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**GRADUATE NURSE TRANSITION
PROGRAMS IN WESTERN AUSTRALIA:
A COMPARATIVE STUDY OF THEIR
PERCEIVED EFFICACY**

**A thesis submitted in partial fulfilment of the requirements of the
degree of Doctor of Nursing by**

**Ce (Cecilia) Kealley, RN, BaSc (HProm),
Grad Dip (HSM), M (HSM)**

**School of Nursing
The University of Notre Dame, Australia, Fremantle**

2012

STATEMENT OF SOURCES

This thesis is my own work and contains no material that has been accepted for the award of any other degree or diploma in any university or other institution. To the best of my knowledge the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis. All research procedures reported in the thesis have received the approval of the relevant Ethics Committee.

Name:

Signature:

Date:

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ACRONYMS

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
AIN	Assistant in Nursing
ANF	Australian Nursing Federation
ANMC	Australian Nursing and Midwifery Council
CNM/S/C	Clinical Nurse Manager/ Specialist/ Consultant
DoHA	Department of Health and Ageing
ED	Emergency Department
EN	Enrolled Nurse
FTE	Full-time Equivalent
GNC	Graduate Nurse Connect
GNP	Graduate Nurse Program
GRN	Graduate Registered Nurse
HWA	Health Workforce Australia
ICN	International Council of Nurses
ICU	Intensive Care Unit
LOS	Length of Stay
N³ET	National Nursing and Nursing Education Taskforce
NBWA	Nurses Board of Western Australia
NHPPD	Nursing Hours per Patient Day
NHWT	National Health Workforce Taskforce

NMBA	Nurses and Midwives Board of Australia
NMBWA	Nurses and Midwives Board of Western Australia
NMO	Nursing and Midwifery Office
OMR	Optical Mark Recognition
PCA	Patient Care Assistant
RN	Registered Nurse
SDE	Staff Development Educator
SDN	Staff Development Nurse
SRN	Senior Registered Nurse
UK	United Kingdom
USA	United States of America
UWA	University of Western Australia
WA	Western Australia
WACHS	Western Australian Country Health Service
WHO	World Health Organisation

ABSTRACT

This research compares the findings of a survey questionnaire sent to 858 newly graduated Registered Nurses (RNs) in 2010, with those from a similar study conducted 10-years previously. The purpose of the present was threefold. Firstly, to investigate how current transition programs compared to those of 10-years ago; second, to gain insight into how well formal programs assisted the transition of the novice nurse into the workforce; and thirdly, to examine what effect transition programs have for making decisions to remain in the nursing workforce.

A mixed methods triangulation design was selected to investigate the research questions. Additional questions to those used in 2000 were incorporated into the study to determine the degree to which a supportive program may have had an effect on the novice RN's intended career trajectory. A small web-based survey of graduate nurse coordinators was utilised to corroborate selected aspects of participant findings.

Findings indicated that the novice nurses' experiences differed on several measures in the period between the two studies. The 2010 nurses indicated that a robust transition program was conducive to becoming a confident and competent practitioner. Adequate and appropriate support was found to be the most consistent theme respondents perceived as necessary for satisfactory transition. Data revealed that current programs are much more structured, and that nurses are more satisfied with their efficacy. The research findings also demonstrated that supportive transition programs positively influence the nurse's career pathway, and their tenure within the nursing workforce. Due to the increase in the complexity of nursing science, findings also indicated that undergraduate education was not able to

comprehensively prepare the student nurse for all aspects of nursing practice.

Suggestions are presented for addressing this concern.

To ensure that all nurses graduating from universities as a Registered Nurse are appropriately supported in becoming competent practitioners, a mandatory period of transition ought to be considered; one based on a robust framework and comprehensive guidelines. This research provides a platform for the development of such guidelines.

CHAPTER 1: INTRODUCTION

1.1 Preface

This chapter provides the context for the present research. It discusses the current shortfall in the global, national and local nursing workforce, and the factors that have contributed to this situation. The impact that insufficient numbers of proficient nurses have on the delivery of safe patient care are described; as is the nature of, and the need for this research. A brief discussion of ethical considerations related to the research is provided, and the research questions conclude the chapter.

1.2 Background to the Study

A significant issue faced by the healthcare industry today is the ongoing shortfall of experienced nurses in the nursing workforce. The issue is world-wide with most international health organisations and all Australian states reporting a widening gap between demand and supply. There is a wealth of literature describing the global nursing shortage, and much written on causes of reduced tenure in the nursing workforce. Some research has been conducted into methods for enhancing work satisfaction, with the intention of improving retention rates, but little of this is empirical. In a global survey of nurses from 11 countries, the International Council of Nurses (ICN) found the main concern amongst the world's nurses was the burden of workloads, remuneration and minimal professional recognition (International Council of Nurses [ICN], 2010).

Current research clearly demonstrates the negative impact on patient safety when the number of RNs allocated to a unit falls below prescribed levels (Duffield, et al., 2009; Tourangeau, et al., 2006; Twigg, Duffield, Bremmer, Rapley & Finn,

2011). In Australia, the State of Victoria is alone in having mandated a minimum five nurses per 20 patients (Gerdtz & Nelson, 2007). Much has been discussed in the literature regarding increasing RN-to-patient ratios, but little has been undertaken to define such ratios (Curtin, 2003; Duffield, et al., 2010, in press; Gerdtz & Nelson, 2007; Twigg, Duffield, Thompson & Rapley, 2010).

Failure to ensure the safety of people accessing health care adds extensively to the costs of that care in many ways, and in some cases may lead to permanent injury or even death (Twigg, et al., 2010). A higher level of education and appropriate transitional experience for the novice practitioner has been shown to have a positive impact on nurse led indicators of care and patient safety (Duffield, et al., 2009; Holden, et al., 2011; Tervo-Heikkinen, Partanen, Aalto, & Vehviläinen-Julkunen, 2008; Tourangeau, et al., 2006; Twigg, et al., 2011). Studies in the United States and Canada have shown that the higher the level of education a nurse has, the more positive the impact on nursing-related outcomes. Studies have also shown that a 10% increase in tertiary educated nurses was correlated with a 5% reduction in rates of “failure to rescue” (Aiken, 2008; Newbold, 2008; Tourangeau, et al., 2006). Aiken, Clarke, Sloane, Sochalski and Silber, (2002) also indicated that as the ratio of patients to nurses increased, so too did the nurses’ levels of dissatisfaction and emotional exhaustion. These issues and the impact upon patient care are discussed in greater detail in Chapter 2.

A prime contributor to the nursing shortfall in Australia is the steadily increasing older population and the impact this will have on the demand for health care services in regards to associated age-related diseases, disabilities and chronic illnesses (Australian Bureau of Statistics [ABS], 2011). Preston (2006) suggested

this demand on the nursing workforce was expected to increase by almost 4% annually over the next few years. Most countries, including Australia, are experiencing a slowing in their birth rates, which means there will not be sufficient younger populations to replace, fund and care for the aging populations. An additional factor contributing to the shortfall of nurses in Western Australia (WA) is the resources industry boom that has resulted in a shift of a portion of workers from traditional roles, including nursing, to higher paying roles in the mining industry (Access Economics, 2008).

Healthcare in Australia is a large budgetary item, which is predicted to almost double in the ensuing years from 4% of the Gross Domestic Product to 7.1% (Commonwealth of Australia, 2010). As nurses form the largest group in the healthcare workforce, delivering the most efficient and effective nursing service possible makes absolute sense. Systems of nursing education, training and retention must be considered and constantly monitored to ensure the most contemporary and innovative continuum of nursing care is provided.

One measure of improving the ratio of RNs in Australia has been to recruit already trained nurses from overseas countries such as the United Kingdom (UK), India, the Philippines, Malaysia, Indonesia and more recently, sub-Saharan Africa. This practice has required review in light of the recent resolution from the World Health Organization (WHO) calling for a voluntary code of practice for recruitment of health personnel from countries where loss of such skills would be highly detrimental to their own health system sustainability (World Health Organisation [WHO], 2010). In 2008, WA recorded 29% of RNs as having received their first qualification from overseas and, of these, 19% from areas considered to be at risk of

losing vital nursing resources to overseas migration (Australian Institute of Health & Welfare [AIHW], 2010b).

In an endeavour to improve the number of Australian trained nurses available to the workforce, the Federal Government has increased funding for additional student places in universities' Schools of Nursing (Bishop, 2006; Department of Health & Ageing [DoHA], 2005). However, the combination of the increase in undergraduate numbers and the impending retirement of the older cohort of clinical instructors is creating further pressure on the system to enable the provision of suitable and necessary practical training opportunities during the nursing students' program (National Health Workforce Taskforce, 2008). Figures from the Australian Institute of Health and Welfare (AIHW) Nursing and Midwifery Labour Force Survey (AIHW, 2010b) show that despite these additional places, the percentage of completions related to commencements in RN undergraduate programs continues to decline, with up to 85% completing in the years 2003 and 2004 but decreasing to 65% completing in 2008, with slightly fewer the year before. In addition to the Federal funding of additional university places, the WA Government provides funding assistance to health care organisations to offer transitional programs and support for the newly graduated nurse.

University level programs of education for Australian RNs and formal transition programs have only been available in the last few decades with the last of the hospital based programs completing in 1987. The transfer of nurse training to the tertiary arena is seen as affording nursing a greater degree of professionalism and credibility (Francis & Humphreys, 1999). As a result, the undergraduate curriculum and graduate programs are still being adjusted and improved, with the intention to

provide an excellent basis of theoretical training with which to ultimately deliver evidence-based health care to the populations who require it.

There is a dearth of literature available to demonstrate the influence of the undergraduate experience on longer-term retention in the nursing workforce. In a framework from the ICIN (2009) to “address concerns about the perceived gap between new graduates’ educational preparation for practice and the expectations of service providers” (p. 5) it was noted by McElmurry & Lee (2007) that:

...nursing today stands at the intersection of powerful forces. The increasingly complex technology growth, an aging population, dramatically changed work environments, and rapid growth in scientific knowledge require substantially expanded nursing roles and responsibilities. In the face of such pressures, there is the important question of how to better educate a competent global nurse workforce for the future (in, International Council of Nurses [ICN], 2009, p. 5).

Despite measures to improve staffing levels, there are concerns that the future nursing workforce will not be sufficient to meet the predicted demand upon it with relevant authors urging ongoing recruitment and retention measures to be researched, refined and implemented (Aiken, 2008; Council of Deans of Nursing & Midwifery, 2005; Thorgrimson & Robinson, 2005; Woods & Craig, 2005). Nationally, there have been several nursing workforce reviews and resultant recommendations to improve recruitment and retention, including continued enhancement of graduate nurse transition programs (Heath, 2002; Karmel & Li, 2002; Pinch & Della, 2001; Queensland Nursing Council, 2001). A selection of such measures is summarised in Table 1.1.

Table 1.1. Summary of Transition Program Recommendations

Heath, 2002, p.22

Recommendation 14 – Standards for transition programs

To ensure consistency and quality in the development and delivery of transition programs:

- a) A national framework should be developed for the transition programs to provide guidelines and standards for institutions
- b) State and Territory nursing registration boards should credit transition programs
- c) Employing institutions should be responsible for meeting the standards.

Heath, 2002, p.23

Recommendation 17 –Transition to workforce: funding

The Commonwealth, States and Territories should establish a system to allocate dedicated funds to (public and private) health and community care institutions to assist registered nurses and enrolled nurses in making the transition into employment, including the transition into employment of those nurses who have completed a re-entry program.

- a) Allocations should attach to the individual employee or registrant (and should be made on their behalf) to institutions whose programs have been accredited for transition
- b) Transition programs should be encouraged in areas such as mental health, aged care, community nursing, and rural health, as well as hospitals.

Pinch & Della, 2001, p.64

Recommendation 19

- a) That health services ensure preceptors are allocated specific non-clinical time with graduates.

Recommendation 20

- a) That health services develop ways of selecting and rewarding preceptors to enhance the role and ensure their importance and status are recognised.

Recommendation 21

- a) That the health industry develops standards of support and settings required for graduate clinical placements and a mechanism for ensuring the standards are maintained.
-

Table 1.1. Summary of Transition Program Recommendations (cont'd)

Pinch & Della, 2001, p.66

Recommendation 35

- a) That continued funding for graduate transition programs be provided and key performance indicators be developed for reallocating funding based on successful programs.

Recommendation 37

- a) That partnerships between university, industry and other key stakeholders be strengthened to ensure that graduates receive a smooth transition.

Queensland Nursing Council, 2001, p.254

Recommendations for Practice

- a) All organisations should provide some form of transition support for new graduates. No specific recommendations can be given about the length, structure and content of the transition support but composite programs that include both didactic and clinical elements should be considered.
- b) Clinical support should be provided by an experienced individual who is known for their clinical and teaching expertise and they should receive training and support to provide them with additional skills and knowledge of the requirements of the new graduate.

Recommendations for Future Research

- a) Considering the cost implications of most transition support strategies perhaps the greatest need is for cost effectiveness studies. These are difficult to conduct and require considerable expertise, however ultimately in the current economic environment there is sufficient motivation to attempt these.
-

While some of these recommendations have been adopted, many have been only partially implemented and are discussed further in relation to the research findings in later chapters. It is a widely held belief that formal programs to assist the transition of the newly graduated nurse into their workplace reduce the shock and stress of becoming responsible for one's own clinical practice, and the reality of being responsible for the wellbeing of others (Clare, White, Edwards & van Loon, 2002). There has been little research in Australia to evaluate the effectiveness of

these programs and their impact on turnover of graduate nurses in their first years of practice (Clare, et al., 2002).

Following the introduction of a Graduate Registered Nurse (GRN) transition program in WA, the Chief Nurse within the WA Health Department commissioned a study through the University of Western Australia (University of Western Australia [UWA], 2000). In the context of this research, transition refers to the transfer of the student nurse from the theoretical learning environment to the workplace as a newly licensed RN with the expectation that they have developed the ability to put theory into practice. The purpose of the UWA (2000) study was to evaluate the programs in public hospitals and to determine the level of support provided to the graduates during their transitional year. The results of that research indicated areas requiring consideration for future transition program planning. Of note was that the level of support that graduates received during the program was perceived to be unsatisfactory; and, that unfair work allocations and incompatible preceptors were concerns. Program structure and specialty placements were also described as a negative experience by some of the study respondents.

In a review of Australian nursing education Johnson and Preston (2001) expressed concern at the rate of nurses who leave the workforce within their first year of employment. Demonstrating a link between undergraduate nursing education, transition to the workforce and influences on longer-term retention in the nursing workforce may assist in identifying strategies for maximising retention of novice nurses. This in turn, is likely to assist in reducing the deficit of nurses in the health care system, and ultimately, provide higher quality health care to the West

Australian population. These issues will be discussed in the review of the relevant literature.

The intent of the current research is to replicate the UWA (2000) study to determine if there is any difference in findings reported 10 years ago and to identify any ongoing concerns. In addition, the perceived efficacy of current programs, and their influence on novice RN career intentions will be examined. The research has the potential to enhance existing transitional programs and to identify resourcing priority areas for neophyte nurse retention within the healthcare workforce.

1.2.1 Global Nursing Shortfall

A reduction in the supply of nurses and an increase in demand for nursing services has been described by the International Council of Nurses as “a global crisis” (Outlon, 2006, p. 34S). The adverse impact of the shortfall is being felt by nations around the world (Buchan & Aiken, 2008). Many developing countries have the added pressure of trained nurses migrating to more affluent nations where they will benefit from improved work conditions but, in doing so, exacerbate their home country’s health system shortfalls (Buchan & Aiken, 2008).

In a World Health Organisation (WHO, 2010) global survey of member states’ nursing and midwifery services, up to 92% of respondents reported extensive nursing shortages, which the surveyors believed clearly implied a need to focus globally on education, training and retention of a viable nursing workforce. An important finding from this survey found a direct relationship between improvements of nursing work conditions, such as safety and security, working hours and entitlements, and a corresponding reduction in infant mortality. Such findings are

significant given that reduction of infant and under-five mortality is a key goal of the United Nations Millennium Declaration (WHO, 2010).

Buchan (2006) discussed the difficulty in assigning uniformity to perceptions of nursing shortages given that there are such wide differences between countries' descriptions of what they consider a deficit. He gives the example of the extreme difference between the United States of America (USA) with 7,000 nurses to each 100,000 population and Uganda having 60 nurses per 100,000 population. Note though, that the data presented by Buchan are from a range of sources and time periods and the levels of nurses are not always clear. Nevertheless, the disparity is cause for concern. Levels of nurses for Australian data are, unless stated otherwise, for RNs only. Some jurisdictions are less clear regarding the inclusion, or exclusion, of other designations of nurses such as Midwives, Licensed or Enrolled Nurses (ENs), and Assistants in Nursing (AINs).

Woods and Craig (2005) reported an expectation that the nurse shortage in the USA would have grown to over one million by 2020, while the supply of nurses is predicted to decline by 40% over the next two decades. Staff turnover costs, which include advertising, recruiting and training, were cited as between US\$30,000 and US\$49,000 per nurse. Such a trend is worrying given that within four years of qualifying more than 40% of nurses were predicted to leave the profession (Woods & Craig, 2005). In an earlier report, Andrew and Dziegielewska (2005) claimed that the deficit would grow to a critical level by 2015, with 20% fewer nurses being available than required. The same authors reported that by 2020, almost 30% fewer nurses than needed would be available to the workforce. Janiszewski Goodin (2003) reported a trend of fewer enrolments in undergraduate nursing programs in the USA;

possibly due to the greater opportunities now available for women in alternative careers. Such a trend is particularly concerning, given that women typically form the vast majority of the nursing workforce.

Europe also has an ageing population and a decreasing nursing workforce, with considerable range between countries of approximately 100 to 2,150 nurses per 100,000 population (Buchan, 2000). The numbers in the Latin American countries also show a broad range with 11 to 512 nurses per 100,000 population (Malvárez & Castrillón, 2005). In describing a policy framework for improving the European nursing workforce, Buchan (2000) stresses the importance of ensuring that approaches to change are evidence based, and inclusive of all facets of workforce planning. The UK is also struggling to maintain a sufficient nursing workforce. Finlayson, Dixon, Meadows and Blair (2002) did not provide data in a per capita format to enable comparison with the data cited above; they did, however, quote nation-wide vacancy rates of up to 22,000 nurses in the National Health Service in the year 2000, with a turnover rate ranging between 11 and 38%. An additional finding from this report was that while undergraduate places for nursing students has increased significantly, approximately 20% will leave prior to completion of their program, and 34% of graduates will not register with the UK registering authority. Reasons cited for problems with retention of nurses in the international workforce are similar to those in Australian literature, that is, low remuneration, not feeling valued and changes in the nursing workload due to factors that will be further discussed in the review of the literature (Bowles & Candela, 2005; Commonwealth of Australia, 2002; Preston, 2006).

Mrayyan (2005) compared job satisfaction and retention of nurses in Jordanian public and private hospitals and alluded to a correlation between diminished quality of care and a declining nursing workforce. Dissatisfaction was shown to be caused by low remuneration, stressful work environment and a lack of career opportunities. With 270 nurses and midwives per 100,000 population, poor professional image and cultural attributes were some of the reasons cited as cause for the declining participation in the Jordanian nursing workforce, particularly among the 30-plus age groups (Abualrub, 2007).

1.2.2 National Nursing Shortfall

The international nursing workforce decline is mirrored in Australia. Nursing workforce issues in Australia have been the subject of many reviews at both industry and government levels, with a major concern being retention of experienced nurses within the system (Council of Deans of Nursing & Midwifery, 2005; Department of Health & Ageing [DoHA], 2005; Nowak, 2000; Senate Community Affairs Committee, 2002).

Factors affecting the nurse shortage in Australia include:

- An ageing workforce – the average age of the Australian nurse has increased from 41.2 years in 1999 to 43.2 years in 2004. In comparison, the average age of West Australian nurses in 2004 was 45.1 years (AIHW, 2006).
- Workforce composition – the cohort identified as the “Y” generation, generally considered to be born between 1981 and 1994 (Walker, 2007), is the future workforce. It is widely recognised that this group has different work concepts and ideals to those of earlier generations. Workforce

planners need to remain cognisant of such differences (National Health Workforce Taskforce, 2009).

- Health population – the demographics of the population to which nurses provide health care is changing and, as such, adding to the pressure on the nursing workforce. The combination of a larger proportion of the population being in the 60-years and older category, and the increase in the life-span of Australians, has resulted in a significant proliferation in the number of chronic illnesses and co-morbidities with which patients present to health care facilities (ABS, 2006).
- Technology – as in many industries, the rapid expansion of technological advances has resulted in changes to the way that health care is delivered. These changes not only impact on health budgets, creating competition between salaries and other system costs (Eggert, 2005), but also on the way health care is delivered (Joseph, 2008). There is also a requirement on practitioners to maintain skills and education with regards to technology, thus creating further industry-based pressures (Foster & Bryce, 2009).
- Health care recipients are more treatment savvy and disease aware than their predecessors and, as a consequence, are more demanding of the latest techniques for diagnosis and treatment. Nurses need to have the education, evidence-based knowledge, and ability to think critically in order to respond appropriately; a skill that will generally synthesise more fully with experience (Health Workforce Australia, 2011b).
- Patient acuity (intensity of illness) has increased as a result of the demand by health care policy makers to reduce Length of Stay (LOS) in hospitals. Traditionally, patients provided a mix of those who were acutely ill at the

beginning of an admission, and those who were moderately or minimally ill prior to discharge and thus, required fewer occasions of nursing care. The net result of reducing LOS, is that the mix of acute and less ill patients no longer occurs, leaving a patient mix that requires more intense occasions of nursing care. In addition, the recent introduction to Emergency Departments (ED) within WA of the 'four hour rule', whereby patients must be attended to within four hours of presentation to an ED, has added to the pressure to move patients more quickly to the ward areas (Forero, McCarthy & Hillman, 2011). These increases in the intensity of the health care providers' work-load add to the pressure on those available to provision it.

These points, and the impact that they have upon the transition experience of the graduate nurse, are discussed more fully in the review of the literature, and in later chapters in relation to the findings of the current research.

In 2004, the Australian Government, Department of Health and Ageing (DoHA, 2005) announced an increase in funding for 4,000 additional nursing undergraduate placements, nationally, over the following three years which has now occurred. While the Australian Nursing Federation was very supportive of this initiative, it believed it would not be sufficient to fill the anticipated gap that would occur when the large cohort of baby boomers, generally considered to have been born between 1946 and 1964, retire from the workforce within the next 10 to 15 years (Iliffe, 2006). It is imperative, for patient safety and fiscal accountability, that the additional places funded by the Government produce nurses who will stay in the nursing workforce to provide future safe staffing levels. In addition to increasing the

entry of new nurses to the workforce, Duffield, et al. (2007) reiterated the view that work intensity and work environment issues, required understanding and resolution to ensure viable retention of nurses within the health system.

The national literature demonstrates a commitment by government and nursing leaders to developing policies addressing the nursing workforce shortage (DoHA, 2005; Heath, 2002; Pinch & Della, 2001; Preston, 2006). The key to successfully staffing the nursing workforce will be how those policies will be implemented, and refined over time. A report from Access Economics (2004) described nursing as an occupation with very strong job security and one that will invariably be in demand for the foreseeable future. As such, it behoves nursing bodies to take advantage of such a positive characterisation in promoting nursing as a very worthwhile career.

1.2.3 The Western Australian Context

Preston (2006) estimated that WA had a deficit in the workforce of 186 RNs per 100,000 population, that is, a total deficit of 3,739 RNs. In adjusting staffing levels to baseline projections, she described WA as having the largest predicted shortfall of all Australian States. Factoring in the influence of an ageing population, RN separations and population growth (which translates to a further increase in the need for health care), it was estimated that the deficit would have increased from 186 to 377 RNs per 100,000 population by 2010 (Preston, 2006). The Nursing and Midwifery Workforce Report for 2011 (AIHW, 2012) reveals an increased supply of RNs in WA from 772.1 RNs per 100,000 population in 2007, to 882.2 RNs per 100,000 population in 2011, which suggests that, while the forecast deficit has been almost half that predicted, it is still present.

Johnstone (2007) has indicated that when numbers of RNs in healthcare facilities are fewer than required, the incidence of medical errors in patient care increases. Adverse outcomes include numerous events such as medication error, hospital acquired infection, patient falls and decubitus ulcers. In a study commissioned by the New South Wales Department of Health, Duffield, et al. (2007) found that with the addition of one RN per shift there was a reduction in the rate of decubitus ulcers of 20 per 1,000 patients, pneumonia of 16 per 1,000 patients, and sepsis of 8 per 1,000 patients. Such figures are sufficient to view any decline in the RN workforce with concern.

In a submission to the National Review of Nursing Education in Australia, the Nurses Board of Western Australia (NBWA, 2001) made several recommendations. Among these was the suggestion that by combining the delivery of core units to all health professional undergraduate students (that is, medical, nursing, allied health), the provision of efficacious treatment and interdisciplinary collegueship would be enhanced. The concept of combining core units has also been put forward by Health Workforce Australia (HWA), a recent initiative set up by the Council of Australian Governments in an endeavour to coordinate an integrated and proactive health workforce plan throughout Australia (Health Workforce Australia, 2011b). The NBWA (2001) also expressed concern that, following the shift of nurse training from industry to academia, adequate funding was not provided to enable sufficient and suitable clinical experiences for the student in the workplace. As a result, there is ongoing difficulty for universities and industry in providing satisfactory placements for the additional student positions (Dragon, 2009). Added to this, is the extra pressure being placed upon already scarce supervisory and mentoring resources (Dragon, 2009).

The NBWA also discussed a need to consider the changing context of health care in relation to the increased acuity of hospital patients and escalating complexity of nursing care of people in the community, suggesting that a paradigm shift in nurse education and placements was needed (2001). Furthermore, the Board made reference to the disparity of thought between academia and industry in relation to these changes, and how this may influence the expectations and experiences of the nurse moving between student and novice practitioner (NBWA, 2001).

As previously mentioned, one strategy for improving the current staffing levels of RNs is to increase the number of nurses graduating from universities. Following the National Review of Nursing Education in Australia, a recommendation was made for an increase in funding to secure additional undergraduate places in Schools of Nursing (Heath, 2002). Consequently, the Australian Government Department of Health and Ageing (DoHA, 2005) announced the increase in national funding for 4,000 additional nursing undergraduate places. With such extra places being made available, it is important to determine whether incumbents are benefiting from post-graduation transitional programs, and whether such are having a positive effect on workforce retention.

1.3 Nature of the Study

A comprehensive survey was conducted by the University of Western Australia (UWA) on behalf of the then Department of Public Health to evaluate graduate nurse programs in public sector hospitals in WA in 2000. The research found many graduates to be dissatisfied with the structure of the programs being offered and the attitude of other nursing staff towards them (UWA, 2000). The UWA (2000) study paralleled part of a much larger Queensland research study commissioned by the

Queensland Minister for Health in 1998. Part of that investigation was to survey RNs who had completed their graduate year in order to determine the level of Undergraduate to GRN support during their transition year (Queensland Health, 1999).

Recommendations from the UWA (2000) study are summarised below and are considered further when compared with the present research findings, in the Discussion Chapter:

- The transition program is worth continuing;
- Preceptors should be carefully screened and selected;
- Preceptors should undergo suitable training;
- Preceptors need to be accessible to the graduate nurse;
- Workload allowances need to be made to allow additional study time;
- Supernumerary time should be mandatory and of suitable length;
- Senior nurses and colleagues need to be made aware of the nature and purpose of the Graduate Nurse Program;
- More choice be made available to the graduate for specialty placements;
- Greater liaison should occur between program providers and academia regarding undergraduate clinical training.

The present research aims to study the experiences of newly graduated RNs during the transition phase, from novice to competent practitioner, to determine if there are changes to the findings reported 10 years ago in the UWA (2000) study. The results will also be used to determine what comparisons there are with similar, national studies in terms of program efficacy and professional support to the novice nurse during the transition phase. Data have been analysed to determine what effect,

if any, Graduate Nurse Programs (GNPs) have on this transitional experience and if any correlation exists between the programs and the future intentions of the newly registered nurse with regard to remaining in the nursing workforce.

1.4 Need for Research

The National Nursing and Nursing Education Taskforce (N³ET) was established in 2003 by the State, Territory and Australian Government Ministers for Education and Health in response to major reviews and reports of Australian nursing and midwifery workforce, training and education. The Taskforce is composed of nurse leaders, educators and researchers committed to progressing and sustaining the education, training and retention of the Australian nursing and midwifery workforce. The N³ET (2006) listed research into health workforce, recruitment and retention, skill mix, and service models, as areas requiring urgent investigation to help inform planning, funding and education policies that would include transition programs.

Conducting research in the Australian context of nursing programs, Gaynor, et al. (2007) suggested that:

...there is a paucity of evidence about the demographics of the future Australian nursing workforce, attrition within undergraduate nursing programs and graduate outcomes. Clearly there is a need to systematically track undergraduates and new graduates to quantify student attrition, graduate retention and career plans and begin to build this evidence-base (p. 12).

An integrated systematic review of transition support for new nursing graduates commissioned by the Queensland Nursing Council suggested that, despite

descriptive studies and many models of practice, there appeared to be no evidence of best practice for graduate nurse programs (Queensland Nursing Council, 2001).

Over the past decade or so, considerable evidence has been amassed suggesting that further transition-orientated research needs to be undertaken (Kelly & Ahern, 2009; Levett-Jones & FitzGerald, 2005; Reeves, 2007). The present study contributes to this need by examining the effectiveness of GNPs in the Western Australian context, as perceived by nurses who graduated from a university nursing degree, and who registered with the Nurses and Midwives Board of Western Australia for the first time as a RN in 2008.

This research has replicated the UWA (2000) survey using a mixed methods design to determine how well GNPs assist the transition of the newly graduated RN into the nursing workforce, and what, if any, effect the programs have in terms of decisions to remain in the nursing workforce. The research also examines if similar issues identified in the original UWA (2000) study continue to impact upon the nurse's transitional experience. The mixed method design allows for a combination of the most suitable aspects from both the quantitative (numeric) and qualitative (textual) methods to address the research questions (Creswell & Plano Clark, 2007). The survey questionnaire, study design and analysis are discussed further in the Methodology Chapter.

1.5 Research Questions

1. In what ways are novice Registered Nurses' experiences different today from those reported in the 2000 University of Western Australia study?

2. From the Graduate Registered Nurse's perception, how efficacious are graduate nurse programs in helping novice nurses to make the transition to competent practitioner?
3. What perceived effect does the Graduate Nurse Program have on predicted career longevity of newly graduated Registered Nurses?

1.6 Summary

This chapter has discussed the issues and some of the consequences of a widening gap between the demand and supply of proficient RNs in the nursing workforce on a worldwide, national and local basis. It has also alluded to the importance of effective transition programs. It is clear the matter of nursing workforce shortages are of importance in terms of providing a safe and high quality health service to the population of WA. Ensuring that novice nurses are retained within the health system and allowed to develop into proficient and productive nurses has been a regular theme in the literature and is expanded upon in the following chapter.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter provides a comprehensive review of the literature that relates to the research, that is, factors that contribute to the Western Australian nursing shortfall, nursing workforce composition, and nurse retention within the workforce. Initiatives to stabilise the workforce; graduate nurse transition programs; research into the benefits of graduate nurse programs; the context of the present research; and the methods chosen to conduct it are also discussed.

The literature was reviewed using primary and secondary sources. Online access to the University of Notre Dame, Australia library enabled utilisation of Google Scholar to search relevant databases. Keyword searches and search filters were employed to identify as many relevant studies as possible. These were then assessed for relevance and importance, and then annotated for ease of tracking. Preference was given to the most recent articles to ensure contemporaneous information was available, and where applicable, manual searches were employed within specific journals, or for key articles. Reports from websites such as the Australian Bureau of Statistics and the Australian Institute of Health and Welfare were vital for obtaining current and comparative data and to further support arguments. Health and nursing websites, including the Australian College of Nursing, the National Nursing and Nursing Education Taskforce and Health Workforce Australia, were also sources of valuable information and reports.

It is clear that the number of RNs in the workforce is in decline (Council of Deans of Nursing & Midwifery, 2005; DoHA, 2005; Nowak, 2000; Senate

Community Affairs Committee, 2002; Thorgrimson & Robinson, 2005; Woods & Craig, 2005). Available literature reveals the factors contributing to this decline and the consequent impact on the sector's ability to provide quality healthcare (AIHW, 2010a; Camerino, et al., 2006; Duffield, et al. 2009; Johnstone, 2007; National Health Workforce Taskforce, 2009; Oulton, 2006; Preston, 2006). The ageing of the Australian population and, consequently, the nursing workforce, is currently the most fundamental issue impacting upon nursing provision (Camerino, et al., 2006; Duffield, et al., 2009). This issue is not able to be reversed in the short-term, and consequently, is one that requires innovative solutions. While most literature agrees that developing and increasing the novice nursing workforce will assist in improving supply, it is also recognised that many of the current graduates are older themselves (Dorion, Hall & Jones, 2008; Morrow, 2009). Consequently, the length of tenure of the older, novice nurse in the health workforce, in comparison to the younger graduate, is reduced and implicates the overall RN gain (Drury, Francis & Chapman, 2008).

