practical and relatively economical undertaking. SAQs are arguably the best way to elicit information quickly from a large and diverse group (e.g. Polit & Beck, 2004). There is no possibility of interviewer bias, and language or written difficulties are reduced when using a SAQ on a population of literate, English-speaking adults, such as New Zealand nurses. There would be participants for whom English is not a first language however it is a requirement by the NCNZ that nurses have a good command of English in order to gain nursing registration. Therefore, it was expected that language would not be a barrier to answering the SAQ.

**Design limitations**

A written survey does however, have a number of limitations, especially if administered in the workplace. Firstly, questionnaire distribution is dependent on a population database, and in a large organisation, this database is constantly changing as employees come and go. There is an inherent risk that the database may be neither current nor accurate and intended recipients do not receive a questionnaire. The ease of returning the questionnaire via the organisational mail system, was balanced against the risk that participants would discuss the questionnaire in the workplace. Discussing the questionnaire with colleagues could have a direct impact on questions assessing a participant’s knowledge and attitudes towards the PDRP. This could lead to a response bias where participants change their answers to perhaps appear more knowledgeable or to answer how they believe they ought to, rather than how they feel. A questionnaire distributed in the workplace, and returned there, also assumes that participants will have time to complete the questionnaire while at work or be able to return to the workplace to post the questionnaire. This presumption may not be true for busy nurses who work varied or infrequent shifts, which is why more than a month was allowed for return of questionnaires.
The reminder letter was timed to encourage participants who may have put the questionnaire aside, thinking there was a long time before it was due to be returned.

Questionnaire return rates can be notoriously low and this risks sample bias (Polit & Beck, 2004). Response rates can be as low as 25-30% for mailed surveys (Burns & Grove, 2003) although Carryer at al. (2002; 2007) had response rates of 43% and 49% for two PDRP studies using the proposed questionnaire. Reminders can increase return rates, and therefore one reminder letter was planned. Incentives can also increase response rates, but funding limitations and the possibility that incentives can be seen as coercion meant this option was not exercised for this study.

The Population

Original information from the Payroll department suggested that there were approximately 2000 nurses at the DHB. Therefore, it was planned to randomly select 20% of nurses, at the study DHB, to receive questionnaires using a Minitab random number generation programme. This sample could be expected to yield 120-200 responses with an approximate margin of error, for a proportion, estimated to be approximately between 7% and 10%. This was judged to be a representative sample of nurses, due to the proposed random sampling frame, and was supported by the consulting statistician.

During the research process, the population of nurses at the DHB was actually found to be significantly smaller than original estimates, at 1374. The expected response from a 20% sample of this reduced population was between 82 and 137 questionnaires returned. The margins of error were similar to the originally predicted population and the sample was still acceptable statistically because of random sampling.

Random selection across the DHB ensured a wide variety of nurses were included in the population. Acute care, chronic care and mental health nurses were represented from a tertiary, a secondary and a psychiatric hospital, along with community and out-patient nurses within the DHB. The population consisted of all Staff Nurses and Enrolled Nurses employed at the study DHB. At the time of the study, it had been estimated that 35% of the DHB nurses had progressed to Proficient or Expert (or Enrolled Nurse Accomplished) Level on the PDRP. The random selection was expected to capture at least some nurses who had progressed, and more who had not, to receive a questionnaire.

Although the population was likely to be demographically similar to other groups of nurses in New Zealand, the PDRP process was unique to the DHB, as described in the Review of the Literature. This could limit the transferability of the study findings to other nurses in
New Zealand or globally. The use of a validated questionnaire and mixed-method research design aimed to generate descriptive data evaluating the PDRP and providing a robust base-line of evidence which would be primarily useful for the evolution of the PDRP at the study DHB.

**Data Collection**

**The Original Questionnaire**

The SAQ was originally designed in the year 2000. Focus groups were held, at another New Zealand DHB, with 12 nurses who had responded to a flyer requesting participation of nurses with strong negative or positive views about the then CCP. From these focus groups, the Clinical Career Pathway Evaluation Tool (CCPET) was developed and used for two studies (Carryer et al., 2002; 2007).

The CCPET questionnaire consisted of four sections. The first ‘Knowledge’ section used multiple-choice questions to examine what nurses knew about the then CCP development and process. The second ‘Attitudes’ section used Likert scales to find out what nurses thought about the CCP and there were sections for those who had, and had not, completed portfolios for progression. The third section was a space to write ideas and comments about the CCP. The fourth and final section collected demographics and used tick boxes where possible. This tool was modified slightly between the original study by Carryer et al. (2002) and the subsequent study (Carryer et al., 2007) to reflect changes in processes and terminology. The Cronbach’s alpha coefficient, a measure of reliability, was consistently over 0.7 for three subscales analysed in the ‘Attitudes’ section in 2002 and over 0.75 in the 2006 study.

**Choice of tool**

The CCPET was chosen as the survey tool for this thesis because of the previous validation with New Zealand nurses, and because the PDRP was similar between the study DHB and the originally studied DHB. A comparison of PDRPs would also be possible between the two DHBs. A written survey was chosen, as opposed to electronic, because not all nurses accessed the study hospital Intranet or had easy access to computer workstations in a situation of privacy. A written survey was also relatively easily copied and distributed using the DHB duplication and mailroom services.
The CCPET was examined carefully to ensure that nurses would understand the questions and scales, and that the tool would elicit the information desired. The CCPET designers were consulted to ensure any modifications remained true to the original questionnaire design and validity would be preserved. The CCPET designers gave permission to use the tool and offered helpful advice on the research process. The PDRP Clinical Nurse Specialist (CNS) at the study hospital was consulted to ensure correct terminology was used in the questionnaire. The questionnaire required small modifications, due to the history, process, and terminology at the study DHB. Understanding of the local history of the PDRP was enhanced by collaborating with past PDRP CNS’. A slightly modified questionnaire was developed from this collaboration, for use in this research study (see appendix).

**Modifications to the Study Questionnaire**

The cover page identified the questionnaire as a University study and gave the study title. The covering letter briefly described the research project and explained that participants had been randomly selected. The letter also acknowledged that the original questionnaire was developed by Carryer, Russell and Budge (2002; 2007). Confidentiality and anonymity was assured and the Lead Researcher (LR) was identified as a hospital employee.

In the knowledge section, there were 14 multiple-choice questions asking about the development and process of the PDRP. These questions assessed participants’ knowledge and understanding of how nurses participate in the PDRP, and who was accountable for different aspects of process. The first two knowledge questions asked about the historical origins of the PDRP and why it was developed. The aim of these questions was to ascertain whether nurses understood the PDRP was a nursing initiative, as opposed to a hospital management or NCNZ initiative. Since more than a decade had passed since CCPs were first developed in New Zealand, and the history was convoluted, the first question was rephrased to ask who originally developed the PDRP locally. Question 11 asked how often individual portfolios were required to be reassessed. In this question, ‘reassessed’ was changed to ‘updated’ to reflect the fact that portfolios are not reassessed at the study hospital, but it is desirable that portfolios are updated for annual performance reviews. Nursing titles in all questions were modified to comply with the study hospital nursing structure and PDRP levels were described as Graduate, Competent, Proficient or Expert, rather than the numeric levels in the original CCPET.

In the Attitudes section there were 23 Likert scales for all participants to answer about their feelings towards the PDRP process. A single Likert scale in the initial Attitudes section was removed as it asked about PDRP Workshops which were not offered at the study hospital,
leaving 22 scales for all participants. Following these 22 questions, participants either answered 6 scales if a portfolio had not been submitted for assessment to progress on the PDRP, or 9 scales if a portfolio had been submitted for progression. The study statistician was consulted about the questionnaire and the ‘Don’t know’ option was removed from the attitude Likert Scales in order to convert the scales to a numerical format for analysis. Each scale still had 5 options, from ‘Strongly agree’ to ‘Strongly disagree’ and included a mid-point ‘Neither agree nor disagree’ option. Removal of the ‘Don’t know’ option was not expected to affect the data because a ‘don’t know’ response for an attitudinal scale equates to not having an opinion, and it was expected the midpoint would be chosen. The terminology in some scales was modified for appropriateness to the PDRP process at the study DHB.

The Ideas and Comments section was a largely blank page where written remarks were invited about the PDRP process or the future of the PDRP. This section remained unchanged from the original CCPET, except for the name of the DHB.

The final section assessed the demographics of participants, including nursing and educational qualification, gender, age, and clinical workplace. This section was modified to provide participants with the choice of broad areas of practice to ensure anonymity of participants. No participant could be identified as working in a single clinical area, from the choices provided e.g. ICU or Emergency. An ethnicity question was added following Maori consultation using the recognised Statistics New Zealand 2001 census format as recommended by the Ministry of Health (MOH, 2009). A question was added asking about participant’s PDRP level to complete the demographic data, and to enable comparison with the hospital PDRP database. The PDRP CNS assisted with final proofing of the questionnaire, and a pilot study was planned, to check the appropriateness and comprehension of the modified CCPET for the study DHB.

In summary, the CCPET (Carryer et al., 2002; 2007) was slightly modified for use in this study. The modifications primarily related to terminology used for the nursing structure or the PDRP process. Likert scales had the ‘Don’t know’ option removed for improved numeric conversion when analysing the data. In the demographics section, the ‘area of practice’ choices were broadened to enhance anonymity. Questions were added about participant ethnicity and PDRP level.
Consultation with Maori

According to University, and the study DHB policies, Maori Consultation is an essential part of any research (Capital & Coast DHB, 2005; University of Otago, 2008). In order to meet the obligations of The Treaty of Waitangi several steps were undertaken. Te Whanau Support Service and Maori staff members were consulted about the proposed study and the implications for Maori. These representatives felt that the study was unlikely to have any implication for Maori from their individual perspective but they could not speak for all Maori. The Research Advisory Group Leader- Maori, at the study DHB, was also consulted along with the Research Manager-Maori for the University. Both Managers felt the research was important for the organisation and aside from ethnicity data collection, the ethical implications for Maori were not great. Support for the research was given, and a report on the conclusion was requested by the University Research Manager- Maori.

During the process of questionnaire development, it had become apparent that ethnicity of the hospital workforce was not well recorded. In fact the ethnicity was not known for over a quarter of DHB employees, both nationally and locally (DHBNZ HWIP, 2008). This data was desirable for workforce development strategies and Maori health initiatives (Ministry of Health, 2002). As a result, the Statistics NZ 2001 Census ethnicity question format was inserted into the questionnaire as recommended by the Ministry of Health (2009) for research within the health and disability sector. The Treaty of Waitangi principles of partnership, participation and protection, were used as an ethical framework for the research proposal.

Ethics

The Treaty principle of partnership was addressed through consultation with Maori, the University Board of Graduate Studies, Nurse Leaders and DHB Managers. The Research Policies for the University and DHB were adhered to, along with Heath and Disability Ethics Committee Research Guidelines. Ethical issues around participation were managed by a covering letter accompanying the questionnaire giving participants the choice to participate or not. This letter also assured participants of anonymity and confidentiality. Protection of participants was critical because the Lead Researcher was given access to the Human Resources database of names and places of work. Privacy of this information was paramount, not only for

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the survey recipients, but the whole study population of nurses at the DHB. Permission to access this database was granted by the Director of Nursing and the Strategic Nurse Leader of the Professional Development Unit. The Human Resources Data Administrator provided the nursing data on request. All Human Resource data was stored on a password protected computer and backed-up to discs, which were stored securely. Questionnaires will be stored securely for a period of ten years.

Anonymity was maintained by using unmarked surveys returned in plain addressed envelopes via the DHB internal mail system. Participants were promised that they would not be able to be identified on the questionnaire or from comments used in future reports or presentations. Ideally, a third party would have managed participant selection and distribution of questionnaires, however administrative funding was not available for this study.

The questionnaire covering letter identified the LR and their position within a clinical area of the DHB. Although the study aimed to be seen as independent of the organisation, the integrity offered by naming the Researcher, was thought to outweigh any links to the employer. The LR was not in a position of employing staff and only had contact with a small group of nurses at the DHB. Support of nurses PDRP progression, in one clinical area, was part of the LR role as a DHB employee.

The study reflected the Guidelines for Observational Studies, Observational Research, Audits and Related Activities because it was an anonymous survey, which did not collect sensitive data, or propose any intervention (National Ethics Advisory Committee, 2006). An application for Expedited Review was submitted to the Central Regional Ethics Committee, along with a copy of the proposed questionnaire and the reminder notice. The Ethics Committee deemed that the proposed study did not require formal Ethics Committee review. The University Board of Graduate Studies was notified in writing of this decision and did not seek further ethical approval.

The consultation and approval process, for this study, required negotiation with many different representatives within several large organisations. A number of organisational policies intersected and care was required communicating between different research groups, iwi, a University and a DHB. Upon this approval, a pilot study was planned to trial the modified CCPET.
The Pilot Study

The pilot questionnaire was sent to 16 senior nurses in the study organisation and another nearby DHB. A covering letter explained that this was a pilot study and responses would not be recorded. This covering letter also explained that formatting and comprehension were the purpose of the pilot study and any comments would be welcomed. Most senior nurses selected within the study hospital had been on the PDRP in the past and this enabled them to consider the survey from the perspective of a PDRP participant. The Nurses at the nearby DHB were on the PDRP of their own DHB, which had slightly different processes.

Eleven surveys were returned promptly. There were no obvious difficulties with the knowledge questions. One participant answered the questions but added further questions. Two participants began by circling the multi-choice answer but then placed the letter in the box provided, as instructed. Two surveys commented about the same Likert scale question being difficult to comprehend, and as a result, the terminology was changed to more accurately reflect the process at the DHB. Interestingly, despite the explanation that this was a pilot study to check formatting and comprehension, several participants still wrote long explanations about the PDRP in the Ideas and Comments section. One person provided a typed page of comments and suggestions about the PDRP, and two others filled the page with handwriting.

The qualifications questions in the Demographics section were not well suited to this group who had multiple advanced qualifications which did not fit into the space allocated. One person wanted further options for nursing qualifications e.g. Master’s level. It was decided to change this question to ask for nurses’ clinical qualifications to gather information about nurses’ original qualifications. It was expected that participants would add postgraduate qualifications in the ‘additional qualifications’ section. One participant changed the ethnicity answer from NZ European to “NZer” and one participant commented that it would be better to use the NCNZ ethnicity groups to add validity to the study, not recognising the question as the MOH recommended ethnicity question.

A few small formatting alterations were also made to the questionnaire prior to printing and distribution. The return date was set for 5 weeks after distribution via the internal mail system and a reminder letter was planned for 2 weeks after survey distribution.
Sampling

Selecting the participants was not straightforward. Payroll had originally estimated nursing numbers at approximately 2000 and a list of all nurses on the PDRP was requested from the Payroll department. This file had unrealistic totals and was neither current nor accurate. Nurse Leaders felt that the ANSOS One-Staff™ Human Resources database would be more up-to-date and more useful for sampling the nursing population at the DHB. Per-Se Technologies ANSOS One-Staff™ (Version 2.1.4.2), 2006, is a licensed computer programme used to manage staffing, rosters and education at several New Zealand DHBs. This programme was originally part of the nursing department, but had become a Human Resources tool more recently, and was managed by Human Resources at the study DHB. ANSOS One-Staff™ is used to write rosters, record actual hours of work, document personnel information including competencies, and manage education bookings. Eventually, ANSOS One-Staff™ records were expected to be linked to the payroll department.

Permission had been granted, by the Director of Nursing, to use this source for the purpose of the study. The LR accessed the ANSOS One-Staff™ data base regularly as a DHB employee. An ANSOS One-Staff™ list was requested from the Human Resources department to include all Staff Nurses and Enrolled Nurses currently employed at the study hospital. A Staff Nurse is a Registered Nurse who has normally completed a 3 year training and may have a Diploma of Nursing or a Bachelors Degree. An Enrolled Nurse is a nurse who has done a 1 year or 18 month programme, who works under the direction of a Registered Nurse.

A current numbered list was derived of nurse’s names, employee numbers, divisions, cost codes and PDRP status as at October, 2008. All senior nurses, health care assistants and midwives had been excluded because they were either; not on the PDRP, or had their own specific programme. Duplicates, where nurses worked in more than one clinical area, were removed in order to remove the risk of a nurse receiving the survey twice. Hospital employee numbers helped remove duplicates in the database where nurses featured under different names e.g. Sandra and Sandy. Nurses designated as ‘holding’ were also excluded. This group were nurses on parental leave, or on leave from the organisation temporarily whilst keeping a position open. The list of nurses, at this point, consisted of 1374 names.

Nurses were then excluded from the population if the physical place of work could not be identified from the cost-code supplied e.g. some regional community teams. This task was particularly challenging as each alphabetical code needed to be identified and located for a
mailing address prior to inclusion or exclusion. The final population list contained the names of 1128 nurses.

A simple random sample consisting of 20% of all identifiable DHB nurses were selected to receive questionnaires. The random number function of the Minitab Version 14 program was used to generate a list of numbers to sample 20% of the 1128 nurse population. Random numbers were correlated to the numbered staff list to identify the sample. From the 1128 nurses, 225 were selected to receive a questionnaire and the subsequent reminder. A wide variety of clinical areas were represented, from out-patient to acute areas of the secondary and tertiary hospitals of the DHB. Mental Health and small specialty areas were well represented.

It appeared, from the sample list, that a sampling bias had occurred because few Expert and Proficient nurses were selected. Expert and Proficient nurses made up only 20% of the sample, yet accounted for 22% of the total 1128 nurses of the population. Despite being small, this difference was significant because this group was already smaller than projected at the study outset. Expert and Proficient nurses were, however, clustered in acute clinical areas e.g. Intensive Care and Neonatal Intensive Care and because random selection had elicited a few nurses from most clinical areas this ‘spike’ of Expert and Proficient level nurses was missed. This apparent sampling distortion increased the significance of the questionnaire demographic question about participant PDRP level. Enrolled Nurses were generally on EN Competent Level on the PDRP, and could choose to present a portfolio for progression to Proficient or Accomplished level.

To summarise the sampling process used for this study, a simple random sample of 20% of the currently employed 1128 nurses at the DHB was undertaken. Exclusions were senior nurses, health care assistants, midwives and those who did not have an identifiable place of work. A false sampling bias occurred because Proficient and Expert nurses were clustered in some acute clinical areas and, as a result, were slightly under-represented in the random sample.

**Distribution and Return**

Envelopes were labelled manually and mailing addresses were located or checked on the DHB Intranet Contact List Directory to enhance the likelihood of individuals receiving the survey. A return address was stamped on all envelopes to aid tracking of non-delivered items. An addressed envelope was included for participants to use the internal mail system to return
completed surveys. The return address would still be valid if standard post was used. The internal mail system was used to distribute the questionnaires and the mailroom staff also agreed to return any undeliverable items. Permission had been granted to use this system for survey distribution and return. The internal mail system proved to be an efficient way of distributing the questionnaires to a varied population in all areas of the DHB. The mailroom was able to distribute the survey within one day without special notice. After 2 weeks, a brief letter was sent to the same randomly selected recipients to say thank you for returning the survey, also serving as a reminder to those who had not yet done so. Recipients were not sent a reminder if the original survey had been returned to sender.

Surveys were subsequently returned by participants, via the internal mail system, in the envelope provided. The surveys were placed in a mailbox in a secure office, prior to collection by the LR. Upon receipt, surveys were checked for completion and allocated a number for coding and audit. The return date and allocated number were recorded on an Excel spreadsheet. Recipients were given over five weeks to return the questionnaires to allow for nurses working infrequent shifts in different clinical areas, or to allow for nurses away on leave. Two participants contacted the LR with questions. One person had difficulty with Likert scale comprehension and the other had changed roles 18 months ago and was unsure about eligibility to participate.

Some participants returned the thank you/reminder letter saying they had completed the survey previously. One recipient returned the reminder with comment doubting the anonymity of the survey because, to them, the reminder suggested the LR knew they had not returned the survey. Seven surveys were returned unopened, one stating that the intended recipient was on two years leave, and another was overseas. The remaining five all said the recipient was no longer employed in the area and to be returned to the sender. One survey was returned uncompleted. Almost all of the returned questionnaires came back within six weeks of the distribution date. Three were very late, but a holiday period had ensued and the recipients may have been away over the time of distribution. Three reminder letters were also returned saying the intended recipient was not there, and it was likely that these people never received the questionnaire either.

After mailing out 225 surveys throughout the DHB, 103 questionnaires were returned. One survey was returned uncompleted, and seven were unable to be delivered to the intended recipient. This left 95 completed surveys for analysis and a 42% return rate was judged reasonable for a mailed survey and provided sufficient evidence for analysis to proceed.
Approximately half of the participants had written in the Ideas and Comments section, and almost all questionnaires were fully completed. One respondent did not complete the demographics section at all and occasionally respondents omitted a knowledge or demographic question or a Likert scale.

**Methods of data analysis**

Two approaches were required for the analysis of this mixed-method study. Standard statistical analysis was used for the quantitative data, while manual summary and content analysis was undertaken for the qualitative data. The questionnaire designers had suggested that similar themes would arise from the ‘comments and ideas’ section, as experienced with two previous studies (J. Carryer & A. Russell, personal communication, March 31, 2008). Content analysis is a method of quantifying written language and counting the frequency of words or themes defined by the researcher (Burns & Grove, 2009). Content analysis was chosen as the most appropriate level of analysis due to the anticipated similarity of themes likely to arise in the comments section, and because of the relative simplicity of this approach.

**Quantitative Analysis**

The study biostatistician was consulted prior to coding of the surveys, for advice on recording participant responses for analysis. Quantitative data was initially loaded on to an Excel spreadsheet using exact participant answers, where possible, to reduce the likelihood of a coding error. The ‘Attitudes’ section Likert scales were converted to numeric values (1-5), as were some demographic data, such as qualifications and PDRP level. Ethnicity and area of practice were recorded as either 1 (chosen) or 0 (not chosen) for all options, to allow analysis if multiple ethnicities or workplaces were selected. Where a participant had written a specific clinical area e.g. ophthalmology, this was changed to the most appropriate broad area of practice listed to enhance anonymity- in this case, ‘other’. A similar process was followed for participants from small ethnic groups, who could be identified as the only person at the DHB from this background. These ethnicities were recorded as ‘other’.

Age ranges were coded as an average age for the range. Several participants had marked several boxes to indicate the best representation of their clinical qualifications, despite being instructed to tick one box. Additional qualifications were then sometimes not completed. To
enable analysis, the lowest qualification was taken to best represent the participant’s clinical qualifications, and the highest was added to additional qualifications e.g. RCpN (Registered Comprehensive Nurse) was recorded as the clinical qualification, while the BN (Bachelor of Nursing) became additional qualifications when both were marked. This provided data on the range and frequency of participant qualifications.

A few participants completed both sets of Likert scales for those who have, and have not, completed PDRP portfolios. If it was unclear whether the participant had or had not completed a portfolio, then these scales were marked as missing data. For a very small number of knowledge multiple-choice questions, some participants chose several answers despite being instructed to choose the best answer. These were changed to the ‘don’t know’ option if available, or marked as missing data. Careful records of the coding criteria were maintained to ensure consistency, and a duplicate copy was stored securely at another location in case of data loss.

The Excel spread sheet was uploaded into SPSS Version 17 for the analysis. Some alphabetical variables were recoded to numeric values for the analysis e.g. M to 1 and F to 0 for gender. Any questions left blank, were recorded as a missing value or as ‘not applicable’ if appropriate. All variables were labelled and assigned values in the variable view of SPSS. Frequency data was then produced while regression analysis examined the association between knowledge scores and selected attitude summary scores (dependent variables) and nurse characteristics e.g. age, ethnicity, experience. If a respondent had not answered a Likert scale in the selected attitude summary groups, the respondent was omitted from that specific summary scale because the score would be unduly affected.

**Qualitative Analysis**

The qualitative data from the ‘comments and ideas’ section, was recorded verbatim in a Word table. Some participant handwriting was difficult to decipher or understand. References to specific places or people were rendered generic in order to maintain anonymity of participants and other employees. Using content analysis, recurrent themes previously identified in the literature were located in the data e.g. time as a barrier, ‘wordy process’. The comments were then scored against the frequency of the occurrence of these themes to identify the range and frequency of similar comments.

An independent nurse audited this analysis by examining the comments according to the themes identified by the Researcher. Any differences, between the Researcher and Auditor, were identified and re-examined for evidence of the specific theme. The overall positive or
negative impression of each comment was also considered by both the researcher and independent auditor and only accepted if there was agreement between both.

**Summary**

In summary, the process for this mixed-method cross-sectional survey was complex and protracted requiring communication with numerous different colleagues and groups both within and outside the DHB. The research design, using a previously validated questionnaire, was chosen because it could reliably generate information on nursing knowledge, attitudes and ideas about the PDRP. The questionnaire was slightly modified and therefore a pilot study was undertaken to test the tool in the study DHB. Maori, both local and at the university, were consulted and expedited ethical approval was granted by the Central Regional Ethics Committee.

Care was taken to use a statistically robust process to select the sample from the population of 1128 identifiable nurses employed in numerous clinical settings within the DHB. The internal mail system was used to distribute questionnaires to 225 (20%) of the nurses at the DHB. A single thank you and reminder note was sent to the sample group two weeks after the initial questionnaire was distributed. Completed questionnaires were returned anonymously via the internal mail system and data was recorded initially on an Excel spreadsheet. Quantitative data was analysed using SPSS while the qualitative data was analysed by grouping comments thematically.

This research process produced a return rate of 42% and most questionnaires were fully completed, many also offering a rich source of qualitative data. This ‘snap-shot in time’ cross-sectional study, carefully followed the steps of the research method to generate ample data for the analysis stage. The study aimed to find out what nurses knew about the PDRP and what nurses thought about the PDRP. Ideas and suggestions for the future evolution of the PDRP were also sought.
CHAPTER 4. RESULTS

Introduction

This chapter presents the results of the survey on ‘Nurses’ understanding and opinions of the Professional Development and Recognition Programme’ undertaken at a New Zealand DHB in October, 2008. This written survey, based on a tool developed by Carryer et al. (2002), was sent to 225 randomly selected nurses using the internal mail system of the DHB.

Quantitative data is analysed by questionnaire sections: Demographics, knowledge, and attitudes. First, the demographic characteristics of the cohort are summarised to describe the respondents. The next section describes the summarised responses to the knowledge questions, which ascertained what the respondents knew about the development of the PDRP, and the process for participation. Thirdly, the section of attitudinal Likert scales is shown for the whole cohort, and then selected scales are used to explore predictors of attitudes questions.

The qualitative data from the ‘Ideas and Comments’ section is analysed according to the themes arising from participant responses. The comments are grouped into dominant themes and then secondary ideas. Finally, quantitative data and qualitative themes are triangulated together to assess where common ground adds strength to the survey findings, or conversely, where diversity between the different sections exists.

This chapter aims to answer the questions: What do nurses know about the PDRP? And what do nurses think about the PDRP? Ideas or suggestions for the future evolution of the PDRP at the study hospital are derived from the comments section of the questionnaire.

Demographics

Gender and age

Of the 95 participants, over 90% (n=86) of the respondents were female, and 7% (n=7) were male. Two respondents did not complete this question. For ease of questionnaire completion and to maintain anonymity for respondents, participants could select one of six age-
group bands, from ‘20-25’ years to ‘over 60’ years of age (see Table 1). The mid-point of these age bands is used to calculate summary data. The mean age of respondents was 40 years, with a standard deviation of 11. The median for the age group sets was 35 years, and the mode was 45 years. Almost a third of respondents were aged 41-50 years, and over a quarter were aged 31-40 years.

Table 1: Age by group

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-25 years</td>
<td>9</td>
<td>9.5</td>
</tr>
<tr>
<td>26-30 years</td>
<td>12</td>
<td>12.6</td>
</tr>
<tr>
<td>31-40 years</td>
<td>26</td>
<td>27.4</td>
</tr>
<tr>
<td>41-50 years</td>
<td>31</td>
<td>32.6</td>
</tr>
<tr>
<td>51-60 years</td>
<td>10</td>
<td>10.5</td>
</tr>
<tr>
<td>Over 60 years</td>
<td>4</td>
<td>4.2</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>3.2</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Ethnicity

Half of the respondents (n=47), recorded an ethnicity of New Zealand European. A few were Maori (5.4%, n=5), or of other minority groups. One third (n=30) were of another ethnicity which was outside the specified choices (see Figure 2). This data showed that half of the respondents (n=46) reported an ethnicity other than New Zealand European. Some people recorded more than one ethnicity, as expected, and one person recorded themselves as a ‘New Zealander’, and another as ‘Kiwi’, in the ‘Other’ ethnicity option. All of the participants who identified as Maori, also recorded a second ethnicity. The United Kingdom and the Philippines were well represented in the ‘other’ ethnic group, while some participants reported very specific ethnicities from small countries. Aside from Samoan nurses, and a single Niuean, other Pacific Island ethnicities were not represented.
Experience and qualifications

Nurses in the study had between 1 and 44 years of nursing experience, with a mean experience of 14.3 years, and a median of 14 years. Two thirds (n=56) worked full-time and one third (n=36) worked part-time. Most nurses (86%, n=81) recorded the best representation of their clinical qualifications as a Registered Nurse, a Bachelor of Nursing or a Registered Comprehensive Nurse (see Figure 3). Almost 10% (n=9) of the group recorded that they were Registered General and Obstetric Nurses, while Enrolled Nurses constituted 3.2% (n=3) of the group, and a single Psychiatric Nurse participated.
Figure 3: Clinical qualifications

Just over half (n=51) of participants had additional qualifications, ranging from computer, smoking cessation and specific clinical courses, to Master’s Degrees (see Table 2). For over half of this group (n=28), additional qualifications were formal postgraduate University courses.

Table 2: Additional qualifications

<table>
<thead>
<tr>
<th>Additional Qualifications</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelors degree</td>
<td>14</td>
<td>14.7</td>
</tr>
<tr>
<td>Certificate</td>
<td>2</td>
<td>2.1</td>
</tr>
<tr>
<td>PG Papers</td>
<td>4</td>
<td>4.2</td>
</tr>
<tr>
<td>PG Certificate</td>
<td>11</td>
<td>11.6</td>
</tr>
<tr>
<td>PG Diploma</td>
<td>9</td>
<td>9.5</td>
</tr>
<tr>
<td>Masters</td>
<td>4</td>
<td>4.2</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>7.4</td>
</tr>
<tr>
<td>No other qualifications</td>
<td>43</td>
<td>45.3</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Less than a quarter of all respondents (n=20), were currently involved in professional study and, of this group, half were undertaking postgraduate papers or certificates. The remaining nurses, in this small group, were studying topics such as alternative therapies, marketing, education, or specific clinical courses.