Additional factors impacting on adequacy of supply within the RN workforce include the increased intensity of the workload. This has been demonstrated by the many studies of retention within nursing suggesting a strong link between perceptions of stress, career burnout, and intention to leave the nursing workforce when the workload is felt to be beyond the nurse's physical and mental sustainability (Cowin & Jacobsson, 2003; McHugh, Kutney-Lee, Cimiotti, Sloane & Aiken, 2011). Numerous factors can lead to stress-induced attrition. Among these are, firstly, new modalities of care, such as the requirement to reduce, as much as is possible, the length of time a patient spends in hospital and emergency centres. This may prove to be stressful because the nurse may perceive an inability to provide the nurturing time

to better understand the patient's needs or to fully recognise changes in a patient's illness profile (Duffield, et al., 2009; Johnson & Preston, 2001).

Secondly, while technology is designed to simplify most tasks, complexity may impact upon stress levels if not well understood or implemented. Most nursing tasks involve some form of technology and require cognisance of, not only how the technology works, but also how to extract and interpret the necessary data. Moreover, troubleshooting technology-related problems can result in increased levels of stress (Kjerulff, Pillar, Mills & Lanigan, 1992). Thirdly, the current epidemic of obesity adds to the workload in that caring for the obese patient requires specific equipment, increases the risk of personal injury and can add to the degree of treatment difficulty (Byles, 2009). Fourthly, although it is desirable to be able to demonstrate sufficient nurse numbers in staffing profiles, ample numbers are of little use if the necessary mix of nurses is not able to be supplied. This is critical for ensuring functional cohesiveness. Further, experienced staff are required to provide the appropriate levels of supervision and expertise to less experienced colleagues.

Finally, those responsible for health budgets are constantly formulating ways of improving efficiencies and moderating expenditure, while balancing delivery of patient safety and quality services, amidst the escalating demand for, and cost of, contemporary treatments (Marchildon, 2005). Such a climate is stressful for nurses when they are required to take time out of clinical duties to either acquire scarce resources, or to negotiate and justify expenditure upon equipment or treatment modalities that ultimately improve patient care (Bartram, Joiner & Stanton, 2004).

The above factors all impact upon the transitional experiences of the newly graduated nurse. The degree to how well these are managed, and translated to the workplace by health care organisations, is crucial to the degree of positive experiences gained by the novice nurse in their assimilation into the nursing workforce and future intentions to remain within it.

2.2 Factors Impinging on Nurse Numbers

While there are many factors contributing to the shortfall of nurse numbers in Australia, an issue that appears to be of great concern in the literature and health workforce planning is the shift in the age profiles of the overall population and the impact this will have on the future nursing workforce (Camerino, et al., 2006; Duffield, et al., 2009). Additional demands on the RN are found in the changes to health profiles and care delivery; technological advancements; and the increasing focus on practice modalities that are based upon quality and contemporary evidence, and consequently, impact on the composition of the workforce and necessitate innovative and productive workforce planning.

2.2.1 Ageing Population

Australia has the third highest life expectancy in the world with Australian females' life expectancy at birth in 2010 being 83.9 years and males 79.3 years. Western Australians' life expectancy at birth is slightly higher at 84.1 years for females and 79.5 for males (ABS, 2011). The cohort aged greater than 65 years has expanded from 8.3% of the total population in 1971 to 13.3% in 2009, and the proportion of those aged greater than 85 years old increasing substantially by 170.6% over the past two decades to form 6.1% of the overall population (ABS, 2010). In

addition to this increased longevity, which adds to the population numbers, immigration rates have increased and added to the rate of the population growth. Since the 1990s, Australia's median age has risen from 31.8 years to 36.9 years in 2009. Figure 2.1 presents the changing age profile of Australia's population from 1990 to 2010.

Figure 2.1. Australia, Population Structure, Age and Sex, 1990-2010

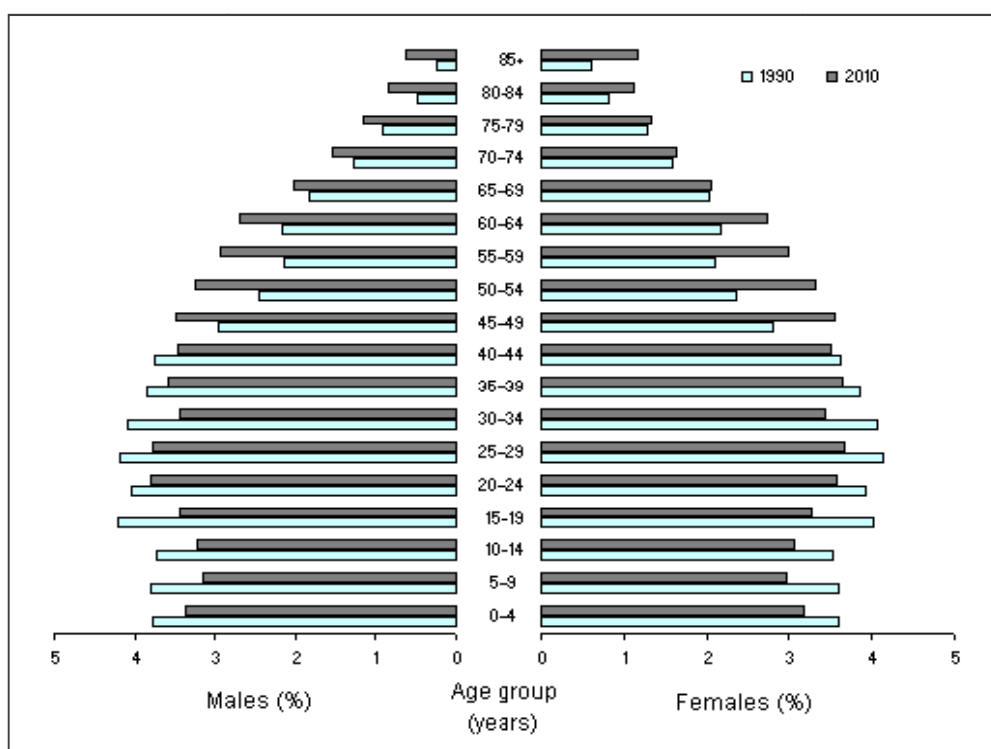


Figure 2.1. Australia's population structure by age group and gender comparing 1990 to 2010. Age groups demonstrate the increase in the older clusters and the decreasing proportion of younger cohorts. Source: Australian Bureau of Statistics (2010).

Chronic diseases become more prevalent with age, consequently, the burden of disease on the health care system increases substantially as populations age; as does the demand for related modes of health care (National Health Workforce Taskforce, 2009). In addition to the age-associated health implications of this trend, and in terms of the ability to fund appropriate care for those dependent upon government

support, the diminishing distribution of working age groups (between 15 to 65-years) that are able to contribute to the economy and to the support of those who have not yet entered (less than 15-years of age), or who are moving out (greater than 65-years of age) of the workforce is also of consequence. This shifting profile of diminishing younger and increasing older cohorts has a significant negative impact on the '*Dependency Ratio*', which is indicative of the ratio of income earners (15 to 64-year olds) to those dependant on direct or indirect financial and/or physical support, including healthcare resources (AIHW, 2010a).

Ischemic heart disease, diabetes, anxiety and depression, cancer and stroke are among the major diseases contributing to the health care burden of Australia (AIHW, 2010a; National Health Workforce Taskforce, 2009). A major change in the burden of disease profile has been seen within Mental Health with the increase in mental illness impacting negatively on all areas of health care (AIHW, 2010a). This change also has implications in health care worker training as many nurses are underprepared for effectively managing mental illness (National Health Workforce Taskforce, 2009).

In the Western Australian population, the proportion of the 60-year old-plus age group has been steadily increasing over the past 15 years at an average of 1.86% per year, but more recently in 2006-2008 at an average increase of 2.45% per year as depicted in Figure 2.2. As discussed, this increased life span is associated with an increase in chronic illnesses and co-morbidities with which patients present to health care facilities (ABS, 2006). The impact of these additional disease burdens that require adjusting the modes of health care delivery also requires additional resources in terms of nursing care and education.

Figure 2.2. Population Percentage of 60+ Age Group (Western Australia)

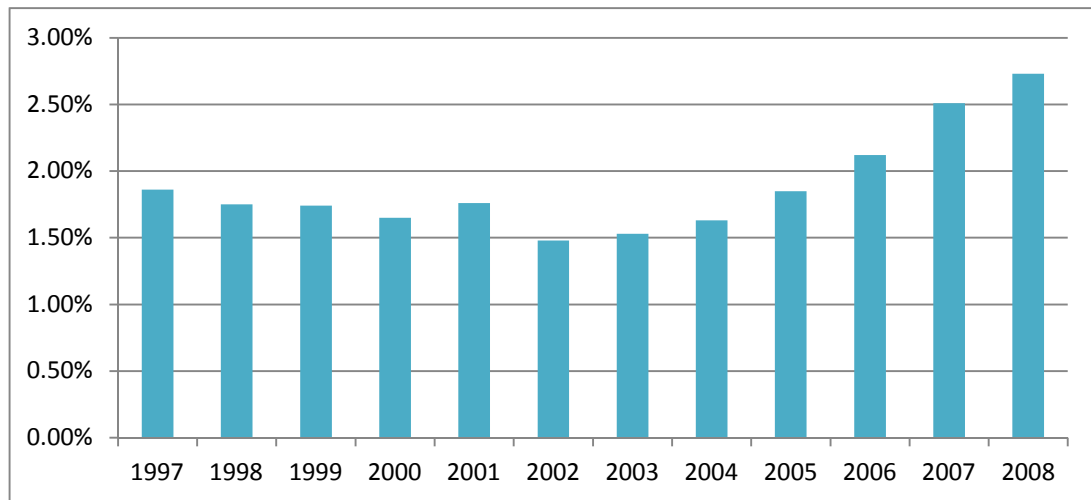


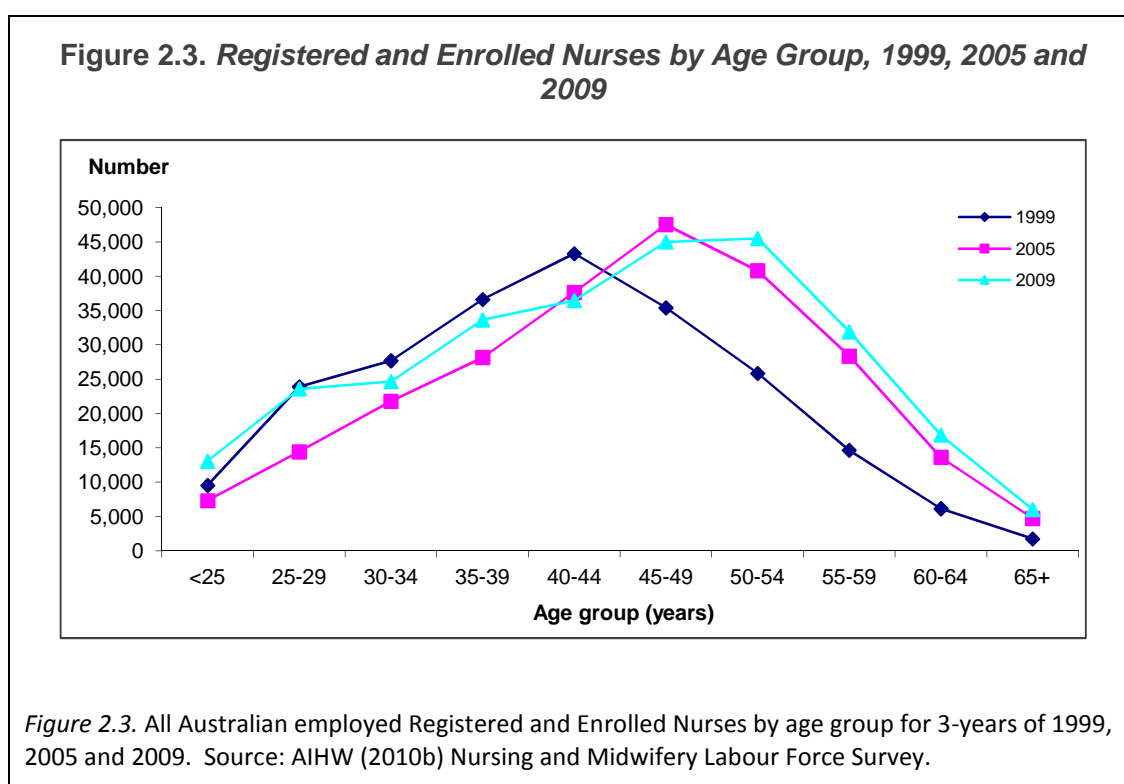
Figure 2.2. Proportion of 60+ Western Australia age group from 1997 to 2008 showing percentage increase from 2002 to 2008. From: Australian Bureau of Statistics, 2008.

A further factor contributing to the increase in the 60-year old-plus age groups is the decrease in the number of births per family unit since the 1950's resulting in a slower growth of the younger age cohorts (ABS, 2010).

2.2.2 Ageing Workforce

In Western Australian males, the percent of the population in 2004 surviving to age 85 was 40% and females were 57%. The national figures for survival rate to age 85 are 38% for males and 55% for females (ABS, 2008). Such figures suggest the Western Australian aged population will place an even greater burden on the health system than the national average. It stands to reason that if the Western Australian population is ageing, then so too is the nursing workforce. The average age of Western Australian nurses in 2007 was 45.2 years compared to 43.7 years for all Australian nurses (AIHW, 2009) while the average age of the Australian worker in 2004 was 38 (ABS, 2008). Although these figures come from data three-years apart,

it is highly unlikely that large changes would occur over this time. Figure 2.3 demonstrates not only the shift in the older age groups of nurses over a 10-year period but also the decline in entry to the workforce of the younger age groups and is inclusive of both Registered and Enrolled Nurses.



These figures suggest that while older cohorts of nurses are caring for the ageing Western Australian population, they will also be dealing with health issues associated with their own ageing, which may impact on their ability to provide care to others. Compounding the issue, is that while the older generation of nurses begin their exodus from the workforce, without an equitable number of incoming nurses to replace them, the gap between demand and supply will continue to widen (AIHW, 2010a). However, despite an increase in student nurses graduating into the nursing workforce, and for reasons already discussed, the escalating need for additional health resources continues to widen the gap between supply and demand. Figures

2.4 and 2.5 (Access Economics, 2008) demonstrate the anticipated replacement requirements over the current period and the predicted supply of graduating nurses.

Figure 2.4. Replacement Requirements of RNs for Australia over 10-year period

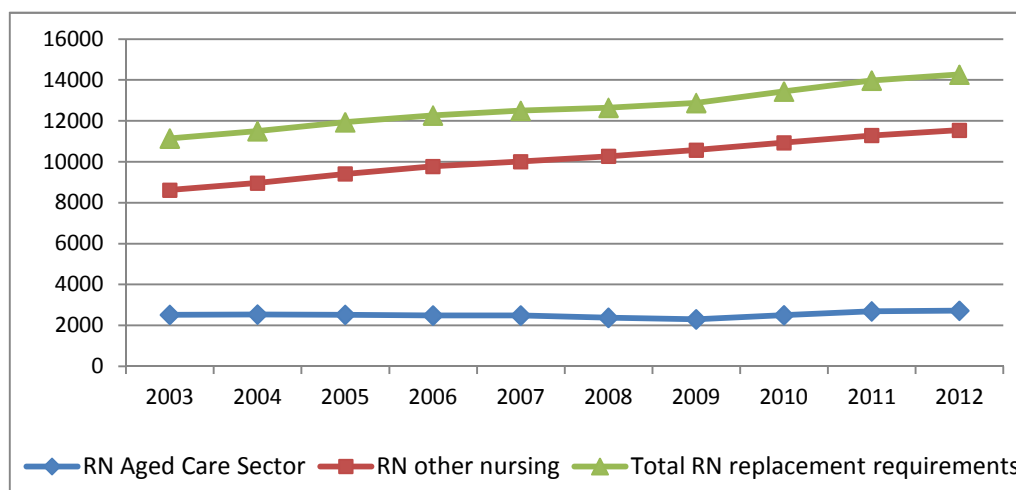


Figure 2.4. Aged care shows a steady rate which may not reflect the actual need. The total RN replacement requirements indicate the widening gap between supply and demand. From: Access Economics, 2008.

Figure 2.5. Employed Graduate Registered Nurse Requirements and Supply

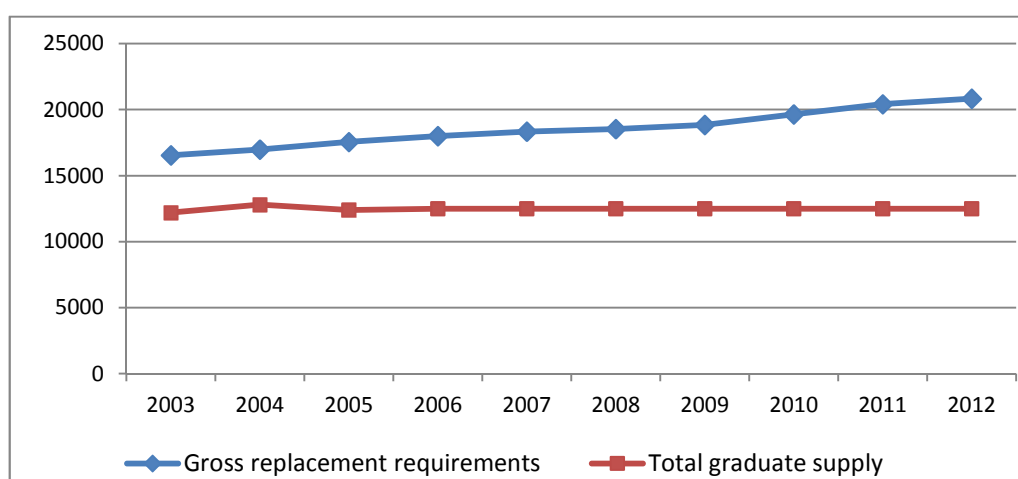
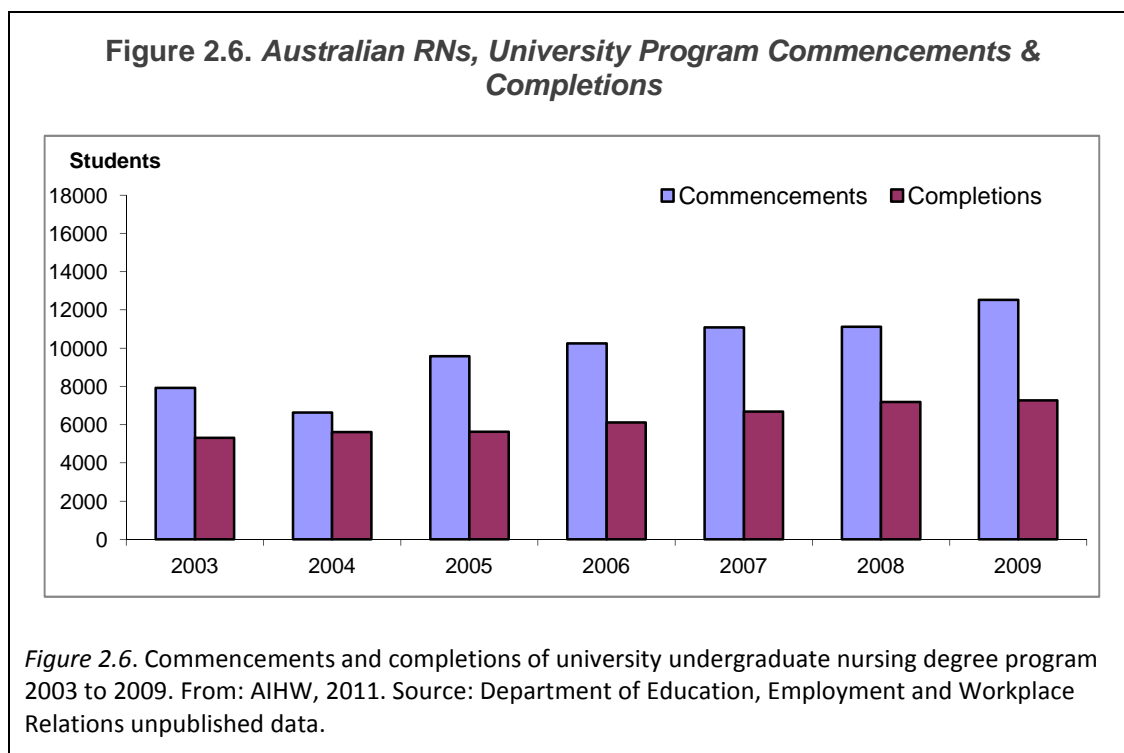


Figure 2.5. GRN replacement supply versus the requirement to replace outgoing RNs over a 10-year period. From: Access Economics, 2008.

Figure 2.6 indicates that while the number of enrolments into nursing degree programs is increasing, the number of nurses graduating to register with the Nurses and Midwives Board of Australia (NMBA) as a Registered Nurse does not appear to be following suit.



Duffield, et al. (2009) suggested that within the next 15 years up to half of the current nursing workforce may retire. Reducing hours of work from full-time to part-time is one method of transitioning to retirement but can have a considerable effect upon the Full Time Equivalent (FTE) of nurses available to the workforce (ABS, 2011). Camerino, et al. (2006) postulated that nurses nearing retirement age were unlikely to consider extending their tenure due to the heavy and stressful nature of nursing work. In a study of European nurses, they found that older nurses perceived their ability to sustain current workloads would decrease with age and,

unless creative measures were taken to decrease the effort required at work, would not change their intention to retire.

2.2.3 Health Profiles

As well as the shift towards more age-related health issues, factors such as the steady increases in patient acuity and population obesity are also impacting upon service requirements.

2.2.3.1 Patient Acuity

Patient acuity is a term used to describe the complexity of care or intensity of illness. Traditionally patients provided a mix of generally being acutely ill and, at the beginning of an episode of care requiring more focused attention, to being moderately or minimally ill prior to discharge and needing less intensive attention. In order to maximise value for health care funding, policy makers have focused on efficiencies and reducing unnecessary servicing. Part of these efficiencies has been to reduce, as much as is safely possible, the amounts of time patients spend in hospital, with some care shifting to outpatient clinics or care in the home. The net result of reducing Length of Stay (LOS) is that the mix of acute and minimally ill patients no longer occurs, leaving only the acute and moderately ill patients to be cared for. This subsequently increases the intensity of the workload of health care providers and adds additional pressure on those available to deliver it, and is further compounded by the reduced ratio of nurses to patients. Brennan and Daly (2009) described nursing related acuity thus:

The concept of acuity can be considered a structure of care, in that it is a characteristic of the patient that, when measured, can be applied to nursing staffing decisions and thus be considered a process of care.

Nurse staffing decisions based on patient acuity have the potential to balance the nursing workload among available nurses, thus improving patient safety and quality, and potentially reducing costs, which are outcomes of care (p. 1115).

Johnson and Preston (2001) suggested that the emphasis on increasing the turnover of patients from hospital beds has resulted in an escalation in stress that is experienced by staff in trying to achieve this. This has reduced the nurse's satisfaction that was previously found in getting to understand the patient's needs more fully over a longer period of time; and thus, reducing the intrinsic rewards of nursing. Adding to this pressure is the perpetual reductions in budgets that result in cutbacks of support staff and an expectation that RNs take on non-nursing tasks such as transporting patients, answering phones and completing unrelated paperwork.

Health related indicators are those which demonstrate disease and illness rates within a community and utilisation of healthcare facilities. Data show WA to be above national figures on most health related indicators including LOS, which is lower than the Australian average LOS, (ABS, 2008; ABS, 2011) and number of patient separations, as can be seen from Table 2.1.

Table 2.1. Western Australian Comparison on National Health Indicators

Indicator	Comment	Western Australia	Total Australia	Data Year
Average Length of Stay	Days per patient	2.9	3.1	09/10
Hospital Separations	Per 1,000 population	389	371	09/10
Morbidity & Disability	Percentage adults with one or more long-term condition	88.4	86.9	04/05
Males surviving to 85	Percentage of population	39.9	38.5	2006
Females surviving to 85	Percentage of population	57.3	55.5	2006
Nurses per 100,000 population	Includes Enrolled & Registered Nurses	1,134	1,250	2007

Source: Australian Bureau of Statistics 2008, 2011.

As well as being useful to determine funding allocations, standardised measures of patient acuity are also used to determine staffing levels, particularly in regards to nurse numbers and skill-mix. Nurse hours per patient day (NHPPD) is a concept introduced to Western Australian government hospitals in recent years, in conjunction with nurses' industrial Awards, in an effort to rationalise safe nurse staffing levels and workloads. This method categorises ward areas based on criteria such as patient mix, for example, surgical or medical; level of acuity; average LOS; and numbers of interventions, such as frequency of vital sign measurement, medication administration, and assistance with hygiene activities; as well as the complexity of treatments (Twigg & Duffield, 2009).

Brennan and Daly (2009) claim the most applicable measures for acuity are the severity of illness and the intensity of care required to manage it. Some of the concepts for consideration when assigning acuity described by these authors include:

- Intellectual repositioning, where a nurse's concentration may need to be shifted rapidly in response to changes in a patient's condition;

- Memory and understanding of disease and treatment modalities;
- Planning for long-term versus acute patient care, or for severe versus mild disease or injury;
- Including holistic patient and family centred care;
- Time taken to deliver care in a safe practice environment;
- Managing complex care and procedures;
- Assisting colleagues in their learning and care provision;
- Physical components of delivering care such as repositioning or moving patients.

Duffield, et al. (2009) described the term *churn* as being the movement of patients between admitting, ward areas and diagnostic units; and how this adds to the workload by requiring the nurse to perform tasks additional to the basic nursing care in preparing the patient, ensuring correct documentation, following up outcomes and re-orientating the patient at each stage. Increases in *churn* occur as a result of more applications of technology, measures to reduce patient LOS and implementing the four-hour rule (time to ward admission from the emergency department). Consequently, such factors add to the workload and decrease the time available for basic nursing care and, as a result, increase pressure and stress on the available nurses.

Compounding the above factors is the evidence of a steady increase over the years of admissions to public hospitals per 1,000 population; a growth from 209 in 1998-99 to 215 in 2008-09. This supports the view that nursing workloads have increased (DoHA, 2005), and has implications for improving nurse-to-patient ratios to ensure the levels are commensurate with the ability to deliver quality nursing care.

2.2.3.2 *Obesity*

In a comparative study of 11 countries within the Organisation for Economic Co-operation and Development (OECD) Australia rated third highest in the prevalence of both overweight and obese persons (Sassi, Devaux, Cecchini & Rusticelli, 2009). As obesity rates within Australia continue to remain high, so do associated chronic diseases, such as arthritis, chronic pain, vascular and respiratory diseases, and diabetes (National Health Workforce Taskforce, 2009). Obesity requires a change to the way health care is delivered and the types of care accessed, such as bariatric surgery, and may even limit or reverse the recently gained improvements to life expectancy (Byles, 2009). Kam and Taylor (2010) cite the treatment costs of obesity in Australia as \$83 million annually and suggest that the increasing frequency of presentations to the healthcare facilities is placing an additional fiscal burden on both staffing and equipment resources. Mainstream equipment such as vital sign measuring devices, hospital beds and surgical equipment are designed for people of average height-to-weight ratio. Equipment especially designed for bariatric patients is more costly than standard equipment and generally requires increased floor space for storage. Management of bariatric patients and equipment also requires adaptation of, and sometimes new, protocols and policies (Kam & Taylor, 2010). The potential risk of staff injury, such as back or shoulder damage, is increased when managing the more obese patient, especially when moving or repositioning them.

In a study of the impact of obese patients on staff in an Emergency Department in Melbourne, Kam and Taylor (2010) found a positive correlation between an increase in Body Mass Index and the degree of difficulty in patient management. Some of the reported challenges included difficulty or delay in gaining intravenous

access and a potential for an increased rate of misdiagnosis due to difficulty in palpation of specific body areas, physical assessment, prolonged procedure time and consequent length of stay. Metabolic changes associated with obesity include increases in cholesterol and insulin resistance, leading to heart and vascular diseases and Type II Diabetes; while the increased weight adds to joint strain and exacerbates rates of osteoarthritis. Rates of breast and colon cancers are also reported to increase substantially when Body Mass Index is in the obese and morbidly obese ranges (Byles, 2009).

2.2.4 Technology

The rapid expansion in technological advances, and its consequent impact on the way health care is delivered, has long been recognised as having a major impact upon nursing. In her editorial in *Nursing Management*, Robinson (2003) described how the technology of nursing has advanced, from “a stethoscope and pair of bandage scissors” as being “basic tools of the trade,” (p. 1) and of paper-based calculations and charts being the fundamentals of the way nurses planned and communicated the delivery of patient care only a few decades ago, to the current plethora of technical equipment and digital treatment devices.

Contemporary routine and advanced health care is predominately delivered, monitored and recorded using advanced systems of technology and computerisation (Robinson, 2003). The older cohort of nurses have not only needed to adjust from the manual systems of treatment and recording that was learned early in their career, to the digital era; but have also needed to learn how to troubleshoot the equipment should it fail. Current nursing practice incorporates a myriad of technology from vital signs recording devices with which to record temperature, pulse, blood pressure

and oxygenation, to fluid and drug delivery systems that incrementally measure and record infusions (Foster & Hawkins, 2005). There are also complex robotic surgical systems that are manipulated by surgeons but require nursing management, knowledge and skills to set up, assist with and maintain in an appropriate working order. Patient records, treatment schedules and plans are entered and stored electronically with the ability to share across sites and distance, report trends and activity and guide future modes of care (Foster & Hawkins, 2005). Health information guidance and evidence is located in global repositories of information and available to health care providers, recipients, trainees and students. This degree of access also enables the population to increase their awareness of disease processes and treatment options which has, at times, the effect of increasing patient demands for more expensive and more complex treatments albeit, not always the most optimal for their care (Watson, 2005).

The change in the way nurses are required to deliver their care has come about incrementally with little input into the introduction of the multiple changes and only minor, ad hoc education in how the technology is optimised (Foster & Bryce, 2009; Hegney, et al., 2007). With the greater cohort of nurses in an age bracket that wasn't raised with this technology, it should come as no surprise that many nurses struggle with its concept.

In *Digital Natives, Digital Immigrants*, Prensky (2001) likens the generational differences in approaches to technology as a language whereby younger generations have been *born into* digital information technology and their older counterparts are *immigrants* to it. He likens it to a dialect where those who are native to technology have no issue understanding and utilising it to its fullest extent. For those not born

into the age of digital technology it is a foreign language needing to be learned and never quite being fully absorbed (Prensky, 2001). He also discusses the difficulty that the older generations may have in learning, adapting and integrating current technology into their everyday work-life. In a study of a selection of adult acute care and psychiatric units in the United States, Kjerulff, et al. (1992) examined what factors, in relation to technology, might contribute to increasing the anxiety of hospital nurses. They found that raised anxiety levels, relating to the use of technology in the provision of health care, were more predominant in older nurses. Considering the average age of the nursing workforce has increased, and technical advances have permeated so many facets of delivering nursing care, the fact that older nurses experienced raised levels of anxiety when using technology is pertinent in terms of how the new technology is introduced into use, and how nurses are educated in its use.

Morris and Venkatesh (2000) conducted research into the relationship between age and technology uptake, and use amongst workers, and found a significant difference between the younger and the older groups in their initial attitudes and acceptance toward new technology, with the latter demonstrating greater difficulty with these. The study did find, however, that over time the older group was able to adapt their internalised apprehension and become more comfortable using the technology. As with Prensky (2001), Morris and Venkatesh (2000) theorised this initial apprehension was a product of discomfort in learning something not made familiar throughout childhood experiences. These authors also suggested training in new technology needed to be adapted to the generational differences in regards to learning pace and strategies. An important point made by Morris and Venkatesh (2000) was in relation to the provision of ongoing learning supports that enables the

older generations to more easily keep pace with new and innovative technologies, thus facilitating more effective utilisation of them, and reducing the associated anxiety in learning such foreign concepts. This is relevant to the current nursing workplace as contemporary equipment and information technology is continually updated, bringing new technical concepts and challenges each time a new product is introduced or upgraded.

The technological phenomenon has also impacted on the way our educators impart information to students. Prensky (2001) discussed how traditional and didactic methods of using staged learning objectives, with an out-dated language, fails to gain the attention of the *digital native* who is more receptive to interactive, vivid and multiple methods of information exchange. With the mix of age ranges of nursing students covering at least three generational groups, educators are faced with significant challenges in the provision of relevant diversity in the exchange of knowledge to ensure all recipients are optimally catered for in their learning experience, particularly as a number of educators tend to fall into the *digital immigrant* category. Prensky (2001) likens the educators' undertaking to that of a foreigner being tasked to teach the local dialect, a task that would undoubtedly be viewed with some scepticism by the *digital native*. Similar issues of disparity in comfort with the digital language may be faced by those in the health workforce when supervising and mentoring novice nurses, who may or may not be, more at ease with the different technologies.

There is a requirement for health care practitioners to maintain their education with regards to contemporary technology and its impacts. The *Australian Nursing Journal* (2010) announced that nursing informatics and information technology

competencies would form part of the new National Standards for registration with the NMBA. This move resulted from research which indicated that a majority of nurses rated their skills in using technology as “low to medium” (p. 7).

Foster and Bryce (2009) also reported a lack of nurse training and preparation in the use of information technology. Nurses working in aged care and remote areas were more likely to report low levels of use and confidence in information technology, and those working in acute areas, such as Intensive Care Units or Emergency Departments, reported greater levels of use and confidence (Hegney, et al., 2007). Based on the above comments, it is highly likely that this reported disparity between confidence and use of technology can be attributed to the fact that the average age of nurses in critical care areas is much younger than that of remote and aged care nurses (Hegney, et al., 2007). Further, in the environments of aged care and remote area health there is often much less access to technology to allow these nurses to develop their skills in this area.

As more and more information and communication systems become available, health care organisations are making a bigger commitment to adopting them. The push for this comes predominately from a quality improvement paradigm as many studies into medical error have shown human error to be the most treatable component of system issues that contribute to adverse events (Jamal, McKenzie & Clark, 2009). Systems to minimise human error include pharmacy systems where the initial order, the dispensing and the administration of drugs are supported and guided by inbuilt alerts, advice and evidence-based information. Decision support systems enable screening for risks such as potential for embolus, diabetes and

adverse drug reactions (Jamal, et al., 2009); as well as provision of data for analysis and evaluation of trends and performance (Halley, Brokel & Sensmeier, 2009).

Contemporary health care is moving towards even greater use of technology with Personal Digital Assistants (PDAs) already in use in some organisations, electronically integrated patient notes and on-line learning and evidence-based healthcare access commonplace in most healthcare facilities; and others working toward full electronic medical record management. It is for these reasons that today's nurse must remain cognisant of, and be current with, technology related to patient care in order to maintain competence to practice (Foster & Bryce, 2009). The nurse who is proficient in using information technology will benefit patients by contributing to integrated and organised communication with colleagues and, when used correctly, improve care, and enhance efficiency and productivity (Schaper & Pervan, 2005).

Changes in the use of technology can also impact on health budgets, creating competition for health providers' salaries and other system costs (Eggert, 2005). Information systems in healthcare are aimed at removing the effort of manual calculations of many treatments; improving and streamlining record keeping; and assisting in the reduction of medical error by removing the human factor, thereby improving patient safety (Jamal, et al., 2009). As such, the argument in favour of adopting these technologies is persistent and consequently, the need to keep pace with the changes will remain a pertinent factor in nursing care delivery.

2.2.5 Workforce Composition

Skill mix is a term used when describing the proportion of experienced personnel to inexperienced, novice personnel. In the nursing workforce, to enable support of the new graduate nurse, a sufficient cohort of experienced nurses is required to enable supervision and mentoring to the newly qualified nurse. As the availability of experienced nurses decreases, the stress on the remaining nurses, including the novice, increases (Cowin & Hengstberger-Sims, 2006). The RN's time, knowledge and skill is also impinged upon in supporting colleagues, other grades of nurses (ENs, AINs), allied health personnel and junior doctors. This perpetuates a cycle of pressure and tension, which is likely to cause some to leave the profession.

The increase in work intensity discussed above is adding to the need to improve the ratio of skilled nurses to the workforce mix (Aiken, 2008). Due to the improvements in care modalities and technology, patients now survive and recover from diseases and injuries that 15 to 20 years ago would have seen a different outcome. Patients who would normally have been treated in critical care units are now common-place in regular ward areas, and the patients they are replacing in the ward areas are now often treated in the community, at home, or as outpatients (Johnson & Preston, 2001). These changes have required a significant shift in the focus of training and education of nurses and revision of workforce planning. In developing its framework for reducing the gap between education and practice, the International Council of Nurses (2009) highlighted the need to re-direct training models to account for the change in modes of care, in particular, the increased emphasis on community and home-based care.

Recent research has demonstrated that patient safety is improved considerably when sufficient ratios of RNs to other nursing levels (ENs and AINs) are available (Duffield, et al., 2009; Tourangeau, et al., 2006). Most industrialised countries use quality indicators to measure health system performance, with some linking outcomes to funding. Tourangeau, et al. (2006) disagreed with the medicalised view that these measures were not related to standards of nursing care, suggesting that such a view was based on a lack of appropriate, evidence-based research. She stated that “Little focus has been placed on studying nursing related structures and processes that might influence hospital mortality and readmission rates” (p. ii). In questioning why there was a great variability between quality indicator rates across Canadian hospitals, Tourangeau, et al. (2006) sought to determine what impact nursing care had on these indicators, and how system improvements would be able to reduce patient mortality and morbidity. In their study, they found that with a 10% increase in the ratio of RNs to other grades of nurses, there were “six fewer deaths for every 1,000 discharged patients”. With a similar increase in RNs with a baccalaureate degree there were “nine fewer deaths for every 1,000 discharged patients”; and with a 10% increase in nurse reported adequacy of staffing, there were “17 fewer deaths for every 1,000 discharged patients” (Tourangeau, et al., 2006, p. iii). This is strong evidence suggesting that adequate levels of university educated RNs are paramount to providing safe, quality care.

Indicators of patient outcomes that are affected by nursing care include, but are not limited to, decubitus ulcers, thrombosis or embolism, sepsis, pneumonia, surgical site infections, shock or cardiac arrest and even mortality (Tourangeau, et al., 2006; Twigg, et al., 2011). *Failure to rescue* is a term describing the absence of appropriate recognition and treatment of the deterioration of a patient when

indicators, such as changes in vital signs to measures outside normal parameters, put the patient at risk of serious medical events such as those described above (Duffield, et al., 2009). Duffield, et al. (2009) found that an 11 to 45% reduction in adverse events occurred when RN hours were increased by 10%. Similar nurse led indicators of care and safety outcomes have been reflected in other studies (Holden, et al., 2011; Tervo-Heikkinen, et al., 2008).

To cite a case study, in 2007 a Northern Territory coroner linked the death of a 64 year-old woman in a Darwin hospital directly to unsafe nurse staffing levels (“Death caused by unsafe staffing levels”, 2008). Despite senior nurses requesting additional staff over a period of time, the hospital executive had failed to act upon the requests in an endeavour to contain budgets. On delivering his findings, the coroner directed the organisation to immediately implement safe, evidence-based nurse staffing levels.

2.2.6 Retention

Nurses leave the nursing workforce for a variety of reasons, including family commitments with a lack of family-friendly provisions in the workplace, remuneration, lack of opportunities for career advancement and job recognition (Cowin & Jacobsson, 2003; Duffield, O’Brien-Pallas, Aiken, Roche & Merrick, 2006). Other factors cited as being a cause for dissatisfaction were staff shortages which, in turn, resulted in increased workloads for the remaining staff and consequent further absenteeism (Johnson & Preston, 2001). It is feasible that nurses who feel dissatisfied in their nursing work may project unfavourable impressions outside the workplace. Such projections may lead to negative connotations regarding nursing being a worthwhile career and, in turn, harm the perceptions of potential

nursing recruits (Preston, 2006). Similar reviews of nurse workplace dissatisfaction are cited throughout the literature pertaining to the nursing workforce and are reflected in international, national and local studies (Hayes, et al., 2006; Oulton, 2006; Pinch & Della, 2001).

Workloads that result in the nurse not having enough time to complete necessary tasks, such as the nursing indicators of patient care and safety, lead to job dissatisfaction and may prompt intentions to leave the workforce (Lawless, Wan & Zeng, 2010). In a study by Duffield, et al., (2009) uncompleted or delayed nursing tasks in Australian Capital Territory hospitals included measurement of vital signs, administration of medications and patient mobilisation which are all treatments which, if not adhered to, have been shown to result in adverse patient outcomes. In discussing the global nursing shortage, Oulton (2006) described how nurses are becoming less tolerant of workplaces where stress, lack of development opportunities and inappropriate workloads are typical and, as a result, are more likely to leave the profession. Research by O'Brien-Pallas, et al. (2004) found that improved nurse-to-patient ratios not only increased patient safety but also enhanced staff satisfaction and retention and reduced staff injury rates and absenteeism, indicators which all have significant quality and cost benefit implications. The authors reported an increase in patient LOS, uncompleted nursing interventions and a reduced perception of quality of care if the unit activity exceeded evidence-based, suitable nurse staffing levels by more than 5% (O'Brien-Pallas, et al., 2004).

In 2001, the Ministers for Education, Training and Youth Affairs and for Health and Aged Care announced a national review of Australian nursing education. This review acknowledged the shortages in the nursing workforce and the challenges

of preparing undergraduate nurses for the workplace (Heath, 2001). The Review found consistency in the theme that there is a high priority need for a focus on retention of nurses in the nursing workforce to bolster the supply of competent nurses in order to meet future population healthcare needs.

In 2001, Pinch and Della reported on a study of Western Australian nursing and midwifery. They indicated that a perception by nurses of not being valued within the health care system had contributed to their decline in the nursing workforce. The same report also identified the need to consider the important role of the preceptor (mentor) in the transition of Student Nurse to novice to proficient RN. The apparent lack of industry support for both the preceptor and the preceptee was believed to influence retention in the nursing workforce of this group of nurses (Pinch & Della, 2001). In an evaluation of the GNP in public sector hospitals in WA in 2000, 21% of respondents were dissatisfied with their programs and 18% dissatisfied with the provision of support (Pinch & Della, 2001). The report suggested that the nursing fraternity needed to recognise that the undergraduate curriculum is unable to provide sufficient clinical preparation to allow the new graduand “to be industry ready” (p. 40).

In a comparative study of professional wellbeing amongst Western Australian police, teachers and nurses between 2005 and 2007, nurses reported a decrease over the two survey periods in the degree of favourable perceptions of personal health, work-life balance and workplace pressure (English, 2008). Well-being factors included autonomy, support, work culture, organisational culture, motivating factors, personal wellbeing, commitment to the profession and perceptions of the image the profession. The category recording the greatest number of negative perceptions was

'work pressure' and even more so for respondents with five or less years of experience, with almost 80% of this group indicating unfavourable levels. Between the two study periods (2005 and 2007) the level of unfavourable findings in the *'work pressure'* category for nurses increased from 59% to 78%. These results suggest that the impact of the increasing intensity of the nursing workload and the ageing population is already being felt by members of the nursing workforce. A very positive rating was found in relation to job image with only 2% of respondents who did not consider nurses' image was perceived positively within the community. Conversely, only half the respondents believed nursing to have a favourable professional standing in relation to opportunities for career progression or in comparison to other professional opportunities (English, 2008).

In summary, to maintain a quality health service and to ensure optimal nurse led indicators of patient care and safety, experienced nurses need to be retained within the workforce. Experience can only be gained by longevity of practice and maintenance of skills. Data from the Australian Nursing Federation (2009) showed that of 285,619 nurses registered in Australia in 2005, 10.7% were not employed in the nursing workforce, a number which had increased from 8.9% since 1999. Wagner (2010) found that nurses with less than five years experience were more likely to leave the nursing workforce than those with more longevity in the profession. Such findings confirm the need to consider the novice nurse transition an important phase in ensuring career longevity.

2.3 Initiatives to Stabilise the Nursing Workforce

Heath (2002) authored the Final Report of the National Review of Nursing Education, which raised the issue of an ageing nursing workforce and a shift towards

nurses decreasing the hours they work. The consequent reduction in total hours worked puts further pressure on the declining numbers of nurses by reducing the full-time-equivalent levels of the overall nursing workforce. Recommendations from this report included:

- The establishment of a national taskforce to “action, monitor and report on the progress of implementation of the recommendations” (p. 108);
- The establishment of a National Nursing Council of Australia;
- Development of national frameworks for transition programs (from undergraduate nurse to graduate nurse); and,
- Improved funding to enable better systems of support for the preceptor and preceptee during the transition of undergraduate nurses into the nursing workforce.

Additionally, a recommendation for funding to increase undergraduate nursing places was made. The N³ET was established in 2003 to instigate the majority of the recommendations. Funding for the undergraduate nursing places, and support for transition of nurses into the workforce has also been implemented (Bishop, 2006; DoHA, 2005).

Augmenting the number of student places in universities’ Schools of Nursing may be one method for increasing the availability of future RNs. Whilst this strategy will nominally increase staffing levels in the short term, it will not improve the current low experience levels and skill-mix. As described earlier, skill-mix is a term used to describe the ratio of experienced staff to inexperienced staff. Without the experienced nurse, the health care organisation is more likely to find it difficult to provide guidance to the inexperienced nurse to assist in attaining the knowledge and skills required for proficient practice. In studies of the newly registered nurse’s

transition into the nursing workforce, the role of the experienced nurse has been described as being of paramount importance to the positive experience and future tenure of the novice nurse (Clare, Edwards, Brown & White, 2003; Evans, 2005; Goh & Watt, 2003; Heath, 2002; Heslop, McIntyre & Ives, 2001; Levett-Jones & FitzGerald, 2005; Reeves, 2007; Reilly, 2005; UWA, 2000).

A report from the Commonwealth of Australia, Senate Community Affairs Committee (2002), recognised the negative impact on the delivery of health care attributed to an insufficient number of nurses available to the nursing workforce. The report discussed factors that compounded the nurse shortage including the ageing workforce, an increasing trend toward part-time work, insufficient remuneration, perceived lack of recognition for expertise required and a lack of system support. The Committee's Terms of Reference included making recommendations in regard to education, training, transition, retention, improving family friendliness of working environments and occupational safety and health of nurses in the workforce. As previously discussed, the N³ET was established in 2003 to progress the education, training and retention of the Australian nursing and midwifery workforce (N³ET, 2006). Funding for the undergraduate nursing places and support for transition of nurses into the workforce has been implemented (Bishop, 2006; DoHA, 2005). Further evidence of implementation of recommendations is seen in the WA Health Department's policies that uphold work-life balance initiatives and are in keeping with the Western Australian *Equal Opportunities Act, 1984*; and for the training of representatives and managers in occupational safety and health (Department of Health, 2005).

To ensure that efforts to recruit more nurses into the profession are of benefit, Duffield, et al. (2007) called for an understanding of the factors impacting upon the nurse workload and the effect these have on retaining the qualified nurse in the workforce. Bowles and Candela (2005) advocated that if novice nurses enter into unhelpful work environments at the inauguration of their career, they are more likely to leave, and consequently be a loss to the profession and to reflect an improvident use of scarce education and recruitment resources. These authors also found that most nurses reported the reason for them leaving a position was a heavy workload caused by high patient acuity with related low staffing levels. This often resulted in perceptions of reduced patient safety. In developing a framework for reducing the gap between education provision and workforce readiness, the International Council of Nurses suggested that by addressing transition issues retention of the novice nurse will improve; as will patient safety through more effective team work and continual acquisition of contemporaneous knowledge (International Council of Nurses [ICN], 2009).

2.4 Graduate Nurse Transition Programs

The Department of Education, Science and Training (Johnson & Preston, 2001), the Australian Bureau of Statistics (2006), and the Australian and New Zealand Council of Deans of Nursing and Midwifery, (Preston, 2006) have highlighted the deficit of RNs throughout Australia and predicted escalating shortfalls as the average age of the overall population continues to increase. In a review of the literature relating to nurses' intention to leave the profession, Flinkman, Leino-Kilpi and Salanterä (2010) found younger nurses to be among those most likely to consider leaving the nursing workforce. Research suggests the

transition from student to qualified nurse is an important stage in a nurse's career and often influences future retention in the workforce (Goh & Watt, 2003; Pinch & Della, 2001). It has also been suggested that the student nurse's experience during their clinical practicum is relevant to that ease of transition (Keller, Meekins & Summers, 2006).

Four of the five Western Australian universities offer bachelor degree nursing programs. During these programs, student nurses are required to undertake a prescribed amount of practical experience within various health care settings with a view to exposing them to the realities of the nursing profession and to assist in translating the nursing theory to nursing practice. Upon completion of the necessary theoretical and practical components, the student nurse is then able to apply to register with the Nurses and Midwives Board of Australia as a Registered Nurse. Successful registration then qualifies the nurse to be employed as an RN within Australian health care settings.

Transition has been described as a period of learning and consolidating theories into practice, and adjusting from a place of learning to one of experience and skills acquisition (Hayman-White, Happell & Charleston, 2007). Keller, et al. (2006) concluded that new nurse graduates were not industry ready, and still required further skills and education to gain confidence and competence in their nursing role. A recognised issue of the *theory-practice gap* related to graduate nurse transition has been widely reported in the literature and refers to the perception of the novice nurses' lack of preparation for their role responsibility, and a described *shock* of the realities of the workplace (Evans, Boxer & Sanber, 2008; Fox, Henderson & Malko-Nyhan, 2005; Kelly & Ahern, 2009). As this phenomenon still occurs in current

programs it is considered to be an issue of concern amongst nurse leaders, and one that requires further understanding and strategy development to ensure the novice nurse is encouraged to remain within the nursing workforce. Canadian novice nurses, for example, appear to face similar issues to Australian graduates with heavy workloads, limited support and colleagues' unrealistic expectations of their capabilities causing many to report job stress and mental exhaustion as a common and, at times, daily occurrence (Morrow, 2009). This study found that novice nurses were on occasion placed in unsafe positions, particularly when put into situations beyond their scope of practice. This risky practice appears to be a regular occurrence when staffing levels don't allow for appropriate supervision and support (Johnstone, Kanistaki & Currie, 2008).

Supportive transitional programs have been shown to improve retention rates of novice nurses (Hayman-White, et al., 2007). Formalising the transition from student to proficient practitioner has been one strategy adopted by the Australian nursing industry to improve nurse numbers and assist with retention within the nursing workforce. In the *Final Report of the Special Commission of Inquiry of Acute Care Services in New South Wales Public Hospitals*, Garling (2008) described proficient training of new clinicians as a “down payment on a safe, good quality system of health care” (p. 10). To assist in the ease of transitioning to the professional role of RN, the majority of Western Australian hospitals and health care settings offer a formal and structured program to enable the novice nurse to consolidate their undergraduate learning and enable ongoing development of nursing proficiencies in a supportive and safe environment.

2.4.1 Nursing Education

Prior to tertiary level education for RNs, clinical training was undertaken within the practice environment, and student nurses were expected to take on a full patient load within their level of training, meaning that they were responsible for provision of nursing care to those patients; unlike modern-day student nurses who are deemed totally supernumerary. Student nurses in the apprentice model were often seen to be pressured into serving the provision needs of the organisation when more senior levels of nursing staff were lacking, and at times, were required to work beyond their scope of practice and to the detriment of their education (Tyrrell, 1998). The belief among some older cohorts of nurses is that these nurses, after three years of training, were practice-ready once registration was gained and already socialised into the work culture. The reality was that, while the apprentice-style student nurse provided around two-thirds of direct patient care, the system experienced a high level of attrition, both during training and shortly following registration (Tyrrell, 1998). These older cohorts of nurses at times still express the belief that nurses graduating from universities are less well prepared for their RN role and, at times, view nursing academia as far removed from the realities of nursing practice (Levitt-Jones & Fitzgerald, 2005).

The impetus to transfer nursing education from its hospital-based training mode into the tertiary level sector was formed as a result of the impending changes in the population demographics, technological impacts on modes of healthcare delivery, and a perceived lack of professional status. Influenced by trends in the UK and the USA, there was a strongly held belief amongst nurse leaders that the higher education would enable nursing to be better perceived as a professional occupation, and to gain much needed respect amongst peer professions (Tyrrell, 1998). There

was concern also, that the apprentice style training lacked some aspects of a tertiary level education in that the latter would enable the RN to develop necessary critical thinking and be better able to reflect on their nursing practice (Tyrrell, 1998). The first tertiary level nursing programs in Australia commenced at a diploma level as early as 1967, but were few and far between. It was not until 1984 that Government support for transfer of nursing education to the tertiary sector was obtained, with a three-year applied science degree deemed the minimum educational requirement. A substantial increase in student numbers was an unexpected and affirmative outcome from the change to nurse education, and suggested that the move to tertiary education was seen more favourably by those considering nursing as a preferred career option. As Johnson and Preston (2001) succinctly stated: “Nurses of this calibre, with university degrees and the habits of mind which degree programs inculcate, are less likely to tolerate aspects of health care management which nurses of previous generations had to accept” (p. 6).

To achieve legitimate professional standing amongst health care colleagues, it is imperative that the undergraduate nursing education emphasises a more theoretical component. However, in doing so, the time factor taken in the edification impinges on the proportion of practical experience that is able to be gained throughout the undergraduate training. Senior nurses educated in the hospital based system sometimes find it difficult to reconcile this difference in outcome and have, at times, been less than welcoming to the new university educated graduate (Kelly & Ahern, 2009).

2.4.2 *Western Australian Transition Programs*

Western Australian nursing transition programs are generally of 12 to 24 months in duration and include at least two, and sometimes several rotations to various specialties, for example, surgical, medical, aged care, mental health, and occasionally, critical care and perioperative areas. There is generally formalised support in the guise of a Staff Development Nurse (SDN), clinical preceptor or mentor and organised study days and networking groups during the program. Regular performance evaluation and assessment throughout the program is aimed at guiding the novice nurse to becoming proficient within their scope of practice.

In 1998, in response to a critical shortage of nurses in WA, the WA Health Department began funding public hospitals to assist in the provision of formal transition programs for graduate nurses, with the intention to improve retention rates of these nurses in the nursing workforce. Currently, the Graduate Nurse Program (GNP) is offered in public hospitals through the Nursing and Midwifery Office (NMO) within the WA Health Department, to assist the transition phase from student to novice nurse. This program is managed through *Graduate Nurse Connect* (GNC), an online recruitment system that allows the pending graduate nurse to apply for their preferred program and hospital site, and for participating sites to select from these applications. A selection of not-for-profit hospitals commenced participation in the GNC system in 2012 (R. Newton, Marketing & Events, Nursing and Midwifery Office, Department of Health Western Australia, personal communication, May 18, 2011). Most private health care organisations also offer GNPs that are advertised through the general media. The Western Australian GNP in public hospitals is a fully paid program where the graduate nurse is contracted with the health care organisation for the term of the program. The recruiting organisation decides if a

temporary or permanent appointment will be offered at the commencement of the program, the latter often an incentive for the graduating nurse to preference that organisation. Government funding to organisations for transitional support originally consisted of approximately \$1,800 per Graduate Registered Nurse (GRN) in 2008 and has since increased to \$2,500 (B. Evans, Principal Nursing Advisor-Workforce, Nursing and Midwifery Office, Department of Health Western Australia, personal communication, May 18, 2011). With over 650 graduates employed in the public health system in 2009, in terms of accountability, this level of funding support becomes significant.

In 1999, at the request of the (then) WA Health Department's Chief Nursing Advisor, the University of Western Australia (UWA) conducted research to assess the effectiveness of the Graduate Nurse Program in public hospitals in Western Australia (UWA, 2000). Findings from this study found considerable dissatisfaction with collegial and organisational support received by the graduates and with the structure and administration of the programs (Pinch & Della, 2001). The outcomes of the present study are compared to those of the UWA (2000) study to determine whether perceptions of graduate satisfaction with the levels of support, and the program structure and administration, have improved.

2.5 Research into Benefits of Graduate Nurse Programs

In Australia, there have been a number of reviews of graduate nurse transition programs, predominately in Queensland, New South Wales and Victoria (Heslop, et al., 2001; Levett-Jones & FitzGerald, 2005; Reeves, 2007; Reilly, 2005).

In a national review of nursing education chaired by Heath (2002), it was found that Australian States differed in the number of programs offered to GRNs. Typically, the range was between 12 to 64% of the Australian public health sector organisations offering a program in 2001. This report discussed several factors impacting on the health care organisations' ability to provide supportive programs, with the primary concern emanating from staff shortages. The report also suggested that the decreasing pool of maturing younger nurses is affecting the ability to provide experienced support and guidance to the novice, often resulting in the GRNs being forced to take on greater responsibilities and workload before they are competent and confident to do so.

A significant disparity has been reported between the expectations of the soon to graduate student nurse and the actual experiences of the newly graduated RN. Reeves (2007) conducted an exploratory, descriptive survey questionnaire of GRNs in Victoria to determine their satisfaction levels with GNP's in that State. While the overall level of satisfaction was found to be acceptable, there were some areas of concern, mainly revolving around the theory-practice gap and the level of support provided by colleagues.

A more comprehensive, two-stage qualitative study in Queensland (Reilly, 2005) assessed third-year student nurses' perceptions of preparedness for practice prior to commencing in the workforce, and again with the same cohort four months after completion of their undergraduate program. Ninety-nine percent of the students surveyed believed they were practice-ready for the role of RN. At the second stage of the research at four-months following graduation, the common themes of theory-practice gap, lack of support and work overload became apparent. Comments were

made in relation to the relevance of some of the undergraduate theoretical content and the lack of emphasis on what, in hindsight, was felt to be more useful, such as the legal aspects of nursing. While the GRNs recognised that the other nursing staff were often too busy providing direct patient care, they still felt disappointed that their needs were not able to be considered (Reilly, 2005). This theme was discussed again by Evans (2005) in a study evaluating the value of GNPs in New South Wales. In this study, it was felt the chronic nursing staff shortage was the reason colleagues were unable to provide the desired support to the GRN. The unrealistic expectations of the neophyte was again cited, this time attributed to attitudes being “formed far from the workplace” (Evans, 2005, p. 18). The criticism of disparity between academia and industry is not new, and has been referred to in other studies which suggest that some topics of nursing education are not necessarily relevant, or in keeping with the requirements of what the contemporary nurse will need to know in the workplace (N³ET, 2006; Wolff, Regan, Pesut & Black, 2010).

Evans’ (2005) study was the only one to provide a set of aims to justify government funding for the GNPs. Objectives to measure program success are important as the program incurs additional costs in terms of program advertising, recruiting and administrative personnel; plus the cost of supernumerary wages while the GRN is developing university-based orientation and skills. As discussed by Evans (2005), however, measures of program effectiveness are difficult to achieve when program objectives are individually devised by the organisations offering them. Apart from the business rules guiding use of GNC, Western Australian sites participating in transitional programs are autonomous in the recruiting process of graduate nurses to their programs (Nursing & Midwifery Office, 2009). To date, in WA, there is no universal group of objectives requiring measurement for these

programs. There is, however, a requirement that health services accessing the GNC funding for graduate nurses to demonstrate evidence of program structure and utilisation of the funding received (Nursing & Midwifery Office, 2009).

In a review of graduate nurse programs across Australia, Levett-Jones & FitzGerald (2005) found differences in most areas in terms of duration, funding and structure. Unfortunately, Western Australia was the only State / Territory not included in this assessment so it is difficult to directly compare Western Australian programs with what is available nationally. In that review, it was suggested there was a lack of evidence demonstrating the efficacy of Australian programs on the retention of GRNs in the nursing workforce, with the reviewers stating, “Certainly there has been little research focused on the Australian context, or on graduates’ perception of either the value of transition programs or the interventions utilised” (Levett-Jones & FitzGerald, 2005, p. 43). This statement supports the intent of the current study and the value of finding answers to the research questions posed, in that the survey questionnaire has sought the respondents’ perceptions regarding the value of their transitional experiences. Other questions posed to the study cohort have allowed components such as length and diversity of rotations, degree and source of support given, and the graduate nurse’s intentions in relation to future career plans, to be explored. The second, smaller survey of the graduate nurse coordinators was aimed at corroborating some of the GRN information, and collecting data in relation to what guidelines govern the individual organisation’s programs, as well as changes and innovations that have been made in recent years.

In WA, only one comprehensive review of graduate nurse programs, conducted by the UWA at the request of the WA Health Department’s Chief Nursing Advisor,

could be located (UWA, 2000). The purpose of the study was to assess the effectiveness of the recently formalised GNP and to demonstrate accountability for the government funding of the program. The UWA (2000) study was based on similar research conducted by Queensland Health (1999) and resulted in comparable findings. Both studies showed that the majority of GRNs (33 to 59%) appreciated the structure of the program, the support provided, and the actual clinical experience encountered. However, a small group (9 to 21%) did not believe the program structure or support to be of any benefit. Reported complaints included the lack of relevance of some study day topics and either poor, or a complete lack of, preceptoring by experienced nurses. In the UWA (2000) study, some GRNs felt that they were limited in achieving their full learning potential due to low staffing levels in their area of work. The resultant increased workload meant assigned preceptors were often too busy to provide guidance and direction. The format of the UWA (2000) study was a survey questionnaire that was posted to 375 GRNs who had enrolled in the Western Australian GNP in 1999, and had a 40% return rate. Questions were asked in the survey to elicit the nurse's current employment, previous employment, and types and lengths of specialty rotations. Open-ended questions were included regarding the GRNs' perceived benefits and problems experienced in the program; the levels of confidence and competence gained from the program; and the degrees of support that were available. Recommendations from the UWA (2000) study have been summarised in the previous chapter and will be expanded upon in the discussion of the results of the current study.

In a report produced by the WA Health Department's Steering Committee study of nursing and midwifery, Pinch and Della (2001) made several recommendations aimed at improving reported issues within the nursing workforce,

including some related to undergraduate education, transitional support to graduate nurses, and workplace issues impacting on their experience. The report also indicated areas of deficits in staffing and training, particularly within the specialty areas of Aged Care, Community and Mental Health that still appear to be ongoing in the current health environment. The degree of implementation of the recommendations and how they relate to this current study, together with the impact on future directions will be discussed in the relevant chapters.

2.6 Framework for Research Methodology

Creswell, Fetters and Ivankova (2004) explained how a mixed method design, infers that the researcher will, at some stage, integrate or mix the research data to contribute to a broader understanding of either, or both, the qualitative or quantitative dimensions of the research. To facilitate an understanding of the mixed method approach, the traditional paradigms of qualitative and quantitative research require explanation.

Quantitative methods are sometimes seen to be the more dominant approach to research in the natural and behavioural sciences. Numerical information is utilised to test hypotheses with statistical data being generated and results interpreted (Teddlie & Tashakkori, 2009). Quantitative research provides descriptions of cause and effect, interrelatedness and measures of observations (Creswell & Plano Clark, 2007). Generalisability of results to the larger population is something for which most quantitative researchers strive.

Qualitative researchers use more socially mediated strategies to gather information, theorising that meaning is *constructed* rather than being the outcome of

direct observation. The research questions generally evolve out of the inquiry and are shaped by what the researcher observes and discovers in the field (Teddle & Tashakkori, 2009). The theories of the constructivist approach are the product of individual inquiry theming into broader, upward patterns. Literature in qualitative research is used to support the rigour and intention of the research but need not play a major role in its direction (Creswell & Plano Clark, 2007).

2.6.1 Mixed Methods

The mixed methods approach to research is a relatively recent orientation in the social and behavioural sciences (Creswell, et al., 2004). The philosophical approach of mixed methods is generally viewed as pragmatic in that it utilises to the greatest advantage what works from both of the more traditional paradigms of post-positivism and constructivism, to gather data and answer the question being explored (Teddle & Tashakkori, 2009). In mixed methods research, it is the question that guides the choice of method, allowing the researcher to employ both numerical and narrative data gathering techniques in order to gain as comprehensive a view as is possible of the matter under consideration (Teddle & Tashakkori, 2009). As suggested by Johnson and Onwuegbuzie (2011), in a mixed method design, the intention is to maximise the strengths, while minimising the limitations of both quantitative and qualitative components. Supporters of mixed methods research see it as a diverse methodology that allows a more comprehensive and rich repository of data for analysis and discovery. In the words of Black and Ricardo, (in Creswell & Plano Clark, 2007), “By using a combination of qualitative and quantitative data gathering techniques, investigators can clarify subtleties, cross-validate findings, and inform efforts to plan, implement and evaluate intervention strategies” (p. 33).