**Clinical workplace**

Questionnaires were returned from a wide range of clinical areas (see Table 3). Just under a quarter (n=22) of respondents worked in a medical area while surgical nurses and Intensive Care or Emergency Department nurses were also well represented. A few nurses (n=7) worked outside the options given in the questionnaire, and described specific workplaces, such as outpatient specialties, flight nursing or intellectual disability care.

<table>
<thead>
<tr>
<th>Clinical Area</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>22</td>
<td>23.2</td>
</tr>
<tr>
<td>Surgical</td>
<td>17</td>
<td>17.9</td>
</tr>
<tr>
<td>ICU/Emergency</td>
<td>14</td>
<td>14.7</td>
</tr>
<tr>
<td>Theatre/PACU</td>
<td>9</td>
<td>9.5</td>
</tr>
<tr>
<td>Neonatal</td>
<td>7</td>
<td>7.4</td>
</tr>
<tr>
<td>Mental Health</td>
<td>6</td>
<td>6.3</td>
</tr>
<tr>
<td>Women's Health</td>
<td>3</td>
<td>3.2</td>
</tr>
<tr>
<td>Elder/Rehab</td>
<td>3</td>
<td>3.2</td>
</tr>
<tr>
<td>Ambulatory</td>
<td>3</td>
<td>3.2</td>
</tr>
<tr>
<td>Child Health</td>
<td>2</td>
<td>2.1</td>
</tr>
<tr>
<td>District Nursing</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>7.4</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>95</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**PDRP Levels**

By far, the greatest proportion of survey respondents (n=56), were Competent on the PDRP. Only 2% (n=2) were Graduate (or on the New Entry to Practice Programme), and 2% (n=2) were Expert. Proficient nurses made up 27% (n=25) of returns, which was a greater proportion than were Proficient in the population. Five participants recorded that they were ‘not
Enrolled nurses made up 3% (n=3) of respondents, including one nurse who had progressed to Enrolled Nurse Accomplished level.

A cross-tabulation with age group shows that the numbers of Competent nurses peaks in the 41-50 year age group, whereas most Proficient nurses were in the 31-40 year age group (see Table 4). The Graduate nurses were in the youngest age category, and the Experts and Enrolled Nurses were all over 40 years of age.

### Table 4: PDRP Level Age Group Cross-tabulation

<table>
<thead>
<tr>
<th>PDRP Level</th>
<th>Age group</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20-25 years</td>
<td>26-30 years</td>
<td>31-40 years</td>
<td>41-50 years</td>
<td>51-60 years</td>
</tr>
<tr>
<td>&quot;Not on&quot;</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>NEIP</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Competent</td>
<td>6</td>
<td>9</td>
<td>17</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Proficient</td>
<td>1</td>
<td>3</td>
<td>9</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Expert</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>EN Competent</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>EN Accomplished</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9</td>
<td>12</td>
<td>26</td>
<td>30</td>
<td>10</td>
</tr>
</tbody>
</table>

A clinical workplace cross-tabulation with PDRP level was undertaken after grouping clinical areas into general directorates, in order to establish whether PDRP levels differed between clinical area groups. Medical, elder health and rehabilitation were grouped as Medical Services, while Surgery, ICU and Emergency and Operating Theatre were grouped under Surgical Services. Other Services consisted of Neonates, Women’s’ and Child Health, Ambulatory Care, District Nursing and any other specified area outside the clinical bands offered in the questionnaire e.g. Flight Nurses or Outpatients Clinics. Almost half of all respondents (n= 40) were working in Surgical Services, and just over a quarter were in Medical Services (n=25) and a quarter (n=28) worked in other services (see Figure 4).
This cross-tabulation revealed there were a lower proportion of Proficient nurses in the Surgical area than in Medical or other services. Therefore, numbers of Competent nurses were proportionally greater in Surgery, than the other directorate groups. One or two nurses claimed to be ‘not on’ the PDRP in each directorate group. No Experts or Enrolled Nurses from the medical area responded to the questionnaire.

Knowledge

The 14 knowledge questions were designed to assess what nurses knew about the origins and processes of the PDRP. At the beginning of the section, participants were asked to identify the best answer. The questions were a series of multiple-choice questions where some answers were simply ‘yes’ or ‘no’ and others had several choices. All questions included a ‘don’t know’ option. This section was completed by all respondents and only occasionally answers were omitted.
Who was responsible for originally developing the PDRP at the study hospital?

The PDRP was originally developed by nurses and 15% (n=14) of respondents knew this. Almost 30% (n=28) of respondents answered ‘don’t know’, and 27% (n= 26) thought the NCNZ were responsible. A further 21% (n=20) thought Nursing Managers developed the PDRP, which is understandable because the nurses originally responsible were indeed nursing leaders and the organisational structure had changed since the 1980s. A few respondents thought Hospital Managers or the New Zealand Nurses Organisation were responsible (n=2-4).

Why was the PDRP [originally] developed?

Three-quarters (n=71) of the respondents knew that the PDRP was originally developed ‘to encourage the professional development of the nursing workforce’. Some thought the PDRP was a requirement for nurses to justify practice (n=13), and a few (n=4) answered that it was for management to measure skill mix, or to adhere to company expectations. Just over 5% (n=5) did not know, and two participants did not complete this question.

Who should feel responsible for the PDRP initiative now?

Almost half (n=46) of respondents answered that ‘nurses’ should feel responsible for the PDRP now, and a further quarter of the respondents felt it should be Nursing Managers. Some participants (n=10) thought it should be the NCNZ, and some (n=8) did not have an opinion. A few (n=7) thought that groups such as Hospital Managers, the NZNO, the Professional Development Unit or the PDRP Panel should feel responsible for the PDRP now.

How often is the PDRP process at the study hospital reviewed?

The NCNZ requires PDRPs to be reviewed at least every five years (NCNZ, 2008), and only 5% (n=5) of respondents were aware of this. The majority of participants (n=37) thought the process was reviewed annually, but a similar proportion of respondents (n=36) did not know the answer.

Who carries out the PDRP review process?

This question was aiming to elicit whether participants knew that widespread consultation takes place for the five-yearly PDRP review process. Slightly under 16% (n=15) of respondents answered ‘all of the above’, i.e. that NCNZ, hospital managers, nursing managers, nurses, and the NZNO are all consulted. Most respondents (39%, n=37) thought that hospital managers reviewed the programme and almost 14% (n=13) of respondents recorded the NCNZ as
responsible for the review. Participants may have considered that the NCNZ reviewed the programme because of the five-yearly audit process for NCNZ accreditation of the PDRP. A few participants, (n=6) thought nurses undertook the review process, possibly because NCNZ standards state that the five-yearly evaluation “includes feedback from nurses and participation by nurses in the programme” (NCNZ, 2008, p. 5).

**Who can you contact for advice or information about the PDRP?**

Most participants (78%, n=74) answered that advice is available from ‘all of the above’, which was the PDRP Clinical Nurse Specialist, Charge Nurse Managers/Team Leaders, and PDRP Assessors/Nurse Educators. A significant group (n=12) answered that PDRP Assessors/Nurse Educators were the only source of advice and a few (n=6) suggested the PDRP Clinical Nurse Specialist was the only source of advice and information. Only a single participant reported they did not know who could offer advice.

**Do all nurses have to start at Competent on the PDRP?**

Nurses can transfer from another DHB and be employed at their previous level while having time to produce the evidence for the PDRP Panel. Just over half of the respondents (n=54) knew this and answered ‘no’ to this question. One third of respondents (n=31) said ‘yes’, you do have to start at Competent, and a further 11% (n=10) were unsure.

**Is participation in postgraduate study required for Expert Level of the PDRP?**

At the study hospital, postgraduate study is not essential for an Expert nurse and 20% (n=19) of the respondents knew this. The general feeling from the majority (n=58), was that one is required to undertake postgraduate study in order to progress to Expert. A large group (18%, n=17) did not know the answer. It is possible to demonstrate Expert practice without participating in postgraduate education, by meeting the PDRP requirements. Postgraduate study used to be a prerequisite for Expert progression, but this is no longer the case.

**At the study hospital, how long after a performance review do you have to submit your PDRP portfolio for assessment?**

Most nurses (60%, n=56) were aware of the six month timeframe for the submission of a PDRP Portfolio following a performance review. One quarter (n=24) did not know and the remaining few (n=14) thought the time frame was longer.
Is each level on the PDRP linked to a monetary payment in the MECA?

Proficient, Expert and Accomplished (EN) levels are linked to payment and a quarter of the respondents (n=24) knew this. A further 47% (n=44) said ‘yes’ PDRP levels are linked to pay. Most participants understood that the PDRP is linked to monetary rewards although the detail was inaccurate. A significant group (17%, n=16) responded with ‘don’t know’ for this question.

How often are individual portfolios required to be updated?

Portfolios are expected to be updated and presented for Annual Performance Review at the study hospital. Many nurses (68%, n=65) knew this was an annual expectation. Only a few (n=4) respondents reported not knowing, and the remainder suggested longer time frames. Interestingly, 22% (n=21) of participants thought portfolios needed updating every three years, possibly because it had previously been a requirement to resubmit a portfolio to the PDRP Assessor Panel after three years. This is no longer a requirement, at the study hospital, but nurses must maintain a portfolio and continue to show evidence of practicing at their PDRP level, at their annual performance review.

If you are on the [study hospital] PDRP, are you exempt from NCNZ audit?

Over half (55%, n=52) of the participants knew this was true. Only a small number (n=4) did not know, and the remainder (41%, n=39) said ‘no’ you were not exempt.

Are all nursing staff expected to have a PDRP portfolio assessed, at least at Competent level?

This is an expectation at the study hospital and most nurses (73%, n=69) knew this. The remaining respondents were fairly evenly split between answering ‘no’ (n=14) and ‘don’t know’ (n=12).

How are PDRP Assessors at CCDHB prepared for their role?

At the study hospital, assessors undergo the New Zealand Qualifications Authority (NZQA) Work-based Assessors training. This is a recognised formal training programme. Less than a quarter of participants (n= 23) correctly answered this question. Almost half of respondents (n=45) answered ‘don’t know’ and a further quarter (n=23), thought training was through inservice.
**Knowledge Scores**

The mean knowledge score for all participants was 6.2, or in other words, not quite half the questions had the best answer (see Figure 5). The mode was 5 accurate answers. No one answered all 14 questions with the best answer, and no one was unable to answer any of the questions, with the range being from 1 to 12 best answers. The four participants who had not answered some questions were removed from the mean calculation because the mean scores would have been falsely low.

![Figure 5: Knowledge scores](image)

**At t i t u d e s**

In the attitudes section of the survey, 52 (54.7%) of the 95 participants had submitted a PDRP portfolio for assessment, 39 (41.1%) had not. Participants were asked to respond to statements about the PDRP using a 5-point scale from ‘strongly disagree’ to ‘strongly agree’. For the analysis, each response was transformed to a numeric value where 1 equaled ‘strongly
disagree’ and 5 equaled ‘strongly agree’. A response of neither agree nor disagree was allocated the mid-point value of 3.

There were 22 statements for all participants, then six for participants who had not submitted PDRP portfolios, and nine for participants who had submitted PDRP portfolios, for assessment. In 3 instances it was unclear whether the participant had completed a portfolio because all sections of the questionnaire had been completed. These participant responses were removed from the comparative analysis to ensure the scores were not affected. Likewise, any participant who had not completed a question, which was subsequently totaled in subscales, was excluded for the mean calculation to ensure mean scores were not affected.

Attitude summary scores were derived from selected Likert Scales to create three subscales, as in previous research (Carryer et al., 2002; 2007). These subscales were used to examine participant attitudes towards the PDRP and then compare the attitudes of nurses who had presented a PDRP portfolio for assessment, and those who had not.

Some attitudinal statements were analysed individually, where particularly polarised attitudes or universality were identified.

**Pro PDRP Subscale**

The first subscale to be analysed, consisted of statements which were positive about the PDRP process and this was labeled ‘Pro PDRP’. All participants (N= 95) were asked to complete the statements in this group of 5 scales (See Table 5).

The first statement revealed that well over half (n=55) of the respondents were unhappy to spend time outside work hours preparing a PDRP portfolio. However, most participants (87.0%, n=82) agreed or strongly agreed that they would be happy to spend time outside work preparing a portfolio if the DHB provided more paid time to do so. Over three-quarters (n=75) of the respondents agreed or strongly agreed that producing a PDRP portfolio was useful for their career. This number dropped slightly (n=68) for agreement that submitting a portfolio for assessment is useful for their career. Over half of the respondents (n=50) agreed that the PDRP would be a powerful process if all nurses ‘got on board’, although, a third of respondents (n=32) ‘sat on the fence’ for this statement.

The mean scores for all Pro PDRP statements were well over the mid-point of 3, except for the first statement about working on a portfolio in your own time. This statement had a mean score of 2.5, or slightly negative. The participants were, however, very positive about working on a portfolio outside work hours (mean score of 4.1) if more paid time was provided.
### Table 5: Pro PDRP subscale responses

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>I am happy to spend time outside work hours preparing my PDRP portfolio</td>
<td>Strongly disagree: 23.2</td>
</tr>
<tr>
<td>I would be happy to spend time outside work hours preparing a PDRP portfolio, if [the DHB] provided more paid time as well in which to do this</td>
<td>2.1</td>
</tr>
<tr>
<td>I believe that producing a PDRP portfolio is useful for my career</td>
<td>2.1</td>
</tr>
<tr>
<td>I believe that submitting a PDRP portfolio for assessment is useful for my career</td>
<td>3.2</td>
</tr>
<tr>
<td>The PDRP would be a powerful process for nursing if all nurses “got on board”</td>
<td>2.2</td>
</tr>
</tbody>
</table>

The Pro PDRP scores for all respondents ranged from 6 to 24 with a mean score of 17.9 and a standard deviation of 3.4 (see Figure 6). A score of 15 would indicate a participant neither agreed nor disagreed with all of the Pro PDRP subscale statements. The plot shows that most participants (84%, n=77) agreed with positive statements about the PDRP.
PDRP Process Subscale

All participants were asked to complete the scales for the ‘PDRP Process’ subscale. This group of statements represented negative attitudes towards the PDRP process (see Table 6).

The first two statements suggested it was embarrassing to describe oneself in terms of achievements and then in terms of what one is good at. Half (n=48) of the respondents disagreed or strongly disagreed with these statements. However, for some participants embarrassment was an issue. Just under a quarter of respondents (n=22) agreed it was embarrassing to describe oneself in terms of achievements, and this rose to 28% (n=27) for describing qualities.

When asked about the competencies in the PDRP, over a third of the participants (n=34) agreed that the competencies are too general and don’t suit all nursing areas, yet 41.1% (n=39) of respondents chose the midpoint, and the remaining significant group (n=22) disagreed. The mean score was 3.2 for this statement, or slightly positive. Responses to the statement that the competencies are clearly written and easy to understand, revealed that a greater portion of respondents (37%, n=35) disagreed with this statement, than agreed (29%, n=28). Reverse coding of this statement for the PDRP Process subscale meant that a mean score under 3 would reflect the feeling that the competencies were easy to understand while a mean of over 3 would
reflect that the competencies were not easy to understand. The reverse-coded mean score of 3.2 reflects that the respondents swayed towards an attitude that the competencies were not clearly written and easy to understand.

Over half of the respondents (n=51) did not have an opinion about the statement ‘portfolio assessors don’t know what to look for if the individual’s area is beyond their nursing expertise’. A quarter (n=24) of the respondents disagreed with the statement, no one strongly so, while 19% (n=18) agreed and only a single respondent strongly agreed. A mean of 3.0, or the midpoint, for this statement shows that the group were not significantly polarised in their attitude towards assessor skills.