As the name implies, mixed methods uses aspects of both, the quantitative and qualitative designs, and consolidates the data to pursue answers to research problems. This is done by either integrating at the point of analysis and/or interpretation; embedding one data type into the other; or using one data type to support the other. As Creswell and Plano Clark (2007) succinctly state, the central premise of mixed methods “is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone” (p. 5). The use of qualitative data within the mixed methods approach provides contextual information to enrich quantitative findings, and conversely, utilisation of quantitative data enhances the subjective interpretation of qualitative information. Mixed method research has been employed as a framework for this study to take advantage of the strengths of both quantitative and qualitative methods.

In discussing the different approaches to conducting research, O’Leary (2005) states “there is no ‘best type’ of research. There are only good questions matched with appropriate procedures of inquiry” (p. 9). In the current study, and following Crotty (1998), the objective and empirical perspective of quantitative research is applied to corroborate, enhance and inform the more subjective meanings construed from participants’ experiences and perceptions. Combining the two traditional research paradigms is likely to lead to discovering the connectivity of variables and show how these interrelate and inform each other. As such, mixed methods research is able to build upon the best of both paradigms to provide a more holistic and comprehensive approach to the proposed research.

Table 2.2 demonstrates how the logic of mixed methodology research (Johnson & Onwuegbuzie, 2011) is used to underpin the current study. It also shows the

strengths and limitations of each paradigm and how the strengths have been incorporated into the current research and limitations minimised, in order to create a robust overall approach.

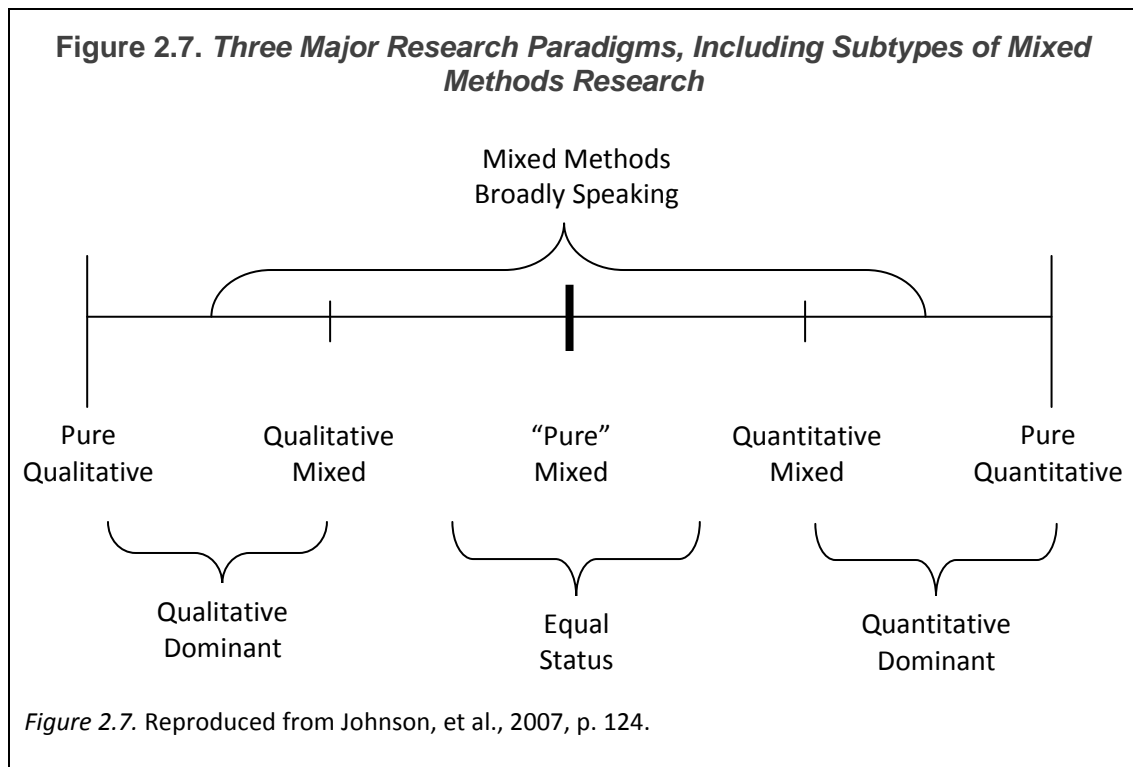
Table 2.2. Quantitative and Qualitative Aspects Applicable to Current Mixed Method Research

Qualitative, Quantitative – Strengths, Limitations	Applicability to Current Research
<i>Quantitative – Strengths</i>	
“Useful for obtaining data that allow quantitative predictions to be made”	Quantified demographic data are used to determine what influences specific ranges may have on perceptions of transitional experience, for example, age groups on career forecasts. Numerical data are easier to analyse and report, particularly when a larger sample is preferred. Use of the whole research population as the study cohort enables improved generalisability.
“Data collection using some quantitative methods is relatively quick”	
“Provides precise, quantitative numerical data”	
“Research results are relatively independent of the researcher”	
“Useful for studying large numbers of people” (p. 19).	
<i>Quantitative – Limitations</i>	
“Knowledge produced may be too abstract and general for direct application to specific local situations, contexts and individuals” (p. 19).	To be able to apply findings to a local context required some qualitative focus to overcome this limitation.
<i>Qualitative – Strengths</i>	
“Data are based on the participants’ own categories of meaning”	To gain truthful insights into graduate nurses’ transitional experience, required contextual data to better explain their perceptions. Able to adjust research plan in response to perceived deficits in some of the initial data, for example, added short survey of graduate nurse coordinators.
“Provides understanding and description of peoples’ personal experience or phenomena”	
“The researcher can study dynamic processes, i.e., documenting sequential patterns and change”	
“Responsive to local situations, conditions and stakeholders’ needs” (p. 20).	
<i>Qualitative – Limitations</i>	
“Data analysis is time consuming”	Resource limitations have excluded expanding the research further, for example, focus groups to further explore transitional experiences. Mixing with quantitative methods allows for quantification of qualitative data.
“It generally takes more time to collect data when compared to quantitative research”	
“It is difficult to make quantitative predictions” (p. 20).	

Source: Johnson & Onwuegbuzie, (2011).

The original survey questionnaire used in the UWA (2000) study, upon which the present research is based, employed both closed (measured quantitatively), as well as open-ended questions (evaluated qualitatively). As such, and to provide meaningful comparative data between the two studies, similar data collection and interpretation were required for the present study. To explore the contemporary graduate nurses' transitional perceptions and their future intentions in greater depth, a broader range of qualitative data was incorporated into the current primary study instrument. This included additional open-ended questions that resulted in an improved balance of quantitative and qualitative data being collected. While the quantitative element of the survey questionnaire enabled generalisation of the findings to a broader population, the qualitative components provided meaningful context to the local experience.

Johnson and Onwuegbuzie (2011) described mixed methods research as a midway point along a continuum, with quantitative research firmly entrenched on one end of the continuum and qualitative research at the other end. Mixed methods research saddles midway across the two points, in varying degrees, according to the researcher's needs as depicted in Figure 2.7.



The integration stages of data collection, analysis and reporting for mixed methods research is similarly viewed as pragmatic, and can occur in a number of ways according to the emphasis of qualitative or quantitative elements in the mixed method design, and the sequence or concurrence of data collection (Creswell, et al., 2004). The current study proportions the elements equally in an attempt to extract as much ‘richness’ from the data as possible.

Although mixed methods research can be more resource consuming than a single method, it does help avoid assumptions being made that may be based upon a singular point of view (Teddle & Tashakkori, 2009). The method is similar to the constructive element of qualitative research in that it retains the option of additional exploration should preliminary data require further clarification, thus allowing triangulation. *Triangulation*, or confirmation of findings, occurs when data from different methods or components of a study are converged, generally to corroborate

findings (Creswell & Plano Clark, 2007; Johnson & Onwuegbuzie, 2011; Teddlie & Tashakkori, 2009). By the use of the survey questionnaire, obtaining perspectives from multiple sources, and engaging in measurement of responses, this study primarily involved concurrent collection of data, and analysis and convergence of the results through the various stages of the research. The use of a triangulation design allows the research to be strengthened.

2.7 Context of the Current Research

Studies into graduate nurse transition from undergraduate to novice nurse in the Western Australian context are sparse. In the Levett-Jones & FitzGerald (2005) review of Australian graduate nurse programs, WA was the only State to be omitted. The only rationale evident for the omission was that the required data was not available. That report suggested there was a lack of evidence to demonstrate the effectiveness of Australian transition programs in the retention of novice nurses within the nursing workforce.

Supportive transitional programs are believed to assist retention rates of nurses (Hayman-White, et al., 2007), however, the UWA (2000) study demonstrated that many graduate nurses felt there was a considerable lack of collegial assistance in their initial tenure following their graduation and upon their induction into the nursing workforce. Recommendations from the UWA (2000) study, in particular those pertaining to appropriate amounts of initial supernumerary time; workloads; and preceptor suitability, have yet to be followed up. In addition, there are no overarching guidelines within WA health to establish how transitional programs should be structured, managed or assessed. The utilisation of a mixed methods

approach has facilitated expanding the qualitative component of the UWA (2000) survey and so permitted investigation into precisely these areas.

This is relevant given that many reviews of the Australian nursing workforce suggest that the transitional stage is important in maturing the novice nurse into a proficient and valuable practitioner who will maintain tenure within the nursing workforce (Clare, et al., 2002; Council of Deans of Nursing & Midwifery, 2005; Goh & Watt, 2003; McKenna & Newton, 2008; Pinch & Della, 2001).

2.8 Summary

This chapter has described how the literature demonstrates the positive effect sufficient numbers of RNs, in a ward or unit, can have on the safety and quality of patient care. The ageing of the population and thereby, the nursing workforce, has been shown as one factor impacting upon the widening gap between the demand and supply of proficient nurses available to provide nursing care to the population of WA. Government policies to increase efficiencies, such as reducing LOS and the four-hour rule in Emergency Departments, have intensified the nursing work load; so too has the proliferation of health-associated technology that effects the way contemporary nursing care is delivered. A supportive transition to proficient nursing practice, aimed at improving retention of novice nurses and, ultimately, skilled nurse numbers, has been considered. The role of the nursing profession in ensuring that transition programs are effective, of benefit to both the graduate nurse and the organisation, and are fiscally accountable, has also been discussed.

Research into contemporary nursing transition processes requires a pragmatic approach to maximise the consolidation and presentation of available information,

and to enable best practice recommendations to be made. The research methodology for achieving this in the present study has been presented. The following chapter further describes the methods used to conduct this research into the transition of newly registered nurses into the Western Australian nursing workforce.

CHAPTER 3: METHODOLOGY

3.1 Design

According to Creswell & Plano Clark (2007) there are three distinct procedures for mixed methodology research. The timing and the sequencing of data mixing determines the method used. Designs used within mixed methods research are the *Embedded Design*, where one data set takes precedence, and the other data type provides a secondary, supportive role within the study approach; the *Exploratory Design* where the qualitative data is used to inform the consequent needs of data type and collection for the remainder of the research study; and the *Triangulation Design*, the design chosen for the current research. Merging or converging data at either or both analysis, or during interpretation, is characteristic of the Triangulation Design. As the current research collected both quantitative and qualitative data within the one data study instrument, and merged and converted the data during the analysis and interpretation, the Triangulation Design seemed the most obvious choice.

3.1.1 *The Triangulation Design*

The Triangulation Design allows the researcher to acquire data that is, in essence, diverse and yet supports and strengthens the analysis and interpretation of findings to provide the best answer to the research questions. As described by Creswell & Plano Clark (2007) “this design is used when a researcher wants to directly compare and contrast quantitative statistical results with qualitative findings or to validate or expand quantitative results with qualitative data” (p. 26).

The use of a single instrument, the survey questionnaire, provided the bulk of the research data in both quantitative and qualitative formats, thus suiting the choice

of the Triangulation Design framework. Additionally, comparison of the quantitative and qualitative responses between the UWA (2000) and current research, and verification of data consistency within the present study, required the use of an instrument similar to that of the original UWA (2000) study. Merging of the two data sets occurred during the interpretation of data and included transformation of qualitative results to quantitative data, which facilitated the demonstration of the relationship of the two data types. Figure 3.1, adapted from Creswell & Plano Clark (2007, p. 63), demonstrates the mixing of quantitative and qualitative data at the various stages applicable to this research, and indicates the stage of transforming qualitative data to quantitative. The purpose of reducing data in this way supports integration and comparison of data. This was employed in the current research by quantifying the qualitative data, primarily to demonstrate the most common themes that applied to the responses from the open ended questions. The capitalised abbreviations indicate emphasis on that data type, for example, QUAN signifies that the quantitative data prevail at that stage of the research. In Figure 3.1 the data types are given equal status at the collection and analysis stages, as both had an equivalent influence on the consequent interpretation.

Figure 3.1. Triangulation Design: Data Transformation Model

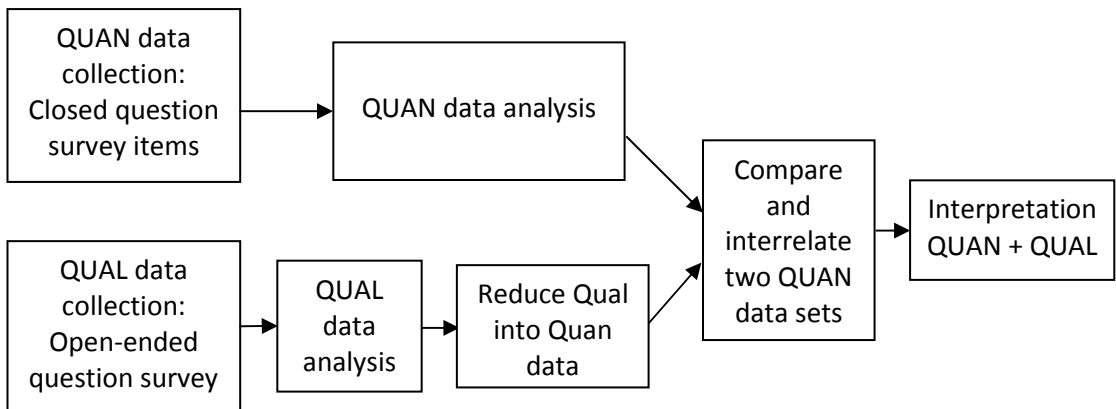


Figure 3.1. Adapted from Creswell & Plano Clark, 2007, p. 63.

3.2 Study Populations

Two study populations were selected for this research. The primary population provided the majority of the data by means of responses to a survey questionnaire. That population consisted of 858 RNs who completed an undergraduate program and registered with the Nurses and Midwives Board of WA (NMBWA) in 2008. The secondary study population consisted of 48 graduate nurse coordinators who were part of the GNC consortium within the WA Health Department. As per the mixed methods framework, this population was used to validate aspects of the primary population responses, and to provide further information related to the graduate nurse transition programs that are offered within WA.

3.2.1 Primary Study Population

Following graduation, all nurse graduates are required to register with the Nurses and Midwives Board of Australia (NMBA) to enable them to practice as a nurse. Prior to the formation of the NMBA in 2010, each Australian state had an

individual registering body, the NMBWA being WA's, and new graduates' details from then are archived by them. The NMBWA recorded initial registrations into a separate database, and this enabled the Board to select the study subjects from that cohort. Discussions had previously been held with the NMBWA to confirm that controlled access to the database was available (R. Lazarus-Gomes, personal communication, May 21, 2007).

The population of 858 was determined by the number of nurses in the NMBWA data base that met the research criteria, that is, RNs who completed an undergraduate program and registered in Division One with the Board in 2008. The rationale for choosing this group was that the majority of new RNs choose to participate in a transition program of some description, most notably a Graduate Nurse Program (GNP) and would have, or have been well on their way to having completed their first transition year at the time of the study. As the current research includes a comparative component, the choice of study population was guided by that used for the UWA (2000) research, which consisted of all RNs who had enrolled in a GNP in 1999. Subsequently, a similar population to the UWA (2000) study was required to ascertain variance between the groups of the GRNs' perceptions of their GNP experiences.

To alert the study population of the impending survey, an introductory letter (see Appendix A) was sent early March 2010, and was followed one week later by the survey questionnaire (Appendix B). This was followed two weeks afterwards by a reminder letter (Appendix C) requesting participants to support the research by completing the questionnaire. A 'return by' date was included on the survey questionnaire and the follow-up letter to encourage timely survey completion and

return. Of the 214 returns, two were from graduate nurses' relatives indicating that the nurse was out of the country and therefore unable to complete the survey within the required time; and eight were marked as '*return to sender*', giving a total of 204 eligible returns, a return rate of 24%. In a study to determine survey response habits among first-year college students, Sax, Gilmartin & Bryant (2003) reported a decline over the past few decades in overall response rates for paper-based surveys to an average rate of 21%. Differences in return rates were also found for gender, with 26.9% of the female subjects responding compared to only 14.3% of the males responding (Sax, et al., 2003). Based on this work, the current study achieved slightly higher than an average return rate. The gender ratios of expected returns in the present study were similar to the Sax, et al. (2003) ratios with 24.6% of possible female respondents and 15.7% of possible male respondents returning the primary survey questionnaire.

In the UWA (2000) study, 375 surveys were mailed out to first year GRNs who had enrolled in a GNP in 1999, with a return rate of 45%. It is surmised that the higher than average return rate was due to that researcher's ability to directly target the study population through the hospital GNP coordinators. A similar approach was not utilised for the current research as the intent was to canvas the entire population of RNs rather than only those participating in a GNP. The number of respondents indicating participation in a formal transitional program in the 2010 research (n = 167) was almost equivalent to the UWA (2000) study (n = 170) and, as such, provided a good basis for comparison of relevant findings from both studies.

3.2.2 *Secondary Study Population*

Despite preliminary testing of the primary research instrument (described in the following section), when analysing the results of the survey questionnaire it became evident that elements of some questions may have been misinterpreted, such as when asked *the number of graduate nurses working in a unit at the same time as the respondent*. A desire to clarify these data, and to seek further information regarding the structure of formal transition programs, led to a smaller, web-based survey administered to the coordinators of the GNPs, the graduate nurse coordinators (see Appendix E). This is a group of senior nurses, Graduate Coordinators, Staff Development Educators, or Staff Development Nurses, responsible for the recruitment of graduating nurses to the GNPs via the WA Health Department's GNC, and management of the individual organisations' transitional programs. Initial verbal permission, followed by written clarification was gained from the Senior Nursing Officer who, at the time managed the WA Health Department GNC consortium, to access the graduate nurse coordinators via the consortium contact database for administration of the web-based survey (R. Newton, personal communication, May 18, 2011).

The secondary study population was contacted in July 2011 via the WA Health Department's group electronic mail with an introductory letter attachment (Appendix D) and a link to the web-based survey. The initial sample number of 45 was the entire GNC contact list from within the public health system. Following advice from the WA Health Department's GNC program Senior Nursing Officer that a small number of private sector hospitals had recently joined the GNC consortium, additional contact was made with three graduate nurse coordinators from these organisations. The total number contacted provided a population of 48 potential

respondents. Twenty graduate nurse coordinators completed the survey, 18 from the public sector and two from private, providing an overall response rate of 41.7%.

3.3 Data Gathering Instruments

A survey questionnaire is an economical means of collecting data from a large cohort in a relatively short period of time as it allows the results to be collapsed into a manageable format and statistical analysis to be performed. To enable suitable comparison of data between the current research and that conducted in the UWA (2000) study, a survey questionnaire based on the instrument that was used in the original UWA (2000) study was essential. With the proliferation of web-based tools to access potential research subjects the web-based survey instrument is fast becoming a preferred method of delivery (Sax, et al., 2003). However, in a review of web-based versus non-electronic methods of administering surveys, Perkins (2004) reported that while respondents found the web-based instrument more convenient and timely, and with more direct data transmission, the better accessibility, confidentiality and control of the non-electronic version were also found to be important. Perkins (2004) found the non-electronic instrument to be more user-friendly to older cohorts and those lacking computer access, a finding that could be relevant in the current study cohort. Although by virtue of completing tertiary education the primary study population would be experienced in the use of information technology, the considerable proportion of study respondents in the older age-brackets (26% of respondents were aged 40 and over), suggest that many within this cohort of nurses may have felt more comfortable with the paper-based instrument.

For the secondary study instrument, the smaller, and more highly trained sample size, and the easier contact option of using electronic mail meant a web-based survey was a more suitable means of data collection (Perkins, 2004; Sax et al., 2003).

3.3.1 Primary Study Instrument

Edwards, et al. (2002) found survey questionnaire response rates were more likely to increase when a stamped and addressed return envelope was included, and when contact prior to sending out the study instrument was made. The introductory letter was sent out by the NMBWA to the identified population, followed a week later by the survey questionnaire. Calder (1998) suggested response rates of postal survey questionnaires may also be improved by 20 to 30% when reminders were sent following the initial survey distribution. Consequently, a reminder letter was posted out to the study population two weeks following the posting of the survey questionnaire. However, as the returns went directly to the NMBWA it was not possible to monitor what effect the reminder letter may have had on response rates. Moderately higher return rates have also been found with survey questionnaires that were in a booklet format, on coloured paper, were user friendly and had demographic items at the start of the questionnaire (Calder, 1998; Edwards, et al., 2002). Informed by such literature, and guided by feedback from the survey questionnaire test-group (discussed in the following section), these methods were incorporated into the primary research instrument.

Permission was gained from the Office of the Chief Nurse and Midwife to use the UWA (2000) questionnaire as the basis for the current research. The majority of the questions in the study instrument were categorical, requiring nominal responses in relation to age-groups, gender and organisational types, or ordinal responses, for

example, in relation to the levels of support given by relevant personnel; and were supported by open-ended questions to allow for expansion of the data. The questions identified the types of institutions and clinical units in which the graduates have worked; the length of their transitional program; the level and type of support received; and the perceived degree of satisfaction with the program. Questions to determine the GRNs' perception of how the program may have influenced their future career intentions; and additional demographic information, were included to further elucidate data to answer the research questions. These questions were based on more recent research by Evans (2005) and Reeves (2007), both of whom looked into similar areas in relation to GRN transition programs in other Australian states. Feedback from the survey questionnaire test group also guided additional questions.

3.3.1.1 *Primary Instrument Testing*

Prior to final administration of the primary instrument, the survey questionnaire was tested for content, design, flow and relevance on a small group of RNs, similar to the study sample, but who had no likelihood of being part of the study population as they had registered with the NMBWA in the two years prior to the study population. The test-group was able to confirm the consistency of the questions and assisted with reformulation of those that required more clarity to improve data reliability (Calder, 1998). An example of this process is in the response choices for the question *what level of support did you receive from each of the following during this rotation?* In the UWA (2000) survey, the related question appeared limited in the degree of information it would elicit with only a *yes* or *no* response available to the question: *Do you believe that you always received sufficient support for your responsibilities when you commenced in your ward/unit?* Feedback from the test-group indicated *support* could be given in varying degrees and from

several aspects. The question was therefore expanded to a scale of five possible levels of support from *extensive* to *negligible*, and included a *not applicable* choice that allowed for scenarios where the support personnel was not part of the specialty unit. It was apparent from the UWA (2000) data and test group feedback that designated personnel contributed to the GRN support at varying levels. Consequently the question also allowed for individual evaluation of these personnel. The designations included the Program Coordinator, the preceptor, Staff Development Nurse (SDN), Clinical Nurse Manager/ Specialist/ Coordinator (CNM/S/C) and other colleagues within the GRN's allocated unit (Table 3.1).

Table 3.1. Support Personnel Identified and Response Options Available to GRNs

Support Component Designations	Ordinal Response Options
Program coordinator	Extensive
Staff development nurse	Very good
Clinical nurse manager/specialist/consultant	Average
Preceptor	Occasional
Ward/unit nursing staff	Negligible
Other (please specify)	Not applicable

3.3.1.2 Survey Questionnaire Format

To maintain comparative data integrity, the UWA (2000) study questions were used verbatim, except where minor formatting modification improved the readability of both the closed and open-ended questions, and some minor adjustments of the available closed-ended responses (Table 3.2). In total, there were 20 closed and 10 open-ended questions in the UWA (2000) study and 28 closed and 20 open-ended questions in the current survey questionnaire.

Table 3.2. Survey Questionnaire Modifications

UWA (2000) Questions	2010 Questions	Comment
Please identify the type of health care institution where you are currently employed.	What type of health care organisation are you currently employed in?	Response choices were expanded from 3 to 8 to include contemporary options.
If this is not the same as the health care institution where you began work in 1999, please identify the type of health care institution where you first worked in 1999.	What type of health care organisation did you work in during 2008?	As above.
In the table below, enter the type/s of units in which you worked in 1999, the length of time you spent in each unit and the total number of new graduates working in the unit at the time of your stay.	Each rotation and components were separated out for better response clarity, e.g., Type of Unit; Length of Stay; Average number of graduate nurses in unit; Average hours contracted to work; How long did you work in unit before given a full patient load; What level of support did you receive from the following; What areas were beneficial; What areas were problematic; What caused most stress; Further comment.	In addition to separating out each of the components, and the provision for 5 rotations, the response options for the first 6 questions were closed to enable better control of the data and the final 4 questions were open-ended to provide the respondents with an opportunity to describe their experiences.
What (if any) components of your new graduate program were not beneficial in facilitating your transition to the role of Registered Nurse?	What areas were problematic with this rotation?	In both surveys this question was preceded by one relating to beneficial components. The opposing terminology was used to elicit more pragmatic responses.
The graduate program made me feel more competent in my clinical practice.	How much do you agree that the graduate program made you feel more COMPETENT in your clinical practice?	The initial response elements of <i>agree</i> and <i>disagree</i> were modified to <i>mostly agree</i> and <i>mostly disagree</i> with an added category of <i>unsure</i> to allow for a more moderate response.

UWA (2000) Questions	2010 Questions	Comment
During your first 12 months as a Registered Nurse, how satisfied were you with the preceptoring that you received?	During the first 12 months as a Registered Nurse, how satisfied were you with the preceptoring/support you received?	Again, the response choices were modified from <i>satisfied</i> and <i>dissatisfied</i> to <i>mostly satisfied</i> and <i>mostly dissatisfied</i> with an added category of <i>mixed experience</i> to reflect more accurately the novice nurse's experience.
On average, how long did you work in each ward/unit before you were given the responsibility of a full client/patient load?	How long did you work in the unit before you were given the responsibility of a full patient/client load in this rotation?	As supernumerary time often varies from rotation to rotation and specialty to specialty, this question was included in the section relating to individual rotations.
Do you believe that you were well prepared for the responsibility of night duty?	How well do you believe you were prepared for the responsibility of night duty?	The UWA (2000) response choices of <i>yes</i> and <i>no</i> were modified to <i>well prepared</i> ; <i>somewhat prepared</i> ; <i>poorly prepared</i> ; <i>no preparation</i> to enable a broader response context.
Do you believe that your university education prepared you appropriately for your role as a newly Registered Nurse?	How much do you agree your university education prepared you adequately for your role as a registered nurse?	Again, the UWA (2000) response choices of <i>yes</i> and <i>no</i> were modified to <i>strongly agree</i> ; <i>mostly agree</i> ; <i>unsure</i> ; <i>mostly disagree</i> ; and <i>strongly disagree</i> to enable a broader response context.

Following discussion with the survey questionnaire test-group, it was felt that the option of recording experiences for each individual specialty rotation should be provided as the graduate's experiences may differ between the different specialties. A specialty rotation is defined as the allocation for a period of time to a clinical area pertaining to a particular specialty, such as surgical, medical, mental health, or critical care. Depending on the number of specialty rotations within a program,

respondents to the 2010 survey had the option of responding to an additional 20 closed and 16 open-ended questions.

Additional components were included in the 2010 survey questionnaire to elicit information relating to the GRNs' perceptions of GNP transition efficacy and future career intentions, and consisted predominately of questions related to demographic information and career intentions (Table 3.3).

Table 3.3. Additional Survey Questions in 2010 Instrument

Additional Question	Inclusion Rationale
Gender	In an endeavour to increase the pool of potential nurses, much advertising is aimed specifically towards males. Knowledge of the gender ratio may be indicative of marketing effectiveness.
Age	As ageing is considered to be a major cause of the current nursing workforce shortfall it is useful to map the age categories of the future workforce.
Health care experience prior to graduation	Some nursing literature suggests prior healthcare experience may ease the transition process, or influence the graduate RN's experiences.
At which university did you complete your undergraduate program?	Each university has variations in program structure, such as length of clinical practice placements. Correlation with responses may show how these differences impact upon their perceived experiences.
What month and year did you commence this program?	Some organisations offer various program start dates to cater for different graduation times.
Have you completed this program? If no, do you intend to complete it?	To determine the dropout rate from transition programs.
What month and year did you (or do you expect to) complete this program?	To determine program length.
How many hours were you contracted to work per week (on average) in this rotation?	There is a reported trend in the literature of the 'X' and 'Y' generations preferring to work less hours which has the potential to impact on overall recruitment hours in terms of full-time equivalents.
What caused the most stress for you in this rotation?	This was in addition to 'benefits' and problems' as it was considered to be a separate concern.
Do you have any other comment you would like to make about this rotation?	An opportunity was provided for comment at the end of each rotation to allow for expression of variances in experiences.
Please indicate below your career pathways/intentions following the program:	The options given related to working in an area the GRN experienced during a specialty rotation, same or different organisation, and was aimed at answering the related research question.
Please comment on how you feel your graduate year experiences have influenced your choices above:	Related to the previous item.

Additional Question	Inclusion Rationale
Where do you see yourself professionally in 5 years time?	As above, this question was aimed at answering the related research question.
Were you seeking a permanent contract at the start of your employment as a Registered Nurse?	As a recruitment strategy, some organisations offered permanent contracts as opposed to fixed term contracts. Following the Global Financial Crisis, many reverted to offering only fixed term contracts. The type of contract may affect selection of organisation for first preference when applying through Graduate Nurse Connect.
Did an offer of a permanent contract influence your choice of organisation for initial employment as a Registered Nurse?	

The cover page of the questionnaire contained further clarification of the purpose of the research. Additionally, the nurse was asked to make contact should the respondent be willing to participate in a focus group, if the need arose, to further clarify data at a later stage. Eight respondents agreed to assist, however, the decision to clarify doubtful data through contact with the graduate nurse coordinators negated the need to enlist these respondents any further.

3.3.2 *Secondary Study Instrument*

The secondary instrument, a brief web-based survey questionnaire, was deemed necessary to clarify minor discrepancies found during the initial analysis stage in the data from the primary survey questionnaire. The purpose was to clarify the responses given by the GRNs where a small proportion of respondents gave a value that appeared extreme and did not make sense; for example, when asked to indicate the *average number of graduate nurses in the unit during your stay including yourself*, figures of up to 30 were given. As this would constitute unsafe and undesirable staffing mixes it would appear the GRNs may have misunderstood the question.

Conducted in the latter stages of the research, the instrument consisted of a simple 10-question, web-based survey utilising a basic SurveyMonkey © platform. In addition to clarifying the apparently erroneous responses from the primary survey questionnaire, the opportunity was taken to gather data regarding the guidelines that each organisation used to guide their transition programs, as well as to request information relating to changes and innovations they had made, or planned to make to their current programs. This information would then be used determine if there were any evidence of related impacts upon the graduate nurses' experiences.

The survey consisted of two closed questions related to demographic data; five questions aimed at clarifying the minor discrepancies that were found in the primary survey questionnaire data; and three open-ended questions to elicit information related to their organisation's GNP guidelines. Given that insufficient support is often a common theme among transitional reports (Johnstone, et al., 2008) a question also asked what supports, in terms of *Graduate Nurse Coordinators, Educators, Staff Development Nurses, Clinical Coaches, Preceptors, and Mentors* were available to the GRN within the graduate nurse coordinator's organisation. The additional data gained from this secondary survey supported the data already gleaned from the GRNs and aided in further triangulating the research findings (Johnson & Onwuegbuzie, 2011).

3.4 Procedure

The primary instrument survey questionnaire met the criteria for a mixed method Triangulation Design in that it simultaneously collected both quantitative and qualitative data from the same sample, providing similar amounts of data for analysis and interpretation. As described by Creswell & Plano Clark (2007), "The

Triangulation Design is a one-phase design in which researchers implement the quantitative and qualitative methods during the same timeframes and with equal weight” (pp. 62-64).

3.4.1 Primary Survey Data Procedures

The final formatted survey questionnaire was sent to the printers who provided a booklet style document with perforated page edges. These allowed for separation of the pages when returned and consequent scanning to the Remark Office (Version 7) Optical Mark Recognition (OMR[®]) software. The finished product was delivered to the NMBWA for posting to the survey population.

Prior to scanning the postal survey questionnaire data into the OMR[®] system, a template was developed to enable recognition of the response marks and allocation of the scanned data within the designated categories.