The final two statements related to the suggested lack of value, and difficulty sourcing, a letter of support, from a senior nurse colleague. Again, almost half of the respondents (n=46-47) for both of these scales did not have an opinion. Over a third of respondents (n=35) disagreed that senior nurse letters were of no value, and 39% (n=37) disagreed that it was difficult to find someone to do a letter for you. The mean scores were 2.7 and 2.6 for these two statements, or in other words, the respondents were swayed towards disagreement with the statements.

Between a third and a half of respondents (n=32-47) offered no opinion for all the statements relating to participating in the PDRP. This is supported by the finding that 42.1% (n=39) of respondents had not completed a portfolio for PDRP progression, and therefore may not have developed an opinion about the process.

The statement mean scores of the PDRP Process subscale shows that respondents disagreed with most of the selected statements, with the exception of the statements about the competencies being too general and not easily understood. These means were over the midpoint of 3 while the other scales were all below.
<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find it embarrassing to describe myself in terms of what I have achieved</td>
<td>15.8</td>
<td>36.8</td>
<td>24.2</td>
<td>17.9</td>
<td>5.3</td>
<td>2.6</td>
</tr>
<tr>
<td>I find it embarrassing to describe myself in terms of what I am good at</td>
<td>12.6</td>
<td>37.9</td>
<td>21.1</td>
<td>24.2</td>
<td>4.2</td>
<td>2.7</td>
</tr>
<tr>
<td>The PDRP competencies are too general and don’t suit all nursing areas</td>
<td>2.1</td>
<td>21.1</td>
<td>41.1</td>
<td>25.3</td>
<td>10.5</td>
<td>3.2</td>
</tr>
<tr>
<td>The competencies are clearly written and easy to understand (reverse coded</td>
<td>8.4</td>
<td>28.4</td>
<td>33.7</td>
<td>28.4</td>
<td>1.1</td>
<td>3.2</td>
</tr>
<tr>
<td>for subscale score)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The portfolio assessors don’t know what to look for if the individual’s</td>
<td>0</td>
<td>25.5</td>
<td>54.3</td>
<td>19.1</td>
<td>1.1</td>
<td>3.0</td>
</tr>
<tr>
<td>area is beyond their nursing expertise</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I doubt the use of Senior Nurse Letters because they are collected from</td>
<td>7.5</td>
<td>30.1</td>
<td>50.5</td>
<td>7.5</td>
<td>4.3</td>
<td>2.7</td>
</tr>
<tr>
<td>friendly colleagues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is difficult to find people to write a Senior Nurse Letter for you</td>
<td>11.7</td>
<td>27.7</td>
<td>48.9</td>
<td>10.6</td>
<td>1.1</td>
<td>2.6</td>
</tr>
</tbody>
</table>
The PDRP Process subscale scores ranged from 11-31 with a mean score of 19.99 (see Figure 7). A greater score represents a more negative attitude about the PDRP. A median score would have been 21, and this means that collectively, respondent attitudes are not greatly negative towards the PDRP, and in fact they are slightly towards the positive end of the attitude scales.

**Figure 7: PDRP Process subscale scores**

![Histogram of PDRP Process Scores]

**PDRP Benefits Subscale**

Only participants who had completed a portfolio for assessment were asked to complete the questions for the ‘PDRP Benefits’ subscale. This subscale reflected the perceived benefits of participating in the PDRP process. Fifty-two nurses completed this section, which was over half of the survey respondents.

Most nurses who had developed a portfolio (86.6%, n=45) agreed, or strongly agreed, that the process encourages reflection on practice (see Table 7). A mean score of 3.9, for this statement, reflects this overall positive attitude. A majority (61.5%, n=32) felt that developing a portfolio was personally worthwhile, with a positive mean score of 3.6, for this scale.
The third Likert scale in this subscale suggested that the costs, in terms of time and money, outweighed the eventual usefulness of the portfolio. One third of the respondents (n=17) ‘sat on the fence’, while slightly under a third of respondents (n=14) disagreed and slightly over a third (n=20) agreed with the statement. Reverse coding of this subscale gave a mean score of 2.8, demonstrating that the group was less positive about the time and money commitment required for a portfolio. Exactly half of the respondents (n=26) agreed or strongly agreed that the satisfaction gained from completing the portfolio was well worth the effort, and, although not as positive as the first two questions, still revealed a slightly positive mean score of 3.3. Almost a quarter of respondents (23.1%, n=12) were undecided about this statement.

Table 7: PDRP Benefits subscale responses

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td>The process of producing a portfolio encourages reflection on practice</td>
<td>1.9</td>
<td>3.8</td>
<td>7.7</td>
<td>71.2</td>
<td>15.4</td>
<td>3.9</td>
</tr>
<tr>
<td>Developing a portfolio was personally worthwhile</td>
<td>1.9</td>
<td>11.5</td>
<td>25</td>
<td>50</td>
<td>11.5</td>
<td>3.6</td>
</tr>
<tr>
<td>The costs (in time and money) of producing a portfolio outweighed it’s eventual usefulness (reverse coded for subscale score)</td>
<td>3.9</td>
<td>23.5</td>
<td>33.3</td>
<td>25.5</td>
<td>13.7</td>
<td>2.8</td>
</tr>
<tr>
<td>The satisfaction gained from completing my PDRP portfolio is well worth the effort involved</td>
<td>9.6</td>
<td>17.3</td>
<td>23.1</td>
<td>38.5</td>
<td>11.5</td>
<td>3.3</td>
</tr>
</tbody>
</table>
The PDRP Benefits subscale scores ranged from 4 to 18 with a mean of 13.6 (see Figure 8). The plot shows that the group swayed towards a positive attitude about the benefits of presenting a portfolio for assessment. Two-thirds (n=35) of the respondents, who had submitted portfolios, had summary scores over the midpoint of 12, for the PDRP Benefits subscale. The outliers, with scores below the normal distribution, showed that there was a group of nurses who found producing a PDRP portfolio to be a negative experience.

**Figure 8: PDRP Benefits subscale scores**

![Histogram showing PDRP Benefits scores](image)

**Individual attitudinal statements**

Some statements in the questionnaire were not evaluated as part of the attitudinal subscales. Most of the statements, which were not part of the subscales, did not reveal unified attitudes or great polarity of the respondents, however a few did, and they are worth mentioning.

Respondents were very clear that they disagreed with the statement: ‘I don’t really understand what is meant by professional development’. The statement mean score of 1.9 revealed the majority (83.2%) disagreed. Only ten participants (10.6%) agreed that they did not understand about professional development and six participants (6.3%) did not have an opinion.

Participants were also unified in their response about wanting education sessions ‘to increase their knowledge base’. The mean score for this scale was 1.9 because over 80% of
respondents (n=77), agreed or strongly agreed with this statement. Only a quarter of the participants (n=25) were happy to stay at the same level of practice for the remainder of their working life, and most of this group fell into the 51-60 year age group. Three-quarters of respondents (n=71), felt there should be more support from the organisation for nurses to do a PDRP portfolio. In fact, only three participants disagreed with this statement, and a few (n=20) neither agreed nor disagreed. This gave a very positive mean score, for this scale, of 4.0. The statement about having plenty of support and encouragement, in the section for nurses who had completed portfolios, was interesting because of the lack of opinion. The mean score for this scale was 3.0, or neither positive or negative, with a very even distribution around the mid-point. Clearly, some participants felt supported and others felt they were not.

Accountability for education and safe practice were topics which revealed similarity of attitudes from study participants. Two-thirds of respondents (n=64) agreed or strongly agreed with the statement ‘my professional development and education is my own responsibility’. Almost all participants agreed with the statement ‘it is my responsibility to ensure that my practice is safe and current.’ In fact, only six participants (6.4%) disagreed or did not have an opinion for this statement which had a median score of 4.4 and proved to be the most polarised attitudinal scale of the questionnaire. The attitude of personal accountability was further supported by the strong negative reaction to the statement ‘my professional development is solely the responsibility of my employer.’ The mean score for this scale was 1.9, with 86.3% of participants (n=82) disagreeing and only a single person agreeing.

The Likert attitudinal scales, measuring nurses’ attitudes to the PDRP, were a complex and interesting aspect of this study. Attitudes to the PDRP had never been formally measured before, at the study hospital, and most participants completed all of the scales, or even more than was asked of them.

**Comparative analysis**

This section compares the characteristics between those who have submitted PDRP portfolios for assessment, and those who have not. The intention is to identify common characteristics, and differences, between the two groups. Initially, the demographic characteristics of each group are examined and then the knowledge and attitude scores are
considered, from this dual perspective. Regression analysis will be used to examine the statistical significance of any conclusions.

**Age and Gender**

The mean age of the participants who had submitted portfolios for assessment (n= 51) was 39.6 years, and the mean age for the group who had not submitted (n=39) was almost the same, at 39.8 years. The distribution was, however, quite different between the two groups as can be seen by the Standard Deviations of 12.5 for the submitted group and 8.9 for those who had not submitted portfolios (see Figure 9). Three-quarters of the group who had not submitted (n=30), were aged 30-50 years, while three-quarters of the group who had submitted were under the age of 50.

The gender mix was very similar between groups, with women making up 94% (n=47) of the submitted group, and 90% (n=35) of the group who had not submitted. Three men made up the difference for the group who had submitted and four men returned questionnaires in the group who had not submitted. It is hard to make any real statistical inferences about gender from the small numbers, although men were more greatly represented in the group who have not submitted portfolios, as a proportion (6% vs. 10%).

![Figure 9: Age group vs. portfolio submission](image-url)
Experience

The mean years of nursing experience was slightly shorter for the group who had submitted (M= 13.8 years, S.D. 11.1) than for the group who had not submitted a portfolio for PDRP assessment (M= 14.8 years, S.D. 8.9). The median experience, as a nurse, was 11.0 years for the group who had submitted, and 15.5 years for the group who had not submitted portfolios. Even though the portfolio group tended to have less experience than the group who had not submitted portfolios, individuals in this group also had the longest and the shortest years of nursing experience (see Figure 10). A numeric questionnaire identifier (81) marks an outlier.

Figure 10: Experience vs. portfolio submission

![Box plot showing experience vs. portfolio submission](image)

Ethnicity

A comparison of the ethnic mix for the two groups revealed that participants who identified as NZ European made up 62.7% (n=32) of the portfolio group, while the group who had not submitted portfolios consisted of 47.4% (n=18) NZ European. A larger proportion of people identified with an ethnic group outside the specified categories (other ethnicity) in the group who had not submitted portfolios (42.1%, n=16) than in the group who had submitted portfolios (27.5%, n=14). Samoan, Chinese, and Indian ethnicities were represented in small
numbers (1-3 participants) for both groups. Two participants in each group identified as being Maori.

The intention was to present statistics for Maori participation in PDRP progression. The fact that numbers were few, limited the statistical analysis of this variable, to the presentation of simple demographics. The use of the standard Statistics New Zealand Census ethnicity question also meant participant choices were not mutually exclusive, thereby affecting the analysis because those who chose Maori as their ethnicity, all selected a second ethnicity. There was no consistency of second ethnicity for those who were of Maori ethnicity.

**Additional qualifications and ongoing education**

A greater proportion of people, who had submitted portfolios for assessment, had additional qualifications beyond nursing registration (60.8%, n=31), when compared with the group who had not submitted portfolios (46.2%, n=18). The group who had submitted portfolios included 21.6% (n=11) who had Bachelor’s Degrees, up to Postgraduate Diplomas. The group who had not submitted portfolios held additional qualifications which were spread fairly evenly from Bachelor’s Degrees up to Master’s degrees; of which there were 4 participants. This shows that although the group who had not submitted portfolios had fewer additional qualifications, the qualifications that were held, were higher than the group who had submitted portfolios (see Figure 11). Only 27.5% (n=14) of the group who had presented portfolios, were engaged in ongoing study. The number of nurses studying in the group who had not presented portfolios, was proportionally even less at 15.4% (n=6). Of those who were studying, most were engaged in formal postgraduate qualifications.
Figure 11: Additional qualification vs. portfolio submission

PDRP Levels

The PDRP profile of the groups reflected the PDRP levels of the population. Most nurses in the group who had not submitted portfolios (84.2%, n=33) were Competent on the PDRP. The participants who said they were “not on” the PDRP were likely to be Competent in the ANSOS One-Staff™ data base by default. The single Proficient nurse in this group, may have been employed from another hospital, and have been temporarily placed at Proficient prior to presenting a portfolio for assessment. Otherwise, it is unclear how a nurse could be at Proficient level, on the PDRP, without ever having submitted a portfolio for assessment.

Competent nurses constituted 41.2% of the group who had submitted a portfolio (n=21). The relatively high number of Competent nurses in this group is because all nurses on the New Entry to Practice (Graduate) Programme are required to submit a portfolio at the conclusion of their first year of practice. Half of the group who had submitted portfolios (n=24), were Proficient or Expert on the PDRP. Two ENs had submitted portfolios for PDRP assessment at EN levels.
Knowledge and attitude scores

A comparison between the knowledge and attitudinal scores of those who had and had not submitted a portfolio is shown in Table 8. The statistical significance of differences was examined using t-tests. The mean knowledge score was higher for the group who had submitted portfolios than those who had not submitted. The attitude scales showed that the group who had presented portfolios were more positive about the PDRP than those who had not, according to the Pro PDRP subscale. This group was also slightly more negative about the PDRP than the group who had not presented portfolios according to the PDRP Process subscale. The mean of 20.2 was, however, very close to the median of 21, or a point of neither agreeing nor disagreeing for all statements.

The difference in knowledge scores was small (equal to less than one question on the subscale), and not statistically significant. There is, therefore, little evidence that increased knowledge about the PDRP, is associated with the likelihood of presenting a portfolio. The difference in mean scores for the Pro PDRP subscale (measuring positive attitudes), was also small, and not statistically significant, and similarly for the PDRP Process subscale (measuring negative attitudes). Statistically, this study also found no evidence that presentation of a portfolio is associated with a difference in attitudes, positive or negative, to the PDRP.

Table 8: Comparison of scores between those who have and have not submitted a portfolio

<table>
<thead>
<tr>
<th></th>
<th>Submitted portfolio N=51</th>
<th>Not submitted portfolio N=39</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.5 (2.3)</td>
<td>5.9 (1.9)</td>
</tr>
<tr>
<td></td>
<td>n=49</td>
<td>n=39</td>
</tr>
<tr>
<td></td>
<td>0.57 (-0.35 to 1.50), p=0.22</td>
<td></td>
</tr>
<tr>
<td>Pro PDRP Subscale</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18.3 (3.3)</td>
<td>17.3 (3.4)</td>
</tr>
<tr>
<td></td>
<td>n=50</td>
<td>n=39</td>
</tr>
<tr>
<td></td>
<td>0.97 (-0.46 to 2.40), p= 0.18</td>
<td></td>
</tr>
<tr>
<td>PDRP Process Subscale</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20.2 (3.9)</td>
<td>19.9 (3.9)</td>
</tr>
<tr>
<td></td>
<td>n=51</td>
<td>n=37</td>
</tr>
<tr>
<td></td>
<td>0.20 (-1.5 to 1.9), p= 0.81</td>
<td></td>
</tr>
</tbody>
</table>

Regression analysis

Linear regression was used to test the features of each group which may be associated with the attitudinal scales. Ethnicity was split into a NZ European or non NZ European for the
purpose of these analyses. Normality and other regression assumptions, examined by residual plots, were met. There was no evidence of an association between age, experience, ethnicity or portfolio presentation, and the Pro PDRP subscale (see Table 9). There was also no evidence of an association between age, experience, ethnicity or portfolio presentation, and the PDRP Process subscale (see Table 10).