Eligible returns from the primary survey questionnaire forms were manually and sequentially numbered to provide an identity for reference purposes when cross-referencing data and wherever clarity was uncertain. The perforated spine of the questionnaire was then removed to enable scanning and each questionnaire individually separated and secured in sequence. Due to some incompatibility issues with the instrument design and the scanning software, close monitoring was required during data scanning to pick up double feeds, missing pages, or out of order pages. These issues resulted in a large number of data requiring manual entry. Throughout the process, all data were randomly and routinely checked for final accuracy. The text entries were visible on the computer screen and able to be entered manually into the correlating data cells for subsequent theming. Where the data were difficult to

read electronically, the original hard copy was referred to. Once scanning into the OMR software was completed satisfactorily, the individual questionnaires were fastened to ensure each respondent's data were kept together and then securely stored in the event further referencing to the hard copies was required.

Quantitative demographic data were cross-tabulated and presented as percentages in frequency distributions to illustrate age-groups; industry types; undergraduate university attendance; and prior employment. Comparative data involved levels of perceived confidence and competency that the GRNs felt they had gained from a GNP. These were also demonstrated using frequency distribution tables to provide comparison with the original UWA (2000) study. The additional demographic data collection provided an opportunity to link the GRN categories with possible influences upon their reported experiences.

For each rotation a mix of closed and open-ended questions followed related to the *perceived benefits, problems, cause of most stress and further comment*. As per the Triangulation Design transformation model (Creswell & Plano Clark, 2007), the qualitative data was transformed to quantitative to allow integration and mixing of data, and reported in its textual format in the Discussion Chapter. Quantification of the qualitative data was achieved through applying themes to the commonly reported experiences as described further in the Data Analysis section.

3.4.2 Secondary Survey Data Procedures

The secondary survey of the graduate nurse coordinators was web-based, and as such, the data were available electronically and easily exported to a Microsoft Office Excel 2007 spreadsheet for analysis. Data that were used to clarify

discrepancies from the primary survey questionnaire responses were incorporated into the primary data collection. The data from the secondary survey related to specialty rotation length was able to validate that obtained in the primary survey. However, the data from the graduate nurse coordinators related to the number of graduates in a unit at the same time as the GRN respondents, confirmed that the data were, in fact, not an accurate representation.

There was no transformation of the secondary survey qualitative data as doing so would not have added any value to the interpretation of results. These data were obtained only to clarify components of the primary survey data and to provide supplementary information (Appendix F). All quantitative data were presented as either frequency distributions or table formats and, where required, triangulated with the primary data.

3.4.3 Data Triangulation Procedures

To inform the associations between the variables, and in accordance with mixed methods Triangulation Design, the quantitative and qualitative data from the primary survey questionnaire were analysed separately, and then merged by transforming the qualitative data to quantitative (Creswell & Plano Clark, 2007). Cross-tabulation between data groups were performed to establish what relationships existed between variables, for example, the length of specialty rotations and the degree of satisfaction with the transitional programs. Links between demographic, employing organisation type, undergraduate educational institution, and employment outcomes and intentions were also examined for trends, as well as possible influences upon current and future nursing career choices. These analyses have allowed for structural and functional theorisation of relationships (Kamoche, Pang &

Wong, 2011) between variables and comparisons with the UWA (2000) data as shown in the Findings Chapter, and considered further in the Discussion chapter. Matrices that were presented were predominately in relation to demographic data and the quantified themes as is demonstrated by the example in Table 3.4.

Table 3.4. Percentage of Respondent Age Groups for Individual University

University	<21-ys	22-29	30-39	40-49	>50
Uni A (n=68)	0.0%	53.9%	22.1%	16.2%	8.8%
Uni B (n=99)	5.0%	46.5%	20.2%	19.2%	11.0%
Uni C (n=24)	20.8%	41.7%	33.3%	0.0%	4.2%
Uni D (n=10)	0.0%	30.0%	20.0%	20.0%	30.0%

3.5 Data Analysis

Data analysis in mixed methods research is conducted by means of the most suitable method to answer the research questions (Creswell & Plano Clark, 2007). While appropriate methods are used for each type of data, for example, quantitative methods for quantitative data, mixed methods research includes the option of transforming data to the opposing mode data to provide more options for data interpretation and presentation, such as quantifying qualitative. In the convention of mixed methods Triangulation Design, qualitative data transformation was employed in this research to provide comparative and correlational descriptions of the findings, particularly in relation to the GRNs' perceptions of their GNP experiences.

3.5.1 Primary Survey Data Analysis

While a large component of the qualitative data has been tabled in its raw format (see Discussion Chapter), it was also categorised into themes, as described

below, to provide more options for data correlation and comparison. The quantitative data were presented mainly as frequencies and percentages of occurrence, for example, the percentage of GRNs for each age bracket and the type of organisation they worked within. This quantification of the qualitative data by categorising into themes, and the validation of one type of data with the other, is typical of the Triangulation Design (Teddlie & Tashakkori, 2009).

3.5.1.1 *Data Theming*

According to Miles and Huberman (1994), data theming is one method of reducing qualitative data into more manageable components for analysis and presentation. In pure qualitative form, the reduction comprises sequential organisation of common patterns of data into groups until the condensed format provides a suitable display of relevant findings. In the current research, the majority of the qualitative data were themed using frequencies of response concepts for some sections, and degrees of positive or negative expressions for others, depending on how the data would be best represented.

On satisfactory completion of data entry for the primary survey questionnaire, the entire database was exported to a Microsoft Office Excel 2007 spreadsheet to enable further manipulation of the data and the thematic coding of the textual entries. Themes were developed according to subject, for example, comments related to the GRNs not feeling adequately supported in their transition were grouped under *lack of support* or items of workload causing stress were themed as *workload*. Following the initial theme allocation, and to enable filtering of the data and correlation amongst associated variables, the themes were applied to the data in a separate field. Table 3.5 shows the set of themes used for categorising *perceived causes of stress*.

Table 3.5. Themes Used to Code First Rotation Perceived Causes of Stress

Themes	Themes
Nil (no causes of stress reported)	Poor Communication
Workload	Busyness of the Unit
Lack of Support	Bullying
Time Management	Poor Skill Mix of Staff
Lack of Knowledge	Work Life Balance

3.5.1.2 Primary Data Statistical Analysis

The OMR software used for the primary survey questionnaire provided basic reports for selected variables such as item analyses and cross-tabulations. Further statistical analysis was possible using the Microsoft Office Excel 2007 functionalities for percentages and frequencies. The predominant statistics required for comparison with the UWA (2000) data and additional reporting were item analyses, frequency distributions, and categorical and numerical values. The quantified qualitative data was used for comparative and trend analysis in relation to both, the UWA (2000) and the demographic data of the current research, predominately with the frequency of particular responses standardised in percentage terms (Calder, 1998).

3.5.2 Secondary Survey Data Analysis

Data from the secondary web-based survey were exported wholly from the web-based report to a Microsoft Office Excel spreadsheet for analysis and interpretation. Again, each entry was assigned an individual identification number to enable cross-referencing and tracking of data.

Quantitative data from the secondary survey of the graduate nurse coordinators were similarly presented as item analyses, frequency distributions, and categorical

and numerical values, with the qualitative data presented purely in table format to demonstrate the various textual feedback provided from the respondents.

The secondary survey data provided validation of some elements of the primary data and supported various assumptions made in relation to the GRNs' perceived experiences pertaining to program structure and support provision.

3.5.3 Validity and Credibility

Whilst postal survey questionnaires may be limited in respect to return rates and internal validity (due to reduced control over the investigation), the ability for the sample to be more representative of the target population maximises external validity (Calder, 1998). The return rate for the primary survey questionnaire of 24% is considered reasonable, implying a satisfactory degree of external validity.

Creswell, and Plano Clark (2007), suggest validity threats to concurrent data may occur when sample sizes for the quantitative and qualitative collection are unequal or when contradictory findings are not followed up. Both these concerns have been addressed in the current study. The first, in having the quantitative and qualitative data collection within the same instrument; and the second, by administering the smaller, web-based survey of the graduate nurse coordinators to clarify what appeared to be confounding data in relation to a small number of responses from the primary survey questionnaire.

3.5.4 Ethical Considerations

Ethics clearance for this research was gained from the University of Notre Dame, Australia's Human Research Ethics Committee in December 2009. The

application for clearance contained no contentious issues and the research was consequently considered low risk from an ethical point of view.

3.5.4.1 *Anonymity*

The primary survey questionnaires were distributed and receipted by the NMBWA so anonymity was preserved. Return envelopes had no identifying information on them to link a respondent to the data. Individual returned survey forms were identified by the application of sequential numbers to allow follow up of any unclear data by referring to the original copy. Anonymity was assured in all correspondence with the study participants. Answers to questions pertaining to workplace organisations in the survey questionnaire were regional and graded, for example, *tertiary*, *rural*, and *mental health*, to avoid identification of individual organisations. Not only would this information have not been useful to the overall research, it is possible response bias could have been introduced by influencing the way respondents answered should they feel there may have been some repercussion were they to provide feedback that may have been deemed negative. University names were de-identified for reporting purposes.

Responders to the secondary web-based survey of the graduate nurse coordinators were asked to indicate the type of organisation they belonged to for purposes of comparison between metropolitan, rural, private, tertiary and secondary facilities. As there were no identifying elements of the survey responders in the data screen, anonymity of the individual was maintained. However, a small number did name their establishment within the textual responses and these were de-identified for presentation purposes.

3.5.4.2 *Informed Consent*

The RN group providing the pilot testing of the primary survey questionnaire were given a comprehensive information letter describing the purpose, aims and objectives of the research and the purpose of their contribution prior to participation and were required to sign a written consent form ensuring confidentiality of any personal information gained in the session (Punch, 2006).

Participants in the primary survey questionnaire study were provided with a comprehensive explanation of the purpose of the research, and the aims and objectives were presented in the introductory letter (Appendix A). An invitation to be notified of associated publications was provided, as was an option to nominate to be involved in focus group interviews should they be deemed necessary. Return of the completed Survey Questionnaire signified implied consent.

The participants of the second web-based survey of the graduate nurse coordinators were provided with an information sheet as an attachment to the electronic mail sent via the WA Health Department system, describing the research and the value of their participation (Appendix D). The email itself contained a further description of the benefit that their assistance would contribute to the research and to Western Australian transitional programs.

3.5.4.3 *Data Security*

As recommended by the National Health and Medical Research Council, ownership of all data and findings remains the property of the researcher, and is secured at all times at the researcher's home address, in a secure room used only for study purposes. All electronic data has secure copies held at the School of Nursing, the University of Notre Dame, Australia, Fremantle Campus, and all the electronic

files are password protected. Data and findings in their entirety will be held for the recommended minimum of five years and, when required, will be destroyed by either shredding of the paper content or deletion of electronic files. The university maintains a copy of the data and completed theses for research purposes only.

3.6 Summary

This chapter has described how a mixed method approach incorporating triangulation of the data was believed to be the most suited to answering the research questions and to allow comparison with the UWA (2000) study; efficacy of nursing transition programs; and predictive effects the perceptions of the graduate nurse have on nursing career longevity. Development of the primary research instrument, based on the UWA (2000) survey, and the rationale for modifications and enhancements that were informed by instrument testing and similar literature, have also been discussed, as has the rationale for employing a further, smaller study of the graduate nurse coordinators. Similarly, the research study populations and instruments, procedural matters and issues encountered during these processes have been considered. The methods of data analysis for both the primary and the secondary studies have been described, including the processes utilised to mix and triangulate the findings. Ethical considerations regarding anonymity and participant consent have been also addressed.

The following chapter presents the findings from the graduate nurse survey questionnaire and the graduate nurse coordinator web-based survey in the convention of mixed methods triangulation design.

CHAPTER 4: FINDINGS

4.1 Introduction

The purpose of this chapter is to present the data from the graduate nurse survey questionnaire and the graduate nurse coordinator web-based survey in the manner prescribed by mixed methods research Triangulation Design; and as described in the previous chapter. The data from the postal survey questionnaire returned by the graduate nurse cohort has been presented as frequencies and percentages of occurrence to provide a comprehensive description of the transition programs offered within WA in 2010. Transformation of the data has enabled comparative depiction between the findings of the UWA (2000) study and the current graduate nurse survey, and facilitated comparisons within the current research by demonstrating the variations between the individual specialty rotation data with each progressive rotation. The written responses are utilised in their qualitative forms in the next chapter to further support the interpretation of the findings.

A brief overview of the original and current survey questionnaires is provided in sections 4.2 and 4.3, the latter section including demographic data that provides context to the current study population. Data from the present study are compared with data from the UWA (2000) study to determine what differences were reported between the two timeframes (sections 4.4 and 4.5). The purpose was to determine how the newly graduated RNs' perception of transitional program efficacy may have changed. In addition to the comparative data, qualitative responses provided an insight into the perceived efficacy of formal transitional programs and demonstrated shifting perceptions over the past decade within the workplace (section 4.6). The

expanded quantitative and qualitative data that was collected in the current research, in relation to future career intentions, was used to depict the perceived influences that a GNP may have upon the novice nurse's career path choices (section 4.7).

Additional comment was invited in the 2010 study and provides further insight into the GRN's perceived integration experiences (4.8).

The secondary web-based survey of graduate nurse coordinators (section 4.9) provided data that validated portions of the primary survey questionnaire in terms of program length, and contracted hours offered to the GRNs during their transitional programs. Additional information that was not available from the GRN, such as recent program innovations, was also considered and is presented in Appendix F.

4.2 Original Survey Questionnaire (UWA, 2000)

According to the UWA (2000) report, literature suggested that alliances between universities and the workplace were limited and expectations as to the graduates' abilities during the transitional period differed between academia and industry. With the intention of assisting the health industry to provide more clinical support to the newly graduated nurse and to encourage their retention in the workforce, the WA Health Department commenced funding of programs in Western Australian public and private hospitals in 1998 and 1999 (UWA, 2000). The funding was to enable programs to offer "extra clinical support, educational materials and often the opportunity to attend education sessions in order to assist them with the transition from university to the workplace" (UWA, 2000, p. 1).

4.3 Current Postal Survey Questionnaire

The postal survey questionnaire for the current study was similarly managed by the NMBWA but in this instance was sent to *all* nurses who graduated and registered with the NMBWA as a RN for the first time in 2008, that is, those who participated in a transitional program and those who chose not to participate. Demographic data were collected in the present study to allow for further exploration of associations related to age-groups, undergraduate education, prior health experience, type of employing institution and potential influence upon perceptions and experiences. Data were also collected to investigate what influence the transitional period may have on future retention of the novice nurse within the nursing workforce and their intended career paths.

4.3.1 Demographics

The UWA (2000) survey did not collect demographic data. The decision to do so in the current research enabled an expansion of the data to examine relationships and comparisons between age groups; undergraduate institutions and prior experience; as well as transitional choices, experiences and perceptions.

4.3.1.1 Gender

The ratio of female to male for the response group was 93.6% to 6.4% respectively. The national ratio of female to male nurses recorded by the AIHW for the year 2008 is 90.3% to 9.7% and for WA is 90.9% to 9.1%, which indicates that the State is marginally behind the national trend of improving the attraction of more males to nursing as a profession (AIHW, 2010b).

4.3.1.2 Age Groups

Almost half the sample was aged 30 or older as indicated by Table 4.1. This is noteworthy given that the general consensus is to focus recruitment on newly graduated nurses to support resupply of the ageing workforce. It is possible a large proportion of the older cohort are those with previous experience as an Enrolled Nurse (EN) as 45% indicated prior employment as an EN, compared to only 19% of the 29 or less age brackets.

Table 4.1. Age Groups of Respondents

Age group - years	Percent of sample
≤ 21	4.9%
22-29	47.0%
30-39	22.1%
40-49	15.7%
≥ 50	10.3%
Total	100%

4.3.2 Prior Experience

More than half the respondents had prior experience as an EN or Assistant in Nursing/Nursing Assistant (AIN). A further 28.5% had prior experience as an Orderly or Patient Care Assistant (PCA). Slightly more than a third (34.8%) had no prior experience in a health related field. As indicated, the older age groups were more likely to have had prior EN experience.

4.4 Comparative Data

The UWA (2000) format of the survey questionnaire providing the comparative data for the current study was maintained to a degree, but where possible, opportunities to enhance data collection were optimised. For example,

industry employment type options were expanded, and options for *specialty unit* choices were increased.

4.4.1 Sector Employment Type

The UWA (2000) survey sought information on four items related to the type of health care institution the subjects were employed in: *Hospital, Community, Private Sector, and Other*. The current survey modified these items to include: *Tertiary, Secondary, Large and Small Rural, Private, Community, Mental Health and Aged Care*. As the transition programs evolve, more types of health organisations are offering graduate programs, an important step towards recruiting to areas that are less well staffed such as Community, Mental Health and Rural. A further element was included in the 2010 survey that asked for the type of health sector the subject was employed in 2008, (their year of first registration), and what their current employing sector was at the time of survey in 2010. While the terminology employed in the UWA (2000) survey was not discussed in the study's Report it is assumed the term *Hospital* referred to all other than Private or Agency, hence the 'grouping' together of the remaining data in the 2010 survey in Table 4.2 for ease of comparison.

Table 4.2. Health Sector Employment Type

Health Sector Type	2000 (n = 170)	2008 (n = 168)	2008 Grouping	2010 (n = 192)	2010 Grouping
¹ Hospital	91.8%		73.8%		80.1%
² Tertiary ^c		45.2%		56.2%	
² Secondary ^c		6.0%		10.4%	
* Community ^c		7.1%		2.6%	
² Mental Health ^c		6.0%		2.1%	
² Large Rural ^c		9.5%		8.8%	
² Small Rural ^c		4.2%		4.2%	
* Private	5.3%	19.0%		18.2%	
² Aged Care		19.0%		3.1%	
¹ Other (Aged Care or Agency)	2.9%				
Total	100%	116% [#]		106% [#]	

Note: 2000 Survey only included the items marked with ¹ or *, 2010 Survey included the items marked with ² or *. 2008 and 2010 'Grouping' is assuming the term Hospital is equivalent to Public Hospital so combines elements marked with ^c.

[#] Percentage totals for the 2008 and 2010 columns equate to more than 100% as some Sector types have been included in more than one group, for example, Mental Health and Tertiary where the Mental Health unit is in a Tertiary setting.

There was a large difference in the proportion of respondents working in Aged Care in 2008 (19.0%) compared to 2010 (3.1%). This is possibly contributable to many of the cohort (64.6%) not commencing their transitional program until 2009 and, as indicated earlier, many working as ENs, AINs or PCAs prior to graduating as a RN.

4.4.2 Types of Units Worked in for Specialty Rotations

GRNs were asked to indicate the specialty units they worked in during their GNP. The UWA (2000) survey responses were free-text whereas the 2010 survey provided 12 choices in a closed response format. While the responses were in

different formats, they were still generally comparable. Again, the detail of the reported results in the UWA (2000) survey were limited with Surgical and Medical combined, and areas that would normally be considered to belong to either of these areas singled out, such as Orthopaedic, Neurology, Palliative, Nephrology, Cardiovascular, Plastics and Gynaecology. For ease of comparison, these have been incorporated into the Surgical/Medical group. Because the current transitional programs have expanded the type of specialty rotations on offer, additional unit types were incorporated into the 2010 survey, and included the separation of Medical and Surgical, as well as the addition of Community, Domiciliary and Midwifery. A further change was made to the way the data in this section was collected by allowing for separate responses to each rotation. This was done as most programs offer a variety of placements, and the experiences of the graduate can vary considerably between rotations. Separating the rotations has the ability to more clearly identify the various experiences in different specialties and to determine if issues are more likely to occur in one area as opposed to another. Table 4.3 demonstrates the results for the types of units worked in for transitional program rotations.

Table 4.3. Type of Unit Worked in for Transitional Rotations

Unit Type	2000 %	2010 <i>n</i> (%) 1 st Rotation	2010 <i>n</i> (%) 2 nd Rotation
Medical	68.0%	76 (35.3%)	52 (29.9%)
Surgical	I/A	77 (35.8%)	69 (39.7%)
Community	N/R	2 (0.9%)	3 (1.7%)
Mental Health	9.7%	12 (5.6%)	8 (4.6%)
Midwifery	N/R	0 (0.0%)	1 (0.6%)
Paediatric	4.8%	14 (6.5%)	9 (5.2%)
Domiciliary	N/R	2 (0.9%)	0 (0.0%)
Rural	3.4%	4 (1.9%)	1 (0.6%)
Emergency	6.3%	4 (1.9%)	7 (4.0%)
Perioperative	2.9%	13 (6.0%)	14 (8.0%)
Critical Care (ICU)	1.4%	7 (3.3%)	9 (5.2%)
Aged Care	1.9%	4 (1.9%)	1 (0.6%)
Other	1.4%		
Total	99.8%	215 (100%)	174 (100%)

Note: I/A= Included Above; N/R = Not Recorded.

Totals for 2010 *n* = columns equate to more than the number of participants as some respondents indicated more than one specialty per rotation, for example, Paediatric Intensive Care Unit (ICU) and has consequently been counted under both Paediatric and Critical Care (ICU).

The main specialties indicating change were in the acute areas of Critical Care and Perioperative rotations with a four and three-fold increase respectively. In 2010, the number of respondents participating in rotations in Mental Health decreased to almost half that recorded in the UWA (2000) survey period. This is concerning given that Mental Health is an area of increasing need but seemingly diminishing resources (Happell, 2008; Taylor & Harrison, 2010).

4.4.3 Graduate Program Competence, Confidence and Support

The general intent of transitional programs is to assist the novice nurse gain confidence and competence on their journey to proficiency. The wording in the 2010

survey was modified slightly with the inclusion of an *unsure* option to allow for variations of opinion, and to give the opportunity for a more neutral response should that be preferred (Table 4.4).

Table 4.4. Response Choices for 2000 & 2010 Questionnaires

2000 Response Choices	2010 Response Choices
Strongly Agree	Strongly Agree
Agree	Mostly Agree
	Unsure
Disagree	Mostly Disagree
Strongly Disagree	Strongly Disagree

4.4.3.1 Graduate Program Competence

Respondents were asked to indicate the degree to which they believed the program had made them feel more *competent* in their nursing role. The vast majority of both the UWA (2000) and 2010 respondents (90.0% and 89.1% respectively) *agreed*, or *strongly agreed*, that the program had made them feel more competent in their clinical practice. The respondents of the 2010 survey were more strongly in *agreement* that the program increased their *competence* than the UWA (2000) group (Table 4.5).

Table 4.5. Agreement Graduate Program Perceived to Improve Competence

Response Choices	2000 (n = 143)	2010 (n = 156)
Strongly Agree	38.4%	48.7%
(Mostly) Agree	51.6%	40.4%
Unsure (2010 only)		5.8%
(Mostly) Disagree	7.6%	3.8%
Strongly Disagree	2.4%	1.3%

Note: The 2000 survey only gave the 'Agree' or 'Disagree' options. The 2010 survey gave the 'Mostly Agree' and 'Mostly Disagree' options, as well as the 'Unsure' option.

The percentage of those who *disagreed* that their program made them feel more competent in the 2010 cohort was half that of the respondents of the UWA (2000) survey. This may suggest that improvements to the program have resulted in enhanced transitional experiences for the graduate nurse; or alternatively, the inclusion of the additional neutral element of *unsure* allowed the respondents to make a choice that more closely reflected their perception of improved competence.

4.4.3.2 Graduate Program Confidence

Respondents were asked to rate the degree to which they believed the program had made them feel more *confident* in their clinical practice. There was a slight difference between the cohorts that may again be attributable to the inclusion of the *unsure* choice in the 2010 survey. The Report of the UWA (2000) survey only gave a breakdown of the *strongly agree* and *agree* components, and did not give a breakdown of the two components related to *disagreement* (disagree or strongly disagree) and are therefore reported under the *Disagree* category (Table 4.6).

Table 4.6. Agreement Graduate Program Perceived to Improve Confidence

Response Choices	2000 (n = 141)	2010 (n = 156)
Strongly Agree	37.1%	45.5%
(Mostly) Agree	51.6%	39.1%
Unsure (2010 only)		5.1%
(Mostly) Disagree	11.3%	2.6%
Strongly Disagree		7.7%
Total	100%	100%

Note: The 2000 survey only gave the 'Agree' or 'Disagree' options. The 2010 survey gave the 'Mostly Agree' and 'Mostly Disagree' options, as well as an 'Unsure' option.

There is a small difference between the *agreement* groups, with more of the 2010 respondents claiming they *strongly agreed* the program had helped them feel more *confident* in their clinical practice, whereas over half the UWA (2000) cohort indicated moderate *agreement* that the program had helped them feel more *confident*.

4.4.3.3 Preceptor Support

Respondents were asked to indicate their level of *satisfaction* with the *support* provided by their preceptors during their transition. The concept of a preceptor is generally agreed to be a formalised support and supervisory person who takes responsibility for induction and guidance of the novice in their initial phases of transition (Hayman-White, et al., 2007; Johnstone, et al., 2008), and is discussed to a greater extent in the following chapter (5.3.3.2). Feedback from the survey questionnaire test group suggested the need to cater for mixed levels of experience and consequently, an additional response level was included. This decision was validated with one third of the respondents indicating a *mixed* degree of satisfaction with their level of preceptor support (Table 4.7). Similarly, the more moderate levels of agreement were changed to *Mostly Agreed* and *Mostly Disagreed* to minimise the

seemingly absolute connotation of purely *Agreed* or *Disagreed*. The combined level of *dissatisfaction* with preceptor support has decreased considerably from 23.9% in 2000 to 11.2% in 2010.

Table 4.7. Satisfaction with Preceptor Support

Response Choices	2000 (n = 155)	2010 (n = 195)
Very Satisfied	21.9%	22.0%
(Mostly) Satisfied	54.2%	33.3%
Mixed (2010 only)		33.3%
(Mostly) Dissatisfied	18.1%	9.2%
Very Dissatisfied	5.8%	2.0%
Total	100%	100%

Note: The 2000 survey only gave the 'Satisfied' or 'Dissatisfied' options. The 2010 survey gave the 'Mostly Satisfied' and 'Mostly Dissatisfied' options, as well as the 'Mixed' option.

4.4.4 Full Patient Load

Respondents were asked how long they were in their assigned unit before being given the responsibility for a full patient load. Additional time frames were incorporated into the 2010 questionnaire in response to feedback from the survey questionnaire test-group. Table 4.8 shows considerable increases in the amount of time graduates were allowed to assimilate into new areas between the two survey groups. Because the 2010 survey separated rotations it is easier to surmise that experience will help reduce the time needed for orientation to new units (Chang & Hancock, 2003).

Table 4.8. Supernumerary Time to Allocation of a Full Patient Load

Time Period to Full Patient Load	2000 (n = 167)	2010 1 st Rotation (n = 166)	2010 2 nd Rotation (n = 150)	2010 3 rd Rotation (n = 71)
* First day	15.6%	4.8%	7.3%	9.9%
* 1 day	29.3%	6.0%	20.0%	22.5%
* 2-3 days	40.1%	40.4%	41.3%	36.6%
* 4-7 days	7.8%	32.5%	20.0%	8.5%
² 7-14 days		12.0%	4.0%	14.1%
¹ > 1 week	3.0%			
² Up to 1 month		3.6%	4.7%	4.2%
² > 1 month		0.6%	2.7%	4.2%
¹ Varied	4.2%			
Total	100%	99.9%	100%	100%

Note: 2000 Survey only included items marked with ¹ or *; 2010 Survey included items marked with ² or *.

4.4.5 Performance Evaluation

Performance evaluation is used to provide structure and direction for the transitioning nurse and to encourage self-reflective and critical thinking. While most transitional programs advocate regular performance evaluation, it is evident from the data that this did not always occur. The majority of respondents were assessed within the first six months. However, a total of 6% of respondents were evaluated only at the end of their employment and 7% were not evaluated at all. It needs to be noted, however, that the first column of the 2010 data is inclusive of *all* respondents, not just those who indicated participation in a GNP, which is shown in the final column (Table 4.9).

Table 4.9. Performance Evaluation Completed

Time Period	2000 (n = 170)	2010 All (n = 199)	2010 GRN Only (n = 167)
End of each placement	52.0%	26.6%	32.9%
Monthly	6.6%	4.5%	5.4%
Every 2-3 months	25.7%	41.2%	43.7%
Every 4-6 months	8.4%	14.1%	13.2%
Every 7-12 months	1.2%	6.5%	2.4%
At completion of employment	1.8%	2.0%	1.2%
Never	4.2%	5.0%	1.2%
Total	99.9%	99.9%	100.0%

Note: '2010 All' column shows response rates for *all* 2010 survey respondents and '2010 GRN Only' column shows percentages for 2010 survey respondents who indicated participation in a GNP.

A secondary question asked who was most involved in the performance evaluation (Table 4.10). The UWA (2000) survey did not include 'Manager' in the selection of available options; however, inclusion of this element in the 2010 survey indicates that almost a quarter of respondents had a manager involved in their performance evaluation. Both surveys enabled demonstration of the collaborative contribution to evaluation; with almost half the respondents indicating more than one person was involved in their assessment; most commonly, their preceptor and Staff Development Nurse (SDN).

Table 4.10. Performance Evaluation Involvement

Person Involved	2000 (n = 170)	2010 (n = 189)
* Preceptor	74.8%	37.6%
* Staff Development Nurse	45.9%	68.2%
* Clinical Nurse	10.7%	18.5%
² Manager		23.3%
* CNS	5.7%	10.0%
¹ Other	4.4%	
Total	141%	158%

Note: The 2000 survey only included the items marked with ¹ or *; the 2010 survey included the items marked with ² or *. Totals equal greater than 100% as most often more than one person was involved in performance evaluation.

The proportion of personnel involved in the graduate nurse assessment is greater than 100% as figures are inclusive of the multiple contributions to assessment (Table 4.10). The UWA (2000) survey indicated almost three quarters of the assessments were done by the preceptor, whereas in the 2010 study there were a larger number of respondents who nominated the SDN as the primary person responsible for their evaluation.

4.4.6 Night Shift Participation and Preparation

In both studies, the cohorts were asked how long it was from the commencement of their program before being rostered onto night shifts. To elicit a more detailed data set, the choice of time periods available was once more expanded in the 2010 survey (Table 4.11). Again, the 2010 data includes all respondents.

Table 4.11. Time Prior to Night Duty Rostering

Time Period	2000 (n=164)	2010 (n=202)
² < 3 months		20.8%
² 3-6 months		45.5%
¹ < 6 months	29.3%	
² 6-9 months		9.4%
¹ > 6 months	28.7%	
² 9-12 months		3.5%
* Did not do night duty	42.0%	20.8%
Total	100%	100%

Note: 2000 Survey only include the items marked with ¹ or *, 2010 Survey include the items marked with ² or *.

In the UWA (2000) study, there was little difference between those who commenced night duty in less than six-months, and those who were given more than six-months before being rostered to these shifts. The 2010 survey shows two-thirds of respondents were rostered onto night shift in less than six-months from commencing their transition year. In the UWA (2000) study, 42% of respondents did not do night duty in their graduate year, compared to 20.8% in the 2010 group.

Respondents were asked how well they felt they were prepared for night duty. To enable more intermediate choices than the *Yes* or *No* of the UWA (2000) survey, the 2010 survey responses were expanded to include the options of *well prepared* and *somewhat prepared*, and *poorly prepared* or *no preparation* (Table 4.12). Over three quarters of respondents in the 2010 survey felt they were sufficiently prepared for the responsibility of night duty, which is comparative to the UWA (2000) group, where only slightly fewer indicated that they felt well prepared.

Table 4.12. Preparedness for Night Duty

Time Period	2000 (n = 170)	2010 (n = 165)
² Well prepared		26.6%
² Somewhat prepared		50.9%
¹ Yes (well prepared)	73.5%	
² Poorly prepared		12.7%
² No preparation		9.7%
¹ No (not well prepared)	23.0%	
Total	96.5%	99.9%

Note: 2000 Survey only included the items marked with ¹, 2010 Survey included the items marked with ². It is unknown why the 2000 total is not equivalent to 100%.

Almost 40% of respondents in the UWA (2000) survey cited a lack of experience as the most problematic area with night duty. Only 20% of those who did night duty in the 2010 survey took the opportunity to comment on their preparation, and of these, only two respondents felt that they had insufficient experience for the role. The mix of positive and negative comments in the 2010 study regarding night duty was similar.

4.4.7 Undergraduate Influences

The issue of the theory-practice gap, referring to the perception of novice nurses' lack of preparation for their RN role responsibility, has been widely discussed in the literature (Evans, et al., 2008; Fox, et al., 2005; Kelly & Ahern, 2009).

4.4.7.1 Undergraduate Preparation for Registered Nurse Role

Respondents were asked to indicate if they felt their university education had prepared them adequately for their role as a RN. The 2010 cohort was in much

stronger accord that their university preparation was adequate, with almost three quarters (73%) indicating they felt they had received sufficient grounding for their role as a RN (Table 4.13). These findings contrast markedly with those of the UWA (2000) survey.

Table 4.13. Agreement that Undergraduate Education Prepared for RN Role

Response Choices	2000	2010
² Strongly Agree		12.8%
² Mostly Agree		60.6%
¹ Yes	42.5%	
² Unsure		13.3%
¹ No	57.5%	
² Mostly Disagree		10.8%
² Strongly Disagree		2.5%
Total	100%	100%

Note: 2000 Survey only included the items marked with ¹, 2010 Survey included the items marked with ².

Despite these positive findings, there were still a number of respondents in the 2010 study who believed there were ways their undergraduate education could be improved. Responses were categorised into themes to demonstrate the main commonalities (Table 4.14). More than half the respondents (54.1%) felt more practical experience would have helped to better prepare them for their RN role and almost one quarter (22.3%) believed more clinical education would have been of benefit.

Table 4.14. Undergraduate Education Improvements

Theme	Total Responses (n = 148)	Total Responses (%)	Uni A (n = 52) %	Uni B (n = 73) %	Uni C (n = 16) %	Uni D (n = 7) %
More Practical	80	54.1%	44.2%	65.8%	37.5%	42.9%
More Clinical	33	22.3%	23.1%	21.9%	25.0%	14.3%
Time Management	8	5.4%	5.8%	6.8%	0	0
Pharmacology	7	4.7%	1.9%	2.7%	18.8%	14.3%
Less Theory	5	3.4%	1.9%	4.1%	6.3%	0
More Reality	3	2.0%	1.9%	0	12.5%	0
Documentation	3	2.0%	1.9%	0	6.3%	14.3%
Total	139	93.9%	80.7%	101.3%	106.4%	85.8%

Note: Uni A = University A; Uni B = University B; Uni C = University C; Uni D = University D. Totals in the bottom row do not equal the n = Total Responses; or 100%, as only the more common themes have been depicted here. Total percentages greater than 100% occur where a respondent has indicated more than one theme, and has therefore been counted in each of those themes.

4.4.7.2 Higher Education Contribution Debt

Although the term *Higher Education Contribution Scheme* (HECS) was replaced in 2005 with *Higher Education Loan Program* (HELP), the former term was retained in the 2010 survey for uniformity, and to inform those still familiar with the previous term. The respondents were asked if they were still paying an education debt and, if this had any influence on their choice of participating in additional, current or future study. Interestingly, the proportions of respondents still paying, or no longer paying off a higher education debt, were reversed in the two studies (Table 4.15). Just over three-quarters of responders in the 2000 study had a HECS debt, whereas only slightly more than one quarter of the 2010 cohort was still paying off their liability at the time of the survey.

Table 4.15. Higher Education Debt

Response Choices	2000 (n = 167)	2010 (n = 203)
Still paying	78.4%	26.1%
Not paying	21.6%	73.9%
Total	100%	100%

Table 4.16 shows that of those nurses who responded, exactly the same proportion in both studies were influenced negatively toward further study or, conversely, felt it had no bearing on their future intent to pursue additional studies.

Table 4.16. HECS Debt Influence on Further Study

Response Choices	2000 (n = 167)	2010 (n = 118)
Negative influence	61.0%	61.0%
No influence	39.0%	39.0%
Total	100%	100%

4.5 Additional Data Questions

Eliciting information regarding the university attended for their undergraduate nursing program was employed to determine if there were apparent differences that may be associated with the affiliated university, and the respondents' transitional experiences and future intentions. While each university's curriculum and content must be accredited by the NMBA, there are often some differences in terms of program structure, and the length and types of clinical practice.

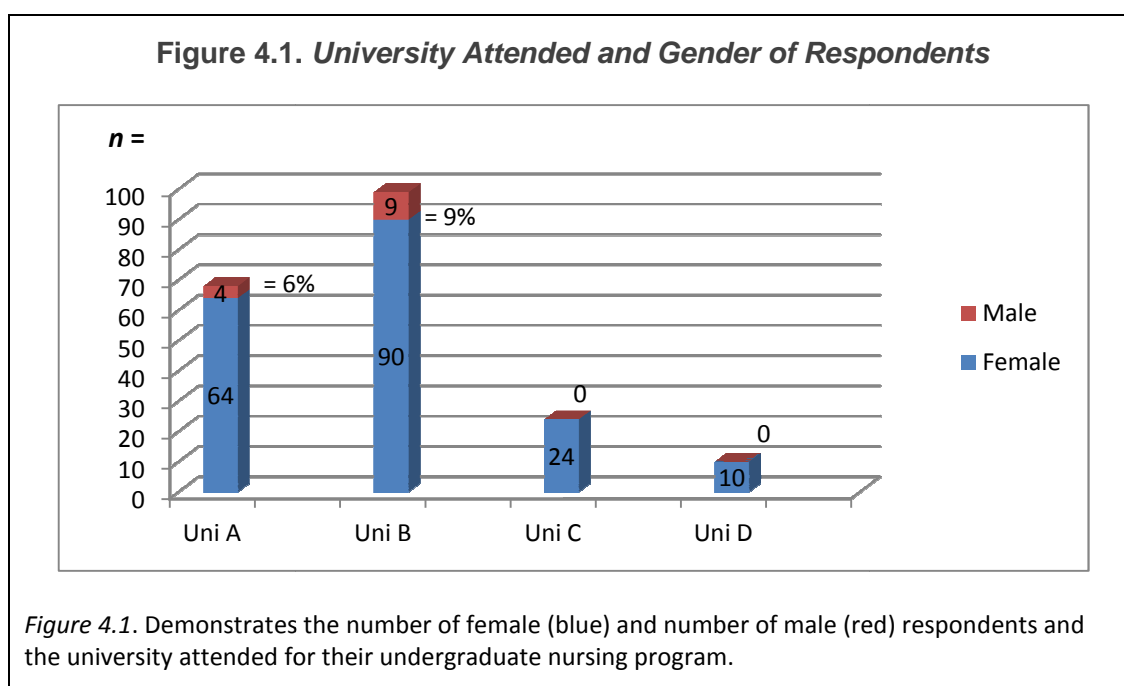
4.5.1 Undergraduate Nursing Program

Respondents were asked to indicate at which university they had completed their undergraduate nursing programs. The numbers are disproportionate as

universities that have been providing a nursing program for a longer period, and consequently are more established, are able to fund and offer a greater number of student places. The names of the universities that were provided for the respondents' selection have been de-identified for reporting purposes.

4.5.1.1 Undergraduate Nursing Program by Gender

Figure 4.1 shows the university where the respondents reported having completed their undergraduate nursing program, the overall proportions of all respondents for each university, and the mix of gender for each. University B recorded the greatest number of respondents and the largest number of males. University D recorded the least number of respondents and there were no male respondents from University D, or University C.



4.5.1.2 Undergraduate Nursing Program by Age Groups

Further breakdown of individual university demographics is given in Table 4.17 and shows the proportions within each age-group category in relation to the

university attended for their undergraduate nursing program. Data show University C to have the lowest age profile and University B the highest. With only 10 respondents from University D it would be unrealistic to claim any meaningful age-group profiles for this institute.

Table 4.17. Respondent Age-Groups for Individual Undergraduate University

Age Group	Uni A (n = 68)	Uni B (n = 99)	Uni C (n = 24)	Uni D (n = 10)
<21	0.0%	5.0%	20.8%	0.0%
22-29	53.9%	46.5%	41.7%	30.0%
30-39	22.1%	20.2%	33.3%	20.0%
40-49	16.2%	19.2%	0.0%	20.0%
>50	8.8%	11.0%	4.2%	30.0%
Total	101%	102%	100%	100%

Note: Uni A = University A; Uni B = University B; Uni C = University C; Uni D = University D.

Shows percentages of respondent age-groups from each undergraduate university.

4.5.1.3 Undergraduate Nursing Program by Participation in Formal Transition Program

Specific university data is further analysed (Figure 4.2), to show the number of respondents who participated in a formal transition program and in relation to the university they attended as an undergraduate. Again, due to the small numbers in the University D and University C cohorts, it is difficult to draw any meaningful comparisons. Between the two larger universities, there were more graduates who responded to the survey that were from University B (84.8%) and who participated in a formal transition program than did those from University A (76.5%).

Figure 4.2. Proportions of Graduating Nurses Participating in Transition Program

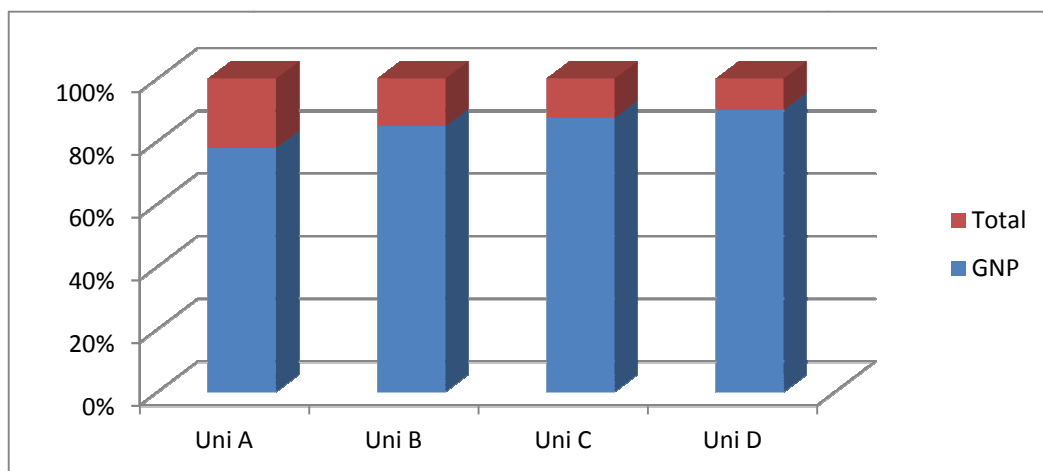


Figure 4.2. Demonstrates the proportion of participants (blue) who enrolled in a formal graduate RN transition program from each university attended for undergraduate nursing program.

Of the 17.6% (n = 36) RNs who chose not to do a formal program 65% had prior experience as an EN, and a further 24% as an AIN or equivalent. Reasons for not participating in a program were varied, but most commonly the respondents were returning to areas they had worked in prior to completing the undergraduate program (Table 4.18).

Table 4.18. Reasons for Not Participating in Formal Transition Program

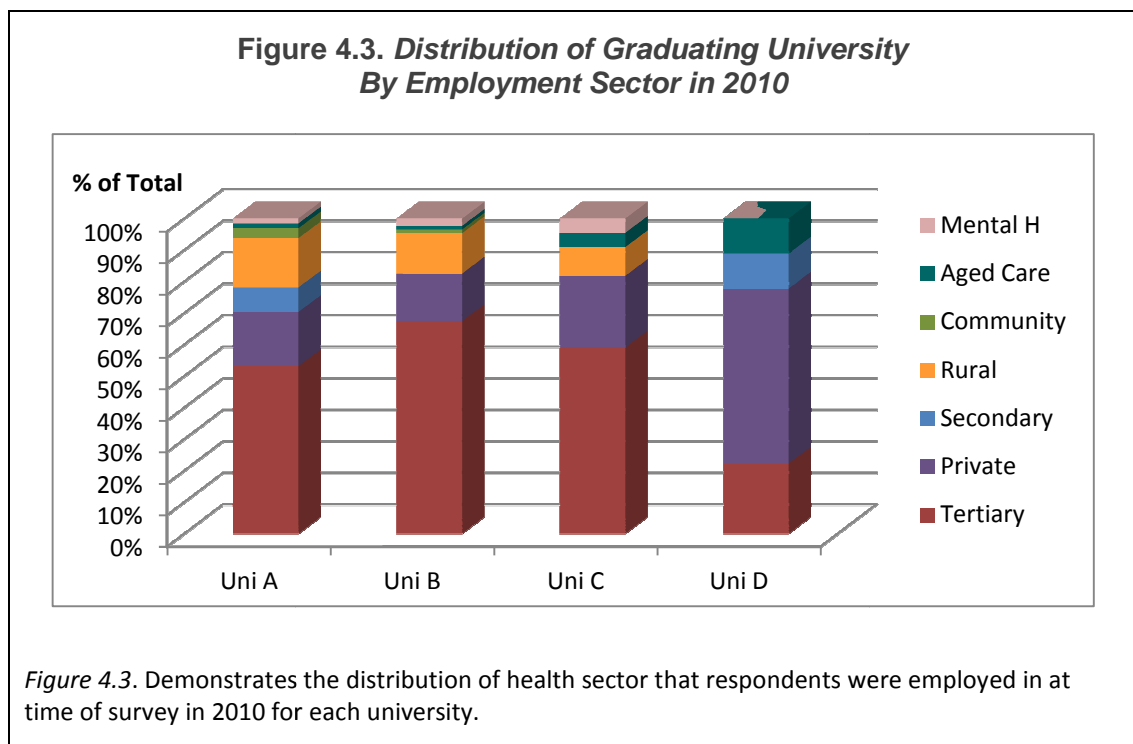
University Attended	% of Total	Return to pre GN Ward	Midwifery Grad Program	Needed Part-time	Maternity Leave	Didn't Appeal / Other	Resigned
Uni A	23%	7	1		1	5	1
Uni B	18%	4	3	3	1	5	1
Uni C	12%	1		1	1		
Uni D	10%	1					
Total	18%	13	4	4	3	2	2

Note: Uni A = University A; Uni B = University B; Uni C = University C; Uni D = University D.

'Percent of Total' is the proportion from each University that did not participate in a GNP.

4.5.1.4 Current Employment Sector by Graduating University

Data was collected related to current employment type at the time of the survey and evaluated in relation to the university the respondent had attended. This is shown in two figures to demonstrate the distribution of the graduates' current health sector, and the university at which the respondents completed their undergraduate program (Figures 4.3 and 4.4).



As can be seen from Figure 4.4, the majority of graduates were employed at a tertiary hospital, understandably, given that tertiary hospitals are the largest employers of professionals within the health system. Traditionally, tertiary hospitals have also been the ones offering the largest number of transitional program places with a wider variety of rotational experiences.

Figure 4.4. Employment Sector Distributions by Graduating University

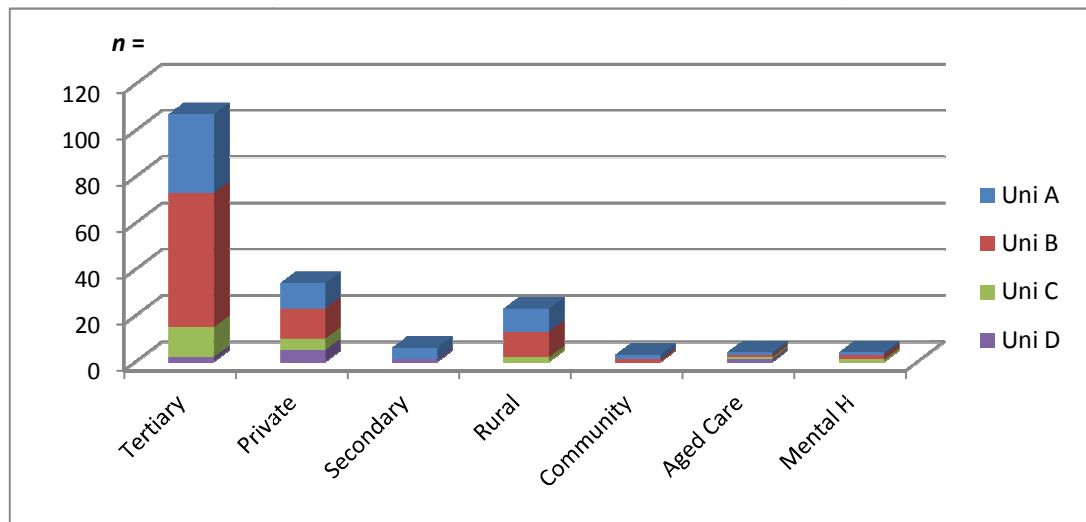


Figure 4.4. The proportion of RNs by graduating university in type of employment sector at time of survey in 2010.

4.6 Graduate Nurse Programs

Current Graduate Nurse Programs (GNPs) appear to be well planned and organised in terms of access to of specific specialties, support personnel and lengths of individual rotations. As discussed, the 2010 survey questionnaire included questions that related to each individual specialty rotation to separate out diverse experiences, and follow changing perceptions of proficiency and support. These are presented in the following sections.

4.6.1 Graduate Nurse Program Commencement and Completion

To cater for the varying time-frames that nursing students graduate from their program of study and complete registration processes with the professional registering body, most healthcare organisations have more than one commencement date for transitional programs. As such, transition program commencement dates for intakes may be staggered over two or three months at the beginning of a year, with

additional one or two intakes in the second half of the year. The query run by the NMBWA selected *all* nurses completing an undergraduate program who registered with them in 2008. This meant that some respondents would have registered early in that year and others, who most likely finished their undergraduate studies later that year, did not commence work as a RN until 2009 (Table 4.19).

Table 4.19. *Month and Year of Graduate Nurse Program Commencement*

Month and Year GNP Start	Number	Percent of total
January / February 2008	22	13.1%
March 2008	4	2.4%
June / July 2008	17	10.1%
August / September 2008	16	9.5%
January / February 2009	94	55.9%
March 2009	12	7.1%
July / August 2009	2	1.2%
Blank but rotations indicate participant	1	0.6%
Total	168	100%

At the time of the survey, and of those participating in a transitional program, 78% (n = 130) had completed the program, 15.5% (n = 26) still had the intention of completing, and 6.5% (n = 11) had not completed their program (Table 4.20). Four percent (n = 7) of the data was incomplete and not able to be analysed.

Table 4.20. Month and Year of Graduate Nurse Program Completion

Month and Year GNP Completed	Number	Percent of total
January / February / March 2009	14	8.9%
June / July / August 2009	26	16.6%
January / February / March 2010	87	55.4%
May / June / July / August 2010	11	7.0%
January / February / March 2011	12	7.6%
Incomplete Data	7	4.5%
Total	157	100%

The reasons for not completing the program included issues such as bullying, stress, and/or other reasons (Table 4.21), and are discussed further in the following chapter.

Table 4.21. Reasons Graduate Nurse Program Not Completed

Reason	Number
Resigned from program (reason not given)	2
Commenced Midwifery Post Grad Diploma	1
Unable to do / unsatisfactory shiftwork	2
Graduate Nurse Program too inflexible	1
Bullying	1
Stress (not stated from what)	1
Lack of Support	1
Completed 2 years of 3 year program	1
Started Grad Dip Perioperative Nursing	1
Total	11

4.6.2 Graduate Nurse Program Length

The available response choices for the GRNs to indicate when they commenced and completed their program were provided in month and year format (for example, January 2008). Of the 86 records with complete data enabling

estimation of GNP length, 52 were for 12-months and 20 for 13-months.

Consequently, a nurse may have commenced their GNP at the end of a month, and finished a week or so beyond the 12-months at the beginning of the thirteenth month. As data from the graduate nurse coordinators' survey was not indicative of 13-month programs, the 13-month data have been incorporated into the 12-month data. A total of 72 (83.7%) respondents participated in a 12-month program; 54.2% from the tertiary sector, 19.4% rural, 9.7% in private and 9.7% at secondary hospitals. Eleven respondents (12.8%) indicated a 24-month program with nine of these at tertiary hospitals and the remaining two in the private sector. Three respondents participated in an 18-month program, two in tertiary hospitals and one in a large rural establishment.

4.6.3 Rotation Characteristics

GNPs vary in structure, number of rotations, degrees of support and types of specialty rotations on offer, therefore the experiences of the GRN are expected to be similarly distinct.

4.6.3.1 Specialty Unit Type

The following section demonstrates characteristics, such as the type of unit or specialty, to which the respondent was allocated for their rotations. Specific options were provided to the respondents to indicate the type of unit they worked in for each rotation (Table 4.22).

Table 4.22. Specialty Unit Options

Medical	Surgical	Community	Mental Health
Midwifery	Paediatric	Domiciliary	Rural
Emergency	Perioperative	Critical Care	Aged Care
Other (please specify)			

Of the 168 respondents indicating participation in a transition program, the majority were allocated to either a medical or surgical specialty for their first rotation. In Table 4.23 most specialties are shown with two dimensions, the first where the graduate indicated only one area was worked, and the second, *plus others*, shows where more than one specialty was indicated, for example, 21 respondents worked in combined medical and surgical areas; and of those indicating Mental Health as the area of work (n = 8) an additional four also worked in other areas. Combined specialties were most common in rural centres, secondary hospitals and some private hospitals where individual units may not be large enough to provide sufficient experience within a single specialty.

Table 4.23. First Rotation – Unit Type, Number and Percent of Respondents

Main Unit Type	N =	(%)	Main Unit Type	N =	(%)
Medical only	50	(29.8%)	Surgical only	47	(28.0%)
Medical plus others	76	(45.2%)	Surgical plus others	77	(45.8%)
Medical and Surgical	21	(12.5%)	Aged Care	1	(0.6%)
Critical Care	3	(1.8%)	Aged Care plus others	4	(2.4%)
Critical Care plus others	7	(4.2%)	Mental Health	8	(4.8%)
Domiciliary	1	(0.6%)	Mental Health plus others	12	(7.1%)
Domiciliary plus others	2	(1.2%)	Paediatrics	4	(2.4%)
Rural	1	(0.6%)	Paediatrics plus others	14	(8.3%)
Rural plus others	4	(2.4%)	Emergency	2	(1.2%)
Perioperative	8	(4.8%)	Emergency plus others	4	(2.4%)
Perioperative plus others	12	(7.1%)			

Note: Totals are not given in this table as many specialties are included in others and would therefore be meaningless, for example, medical and surgical units are sometimes combined, and paediatrics may be surgical, medical, critical care or perioperative.

Of the 168 respondents participating in a transitional program, 153 (91%) indicated participation in a second specialty rotation (Table 4.24), and 123 (73%) a third rotation (Table 4.25). Again, the specialties the graduates worked in are demonstrated with two dimensions, the first where the graduate indicated only one area was worked, and the second, *plus others*, shows where more than one specialty was indicated.

Table 4.24. Second Rotation – Unit Type, Number and Percent of Respondents

Main Unit Type	N =	(%)	Main Unit Type	N =	(%)
Medical only	38	(24.8%)	Surgical only	53	(34.6%)
Medical plus others	52	(34.0%)	Surgical plus others	69	(45.1%)
Medical and Surgical	12	(7.8%)	Aged Care	0	
Critical Care	5	(3.3%)	Aged Care plus others	1	(0.7%)
Critical Care plus others	9	(5.9%)	Mental Health	7	(4.6%)
Domiciliary	0		Mental Health plus others	8	(5.2%)
Domiciliary plus others	0		Paediatrics	4	(2.6%)
Rural	1	(0.7%)	Paediatrics plus others	8	(5.2%)
Rural plus others	0		Emergency	5	(3.3%)
Perioperative	12	(7.8%)	Emergency plus others	7	(4.6%)
Perioperative plus others	14	(9.2%)			

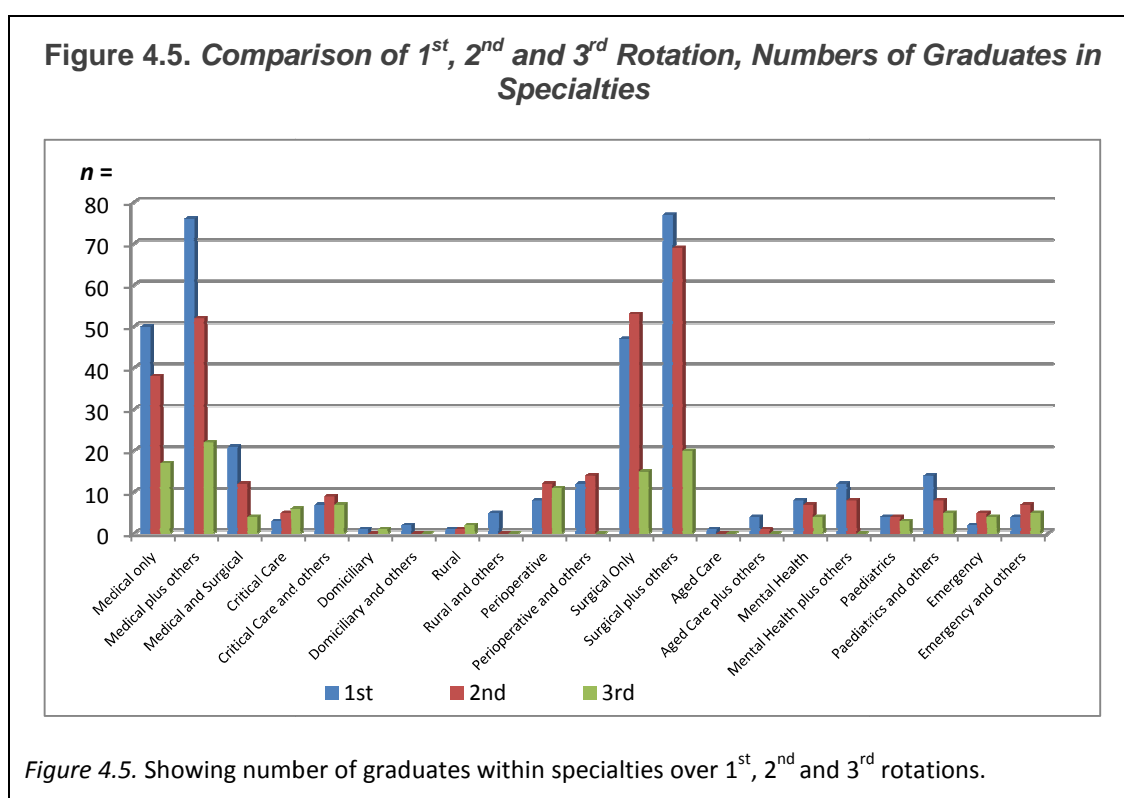
Note: Totals are not given in this table as many specialties are included in others and would therefore be meaningless, for example, medical and surgical units are sometimes combined, and paediatrics may be surgical, medical, critical care or perioperative.

Table 4.25. Third Rotation – Unit Type, Number and Percent of Respondents

Main Unit Type	N =	(%)	Main Unit Type	N =	(%)
Medical only	17	(23.3%)	Surgical only	15	(20.5%)
Medical plus others	22	(30.1%)	Surgical plus others	20	(27.4%)
Medical and Surgical	4	(5.5%)	Aged Care	0	(0.0%)
Critical Care	6	(8.2%)	Aged Care plus others	0	(0.0%)
Critical Care plus others	7	(9.6%)	Mental Health	4	(5.5%)
Domiciliary	1	(1.4%)	Mental Health plus others	0	(0.0%)
Domiciliary plus others	0	(0.0%)	Paediatrics	3	(4.1%)
Rural	2	(2.7%)	Paediatrics plus others	5	(6.8%)
Rural plus others	0	(0.0%)	Emergency	4	(5.5%)
Perioperative	11	(15.1%)	Emergency plus others	5	(6.8%)
Perioperative plus others	0	(0.0%)	Midwifery	1	(1.4%)

Note: Totals are not given in this table as many specialties are included in others and would therefore be meaningless, for example, medical and surgical units are sometimes combined, and paediatrics may be surgical, medical, critical care or perioperative.

Rotations to the more general specialties in the third rotation were not as frequent as in the earlier rotations, and, when compared to previous rotations, those allocated to the more acute specialties, such as Critical Care, Emergency and Perioperative showed an increase in proportions (Figure 4.5).



Fewer graduates (14.3%) completed a fourth rotation and even fewer (4.8%) a fifth. As such, only a brief statistical summary of the main characteristics is presented in Table 4.26.

Table 4.26. Additional Rotations – Unit Type, Number and Percent of Respondents

4 th Rotation		5 th Rotation	
Main Unit Type	N = (%)	Main Unit Type	N = (%)
Medical	6 (25.0%)	Medical	
Surgical	7 (29.2%)	Surgical	1 (12.5%)
Medical and Surgical		Medical and Surgical	1 (12.5%)
Critical Care	3 (12.5%)	Critical Care	
Perioperative	3 (12.5%)	Perioperative	3 (37.5%)
Mental Health	2 (8.3%)	Mental Health	
Emergency	1 (4.2%)	Emergency	3 (37.5%)
Rural	1 (4.2%)	Rural	
Midwifery	1 (4.2%)	Midwifery	
Total	24 (100%)	Total	8 (100%)

4.6.3.2 Specialty Rotation Length of Stay

The majority of rotations were approximately six-months in duration, with a one year program generally consisting of two specialty rotations, and most usually providing a mix of either a medical or surgical experience. Some organisations offer 18 to 24 month programs, with latter rotations to the critical care specialties, such as Intensive or Coronary Care. From the data provided, it was evident that some who participated in a perioperative rotation considered each specialty within that area to be a rotation. A perioperative rotation is generally considered a single rotation. This data was still included in the findings as it contributed some pertinent points in regards to the written feedback. The choices for *length of stay* in a specialty rotation provided to the respondents are shown in Table 4.27.

Table 4.27. Choices Available to Respondents to Indicate Rotation Length

Less than 8 weeks	8-12 weeks	13-25 weeks	26-39 weeks
40-52 weeks	More than 52 weeks	Other (please specify)	

The total figures given for each component for the GRNs' first specialty rotation in Table 4.28 add up to more than the total number of respondents who participated in a transitional program due to the many combined specialty rotations, as described previously.

Table 4.28. First Rotation – Weeks Spent in Specialty by Type

Unit Type	< 8 weeks	8-12 weeks	13-25 weeks	26-39 weeks	40-52 weeks	> 52 weeks
Medical	1 (rural)	12	34	28	1	
Surgical	1 (rural)	14	30	28	2	2
Aged Care	1	1		2		
Mental Health		2	6	4		
Critical Care			4	3		
Domiciliary	1 (rural)					1
Emergency		1	1		2	
Paediatrics		1	6	6	1	
Perioperative		1	4		4	2
Rural		2	1		1	

Note: Totals are not given in this table as many specialties are included in others and would therefore be meaningless, for example, medical and surgical units are sometimes combined; paediatrics may be surgical, medical, critical care.

Table 4.29 shows the number of participants within each category of weeks spent in their first rotation, and the proportion that number represents of the total responding to that element.

Table 4.29. First Rotation – Proportions of Total Weeks Spent

Weeks	< 8 weeks	8-12 weeks	13-25 weeks	26-39 weeks	40-52 weeks	> 52 weeks	Blank	Total
Number of Total	4	23	73	58	6	3	1	168
Percentage of Total	2.4%	13.7%	43.5%	34.5%	3.6%	1.8%	0.6%	100%

The greatest number of respondents indicated their first rotation was of 13 to 25 weeks duration (43.5%); followed by those who indicated their initial rotation was of 26 to 39 weeks duration (34.5%).

Data for the number of weeks spent in their second specialty rotation are shown in Table 4.30.

Table 4.30. Second Rotation – Weeks Spent in Specialty by Type

Unit Type	< 8 weeks	8-12 weeks	13-25 weeks	26-39 weeks	40-52 weeks	> 52 weeks
Medical		7	17	26	1	1
Surgical	2	13	27	27		1
Aged Care	0	0	0	0	0	
Mental Health	1	3	1	2		
Critical Care				7	1	
Community	1	1		1		
Emergency			2	4		
Paediatrics		2	1	5		
Perioperative	1	1	10			
Rural				1		
Endoscopy			2			

Note: Totals are not given in this table as many specialties are included in others and would therefore be meaningless, for example, medical and surgical units are sometimes combined; paediatrics may be surgical, medical, critical care.

Table 4.31 again, includes the number of participants within each category of weeks spent, and the proportion that number represents of the total responding to the element.

Table 4.31. Second Rotation – Proportions of Total Weeks Spent

Weeks	< 8 weeks	8-12 weeks	13-25 weeks	26-39 weeks	40-52 weeks	> 52 weeks	Total
Number of Total	5	27	56	62	2	1	153
Percentage of Total	3.3%	17.6%	36.6%	40.5%	1.3%	0.7%	100%

The majority of respondents, (40.5%) indicated their second rotation was of 26 to 39 weeks in length; closely followed by those denoting 13 to 25 weeks for their second specialty rotation (36.6%).

For their third rotation, GRNs predominately spent between 13 and 25 weeks in the specialty, and no respondents indicated a stay greater than 40 weeks (Table 4.32); and similarly for those GRNs participating in further rotations (Table 4.33).