Table 9: Regression analysis- Pro PDRP subscale

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>t</th>
<th>p-value</th>
<th>95.0% Confidence Interval for B</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>20.098</td>
<td>2.170</td>
<td>9.260</td>
<td>.000</td>
<td>15.773 to 24.424</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>-.029</td>
<td>.054</td>
<td>-.536</td>
<td>.593</td>
<td>-.137 to .079</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years experience</td>
<td>-.085</td>
<td>.059</td>
<td>-1.436</td>
<td>.155</td>
<td>-.202 to .033</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity (NZ Euro/other)</td>
<td>.371</td>
<td>.767</td>
<td>.483</td>
<td>.631</td>
<td>-1.159 to 1.900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submitted portfolio</td>
<td>-.999</td>
<td>.765</td>
<td>-1.307</td>
<td>.195</td>
<td>-.2523 to .525</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10: Regression analysis PDRP Process subscale

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>t</th>
<th>p-value</th>
<th>95.0% Confidence Interval for B</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>16.944</td>
<td>2.593</td>
<td>6.535</td>
<td>.000</td>
<td>11.775 to 22.112</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>.103</td>
<td>.066</td>
<td>1.577</td>
<td>.119</td>
<td>-.027 to .234</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years Experience</td>
<td>-.059</td>
<td>.071</td>
<td>-0.833</td>
<td>.408</td>
<td>-.200 to .082</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity Split</td>
<td>-.054</td>
<td>.935</td>
<td>-0.058</td>
<td>.954</td>
<td>-1.918 to 1.809</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submitted portfolio</td>
<td>-.107</td>
<td>.939</td>
<td>-0.113</td>
<td>.910</td>
<td>-1.978 to 1.765</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In summary, the group who had submitted portfolios for PDRP assessment, tended to be younger and had less clinical experience than the group who had not. Those who had submitted portfolios more commonly reported their ethnicity as NZ European and had additional qualifications from a Bachelors Degree up to Postgraduate Diplomas. Half of the group were Proficient or Expert on the PDRP.
The group who had not submitted portfolios for PDRP assessment were more likely to be between 30 and 50 years of age and have a longer experience nursing than those who had submitted portfolios. If a nurse had not submitted a portfolio, they were less likely to have additional qualifications beyond nursing Registration, but if they did, it was more likely to be formal postgraduate qualifications up to a Master’s Degree. Almost all of this group were Competent on the PDRP or felt they were ‘not on’ the PDRP at all.

When statistically analysed, using linear regression, there was no evidence that age, experience, ethnicity, or portfolio presentation were associated with scores on the knowledge, Pro PDRP or PDRP Process subscales. The limitations of this analysis will be considered further, in the following chapter of this thesis.

**Qualitative Data Analysis**

Over half of the respondents (n=49) wrote in the Ideas and Comments section or the body of the questionnaire. Participants were invited to make suggestions about the process and the future of the PDRP at the study hospital. Many comments were very long and completely filled the page. Thirteen themes arose from the content analysis, five of which occurred repeatedly in more than 20% of this group of respondents.

**Complexity**

Over half of those who wrote comments in the questionnaire (n=27), felt the PDRP process was too complex. Many respondents used words such as ‘time-consuming’, ‘daunting’ or ‘lengthy’ and wrote about the amount of ‘paperwork’ required. When writing about the ‘paperwork’ being demanding, participants described hours spent on the self assessment or the extensive time required to develop a portfolio. Others found the wording of the competencies and templates difficult to understand, and felt this detracted even more, for nurses who speak English as a second language. One participant found the Key Performance Indicators in the self-assessment overly prescriptive and it was hard to find a good example to fit the indicators.

There were comments about unclear goals and changing processes which meant participants felt unsure about demonstrating competencies: “Some say you have to coordinate while others say something else depending on staffing levels at the time.” Three participants wrote about failed attempts at progression after significant effort taken to develop a portfolio.
One of these participants understood their portfolio was incomplete, and another did not understand why they “did not succeed” from the letter they were sent. The third person felt they had “failed” due to lack of time to sit down and do the portfolio.

**Time and money**

A third of the comments (n=16) requested preparation time or remuneration for the time spent on the PDRP process. Many participants, who found the process time-consuming, commented on the amount of their own time, outside work hours, required to complete the documentation. Participants commonly wrote that some allocated or paid time for PDRP work was needed:

“At the moment my sole concern is that doing the PDRP outside work hours is partly taking hours of my personal time. Is it possible to take a few hours counted as working hours? It might be nicer if it is included.”

Specific suggestions included time in-lieu, one day per month, 24-48 hours of leave, or two to three days PDRP leave. Two people recommended PDRP study sessions, either in groups or half days. Two participants mentioned the leave allowed under the MECA for portfolio development (DHBs/NZNO, 2007), although one of these people also wrote that they had never had a PDRP study day. There was general unawareness of PDRP leave entitlements under the MECA amongst the many requests for time to develop portfolios.

As well as formal time to participate, four people commented on the remuneration associated with PDRP progression. Two comments were very general e.g. “more rewards!” or “more money should be put into it.” Two other comments said the remuneration was insufficient for the amount of work required. One comment, written beside the attitude scales in the questionnaire, suggested that the participant thought you would not get any additional money for submitting a portfolio.

**Education and support**

A third of those who commented (n=16), felt more education and support was needed to enable nurses to participate in the PDRP. Some of this group had obvious knowledge deficits e.g. “there was a lot of confusion of all expectations and I ended up doing unnecessary tasks.” Others requested sessions about portfolio preparation and layout or documentation, especially for people new to the hospital: “I have not learnt anything about the PDRP since commencing—perhaps this could be a session in orientation for nurses.” One participant wrote that although
the PDRP encourages reflection, participants needed a systematic process for reflection or they risk simply producing narratives.

Several people wrote about the difficulty accessing support or a performance review. For one, it was a reply to an email, and for others it was timely performance reviews or access to advice:

“I strongly suggest that further guidance must be given to nurse educators for new nurses to be guided especially at the start of their work...so as they can keep track of every study/session they have attended.”

Two people wrote that they would rather be evaluated by a senior colleague or a manager who saw them at work on a day-to-day basis, than from a portfolio. Three participants praised the support they received from senior nurses and colleagues.

**Clinical relevance**

Nearly 40% of participants who wrote comments (n=19), discussed the relevance of the PDRP to nursing care. More than half of this group thought the PDRP did not relate well to nursing practice, although some were positive about the PDRP being relevant to their personal development.

Some felt strongly that those who are academically talented would be able to progress on the PDRP and yet would not necessarily be effective clinically. A typical comment was:

“I have a lot of experience and knowledge. I bring this to my workplace. I don’t feel I have to prove this—it shows in my work. Sometimes nurses are very good at documentation [and] paperwork but their clinical hands-on nursing needs help, in this way PDRP clinical assessment is missed.”

Others thought that the PDRP did not assess qualities such as politeness or teamwork adequately and focused on technical skills, while a few felt the Key Performance Indicators were too general and failed to recognise specific skills or care of patients. Several comments reflected the opinion that experience and practical skills were of more value than a nurse’s PDRP level:

“At the end of the day, the professionalism, work ethics and care of the patients, as displayed by the nurse and observed by management and staff, speak volumes more than a self analysis on paper.”

There was a general feeling, from this group of respondents, that participating in the PDRP was all about theory rather than practical skills:
“I do not think my competencies can be judged by reviewing my exemplars, reading about a brief teaching session from an appreciative colleague, or career plans for next year. There must be more accurate ways of assessing one’s abilities!”

On the positive side, there were the six nurses who felt the PDRP process was a way of measuring and developing clinical skills: “I am glad I have done this as it shows my level of knowledge and acknowledges the time and effort I put into my job…” This group felt motivated and encouraged by the PDRP to ‘better themselves’ or have confidence in their ability to be able to document their nursing care. In this small group of nurses, some had, and some had not presented portfolios.

**Competing priorities**

Almost a quarter of those who commented (n=11), mentioned competing priorities. Sometimes this was simply stated as being busy and not having time, while others mentioned family commitments, and the stress and pressure of work, or juggling the two. Issues, such as increasing workloads or insufficient staffing were identified as adding to the pressure. One respondent wrote:

“I find it stressful to find the time to keep my portfolio current and hold down a job and run a household. When I finish at the end of a shift I want to relax and not think about work. I understand that as a nurse- there needs to be a way to assess that I am safe to practice my career- but there seems to be an increasing amount of extra paperwork involved which puts extra pressures on nurses- who end up disillusioned and many leave the profession.”

Several people wrote comments which were quite similar to this, or contained elements of this passage. Childcare priorities or family commitments were reported by several respondents as a barrier to developing a portfolio. People who worked part-time hours reported difficulties balancing the time spent on developing a portfolio with their few hours at work. One respondent pointed out that the three days spent on developing a portfolio equated to three weeks work.

**Clinical workload**

Nurses mentioned the impact of the workload, short-staffing and the difficulty getting any ‘down-time’ at work, when completing a professional portfolio. These comments generally related to an expectation that there would be opportunities in the workplace to do the written
work, and yet nurses were not able to find this time. For some however, it was the burden of a busy workplace and the added stress of trying to achieve something else ‘on top of’ clinical demands. One nurse wrote: “I don’t like being made to jump through hoops. My job is busy enough!” One person wrote about needing to “adapt to new systems being implemented by management” which was contributing to the already heavy workload, and staffing shortage. All of the participants who wrote about the high acuity of the workplace preventing the completion of a portfolio, had not presented portfolios.

A sense of accomplishment

A common theme to emerge, from comments, was that participating in the PDRP was worthwhile and they were “glad” they had done it. The challenge of completing the process enhanced the sense of satisfaction for some participants, and others thought the process was good for nursing as a whole. Some found the personal development valuable and the process and support from senior nurses, encouraging. One person, who had offered several criticisms of the process, then wrote:

“On a positive note- the whole process has been interesting and helpful to me, made me look at my practice in a different way and given me confidence in my ability to put in writing how I work as a nurse.”

Almost all of the participants who said they found the process rewarding, qualified this comment with criticisms or suggestions for improvements. The main qualifying theme associated with a sense of accomplishment, was that the process was too time-consuming. The people who made the most obviously positive comments, had presented portfolios for assessment, although some people were positive, yet had not presented portfolios.

Sub-themes

Several other sub-themes were identified in the comments from survey participants. The perceived academic nature of the PDRP was a barrier for some participants, who had difficulty with self assessments and writing exemplars e.g. “I trained in days when to openly ‘blow your own trumpet’ was frowned upon.” These people did not view themselves as ‘career nurses’ and whilst wanting to maintain current practice and a commitment to quality care, they did not want to undertake academic programmes or progress their careers at this time in their lives. The overarching theme here, was that the demands of work and life consumed these nurses who would like recognition for their skills, but do not want to undertake work related documentation in their own time. For some, the written work, especially reflecting on self, was particularly
challenging. Most of the respondents who found the PDRP overly academic, had not submitted portfolios.

Several people wrote about commitment to professional development. Almost all of the respondents, who wrote about commitment, reported that it was a joint responsibility between a nurse and their employer to maintain professional development. Some nurses thought the PDRP was useful for “keeping up with competencies” or for accessing education.

Advancing age was a barrier to participating in the PDRP, for a small group of respondents. One participant implied that some nurses were too old to make the effort worthwhile, by writing: “[The] average age of [the] nursing workforce should be considered in the amount of work needed to collaborate and start the PDRP i.e. not all nurses want to be career driven and therefore although standards should be maintained, this needs to be taken into consideration.” Other respondents wrote about lack of recognition for long experience e.g.

“I know of many nurses who have looked at this process and have been intimidated by it so much that they have neglected to progress on the levels, content with remaining at a lower rate of pay than what they are worth. These are mostly senior nurses who have a wealth of experience and receive little recognition unless they follow the [PDRP] pathway – [a] very discouraging process.”

These participants wrote about experience, almost as a handicap for PDRP participation. One nurse, who had not submitted a portfolio, was obviously very despondent and wrote:

“After 20 years in nursing I feel my expertise and knowledge are not appreciated or acknowledged by this dreadful assessment system. New graduates however are very good at this paperwork and progress quickly through to levels despite a poor knowledge base. I am so angry about this I am leaving in the near future to pursue another career.”

Several people wrote about transferring clinical areas and inequity in the PDRP. These respondents reported a lack of consistency in the effort required between areas, or that their previous skills were unrecognised. One nurse, who had previously been working in the UK, found that there was a “drop to Proficient” level in New Zealand, and would have liked to be employed on the same grade as in the UK. This group of respondents wrote about a perceived lack of recognition and transferability of their skills.

A number of nurses wrote about the PDRP relating to quality care. A typical comment was that improving the skills of nurses equated to improved nursing care. These respondents
were quite positive about the PDRP and all were participating in the PDRP, or had presented portfolios for progression.

**Suggestions**

The questionnaire asked participants for ideas and comments and encouraged people to have their say about the future of the PDRP process at the study hospital. A number of participants took this opportunity to offer suggestions for improving the process.

Obviously, better remuneration and a less complex process featured highly as themes for suggestions about the PDRP. Other suggestions included the use of regular group meetings to allow people of the same level to work together, and education on how to prepare a portfolio, in terms of layout and content. People clearly wanted some education on the PDRP, especially when they were new to the organisation. One participant requested flexibility in times for submitting a portfolio, and felt there should not be a monthly date of submission. Some people suggested divulging applications for progression to managers and senior nurses working alongside the nurse, rather than presenting a portfolio to the PDRP Panel. One participant hoped nurses would be consulted when the PDRP was reviewed by the NCNZ.

Overall, the suggestions were positive and constructive. Many suggestions related to a need for better support and education about the PDRP, and streamlining of the process itself.

**Triangulation**

Many of the comments (n=18) were clearly negative about the PDRP, while some were very positive (n=8). For the remainder of the comments it was unclear whether the participant was negative or positive, and sometimes a response contained both negative and positive aspects. Triangulation of the data, enabled some interesting findings about the respondents.

Some of the lowest knowledge scores were attained by participants who had written negative comments, while the highest scores were found amongst those who had returned positive comments. As would be expected from the attitudinal summaries, most of the respondents who made negative comments had Pro PDRP (or positive scale) scores below the mean, and one respondent had the lowest score overall (or was the most negative). All but one of the participants returning a positive comment, had scored above the mean Pro PDRP score.

The PDRP Process (or negative attitude scale) was not as polarised as the previous measures. Most of those who wrote negative comments, had PDRP Process scores above the mean (more negative) while most of those who were positive, had PDRP Process scales below the mean (less negative). The PDRP Benefits subscale was only completed by those who had
presented portfolios, and therefore, numbers were smaller than for all of the other measures. Only two respondents made positive comments and had presented portfolios. The PDRP Benefits scores, for these two respondents, were above the mean. Ten respondents who had returned negative comments, had presented portfolios. This group had mean scores both above and below the mean for the PDRP Benefits subscale. The highest and lowest PDRP Benefits scores were not within this group, and there was no real commonality evident.