Table 4.32. Third Rotation – Proportions of Total Weeks Spent

Weeks	< 8 weeks	8-12 weeks	13-25 weeks	26-39 weeks	40-52 weeks	> 52 weeks	Total
Number of Total	5	20	37	11	0	0	73
Percentage of Total	6.8%	27.4%	50.7%	15.1%	0	0	100%

Table 4.33. Additional Rotations – Proportions of Total Weeks Spent

Rotation		< 8 weeks	8-12 weeks	13-25 weeks	26-39 weeks	Other	Total
Fourth	Number of Total	5	8	6	3	2	24
	Percentage of Total	20.8%	33.3%	25.0%	12.5%	8.3%	100%
Fifth	Number of Total	2	3	2	1		8
	Percentage of Total	25.0%	37.5%	25.0%	12.5%		100%

4.6.3.3 Contracted Hours of Work

Hours the GRNs were contracted to work in their first rotation were predominately what is considered full time, that is, 38 to 40 hours per week. There were a small number of graduates contracted to work fewer hours. Responses from the graduate nurse coordinators' survey indicated that most full-time contracted hours for the GRNs were 40-hours per week, with two metropolitan hospitals indicating the contracted hours were 37-hours per week. Full-time hours given by one private organisation's graduate nurse coordinator were 35-hours per week. As the options given in the survey questionnaire for the first two ranges of contracted hours were 38-40 or 30-37 (Table 4.34), the GRN responders working the 35 and 37-hour week would have been forced to choose a value that suggested fewer hours were worked.

Table 4.34. Choices Available to Indicate Average Contracted Hours per Week

38-40	30-37	20-29	Other (please specify)
-------	-------	-------	------------------------

No respondent chose the *other* category, which suggests that half of full time equivalent (38 to 40 hours per week) is the minimum a GRN is required to work in order to participate in a transitional program. The total number of hours worked by the respondents in their first rotation in relation to specialties (Table 4.35) equates to

greater than the number of nurses participating in a transitional program as many (22%) indicated a combination of specialties such as surgical and paediatrics.

Table 4.35. First Rotation – Specialty by Average Contracted Hours

Unit Type	38-40 hours	30-37 hours	20-29 hours
Medical	49	22	5
Surgical	53	18	6
Aged Care		2	2
Mental Health	9	2	1
Critical Care	6	1	
Domiciliary		2	
Emergency	2	2	
Paediatrics	11	3	
Perioperative	9	2	1
Rural	1	3	

Note: Totals are not given in this table as many specialties are included in others and would therefore be meaningless, for example, medical and surgical units are sometimes combined; paediatrics may be surgical, medical, or critical care.

Table 4.36 shows the number of participants who indicated each category of contracted hours worked during their first rotation, and the proportion that number represents of the total responding to that element.

Table 4.36. First Rotation – Average Contracted Hours

Ave Contracted Hours	38-40 hours	30-37 hours	20-29 hours	Blank	Total
Number of Total	114	40	13	1	168
Percent of Total	67.9%	23.8%	7.7%	0.6%	100%

More than two-thirds of respondents indicated full-time hours, and slightly fewer than a quarter indicated 30 to 37 hours were their average contracted hours.

Of those working 20 to 29 hours per week, six were from tertiary, three private, two secondary and one from the rural health sector. More than half ($n = 25$) of those working 30 to 37 hours per week were from secondary, rural or private health organisations, however, this may be attributable to the aforementioned data collection anomaly where respondents were forced to choose a value that was not reflective of their organisation's full-time hours. Two-thirds of those working full-time were from tertiary hospitals but this is most likely reflective of the greater number of respondents who were employed within this sector.

Hours the GRNs were contracted to work in their second rotation were similar to those indicated in the first, with a small decrease in the percentage who worked full-time hours and a slight increase in the 20 to 29-hour bracket (Table 4.37).

Table 4.37. Second Rotation – Specialty by Average Contracted Hours

Unit Type	38-40 hours	30-37 hours	20-29 hours
Medical	34	15	3
Surgical	47	18	5
Aged Care			1
Mental Health	4	1	3
Critical Care	7	2	
Community	2		1
Emergency	2	4	1
Paediatrics	7	2	
Perioperative	9	2	1
Rural		1	
Endoscopy			1

Note: Totals are not given in this table as many specialties are included in others and would therefore be meaningless, for example, medical and surgical units are sometimes combined; paediatrics may be surgical, medical, critical care.

The total number indicated in Table 4.37 equates to more than the number of nurses participating in a transitional program, as many (13%) had indicated a combination of specialties, such as surgical plus paediatrics. The data for the average hours contracted to work during their second rotation are shown proportionately in Table 4.38.

Table 4.38. Second Rotation – Average Contracted Hours

Ave Contracted Hours	38-40 hours	30-37 hours	20-29 hours	Total
Number of Total	99	39	15	153
Percent of Total	64.7%	25.5%	9.8%	100%

Of those working 20 to 29 hours per week, eight were from tertiary, four in private, two in secondary and one in the rural sector. The increase in the number of those working less hours per week in the second rotation suggests that following their initial phase of transition, some graduands may choose to decrease their average weekly hours worked.

Hours GRNs were contracted to work in their third rotation were similar to those indicated in the first and second rotations, but with a further percentage decrease in those working full-time hours and a moderate increase in the 20 to 29-hour bracket (Table 4.39 and Figure 4.6).

Table 4.39. Third Rotation – Specialty by Average Contracted Hours

Unit Type	38-40 hours	30-37 hours	20-29 hours
Medical	12	5	5
Surgical	12	2	6
Aged Care			
Mental Health	3	1	
Critical Care	3	2	1
Community	1		
Emergency	3	2	
Paediatrics	3	2	
Perioperative	8	3	
Rural	2		
Angiography: Dialysis	1 ea		

Note: Totals are not given in this table as many specialties are included in others and would therefore be meaningless, for example, medical and surgical units are sometimes combined; paediatrics may be surgical, medical, critical care.

Figure 4.6. Comparison 1st, 2nd and 3rd Rotation, Average Hours Graduates Contracted to Work

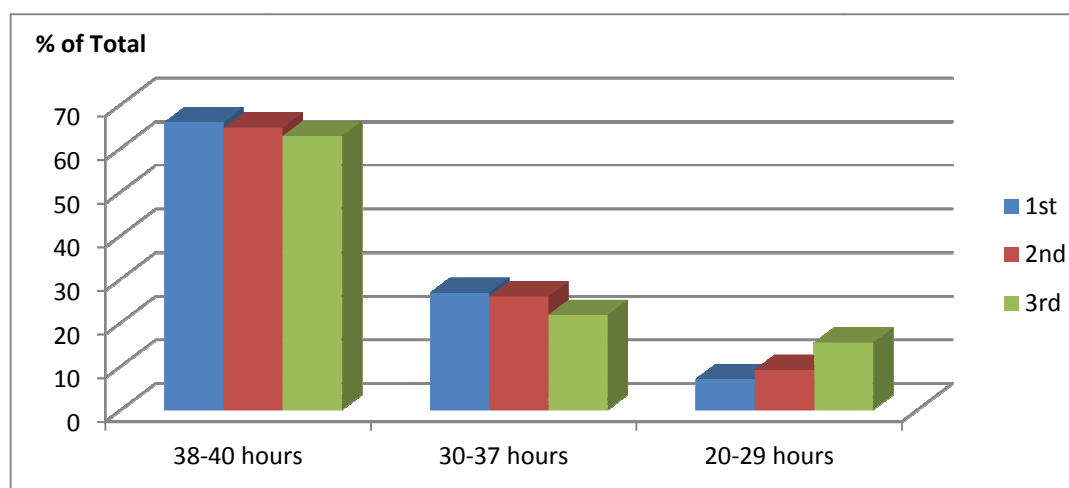


Figure 4.6. Showing the proportions of graduates within categories of average hours contracted to work over 1st, 2nd and 3rd rotations.

Hours worked by those indicating participation in additional rotations are shown in Table 4.40.

Table 4.40. Additional Rotations – Average Contracted Hours

Rotation		38-40 hours	30-37 hours	20-29 hours	Total
Fourth	Number of Total	13	4	6	23
	Percentage of Total	56.5%	17.4%	26.1%	100%
Fifth	Number of Total	2	1	5	8
	Percentage of Total	25.0%	12.5%	62.5%	100%

Note: One participant responding to this section was still to commence the fourth rotation so data is not included.

4.6.3.4 Support Provision in Specialty Rotations

Respondents were asked to indicate the level of support they perceived was provided by various personnel throughout their rotations. Levels of support available for selection were *extensive*, *very good*, *average*, *occasional*, *negligible*, and *not applicable*. The options available for support personnel are listed in Table 4.41, with a brief description as to the general role definition.

Table 4.41. Support Personnel Definitions

Personnel	Description
Program Coordinator	Most organisations allocate a specific senior role to coordinate transitional programs
Staff Development Nurse	Usually a specific, promotional role to oversee personal development of unit nurses and provide educational support. Sometimes referred to as Professional Development Nurse
Clinical Nurse Manager/ Specialist/Coordinator	A senior level role in charge of a unit and/or of the relevant clinical practices and policies
Preceptor	Generally a specific task allocated to an experienced nurse to guide and assist the novice who is new to an area
Ward/Unit nursing staff	The graduate nurses' colleagues, peers and supervising staff in a ward or specialty area
Other	Of the 11 indicating 'other' 6 specified support came from other graduates and 4 from a graduate support nurse

Tables 4.42 to 4.47 show the degree of support the GRNs perceived they received from the various personnel in their first rotation. The organisation affiliation is given in the parentheses next to the totals.

Table 4.42. First Rotation – Extensive Level of Support

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 8)	(T = 26)	(T = 9)	(T = 14)	(T = 20)	(T = 3)
(S = 2)	(S = 6)	(P = 3)	(P = 2)	(S = 4)	(R = 1)
(P = 1)	(P = 6)	(R = 1)	(R = 3)	(P = 4)	
(R = 2)	(R = 4)		(MH = 1)	(R = 6)	
	(MH = 1)				
13	43	16	20	34	4

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; MH = Mental Health

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/unit staff = ward or unit nursing staff.

Table 4.43. First Rotation – Very Good Level of Support

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 36)	(T = 46)	(T = 37)	(T = 38)	(T = 52)	(T = 5)
(S = 6)	(S = 4)	(S = 8)	(S = 8)	(S = 9)	(P = 1)
(P = 11)	(P = 13)	(P = 9)	(P = 10)	(P = 14)	(R = 1)
(R = 8)	(R = 5)	(R = 5)	(R = 2)	(R = 10)	
	(MH = 1)	(MH = 2)	(MH = 2)	(MH = 2)	
63	69	61	60	87	7

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; MH = Mental Health

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/unit staff = ward or unit nursing staff.

Table 4.44. First Rotation – Average Level of Support

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 29)	(T = 16)	(T = 30)	(T = 20)	(T = 22)	
(S = 4)	(S = 3)	(S = 2)	(S = 1)	(S = 3)	
(P = 5)	(P = 5)	(P = 6)	(P = 4)	(P = 7)	
(R = 4)	(R = 5)	(R = 5)	(R = 6)	(R = 5)	
(MH = 1)	(MH = 2)	(MH = 1)		(MH = 2)	
43	31	44	31	39	

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; AC = Aged Care; MH = Mental Health

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/unit staff = ward or unit nursing staff.

Table 4.45. First Rotation – Occasional Level of Support

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 15)	(T = 6)	(T = 16)	(T = 14)	(T = 3)	
(S = 2)	(S = 1)	(S = 4)	(S = 2)	(P = 2)	
(P = 6)	(P = 3)	(P = 5)	(P = 5)	(R = 1)	
(R = 4)	(R = 3)	(R = 6)	(R = 5)		
			(MH = 1)		
27	13	31	27	6	

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; MH = Mental Health

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/Unit Staff = ward or unit nursing staff.

Table 4.46. First Rotation – Negligible Level of Support

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 8)	(T = 1)	(T = 4)	(T = 6)	(R = 1)	
(S = 2)	(P = 1)	(S = 1)	(S = 3)		
(P = 4)	(R = 3)	(P = 3)	(P = 5)		
(R = 6)		(R = 6)	(R = 5)		
(MH = 1)		(MH = 1)			
20	5	15	19	1	

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; MH = Mental Health

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/unit staff = ward or unit nursing staff.

Table 4.47. First Rotation – Support Personnel Not Applicable

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 1)	(T = 2)	(T = 1)	(T = 4)	(D = 1)	(MH = 4)
(S = 1)	(S = 2)		(S = 3)		
	(R = 2)		(P = 1)		
	(C = 1)		(R = 2)		
			(C = 1)		
2	7	1	11	1	4

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; MH = Mental Health; AC = Aged Care; C = Community; D = Domiciliary

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/Unit Staff = ward or unit nursing staff.

The prevailing level of support as perceived by the GRNs in this study is shown to be in the *very good to extensive* range (Figure 4.7).

Figure 4.7. Level of Perceived Support to GRNs in First Rotation

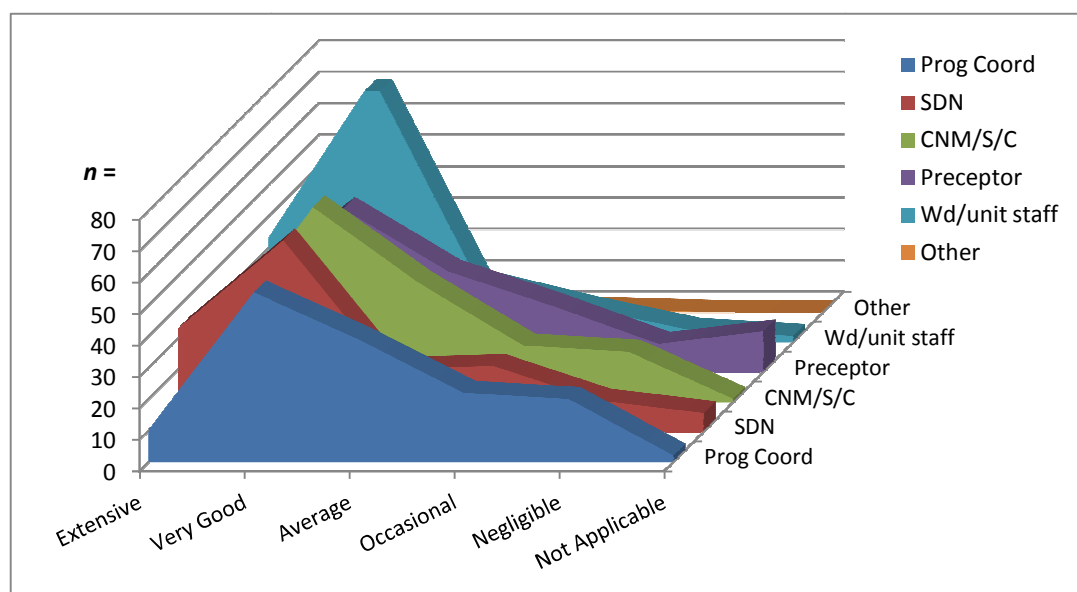


Figure 4.7. Shows the majority of perceived levels of support in first rotation for all personnel to range in the *extensive* to *very good* categories.

Tables 4.48 to 4.53 show the degree of support the GRNs perceived they received from the various personnel in their second rotation. The breakdown of organisation affiliation is again, given in parentheses next to the totals.

Table 4.48. Second Rotation – Extensive Level of Support

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 6)	(T = 25)	(T = 12)	(T = 13)	(T = 18)	(T = 3)
(S = 1)	(S = 1)	(S = 1)	(S = 4)	(S = 4)	
(P = 2)	(P = 6)	(P = 3)	(P = 4)	(P = 7)	
(R = 1)	(R = 2)	(R = 1)	(R = 4)	(R = 4)	
			(MH = 1)		
10	34	17	26	33	3

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; MH = Mental Health

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/Unit Staff = ward or unit nursing staff.

Table 4.49. Second Rotation – Very Good Level of Support

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 34)	(T = 37)	(T = 30)	(T = 33)	(T = 54)	(T = 5)
(S = 4)	(S = 8)	(S = 9)	(S = 3)	(S = 8)	(P = 2)
(P = 6)	(P = 7)	(P = 11)	(P = 9)	(P = 9)	
(R = 7)	(R = 6)	(R = 9)	(R = 4)	(R = 11)	
(MH = 3)	(MH = 3)	(MH = 3)	(MH = 2)	(MH = 2)	
			(AC = 1)		
54	61	62	52	84	7

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; MH = Mental Health; AC = Aged Care

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/Unit Staff = ward or unit nursing staff.

Table 4.50. Second Rotation – Average Level of Support

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 27)	(T = 14)	(T = 27)	(T = 24)	(T = 12)	(T = 1)
(S = 7)	(S = 1)	(S = 4)	(S = 3)	(S = 3)	
(P = 2)	(P = 2)	(P = 3)	(P = 1)	(P = 3)	
(R = 3)	(R = 3)	(R = 5)	(R = 4)	(R = 1)	
39	20	39	32	19	1

Note: T = Tertiary; S = Secondary; R = Rural; P = Private;

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/Unit Staff = ward or unit nursing staff.

Table 4.51. Second Rotation – Occasional Level of Support

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 11)	(T = 9)	(T = 11)	(T = 13)	(T = 5)	(T = 1)
(P = 7)	(S = 1)	(P = 4)	(S = 2)	(P = 4)	
(R = 3)	(P = 6)	(R = 3)	(P = 2)	(R = 1)	
(AC = 1)	(R = 5)		(R = 4)	(MH = 1)	
22	21	18	21	11	1

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; AC = Aged Care; MH = Mental Health

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/Unit Staff = ward or unit nursing staff.

Table 4.52. Second Rotation – Negligible Level of Support

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 12)	(T = 1)	(T = 9)	(T = 3)	(P = 1)	
(S = 3)	(S = 3)	(S = 1)	(S = 2)	(R = 3)	
(P = 6)	(P = 3)	(P = 3)	(P = 3)		
(R = 5)	(R = 3)	(R = 2)	(R = 1)		
		(AC = 1)			
26	10	16	9	4	

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; AC = Aged Care

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/Unit Staff = ward or unit nursing staff.

Table 4.53. Second Rotation – Support Personnel Not Applicable

Prog Coord	SDN	CNM/S/C	Preceptor	Wd/Unit Staff	Other
(T = 1)	(T = 3)	(T = 1)	(T = 4)	(T = 1)	(T = 80)
(C = 1)	(S = 1)		(S = 1)	(R = 1)	(S = 15)
	(R = 2)		(P = 4)		(P = 22)
			(R = 3)		(R = 21)
			(C = 1)		(MH = 3)
2	6	1	13	2	141

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; MH = Mental Health; C = Community;

Prog Coord = Program Coordinator; SDN = Staff Development Nurse; CNM/S/C = Clinical Nurse Manager / Specialist / Consultant; Wd/Unit Staff = ward or unit nursing staff.

The *other* areas of support were mainly from fellow graduate nurses; either as part of the ward staff or via graduate nurse networks. Clinical Coach was also given as *other*, as were Doctors.

The proportions of total responders for each group from the first and the second rotation are diagrammatically presented to enable better comparison of the levels of support as perceived by the graduates (Figures 4.8 to 4.14).

Figure 4.8. Comparison of 1st and 2nd Rotation, Perceived Support from Program Coordinator

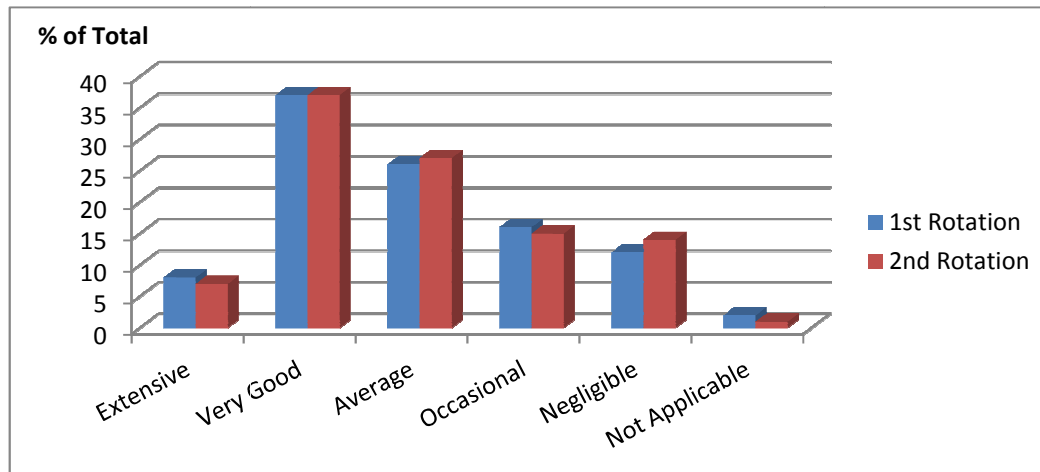


Figure 4.8. Comparison of 1st and 2nd rotation support from Program Coordinator.

There was minimal change in the perceived support from the Program Coordinator between the two rotations. The more common areas to record less support from the Program Coordinator were from either the Private or Rural sectors (Figures 4.9 and 4.10).

Figure 4.9. 1st and 2nd Rotation, Perceived Support from Program Coordinator in the Private Sector

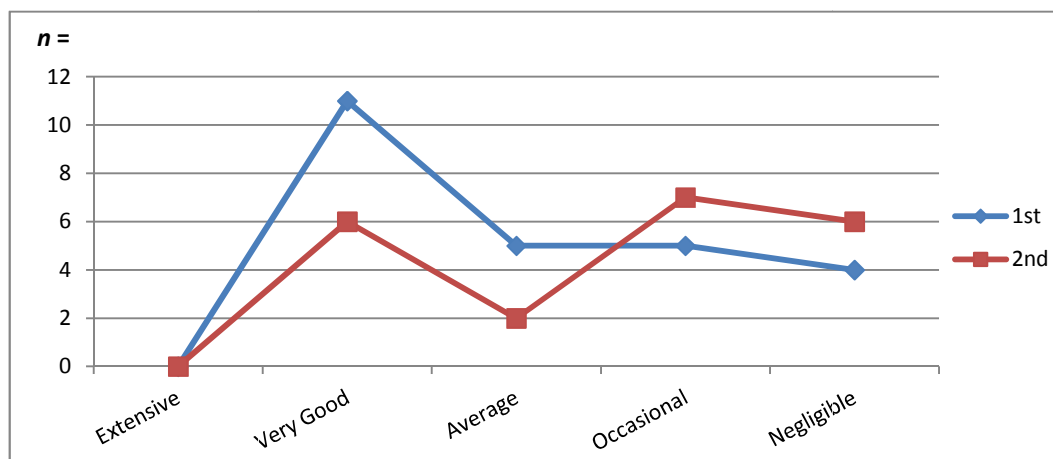


Figure 4.9. Comparison of 1st and 2nd rotation support from Program Coordinator in the Private sector.

Figure 4.10. 1st and 2nd Rotation, Perceived Support from Program Coordinator in the Rural Sector

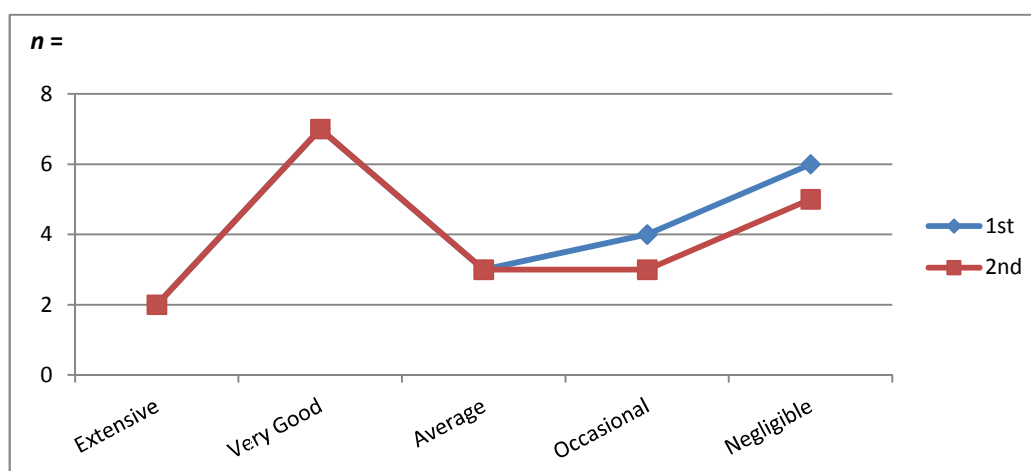


Figure 4.10. Comparison of 1st and 2nd rotation support from Program Coordinator in the Rural sector.

Figure 4.11. Comparison of 1st and 2nd Rotation, Perceived Support from SDN

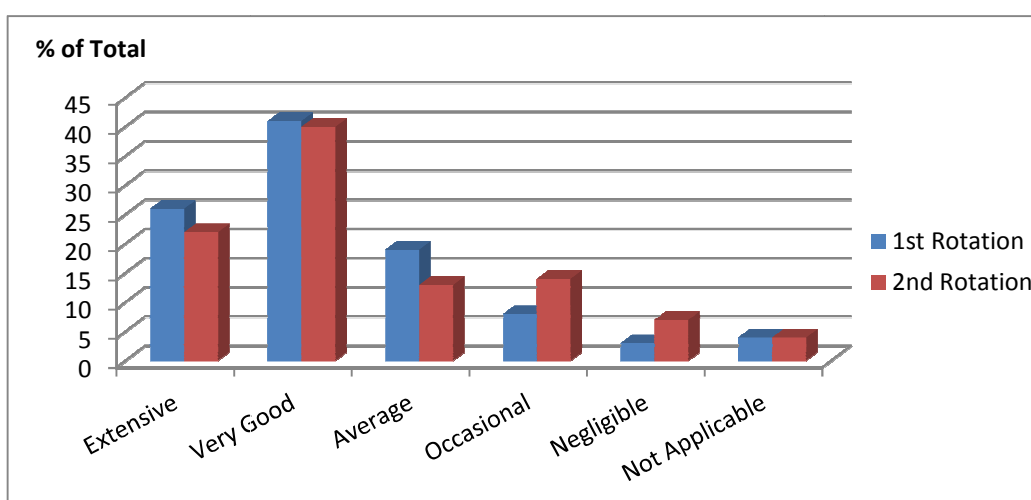


Figure 4.11. Comparison of 1st and 2nd rotation support from Staff Development Nurse.

While the *extensive* and *very good* ratings remain at a reasonable level of support from the SDN, frequencies of *occasional* and *negligible* support show an increase in the second rotation. This appears to have occurred predominately within the secondary and private sectors.

Figure 4.12. Comparison of 1st and 2nd Rotation by Sector; Perceived SDN Occasional & Negligible Support

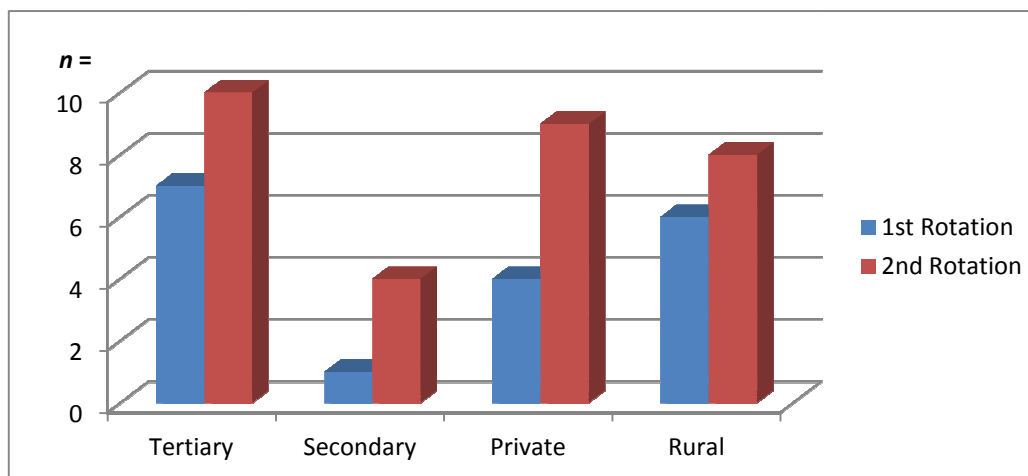


Figure 4.12. Comparison of 1st and 2nd rotation Occasional and Negligible support by sector from Staff Development Nurse.

Figure 4.13. Comparison of 1st and 2nd Rotation, Perceived Support from CNM/S/C

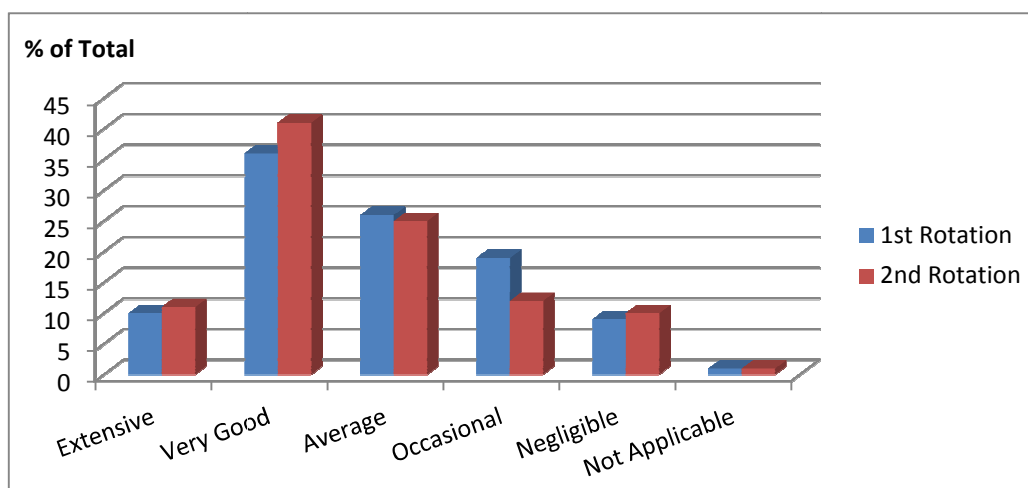


Figure 4.13. Comparison of 1st and 2nd rotation support from Clinical Nurse Manager/Specialist/Consultant.

The perceived support from the Clinical Nurse Manager, Specialist or Consultant (CNM/S/C) appears to have improved slightly between the two rotations (Figure 4.13). Minor differences between the two rotations emerged for preceptor or

mentor support, in particular an increase in the *extensive support*, predominately in the secondary and private sectors; and a decrease in the *negligible* group that was distributed amongst all areas (Figure 4.14).

Figure 4.14. Comparison of 1st and 2nd Rotation, Perceived Support from Preceptor/ Mentor

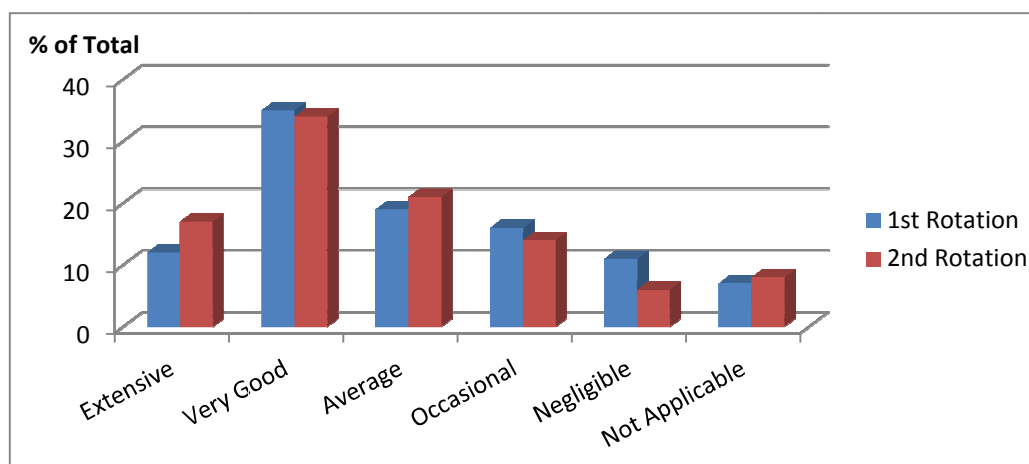


Figure 4.14. Comparison of 1st and 2nd rotation support from Preceptor/ Mentor.

Third rotation perceptions of *support* show that the perceived levels of *extensive* and *very good* have continued to decrease in the categories of Program Coordinator and SDN, but have retained similar ratios as previous rotations for other elements of support (Figure 4.15).