These findings add weight to the attitudinal scales as an accurate representation of negative and positive attitudes towards the PDRP process. The relationship between a low knowledge score and negative comments is evident, while higher knowledge scores were seen in the group who responded with positive comments. Two-thirds of those who made negative comments were below the mean Pro PDRP score, and above the mean PDRP Process scores. Conversely, almost all the people who made positive comments, had Pro PDRP scores above the mean, and PDRP process scores below the mean.

In summary, the Ideas and Comments yielded a rich source of qualitative material. Over half of the people who returned questionnaires provided some comments. The main themes were: complexity of the process, time and money, education and support, clinical relevance, competing priorities, workloads, and a sense of accomplishment. Over half of the people who had commented, had presented portfolios for PDRP progression. More comments were negative than positive, and some people used the opportunity to vent frustration, not only about the PDRP, but sometimes other aspects of their work. Almost all of the positive comments had qualifying factors.

When strongly negative or positive comments were compared with knowledge and attitude scales, some patterns were visible. Those who wrote negative comments tended to have lower knowledge scores, while those who wrote positive comments, had the highest knowledge scores. It was also apparent that a negative comment was associated with a less positive and more negative attitude on the attitudinal scales, and vice versa for those who wrote positive comments.

**Summary**

This study yielded a large amount of information on nursing career development. The participants were mostly female, with a median age of 40 years and half were of New Zealand
European ethnicity. Approximately half of the respondents worked in surgical areas and a quarter in medical areas. Most respondents were Competent on the PDRP, and just over a quarter were at Proficient level. Experts and Graduates were represented in very small numbers.

In general, knowledge levels were fairly low relating to the history and ongoing development of the PDRP however many nurses knew about the PDRP process. Most participants gave the best answer for around half of the multiple-choice knowledge questions. Nurses showed positive attitudes towards the PDRP and those who had presented portfolios for progression found the PDRP was worthwhile and encouraged reflection. Almost all participants in the study agreed that there was a need for more PDRP education and support.

Those who had presented a portfolio for progression tended to be younger, of NZ European ethnicity, with more qualifications, but less clinical experience, than the group who had not presented portfolios. Half of the respondents wrote in the comments and ideas section of the questionnaire. This qualitative data often related to the complexity of the process and the time required for developing a portfolio. Triangulation between quantitative and qualitative data showed that the attitudinal scales reflected the participant comments.
CHAPTER 5. DISCUSSION

Introduction

The aim of this study was to find out what nurses knew about the PDRP and how nurses felt about the PDRP. This chapter therefore, considers nursing knowledge and attitudes towards the PDRP, in relation to previously published literature. The purpose of this discussion is to compare the study to what has previously been reported and to reflect on the merit and limitations of the research in relation to the future of nursing careers.

International perspectives and models of career development are woven into the discussion for two reasons. Firstly, international models parallel some aspects of the New Zealand PDRP model, and secondly, the New Zealand PDRP is relatively young in comparison to the pioneers of clinical ladders in North America, where most of the evaluative studies originate. This application of the international literature enables contrasts to be made, in order to suggest ways to evolve the PDRP in the future.

The research strengths and the weaknesses will be acknowledged in order to evaluate the research as a whole. This review of the research process will assess the reliability and validity of the study.

Participation in the PDRP

The database used for this study showed that progression on the PDRP at the study hospital was lower than expected. Proficient and Expert nurses constituted just under 25% of the population from the ANSOS One-Staff™ data base, in October 2008 (Proficient=21%; Expert=3.9 %). Nurses at the study hospital were placed at Competent by default when the PDRP was initiated, but were removed if the appropriate documentation and performance reviews were not maintained. The ANSOS One-Staff™ Human Resources database did not have a category for nurses who were ‘not on’ the PDRP.
Nationally, participation rates in PDRP were recognised as ‘low’ at 43.7%. This data was gathered in late 2008, and measured all nurses participating on all levels of the PDRP in New Zealand, not just those progressing beyond Competent.

The international literature also contains very little data on career pathway participation rates. News reports from the UK suggest varied uptake of the KSF, from few in some NHS trusts, through to high levels of participation in Scotland (Staines, 2009). The UK KSF is a relatively recent innovation and no research was found to corroborate reports on progression rates. In the US there is a paucity of research detailing progression rates on clinical ladders (e.g. Drenkard & Swartwout, 2005; Krugman, et al., 2000; Schoessler et al., 2005; Ward & Goodrich, 2007). Progression beyond Competent is the most appropriate comparison to PDRP participation rates because of the similarity to the New Zealand Benner-based PDRP. According to these studies, a maximum of 16% of nurses in the US have progressed to levels comparable with Proficient or Expert (Ward & Goodrich, 2007).

In comparison to this, the earlier New Zealand study found almost a quarter of nurses at one DHB had progressed to Proficient or Expert after a decade of the PDRP (Carryer, et al., 2007). Therefore 25% of nurses progressing to Proficient or Expert on the PDRP, at the study DHB, compares favourably with previous New Zealand research and clinical ladders in the US (Carryer et al., 2007; Ward & Goodrich, 2007).

**Ethnicity**

The demographic question about participant ethnicity, was not straight-forward. Ethnicity is the noun derived from ‘ethnic,’ which is defined as: “relating to a group of people having a common national or cultural tradition, [or] referring to origin by birth rather than by present nationality...” (Oxford English Dictionary; 2002). In the book, *Cultural Safety in Aotearoa New Zealand*, ethnicity is described as not merely implying race, but encompassing a number of additional features (Wepa, 2005). Wepa describes members of an ethnic group as sharing historical heritage, a common language, similar features and that the group “feel a sense of unique collective solidarity” (2005, p. 34). This measure of ethnicity according to racial and cultural origins means that an individual’s ethnicity is a subjective and complex gauge, open to interpretation. Added to this subjectivity of interpretation, New Zealand is seeing an increase in
ethnic diversification due to immigration and intermarriage, especially amongst those who identify as Asian (Friesen, 2009).

This individual subjectivity about ethnicity led some participants in this study to report they were a ‘NZer’ or a ‘Kiwi’ in the ‘other’ choice for the ethnicity question. These responses may have skewed the data to increase the number of respondents outside the NZ European choice. Added to this, all Maori participants identified with more than one ethnicity including NZ European, Pacific Islander, or ‘Kiwi’’. This is further evidence of increasing ethnic diversity and the subjective interpretation of a question, which becomes complex as a measurement tool.

As is recommended by the Ministry of Health (2009), this research study used the NZ standard census question to ascertain the ethnic mix of the nurses at the study DHB. However, because participants could choose more than one ethnicity (and needed to be able to), it is impossible to extract an accurate summary of the population mix. A summary of ethnicity as a percentage requires ethnicity to be prioritised to a single choice, and this is not always possible e.g. a person with a parent from two different ethnic groups. As a result, only the ethnicity frequency was reported in this study and a precise summary is not possible.

**Knowledge Levels**

The knowledge section of the survey revealed some interesting findings. Most participants answered just under half the questions with the best answer. There were some obvious gaps in knowledge about the PDRP and some aspects where almost all participants had a good understanding.

The historical development of the PDRP was not well understood and most nurses in the study did not realise that the PDRP was developed by nurses, for nurses (Capital & Coast DHB, 2001; Trim, 1998). Despite a limited knowledge of the PDRP history, almost half of the respondents understood the link to the PDRP of today, by responding that nurses ‘should feel responsible now’. This attitude of current accountability by so many nurses, suggests nursing empowerment and a feeling of ownership of the PDRP process. This original principle of nursing ownership of the PDRP has not become diluted over the past decade, even though the history has faded.

There was clear understanding, by most participants, that the PDRP is for professional development of nurses. A significant group of respondents (17%) however, thought the PDRP
was an organisational measurement instrument as opposed to a professional development tool. This is a viewpoint mirroring the difference between the Government initiated KSF in the UK, and the clinical ladders of the US. The KSF is an organisational structure to train and develop the health workforce (Benton, 2003; Douglass & Ruddle, 2009), while clinical ladders are primarily nurse-developed programmes of clinical recognition and individual growth (e.g. Brenner, et al., 2008; Fusilero et al., 2008). In the UK, the KSF is struggling to get off the ground despite repeated re-launches and attempts to get nurses involved (e.g. Staines, 2009). Likewise, in the US nurses are evaluating and changing clinical ladders in an effort to boost participation (e.g. Riley, Rolbrand, James, & Norton, 2009). These international challenges are relevant to the group of nurses who see the PDRP as an organisational measure because successful change involves consultation and ‘buy in’ by all participants (e.g. Hayman, Wilkes & Cioffi, 2008). Nursing ownership and belief in the PDRP will be vital if organisations wish to maintain participation and momentum.

Throughout the Knowledge section of the survey, there were significant numbers of ‘don’t know’ responses. For many of the questions about the PDRP process, between 10% and 25% of the respondents responded that they were unsure of the requirements or the process of the programme. This showed a significant knowledge gap for many nurses, which again limits participation in the PDRP. Few participants were aware of the NCNZ 5-yearly review of the PDRP for accreditation purposes, or that this review involves wide-spread consultation from a wide variety of interested parties, including nurses (NCNZ, 2008).

The majority of participants knew where to get advice about the PDRP, that it was linked to pay, and that an updated portfolio, at least at Competent level, was required for annual performance review. Knowledge about participating in the PDRP was generally better than aspects of monitoring or maintaining the programme. Perhaps, the most surprising result of this survey was that nurses were generally unaware that PDRP Assessors had formal NZQA training. An understanding of Assessor qualifications could boost the credibility of the PDRP panel.

There was evidence that recent changes to the PDRP were not well understood despite a handbook and intranet information being available, and occasional in-service education. Nurses generally thought that Expert level on the PDRP essentially entailed postgraduate study, which was no longer a requirement, and some nurses thought that portfolios required updating every three years, as previously, when this is a requirement for annual appraisal. The availability of written material and in-service education does not necessarily guarantee that nurses will be
familiar with a career advancement programme (Fusilero et al., 2008), and new ways to deliver the information are required.

A comparison of knowledge scores between the previous studies on the PDRP (Carryer, et al., 2002; 2007) is difficult because these earlier studies used 13 of the 14 questions in the knowledge section for data analysis, and it is unclear which question, from the survey tool, was not included. It is clear however, that nurses’ knowledge about the PDRP has not increased significantly when compared with earlier studies: M=6.91 in 2002 and M=7.11 in 2007, for 13 questions; M=6.23 in 2008, for 14 questions (Carryer et al., 2002; 2007).

There was a small difference between the mean knowledge scores of those who had presented portfolios for PDRP assessment when compared with those who had not (M=6.5 vs. 5.9). This is a similar finding to previous studies (Carryer et al., 2002; 2007) and, being small and statistically insignificant, probably reflects an overall knowledge deficit, as opposed to a specific issue for those who have never submitted a portfolio.

The question remains about why so many nurses have knowledge deficits about the PDRP process. Some of this could be explained by relatively recent changes to the process, and access to information and support for PDRP progression. However, an examination of the barriers to career development and nursing attitudes towards the PDRP also contributes to limitations for nursing knowledge of the PDRP.

**Barriers to PDRP Participation**

Barriers to professional development and education have been identified in previous studies, both in New Zealand and overseas (e.g. Brinkman & Wilson-Salt, 2008; Gould, Drey, et al., 2007; Hughes, 2005). This thesis primarily concurred with all the barriers to professional development which have been recognised in previous research.

Nurses were acutely aware of the barriers affecting participation in the PDRP and frequently commented on this issue in the questionnaire. Of all the barriers mentioned, the complexity of the process featured as the most common hurdle. The comments reflected that there was no time in the workplace to develop a professional portfolio and there was resentment about spending ‘personal’ time on developing a portfolio. These feelings have been reported in a previous PDRP study (Carryer et al., 2002) and in studies on nursing development (Gould, Drey, et al., 2007; Hughes, 2005).
Interestingly, the participants did not link the PDRP with formal postgraduate education. Even though a quarter of participants in the study had postgraduate qualifications, and a fifth engaged in ongoing education, this education seemed completely separate to the PDRP. In contrast to the PDRP, nurses did not mention lack of time for formal education and the associated ‘paper work’ despite only receiving study leave for some class time and not for assignment writing. There was also no suggestion that postgraduate education lacked clinical relevance, as was inferred about the PDRP. Participants collectively agreed that professional development is an individual’s own responsibility, along with safe and current practice, and yet there was strong resistance to working on the PDRP outside work hours, and not other educational pursuits. This disparity between formal education and PDRP activity suggests that the PDRP is not viewed as professional development nor seen in the same light as postgraduate study.

A link that was evident, however, was that nurses who are younger and University educated are more likely to present a portfolio and may find the written requirements of the PDRP more manageable, than ‘old school’ nurses. Several comments reinforced the finding that older nurses, who were not tertiary educated, viewed the PDRP as a daunting academic process, as was found in an earlier study (Carryer et al., 2007).

Nursing research has established that clinical demands can pose a barrier to nursing education (e.g. Gould, Drey, & Berridge, 2007; Penz et al., 2007). One of the main themes reported in the comments offered by recipients, was the desire for paid time to develop a professional portfolio for PDRP submission. Surprisingly, only one participant mentioned the entitlements for Proficient and Expert nurses to have paid time for PDRP preparation, under the MECA (DHBs /NZNO, 2007). When considering that this allowance has been in the national nursing employment contract for over two years, there was general unawareness of the allocation, and nurses may not be receiving this leave entitlement.

Nurses have also reported that their careers use all their energy and there is little scope to undertake education in addition to this work load (e.g. Bates, 2006; Hughes, 2005). In this PDRP study, the nurses also talked about families, staffing and the ‘juggling act’ of childcare and work-life balance. Despite these barriers, as Shermont et al. (2009) also found, nurses in the study primarily aspired to enhance their practice. Nurses are not generally a group of people who ‘go to work to do their eight hours’ and wish to stay at the same level of practice for their working careers. In fact, only a quarter of nurses reported that they would be happy to remain at their current level of practice in the future. This group of nurses, who did not want to pursue
advancement of practice, were primarily in the later years of their nursing careers (over 50 years of age). Brinkman and Wilson-Salt (2008), also found that New Zealand nurses much preferred education during work hours and this leads to the conclusion that it is likely to be the personal cost which impinges the most on nursing participation in the PDRP. Professional development is desired yet nurses would prefer that it was not at the expense of nursing care or personal time.

Money was an issue for some nurses beyond the requests for paid time. When combined, the attitudinal scales and comments reflected that some nurses felt the financial incentives did not equate to the effort involved in progressing on the PDRP. This muted response, in comparison to the numerous requests for leave, suggested that time was of far greater value to nurses, than money alone. It is possible that the significant nursing pay rise dating back to the 2004/5 MECA means that nursing salaries may not be a major issue in New Zealand, currently.

In summary, the barriers to education, which have been identified in the international literature, were extremely similar to the barriers reported by nurses in the PDRP survey. Time, families, clinical demands, advancing age and money all emerged as having significant impact on nursing career development via the PDRP. Although formal nursing education was not reported to be hindered, there was essentially no association made between the PDRP and postgraduate education, in the survey. There appears instead to be an attitudinal difference between the PDRP and education. Instead of barriers to education becoming barriers to career development it appears that the barriers are the same. The PDRP and postgraduate education appear to have become distanced despite the paths on the original model being side-by-side (National PDRP Working Party, 2005).

**Attitudes towards the PDRP**

This research revealed that some nurses have significant issues about the PDRP yet, as a group, nurses were not greatly polarised in their attitudes. The fact that over a third of respondents offered no opinion for statements about PDRP participation, and 40% had not completed a PDRP portfolio at all, shows a general indifference towards participation in the programme. Not surprisingly, the most unenthusiastic group were the nurses who had not presented portfolios and had lower scores in the knowledge section of the questionnaire, while those nurses who had presented portfolios felt it was challenging yet worthwhile.
When compared with the previous research by Carryer et al. (2002; 2007), the nurses at the study DHB were more positive about the PDRP than in the earlier studies. The Pro PDRP Scale (or positive scale) yielded a mean score of 17.92 which was higher than the means of the previous studies (M=16.39 in 2002 and M=16.99 in 2007) and showed most nurses were positive about the PDRP. The PDRP Process Scale (or negative scale) had a mean score of 19.99 which was actually lower than the midpoint of 21, or in other words was slightly positive. This result was more positive than previously, where the means were 22.30 in 2002 and 20.48 in 2007 (Carryer et al., 2002; 2007). The PDRP Benefits Scale, which measured attitudes towards the PDRP in the group who had presented portfolios for assessment, was almost identical to the most recent PDRP study (Carryer et al., 2007). This mean of 13.57 (midpoint of 12), like the previous study, was positive about the value of producing a PDRP portfolio, but only just.

The modestly positive attitudinal scores corresponded to the comments offered by participants about the PDRP. These comments reflected a general positive view yet almost all positive comments contained qualifying factors. This was interpreted as an underlying lack of enthusiasm and optimism. This lack of interest in the PDRP bears a similarity to many reports about the lukewarm nursing response to the KSF which are emerging from the UK (Snow, 2009; Staines, 2009). There are also reports of a similar loss of interest in some established clinical ladders in the US which have subsequently been revamped (e.g. Riley et al., 2009; Winslow & Blankenship, 2007).

Only two responses to the questionnaire reflected the assumption that enhanced education via the PDRP improves the quality of nursing care. This attitude towards education, as a quality enhancer, has been identified in research from around the globe (e.g. Cheeseman, 2009; Joyce & Cowman, 2007; Torstad & Bjork, 2007). Unfortunately the measure of quality in nursing is a wooly concept and no universal determinants have been found (Robb et al. 2002). This relative invisibility of the PDRP as a tool to promote excellent nursing care is at odds with the goals of increased PDRP participation as a measure, at least in part, of quality nursing care in New Zealand.
Recruitment and Retention

In this study, nurses did not report that they viewed the PDRP as a recruitment and retention tool. If anything, the PDRP was felt to be a deterrent to a career in nursing for some participants, with one respondent disillusioned and about to leave due to the impact of the PDRP.

This lack of recognition of the PDRP as a retention tool was unexpected in this study. International literature supports the theory that nursing career development programmes play a part in enhancing recruitment and retention of nurses (e.g. Brenner et al., 2008; Drenkard & Swartwout, 2005), yet nurses did not report that the PDRP had attracted them to the job, nor added to a desire to stay in a role. A few participants reported issues with transferability on the PDRP, either from another country or clinical area, in effect reducing the desire to engage in the PDRP, rather than demonstrating that the PDRP had been an attraction.

The PDRP may be unimportant as a recruitment and retention initiative for nurses, as was previously found by Ward and Goodrich (2007), because nursing turnover is a complex and broad issue (Hayes et al., 2006). The numerous contributing factors which impact on nursing turnover may have overshadowed the PDRP as a factor in recruitment or retention. It is also possible that the “pay jolt” of the 2004 MECA has been responsible for attracting nurses to clinical roles by boosting nurses’ wages and morale (Buchan & North, 2008), to a far greater extent than the PDRP.

It is a concern that the PDRP is seen by some nurses as a negative influence on career development, when this conflicts with the goals of the PDRP (National PDRP Working Party, 2005). Despite agreeing that the process of producing a PDRP portfolio is valuable for career development, and revealing strong support for individual accountability in practice, nursing resistance to PDRP participation is still an issue for some.

Relevance of PDRP

The root of this resistance appeared to originate from participant comments questioning the relevance of the PDRP to clinical nursing. The relationship between the PDRP and clinical competence has also been doubted by participants in previous studies (Carryer et al., 2002;
2007). Some of this resistance has related to the PDRP process in that it is seen as daunting and long-winded and therefore irrelevant to busy nurses wanting to ‘get on and nurse people’. There is also the apparent disconnection of the PDRP from formal education, meaning nurses are unable to easily link postgraduate study to PDRP competence, further distancing the PDRP from clinical nursing.

Nurses have issues with the paperwork associated with the PDRP and this has been the case for some time now (Carreyer et al., 2002). A working party of national representatives is currently reviewing the evidential requirements and seeking consultation with interested parties (PDRP Evidential Requirements Working Party, 2009). The self assessment (Performance Review) template at the study hospital is 14 pages long before the nurse and the reviewer provide examples of practice and reflection. It is not uncommon to finish with a document well in excess of 20 pages long, and then nurses also complete a Professional Development Plan, a record of professional development (including reflection on some of the learning activities), a reflective exemplar of practice, a record of a quality initiative, and records of teaching sessions. Finally the nurse seeks a letter of support from a senior nurse, and provides documents such as a position description, a Curriculum Vitae, a Practicing Certificate and certificates of educational attendance. The final Professional Portfolio is a source of pride for the nurse, yet is seen as overwhelming for many people initially.

This criticism of complexity has also been levelled at the KSF where some people believe it is a “box ticking exercise” (Jebb et al., 2009, p. 28), and intricacies of the documentation seem well recognised (Buchan & Evans, 2007; Douglass & Ruddle, 2009). In the US, clinical ladders have been rationalised, even trialling a points-based model and facilitated workshops on documentation, in an effort to reduce the cumbersome and time-consuming written workload for nurses (e.g. Brenner et al., 2008; Winslow & Blankenship, 2007). These international issues of process difficulties were reiterated by nurses in this PDRP study, where some participants felt that those who progresses on the PDRP were good ‘book nurses’ who were able to complete academic writing, yet were not necessarily good clinical nurses. This suggested difference between good PDRP documentation and good clinical nursing attracted much criticism.

The relatively low knowledge scores showed that many nurses did not understand the PDRP process well, leading to misconceptions and further reluctance to participate. Three-quarters of participants wanted more education and support for the PDRP, and some commented about wanting to see example portfolios and better information on layout and templates. A PDRP Handbook is available for nurses and a dedicated site on the DHB Intranet
is easily accessible for templates. Unfortunately, information folders in the workplace have been recognised as of limited value (Fusilero et al., 2008), and this may be comparable to the written handbook and Intranet sources. Another issue which may arise, is the limited word-processing skills of some nurses (Winslow & Blankenship, 2007). Not all nurses have access to home computers, necessitating time at a workplace computer, and typing a long document can be challenging for nurses who have few word processing skills.

The study participants almost universally requested more education and more support for the PDRP whilst wanting to continue learning and development in order to deliver skilled care. The clear message was, however, that the written requirements of the PDRP seemed irrelevant to clinical nursing. Perhaps the greatest challenge for the future of the PDRP is understanding why a programme of career development, designed to recognise clinical nurses and keep skilled clinicians ‘at the bedside’, should pose such difficulty for these very nurses.

**The PDRP of the future**

Ongoing review of PDRP documentation is paramount for nurses and support staff, in order to simplify the process. The fact that the self-assessment can only be completed by the nurse themselves, requires buy-in by nurses and therefore nurses in the clinical setting need to be involved in reviews of the documents. Of note, is that a working party is currently examining the evidential requirements for the PDRP and a report is expected in early 2010. The disconnection between postgraduate study, professional development and PDRP competencies could be examined in order to streamline documentation and reduce duplication. The current model does not invite nurses to apply postgraduate work to competencies directly, and yet assignments and course work may pertain to some competencies. A points-based system, as developed in the US (Nelson, Sassaman & Phillips, 2008), could be a way to recognise postgraduate education and professional development while reducing documentation. This model is certainly worth investigating as a method to increase PDRP participation.

A mentored clinical ladder model, as suggested by Winslow and Blakenship (2007) has merit. In this model, a two-hour workshop, nurses are supported to begin documentation and complete approximately half of the requirements to progress on a clinical ladder. In the New Zealand setting, there is time allocated for PDRP development in the MECA (DHBs/NZNO, 2007). “Protected time” has been found to be helpful for nurses working on the KSF (Douglass
& Ruddle, 2009), and the provision of planned paid time could be used to assist nurses to make real progress on the PDRP. A PDRP workshop, with a folder provided, including an index and labelled dividers, the appropriate level Job Description and a disc with the document templates, might be the impetus to drive nurses’ enthusiasm and save duplication of effort for busy nurses. This small ‘leg-up’ may reverse some of the waning enthusiasm for the PDRP and is a good opportunity to showcase support for the workforce within the organisation, for minimal outlay, thereby recognising that nurses are united in a request for help.

Three-quarters of the participants in this study were unaware that PDRP Assessors had formal training. The attitude scale questioning the relevance of assessor clinical expertise revealed a mean of three, or in other words a non-committal midpoint. Advertising the assessors and their clinical skills would add relevance and credibility to the PDRP panels, within the DHB. Nurses would be able to see that assessors are clinically credible nurses who they know, rather than a group of unknown and distant desk-dwellers. Equally, this study showed that nurses had limited understanding of the genesis of the PDRP. Over time, the original aim of the PDRP, to create a career path for clinical nurses, has become diminished. There may be value in revisiting the origins and purpose of the PDRP, as a marketing tool to boost enthusiasm from nurses.

Considering that the participants who were the most negative about the PDRP also had the lowest knowledge scores, it is a reasonable assumption that enhanced knowledge about the PDRP is the key to increased participation. These suggestions for the future, based on international findings, may prove valuable for evolution of the PDRP.

Study limitations and strengths

Aside from the limitations of meaningful measurement of ethnicity of the study participants, several other limitations became apparent during the research study. A weakness of the research was the small scale arising from 95 respondents. The limited numbers meant that there was no evidence of statistical associations between respondent characteristics using T-tests and linear regression. A larger sample may have produced different data.

The small numbers within subgroups made it difficult to examine some groups e.g. Expert and Maori nurses. While small numbers were expected for these groups, data is keenly sought within DHBs for the purpose of future workforce planning and policy and wider data would be
invaluable (e.g. Capital & Coast DHB, 2007; MOH, 2002). The greater proportion of Competent nurses in Surgical areas and absence of Expert nurses in the Medical directorate may have resulted from sampling. There were clusters of Proficient and Expert nurses in the Neonatal Unit and Intensive Care Unit whereas the Medical Directorate did not contain a similar large high dependency unit. This feature could explain the absence of Expert nurses yet a greater proportion of Proficient nurses in the area.

The sampling process highlighted some other issues concerning identifying and locating respondents. The ANSOS One-Staff™ human resources database was used because the DHB Pay Roll data was incomplete. Despite efforts to access a current ANSOS One-Staff™ database, remove duplicates, and manually find mailing addresses on the contact directory, at least ten people selected to receive surveys, had moved within or away from the organisation (as seen by the returned mail). Two intended recipients had left at least 18 months previously. An issue also arose where some people on the ANSOS One-Staff™ database were thought to be midwives when midwives had been excluded due to a separate professional development programme. An explanation may be that these people held dual registration as midwives and nurses but there was no way of knowing from the database. No respondents identified themselves as a midwife but not a nurse, yet it is possible that if these participants received a questionnaire, it was disregarded as irrelevant.

The limitations posed by the inaccurate database made it extremely difficult to access all nurses. Some clinical areas marked the questionnaires ‘return to sender’ while other areas may have discarded the envelopes. This potential loss of randomly selected nurses would have impacted on the return rate and it was fortunate that 42% were returned. Accurate data on the health workforce has been a problem in New Zealand as is suggested in Health Workforce Information Programme reports by the DHBNZ: “When it comes to managing and planning the [health and disability] workforce the sector has been essentially ‘flying blind’ with little reliable information to draw on” (2008, p. 5). These difficulties sourcing current and accurate data on the nursing workforce added challenge to this research.

The previously validated survey tool had both strengths and weaknesses. The questionnaire was long (nine pages), and most participants were required to answer over 50 questions or scales. Despite the length, participants generally completed all of the survey and only a small number left some knowledge or demographic questions unanswered. It is possible that no response to a multiple-choice question may have been perceived as better than marking the ‘don’t know’ option, hence some omitted answers. In the case of demographics, the length
of the questionnaire or concerns about privacy or disclosure of age, experience or ethnicity may have deterred participants towards the end. Several participants left the experience (in years) question unanswered. Almost all other questions required a tick, and the time taken for this numeric question, may have been the issue.

Other concerns with privacy within the workplace may have existed, where nurses knew the LR or felt questionnaire identification was possible. Naming the researcher and their minor role within the DHB was thought to add integrity to the study, but this had to be balanced with privacy and any perceptions of coercion or vulnerability in the workplace. It was possible that the study was perceived as research from the employer, although the university coat of arms was on the cover, as opposed to a DHB logo, to reduce the likelihood of coercion. No incentives were offered intentionally, in order to strengthen the freedom of choice to participate without inducement.

Nurses involved with research or postgraduate studies, may have recognised the value of research and been more inclined to participate in the survey thus creating a selection bias. The use of a written questionnaire was purposeful to address this bias by capturing nurses who may not be academically or technologically skilled, who may feel more comfortable with a hard copy. This use of a written tool in the workplace, also created a possible response bias where nurses may have discussed answers with colleagues, especially for the knowledge questions. There was, however, no evidence that this occurred.

The questions in the survey asked for the best response for multiple choice questions. Some participants marked several choices for some knowledge questions and the question asking about clinical qualifications. The question pertaining to participants’ clinical qualifications elicited many ticks as opposed to the single best representation of clinical qualifications which was requested. In retrospect, this question did not reflect current NCNZ scopes of practice and could be considered obsolete. The question was used in order to stay true to the original tool, and had been modified after the pilot study highlighted a wide variation in nursing training. The responses were coded according to the lowest and highest qualifications and advice was sought about New Zealand equivalency in the case of international qualifications. Any future studies should clarify the single answer for multiple choice questions and offer nursing qualifications as a single question, according to the NCNZ scopes of practice.

Random selection and effort to locate individual nurse workplace addresses across the DHB aimed to minimize the likelihood of a sample bias, and as a result there was wide representation of clinical areas both on and off the main hospital campus. The return rate of
42% was acceptable for a postal survey and was similar to previous PDRP research (Carryer et al., 2007). This ‘snap-shot’ of the DHB provided valuable baseline data which confirmed the findings of comparable studies about nursing development reinforcing the reliability of the study. This study was undertaken at only one DHB in New Zealand, where the PDRP process is unique and therefore the results may not be generalised to other New Zealand DHBs. The content validity may, however, be strengthened by the many qualitative responses received and the finding that triangulation with the quantitative data demonstrated consistency of attitudes.

The research process was followed faithfully and a number of internal quality controls were instituted. The strength of the research was enhanced by quality measures such as meticulous record keeping and audit during data entry, and independent audit of the thematic analysis of qualitative data. Despite the limitation of a small cohort and an inaccurate database of the population, the study generated varied data from a good cross-section of nurses at the DHB.

**Summary**

This research demonstrated that progression rates on the PDRP were higher than what has been reported in the US literature about clinical ladders. Nursing knowledge of the PDRP was only fair and similar to levels reported in previous studies (Carryer et al., 2002; 2007) although it is acknowledged that it can be difficult to improve understanding with workplace resources (Fusilero et al., 2008). Barriers to participation in the PDRP were consistent with those previously reported in the international literature concerning nursing career development. The difficulties with competing priorities did not outweigh the strong feeling of individual accountability for professional development.

Many nurses expressed that the PDRP lacked clinical and educational relevance. It was suggested that ‘academic nurses’ found the process easier and the demographic data supported this suggestion in finding that younger tertiary-trained nurses were more likely to progress on the PDRP. Participants also felt the PDRP portfolio documents were overly time-consuming and complex as has been reported previously (Carryer et al., 2002; 2007), and more recently, concerning the KSF in the UK (Douglass & Ruddle, 2009).

Despite the ambivalence about the PDRP seen in the qualitative data, attitudes towards the PDRP were marginally more positive than in the previous PDRP studies (Carryer et al.,
2002; 2007). The PDRP was not generally viewed as a measure of excellence in nursing, or an incentive for recruitment or retention, as has been suggested in founding documents (National PDRP Working Party, 2005). Instead, the PDRP was seen as a de-motivator for a few nurses who expressed resistance for the process, while a general lack of enthusiasm was evident for a majority. Nurses requested better support and education for the PDRP in the future. Improved marketing and a stream-lined process are recommended in order to increase participation.

The research process was reviewed and whilst some weaknesses were identified, efforts were made to reduce possible bias from these limitations. A previously validated questionnaire and a random sampling framework supported the strength of this study, which followed a carefully audited research process in order to produce reliable data.
CHAPTER 6. CONCLUSION

The aims of this study were to ascertain what nurses knew, and what nurses thought, of the PDRP. It was hoped that the gathering of this base-line data, at one New Zealand DHB, might provide the information to develop the PDRP process and promote participation in the future.

The New Zealand PDRP was experiencing low levels of PDRP participation where nationally less than half of all nurses were engaged (PDRP Evidential Requirements Working Party, 2009). The literature review ascertained that career development processes are in place globally, and after a long history in the US, some clinical ladders are being revamped or streamlined, while the relatively recent KSF in the UK is endeavouring to gain support.

The study objectives of generating baseline data about PDRP knowledge and attitudes, at the study hospital, were met. It was found that nurses generally understood the PDRP participation process however few knew the rationale for the original development of the PDRP, or the quality measures of the programme. Furthermore, a significant group (between 10 and 20%) of participants marked the ‘don’t know’ option for most questions about the PDRP process. The study also found that nurses showed modestly positive attitudes towards the PDRP and 61.5% of respondents who had submitted portfolios for progression found the process worthwhile. These findings were similar to previous New Zealand research (Carryer, et al. 2002; 2007). The qualitative data revealed considerable depth of feeling from study participants and was consistent with the quantitative data. Therefore, despite the overall positive attitudes, the challenges of the process cannot be ignored. Many nurses wrote very long and involved comments, often containing carefully considered positive and negative aspects of the PDRP, followed by constructive suggestions.

As a whole, three-quarters of the participants wish to increase their knowledge base and to progress their level of practice. Universally, nurses accept responsibility for safe and current practice, and two-thirds agreed that professional development is an individual’s responsibility, although this was not suggested to be exclusive of employer support. Therefore, it is reasonable to consider that the PDRP is required and desired by nurses as a framework for increased knowledge and improved practice. Nurses, however, clearly feel aggrieved about the significant personal time and resources necessary to engage in the PDRP while multiple barriers
exist. It is evident that the ‘charity paradigm’ exists (Munro, 2008), as seen in the expectation that nurses will participate in the PDRP despite clinical, educational and personal demands and limited organisational support.

Suggestions for the evolution of the PDRP have been made, in order to increase the relevance of the programme to nurses ‘at the coal-face’. These suggestions relate to marketing initiatives, streamlining the documentation, and offering simple incentives to nurses, by way of workshops and the provision of portfolio folders. Special support, which takes into consideration the barriers faced by nurses, could be tailored to the needs of nurses who are less likely to progress on the PDRP, such as experienced nurses who have not completed tertiary study and may need assistance with computer literacy. It is recommended that employers provide formal support in order to develop the nursing workforce, especially if PDRP levels are to be used as a national benchmark of nursing skill levels, which is very likely in the future.

These suggestions for the PDRP are not changes to the competencies for a Registered Nurse or the NCNZ PDRP standards (NCNZ, 2007; 2008). Instead these ideas concern the delivery and the experience of the PDRP for nurses. Prescriptive evidential requirements could be expanded to recognise a wider range of demonstrations of practice while the potential is rapidly appearing for the possibilities of electronic portfolios.

This base-line research study would benefit from a sequel. From this starting point the PDRP can evolve according to the needs of clinical nurses- the very people for whom it was originally devised. The outcomes of any changes can be measured by changes in PDRP participation rates. There is also significant need for more research on the health care workforce as a whole, to enable planning for a future of ongoing shortages of skilled staff, and the changing face of the people nurses care for (e.g. Friesen, 2009). As the Minister of Health said, in his address at the recent NZNO Centennial Celebrations: “The biggest issue in health is workforce, workforce, workforce” (Ryall, 2009). Nurses, as the largest group of workers in the health workforce, need to want their PDRP to propel them towards the future.
REFERENCES


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Nurses’ understanding and opinions of the Professional Development & Recognition Pathway (PDRP) at CCDHB
Nurses’ understandings and opinions of the Professional Development and Recognition Programme at CCDHB

You have been randomly selected to participate in this survey investigating the PDRP at Capital and Coast District Health Board (CCDHB). This survey examines knowledge of the evolution of the PDRP, and opinions of the PDRP process, and the development of a portfolio.

This survey is based on two studies undertaken at MidCentral DHB and published in Nursing Praxis in New Zealand (Carryer, J., Budge, C., & Russell, A. 2002, Carryer, J., Russell, A., & Budge, C. 2007). These researchers have given permission to use their survey, which was originally developed in 2001, after focus groups with nurses. This study is being done as part of the requirements for a Master of Nursing Degree.

Questions addressing themes identified in the 2001 research are presented in sections one and two. Section three asks for your ideas about improving CCDHB’s PDRP process. The final section consists of demographic questions, so we can describe our sample of respondents. It is hoped that this study will provide the data to evolve the PDRP at CCDHB. The results of the study will be reported on the CCDHB Intranet at the conclusion of the study in late 2009.

All responses will be treated confidentially, and individuals will not be identified. Care will be taken with comments to ensure anonymity is maintained in future reports or presentations.

Please note that completing this questionnaire implies that you consent to take part.

Leanne Havill, Clinical Nurse Educator, Cardiothoracics.

SECTION 1: KNOWLEDGE

Please answer the following questions by putting the letter of the best response to each question in the box to the right.

1. Who was responsible for originally developing the PDRP at CCDHB?
   A) Nursing Council of New Zealand
   B) Hospital Managers
   C) Nursing Managers
   D) Nurses and Midwives
   E) NZNO
   F) Other (please specify)_________________
   G) Don’t know

2. Why was it developed?
   A) For management to measure nursing skill mix
   B) As a requirement for nurses to justify their practice
   C) To encourage professional development of the nursing workforce
   D) To encourage adherence to company expectations and values
   E) Don’t know

3. Who should feel responsible for the PDRP initiative now?
   A) Nursing Council of New Zealand
   B) Hospital Managers
   C) Nursing Managers
   D) Nurses
   E) NZNO
   F) Other (please specify)_________________
   G) Don’t know
4. How often is the PDRP process at CCDHB reviewed?  
A) Annually  
B) Two Yearly  
C) Five Yearly  
D) Never  
E) Don’t know

5. Who carries out the PDRP review process at CCDHB?  
A) Nursing Council of New Zealand  
B) Hospital Managers  
C) Nursing Managers  
D) Nurses  
E) NZNO  
F) All of the above  
G) Other (please specify)_________________  
H) Don’t know

6. Which of the following people can you contact to obtain advice or information about the PDRP?  
A) PDRP CNS  
B) Charge Nurse Manager/Team Leader  
C) PDRP Assessors /Nurse Educators  
D) All of the above  
E) Don’t know

7. Do all CCDHB Nurses have to start at Competent on the PDRP?  
A) Yes  
B) No  
C) Don’t know

8. Is participation in Postgraduate study required for Expert level of CCDHB PDRP?  
A) Yes  
B) No  
C) Don’t know

9. Under the CCDHB PDRP policy, once you have had your performance review, how long have you got to submit your PDRP portfolio for assessment?  
A) 6 months  
B) 12 months  
C) 24 months  
D) Unlimited time  
E) Don’t know

10. Is each level on the PDRP linked to a monetary payment in the MECA?  
A) Yes  
B) No  
C) Proficient, Accomplished & Expert, levels only  
D) Don’t know

11. How often are individual portfolios required to be updated?  
A) Annually, for performance review  
B) Two Yearly  
C) Three yearly  
D) Never  
E) Don’t know

12. If you are employed by CCDHB and on the CCDHB PDRP, are you exempt from Nursing Council of New Zealand audit?  
A) Yes  
B) No  
C) Don’t Know
Are all CCDHB nursing staff expected to have a PDRP portfolio assessed, at least at Competent level?  

A) Yes  
B) No  
C) Don’t know

How are the PDRP assessors at CCDHB prepared for their role?  

A) Not at all  
B) Through doing Postgraduate study  
C) In-service education  
D) New Zealand Qualifications Authority (NZQA) Work-based Assessors Training  
E) Don’t know

SECTION 2: ATTITUDES

In this section you will read a number of statements. Please indicate your level of agreement with each statement by ticking the appropriate box.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tbody>
<tr>
<td>1. I shouldn’t have to complete a PDRP portfolio to demonstrate my</td>
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<td>capabilities</td>
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<td>2. I don’t really understand what is meant by professional development</td>
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<td>3. I would like to attend education sessions to increase my knowledge</td>
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<td>4. I would be happy to remain at my current level of practice for the</td>
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<td>rest of my working life</td>
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<td>5. I don’t have time to work on my professional development</td>
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<td>6. I find it embarrassing to describe myself in terms of what I have</td>
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<td>achieved</td>
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<td>7. I find it embarrassing to describe myself in terms of what I am good</td>
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<td>8.</td>
<td>I am happy to spend time outside work hours preparing my PDRP portfolio</td>
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<td>9.</td>
<td>I would be happy to spend time outside work hours preparing a PDRP portfolio, if CCDHB provided more paid time as well in which to do this</td>
<td>☐</td>
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<td>10.</td>
<td>I believe that producing a PDRP portfolio is useful for my career</td>
<td>☐</td>
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<td>11.</td>
<td>My professional development and education is my own responsibility</td>
<td>☐</td>
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<td>12.</td>
<td>I believe that submitting a PDRP portfolio for assessment is useful for my career</td>
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<td>13.</td>
<td>The PDRP competencies are too general and don’t suit all nursing areas</td>
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<td>14.</td>
<td>The competencies are clearly written and easy to understand</td>
<td>☐</td>
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<td>15.</td>
<td>The portfolio assessors don’t know what to look for if the individual’s area is beyond their nursing expertise</td>
<td>☐</td>
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<td>☒</td>
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<td>16.</td>
<td>It is my responsibility to ensure that my practice is safe and current</td>
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<td>17.</td>
<td>I doubt the use of Senior Nurse Letters because they are collected from friendly colleagues</td>
<td>☐</td>
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<tr>
<td>Question</td>
<td>Strongly disagree</td>
<td>Disagree</td>
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<tr>
<td>It is difficult to find people to write a Senior Nurse Letter for you</td>
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<td>There should be more support from the organisation for nurses to do a PDRP portfolio</td>
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<td>The PDRP would be a powerful process for nursing if all nurses “got on board”</td>
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<td>My professional development is solely the responsibility of my employer</td>
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<td>I am confused about what the PDRP is supposed to achieve</td>
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</table>

Questions 23 -28 are only for those people who *have never submitted* a PDRP portfolio for assessment. If you *have submitted* a PDRP portfolio, please turn to question 29 on the next page.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would like to be on the PDRP but don’t know what level to aim for</td>
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<tr>
<td>If I was able to work with a small group of others on my portfolio I would like to start one</td>
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<tr>
<td>I only have time to do further study or a portfolio, not both</td>
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<td>If a portfolio could be prepared and assessed in stages, rather than all at once, I would be prepared to do one</td>
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<td>The money I would get at the end isn’t worth the effort</td>
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<td>I haven’t kept records of my work and educational achievements and don’t want to collect them all again for a portfolio</td>
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</tbody>
</table>

Those who *have never* submitted a portfolio should now proceed to Section 3 on page 8 →
Questions 29-37 are only for those people who have already submitted a PDRP portfolio for assessment.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>29. The level of achievement identified in my portfolio is not linked to my performance review</td>
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<tr>
<td>30. The process of producing a portfolio encourages reflection on practice</td>
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<td>31. Developing a portfolio was personally worthwhile</td>
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<td>32. There was plenty of support and encouragement for me from other nurses while I was working on my portfolio</td>
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<tr>
<td>33. The costs (in time and money) of producing a portfolio outweighed it's eventual usefulness</td>
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<tr>
<td>34. The satisfaction gained from completing my PDRP portfolio is well worth the effort involved</td>
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<tr>
<td>35. My nursing practice has improved as a result of doing my PDRP portfolio</td>
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<tr>
<td>36. My portfolio doesn’t really represent me and my capabilities</td>
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<td>37. My attitude to professional development has changed as a result of doing my PDRP portfolio</td>
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</tbody>
</table>

Please proceed to Section 3
SECTION 3 : YOUR IDEAS AND COMMENTS

We would like to discover more about your ideas or comments in connection with the PDRP process. These could be comments that you might have liked to make as you were filling in this form, or comments in general about the PDRP process.

Please use the rest of this page (both sides, and more if necessary) to have your say about the future of the CCDHB PDRP process.

Please complete the next section to finish the survey. It is important that we know about respondents.
SECTION 4: DEMOGRAPHICS

1. Please indicate which of the following best represents your clinical qualifications?
   Tick only 1 box.
   - Registered Nurse
   - General & Obstetric Nurse
   - Psychopaedic Nurse
   - Bachelor of Nursing
   - Psychiatric Nurse
   - Enrolled Nurse
   - RCPN / Diploma

2. Please list any additional qualifications you have: ________________________________

3. Are you currently involved in any professional study?  Yes ☐  No ☐

4. If you have answered YES, what are you currently studying? ____________________

5. For how many years have you been practising as a nurse? ________________ Years

6. Please indicate whether you are working…  Fulltime ☐  Or Part time ☐

7. Please indicate whether you are…  Female ☐  Or Male ☐

8. Please circle the current age group you are in
   - 20 –25 yrs
   - 26 - 30 yrs
   - 31-40 yrs
   - 41-50 years
   - 51-60 yrs
   - over 60 years

9. To which ethnic group do you belong? Mark the space or spaces which apply to you.
   - NZ European
   - Māori
   - Samoan
   - Cook Island Maori
   - Tongan
   - Niuean
   - Chinese
   - Indian
   - other (such as DUTCH, JAPANESE, TOKELAUA). Please state: ____________________

10. Please indicate your current area of practice
    - Medical
    - Surgical
    - Neonatal
    - Child Health
    - Women's Health
    - Elder Health or Rehab
    - Intensive Care or ED
    - Mental Health
    - Ambulatory Care
    - Theatre or PACU
    - District Nursing
    - Casual Pool
    - Public Health
    - Other (Please specify)

11. What level are you on the PDRP?
    - NEiP
    - Expert
    - EN Accomplished
    - Competent
    - EN Competent
    - Proficient
    - EN Proficient

Many thanks for your participation in this study. Please return the questionnaire in the enclosed envelope via the internal mail by 27 November, 2008.