Figure 4.15. Comparison of 1st, 2nd and 3rd Rotation, Perceived Extensive and Very Good Support from all Categories

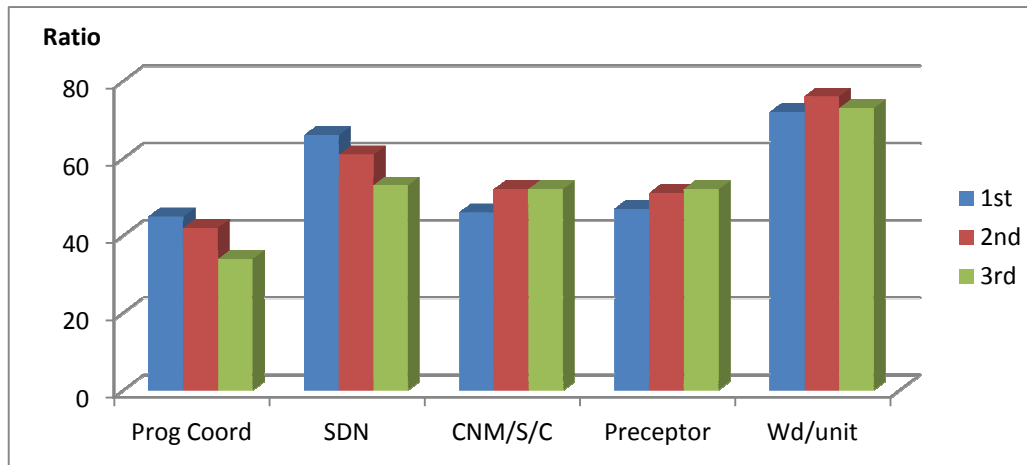


Figure 4.15. Comparison of 1st, 2nd and 3rd rotation levels of *extensive* and *very good* support.

Conversely, the incidence of *occasional* or *negligible* support provided between the rotations shows a marked increase across all personnel (Figure 4.16).

Figure 4.16. Comparison of 1st, 2nd and 3rd Rotation, Perceived Occasional and Negligible Support from all Categories

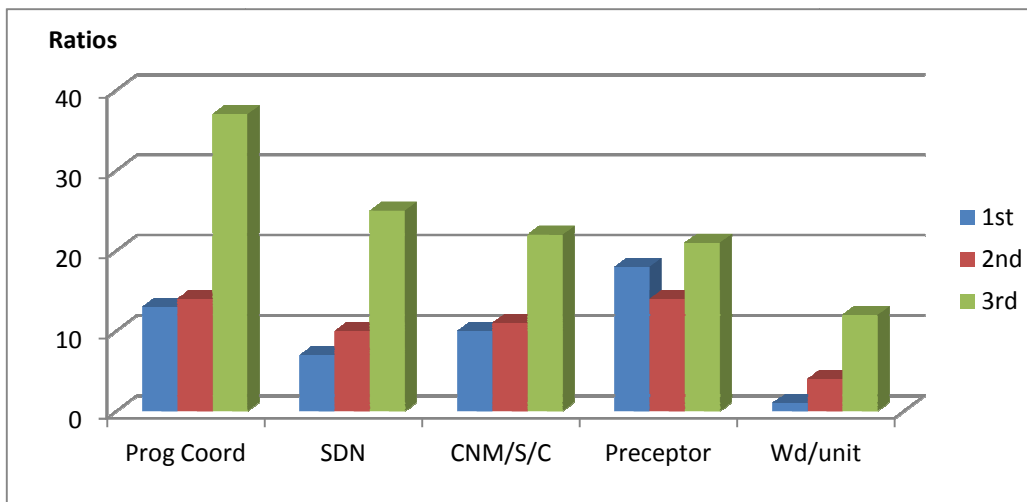


Figure 4.16. Comparison of 1st, 2nd and 3rd rotation levels of *occasional* or *negligible* support.

Levels of support provided to those GRNs who participated in further rotations are demonstrated in Table 4.54 and show a continued trend of an increase in ward or unit based support and a corresponding decrease in the more senior levels of support.

Table 4.54. Additional Rotations – Levels of Support in Fourth and Fifth Specialities

Rotation	Level of Support	Program Coord (n =)	SDN (n =)	CNM/S/C (n =)	Preceptor (n =)	Wd/Unit Staff (n =)
Fourth	V Good/Extensive	7	12	9	11	18
	Occasional/Negligible	7	7	7	3	2
Fifth	V Good/Extensive	0	3	4	5	6
	Occasional/Negligible	5	4	4	2	1

4.6.3.5 Supernumerary Time to Full Patient Load Allocation

For each specialty rotation, respondents were asked to indicate how long they had worked in a supernumerary capacity before being given the responsibility of a full patient or client load. It is assumed that, as the graduand becomes more competent and confident with their skills and knowledge, the consequent rotations to different units will require shorter periods of time for orientation. Table 4.55 shows the number of respondents for each supernumerary time period and the type of organisation they were working in for their first rotation.

Table 4.55. First Rotation – Supernumerary Days to Full Patient Load

Time	Total	T	S	Private	Rural	MH	AC	C
1 st day	8	3	1	2	1	1		
1 day	10	5	1		4			
2-3 days	71	37 (inc MH,AC,P)	10	11 (inc S,T,R)	9	2	2	
4-7 days	53	33	2	10	5		1	2
7-14 days	20	14	1	2	3			
Up to 1 month	6	4	1	1				
> 1 month	2			2 (Periop)				
Total	170	96	16	28	22	3	3	2

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; MH = Mental Health; AC = Aged Care; C = Community; Periop = Perioperative.

Shows the number of respondents from each sector indicating the supernumerary days allowed prior to being allocated a full patient load.

Of the 18 respondents who indicated that they were required to take a full patient load, either on their first day on the ward or unit, or following one day's orientation, eight had previous experience as either an AIN or a PCA, and seven had no prior experience in healthcare. Of those with no prior experience, four of the seven were from tertiary hospitals.

Table 4.56 shows the second rotation respondents' length of time worked in a supernumerary capacity before being given a full patient or client load.

Table 4.56. Second Rotation – Supernumerary Days to Full Patient Load

Time	Total	T	S	Private	Rural	MH	AC	C
1 st day	11	5	1	4	1			
1 day	30	21	2		7			
2-3 days	62	34	8	10	6	2	1	1
4-7 days	30	21	1	5	3			
7-14 days	6	4		2				
Up to 1 month	7	2	2	1	2			
> 1 month	4	3		1				
Total	150	90	14	23	19	2	1	1

Note: T = Tertiary; S = Secondary; R = Rural; P = Private; MH = Mental Health; AC = Aged Care; C = Community; Periop = Perioperative.

Shows the number of respondents from each sector indicating the supernumerary days allowed prior to being allocated a full patient load.

When compared to the first rotation, there was an increase in the number of respondents who were expected to take on a full patient load within one-day of their new specialty rotation and a marked decrease in those who were allowed four to seven, or seven to 14 days as a supernumerary staff member (Figure 4.17).

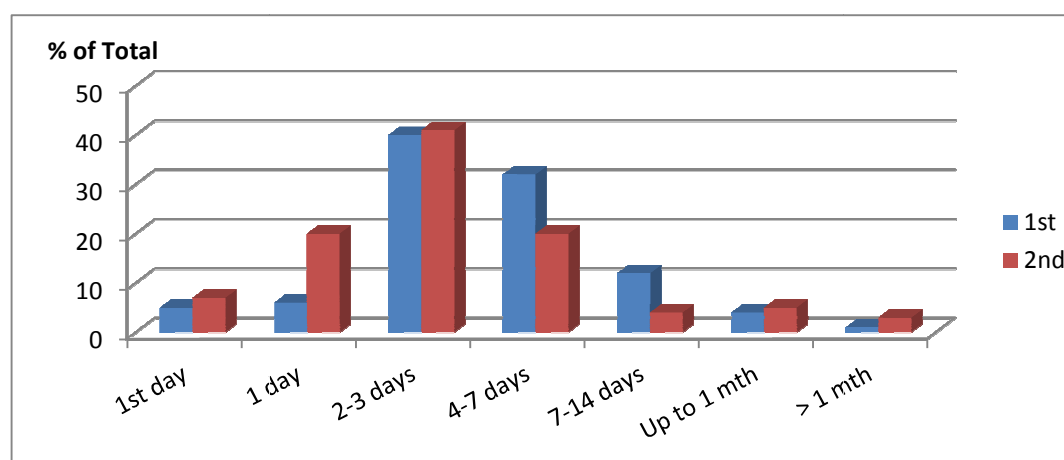
Figure 4.17. Comparison of 1st and 2nd Rotation, Supernumerary Days to Full Patient Load

Figure 4.17. Compares proportions of respondents in 1st and 2nd rotation indicating supernumerary days in ward or unit to full patient or client load.

Changes in the number of supernumerary days allocated to the GRN for their new specialty rotation occurred across all sectors (Figures 4.18 to 4.20).

Figure 4.18. Comparison of 1st and 2nd Rotation, by Sector, One Day to Full Patient Load

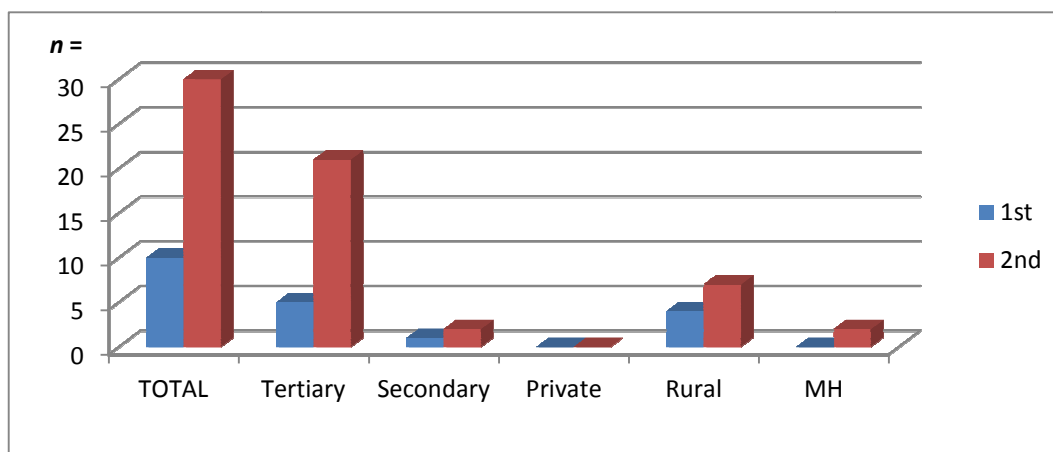


Figure 4.18. Shows increase in number of respondents between 1st and 2nd rotation taking full patient load after one day.

Figure 4.19. Comparison of 1st and 2nd Rotation, by Sector, 4-7 Days to Full Patient Load

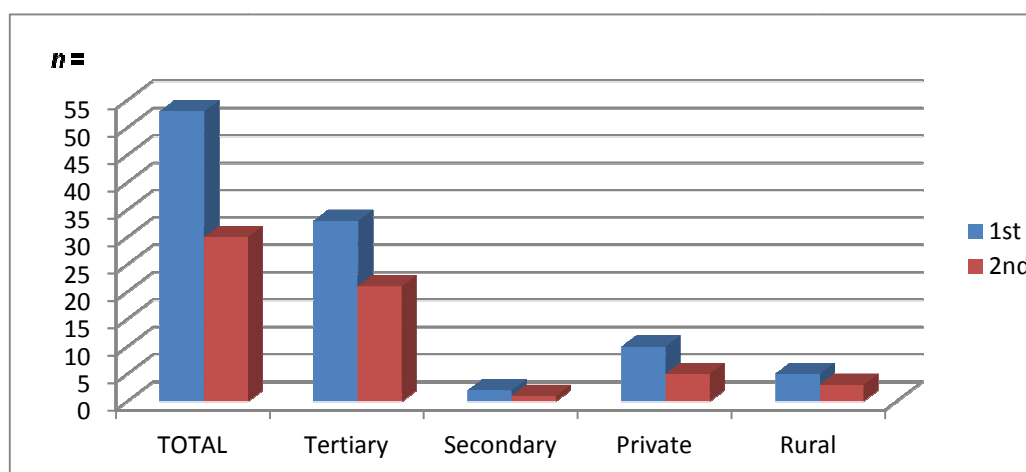


Figure 4.19. Shows decrease in number of respondents between 1st and 2nd rotation taking full patient load after 4-7 days.

Figure 4.20. Comparison of 1st and 2nd Rotation, by Sector, 7-14 Days to Full Patient Load

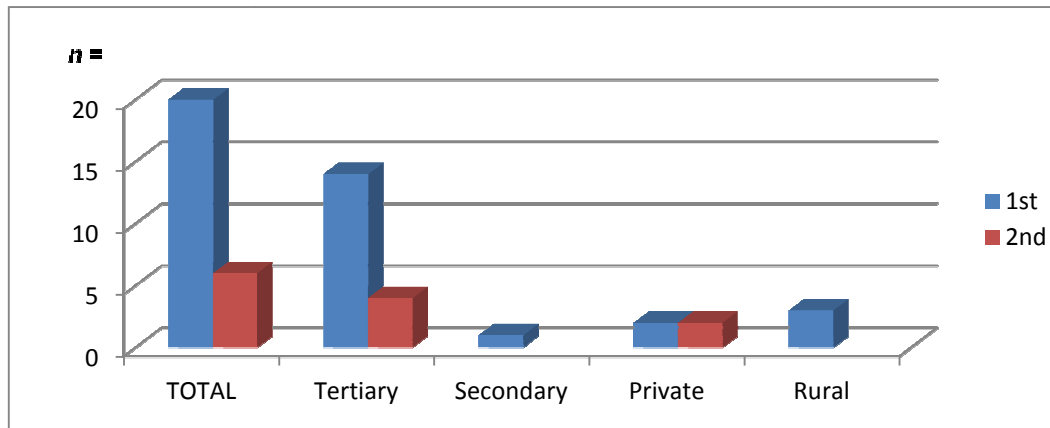


Figure 4.20. Shows decrease in number of respondents between 1st and 2nd rotation taking full patient load after 7-14 days.

While there was an overall decrease in supernumerary time for the GRNs second rotation, there was an increase in the number of respondents who indicated their supernumerary time for their second rotation was up to, or more than, one month (Figure 4.21). The majority of these were for perioperative rotations, or other specialised areas such as paediatrics, Critical Care or the Emergency Department.

Figure 4.21. Comparison of 1st and 2nd Rotation, by Sector, Up to, or More than One Month to Full Patient Load

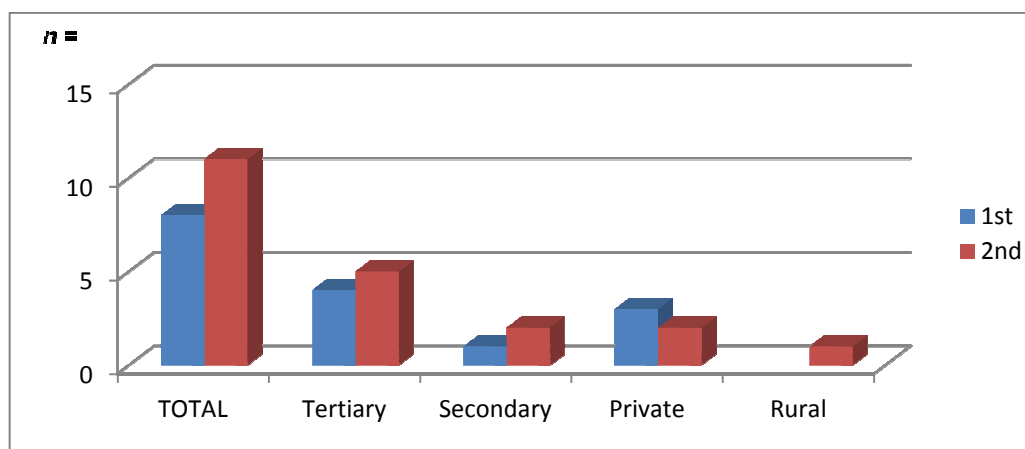


Figure 4.21. Shows increase in number of respondents between 1st and 2nd rotation taking full patient load from up to, or more than one month.

Respondents participating in a third rotation demonstrated a small increase in the proportion of respondents who were expected to take on a full patient load within one-day of their new specialty rotation and a marked decrease in those who were allowed four to seven days as a supernumerary staff member (Figure 4.22).

Figure 4.22. Comparison of 1st, 2nd and 3rd Rotation, Supernumerary Days to Full Patient Load

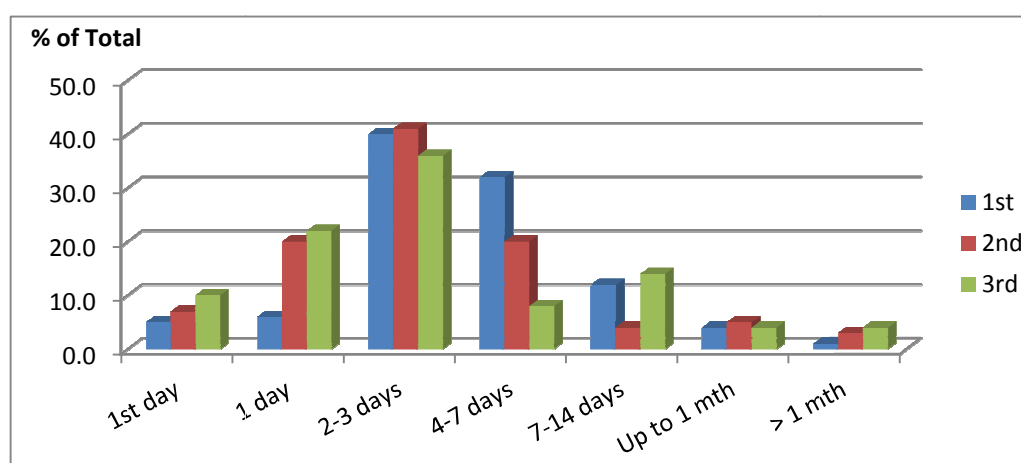


Figure 4.22. Comparison of proportions for 1st, 2nd & 3rd rotation supernumerary days in ward / unit to full patient or client load.

While there is an increase in the proportions of GRNs who were allocated fewer supernumerary days for their third rotation (Figure 4.22), there is again an increase in the number of respondents who indicated their supernumerary time was between seven and 14 days, or more than one month. Half of the respondents indicating thus were for perioperative rotations and the remaining were for other specialised areas, such as paediatrics, where previous more generalised experience is not able to be drawn upon to base much of the required new knowledge and skills and, as such, is to be expected. Table 4.57 demonstrates the continued trend of a reduction in supernumerary days to a full patient load for the additional rotations, with the exception of the specialties requiring an increased orientation time.

Table 4.57. Additional Rotations – Length of Time to Full Patient Load

Rotation	First Day (n =)	1 Day (n =)	2-3 Days (n =)	4-7 Days (n =)	>7 Days (n =)	> 1 Month (n =)	Total
Fourth	3	5	10	1 (MH)	1 (periop)	1 (periop)	23
Fifth	2		3	1	1		8

Note: MH = Mental Health; periop = Perioperative.

4.6.3.6 Perceived Benefits of Specialty Rotations

The final segment within each section relating to questions on specialty rotation experiences gave respondents the opportunity to provide open-ended responses to the following questions:

- *What areas were beneficial with this rotation?*
- *What areas were problematic with this rotation?*
- *What caused the most stress for you in this rotation?*
- *Do you have any other comment you would like to make about this rotation?*

Comments in relation to *beneficial areas* were themed into four basic streams of *learning* (knowledge), *clinical* (gaining clinical skills), *support*, and *time management* so these could be quantified for further comparison. Of the 153 participants who took the opportunity to respond to this question, the majority (43.8%) found *learning* to be of the greatest benefit in their first rotation, followed by *clinical* (35.9%), *support* (27.4%) and *time management* (19.6%). Many responses were themed under more than one concept as they were deemed to contain multiple perceptions of *benefits*.

In the second rotation, of the 138 participants who took the opportunity to respond to the question of perceived areas of *benefit*, the majority of graduates (56.5%) once more found *learning* to be of the greatest benefit of the rotation; followed by *clinical* (41.3%), *support* (34.8%) and *time management* (8.7%). As with the first rotation, many responses were deemed to contain multiple perceptions of benefits and, as such, were themed under more than one concept. While the ranking of the most common themes were the same as the first rotation, the percentage of the whole number of responses increased for all, with the exception of *time management*, which decreased by more than half from the first rotation responses (Figure 4.23).

Figure 4.23. Comparison of 1st and 2nd Rotation, Perceived Benefits Response Themes

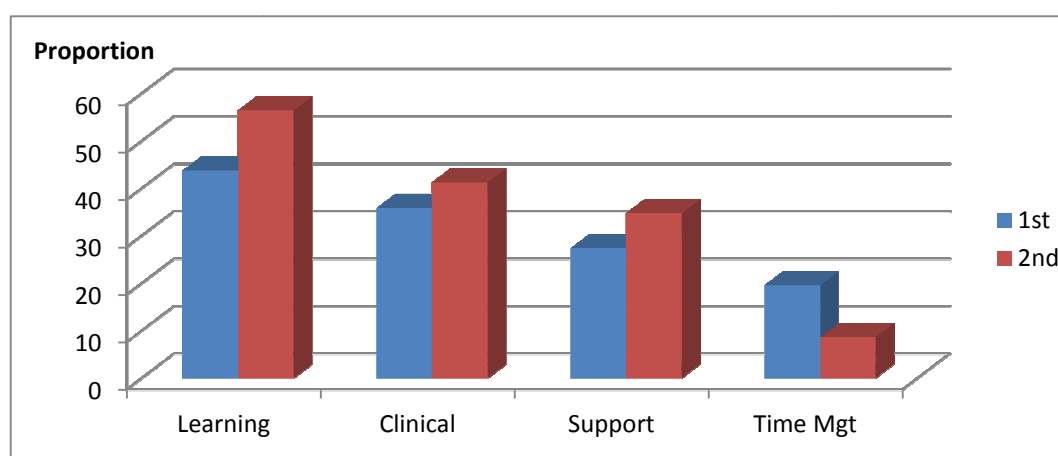


Figure 4.23. Shows increases and decreases in proportions of responses between 1st and 2nd rotation, indicating learning, clinical, support, and time management themes of perceived areas of *benefit*.

Of the 64 participants in the third rotation who took the opportunity to respond to the question of perceived areas of *benefit*, the majority of GRNs (56.5%) once more found *learning* to be of the greatest *benefit* in the rotation. *Support* (29.7%) rated the second most common theme and *clinical* (21.9%) moved to a lower

ranking; with *time management* (8.7%) remaining the same (Figure 4.24). An additional theme of *confidence* became evident in this rotation with 7.8% indicating it to be a *benefit*.

Figure 4.24. Comparison of 1st, 2nd and 3rd Rotation, Perceived Benefits Response Themes

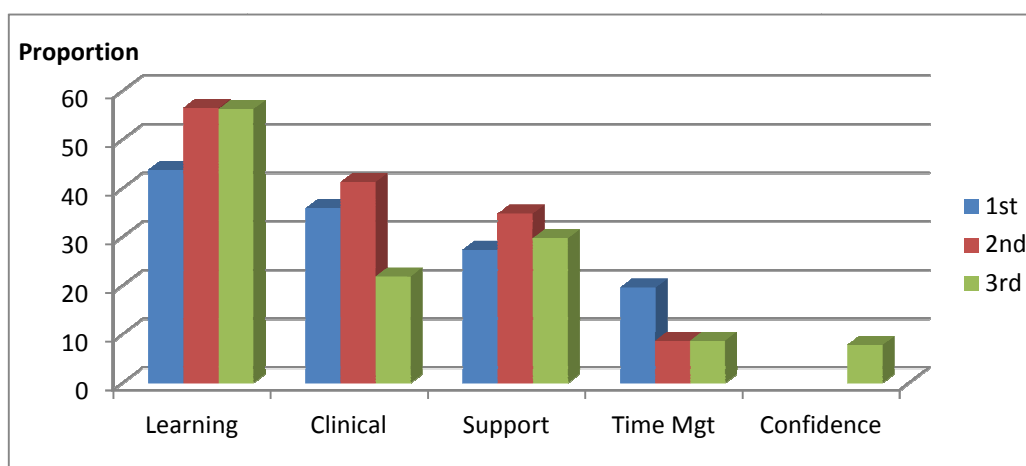


Figure 4.24. Shows increases and decreases in proportions of responses between 1st, 2nd and 3rd rotations, indicating learning, clinical, support, time management and confidence themes of perceived areas of *benefit*.

In the fourth and fifth rotations *learning* continued to dominate the themes (more than half in both groups), followed by *support*, *confidence* and *competence*.

4.6.3.7 Perceived Problems in Specialty Rotations

Respondents were also asked to describe what areas they felt were *problematic* in their specialty rotations. There were more themes used for this sector than the areas of *benefit* as it was felt any further compaction of themes would diminish the context and lose the sense of the issues that concerned graduates the most (Table 4.58). Of the 168 who participated in a GNP, almost one-quarter reported that they did not experience any real problems.

Table 4.58. First Rotation – Perceived Problems

Theme	Number	% of Respondents (n = 168)
Nil (no problems experienced)	40	23.8%
Lack of support	33	19.6%
Workload	27	16.1%
Lack of competence	25	14.9%
Busyness of the unit	15	8.9%
Poor skill mix of staff	11	6.5%
Bullying	7	4.2%
Other	22	13.1%

Note: Totals are not given for this table as some respondents indicated more than one theme in their response so are counted within each theme.

In their first rotation, responders who were in a secondary sector hospital were most likely to indicate a *lack of support* as being a *problem* with 26.7% denoting thus; and the least likely to report a *lack of support* as a *problem* were respondents from tertiary hospitals. Where a respondent has indicated a dual organisational type, for example, a tertiary private hospital, the response has been included in each of those categories (Table 4.59).

Table 4.59. First Rotation – Sector Respondents Reporting Lack of Support

Type of Organisation	Total Responses for Perceived Problems	% of Total in Sector Citing Lack of Support
Secondary	18	26.7%
Private	27	18.5%
Rural	24	18.2%
Tertiary	99	17.7%
Total	168	19.6%

Further breakdown of those describing that *lack of support* was perceived as a *problem* in their first specialty rotation showed more than half (57.6%) were aged less than 30-years, and slightly less than half (48.5%) indicated they had no prior employment in a health related occupation. Those who attended University D as an undergraduate student showed a slightly higher proportion (22.2%) detailing *support* related problems than other universities, with University A showing 21.2%, University B 20.2%, and University C the least, with 14.3%. Conversely, University D had the greatest proportion of respondents who indicated that they had *no problems* in their first rotation (this is including all problem themes), and University C showed the least number of graduates (9.5%) indicating they had *no problems* during their first rotation.

Of the 168 responding to the first rotation *problems* question, three respondents cited they felt that they were not using the knowledge and skills they had gained during their undergraduate education. All three of these indicated that University A was the place of their undergraduate nursing program; they were in the 20 to 29 year-old age bracket; were female; and, had not indicated any prior health care experience before graduating. The specialties they worked in for their first rotation were paediatrics, rehabilitation and mental health. Two of the three indicated future careers in nursing, however, the third had resigned during her graduate program to pursue a non-nursing degree.

During their second specialty rotation a greater proportion of respondents indicated they had not experienced any areas they perceived as *problematic*. For those who did, the theme *lack of support* was again the most predominate *problem*

indicated and was reported more commonly in their second rotation than their first (Table 4.60).

Table 4.60. Second Rotation –Perceived Problems

Theme	Number	% of Respondents (Total = 153)
Nil (no problems experienced)	46	30.1%
Lack of support	41	26.8%
Workload	14	9.2%
Lack of competence	21	13.7%
Busyness of the unit	8	5.2%
Poor skill mix of staff	7	4.6%
Bullying	4	2.6%
Other	32	20.9%

Note: Totals are not given for this table as some respondents indicated more than one theme in their response so are counted within each theme.

Data proportions in relation to perceived *problems* are compared between the first and second specialty rotation response (Figure 4.25).

Figure 4.25. Comparison of 1st and 2nd Rotations, Perceived Problems Themes

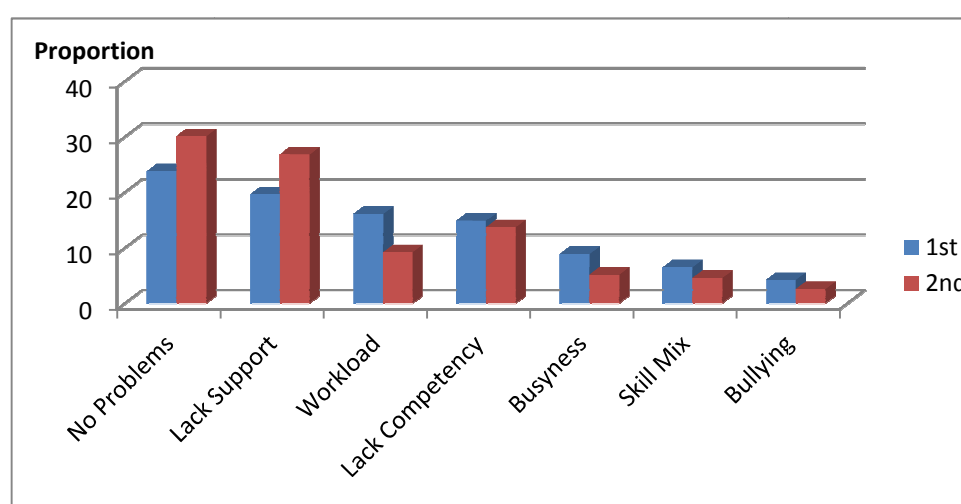


Figure 4.25. Shows changes in proportions of respondents who perceived problems between 1st and 2nd rotations according to themes allocated.

Themes such as *busyness*, *lack of competence*, *poor skill-mix* and *bullying* were reported by the graduates as a perceived problem. Additional themes of *poor communication* (6.5%) and *unprofessional behaviour* (5.6%) emerged in their second rotation, as did those of *not using skills* learned in their undergraduate nursing program (2.8%) or, where the work was *repetitive* or *boring* (4.7%). The concept of *program structure* as an issue was also evident from the responses in this rotation, with 4.7% (n = 5) indicating thus.

As in the findings of the first rotation, responders who were in a secondary level hospital were more likely to indicate that a *lack of support* was as a *problem*, (62.5%) and at more than twice the rate of the first rotation. Those from the rural sector were the least likely to report a *lack of support* as a *problem*, with the rate half of that recorded in the first rotation (Table 4.61).

Table 4.61. Second Rotation – Sector Respondents Reporting Lack of Support

Type of Organisation	Total Responses for Perceived Problems	% of Total in Sector Citing Lack of Support
Secondary	15	40.0%
Private	24	37.5%
Tertiary	93	24.7%
Rural	21	9.5%
Total	153	26.8%

Comparison of the ratios between the first and second rotations of total responses themed as *lack of support* clearly illustrates the substantial increase in occurrence within three of the four organisational sectors (Figure 4.26).

Figure 4.26. Comparison of 1st and 2nd Rotations, Lack of Support – Sector Type

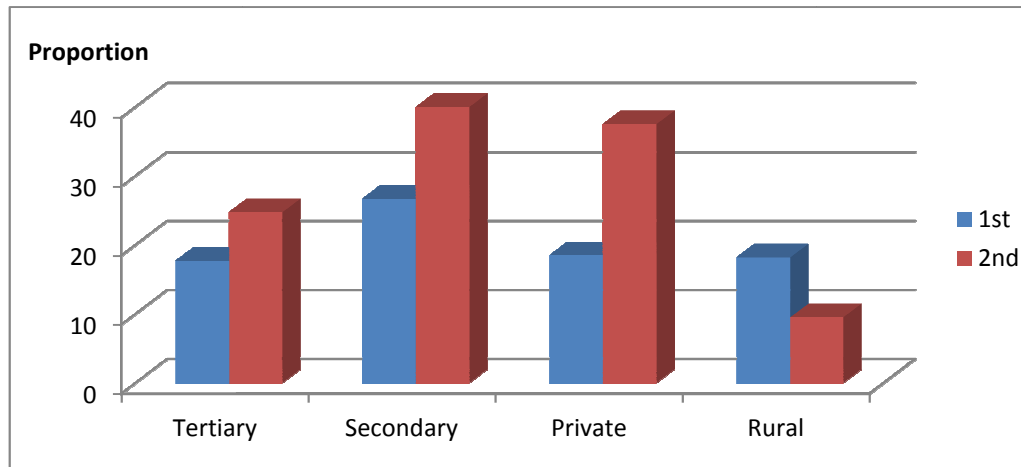


Figure 4.26. Changes in proportions of *lack of support* theme between 1st and 2nd rotations by Sector type.

Of those GRNs who perceived that *lack of support* was a *problem* in their first specialty rotation, more than half (57.6%) were aged less than 30-years; similarly, in the second rotation, 61% were aged less than 30-years. Figure 4.27 also compares the proportion of respondents reporting *lack of support* as a problem and is related to the university the GRN attended as an undergraduate. For the second rotation, those who attended University B as an undergraduate student showed a higher proportion (32.4%) who indicated *support* related problems than did respondents who had attended other universities, with University A showing 22.4%, University D no change from the first rotation (22.2%), and University C the least again, but with somewhat more for the second rotation (21.0%) compared to the first rotation (14.3%).

Figure 4.27. Comparison of 1st and 2nd Rotations, Lack of Support - Undergraduate University Attendance

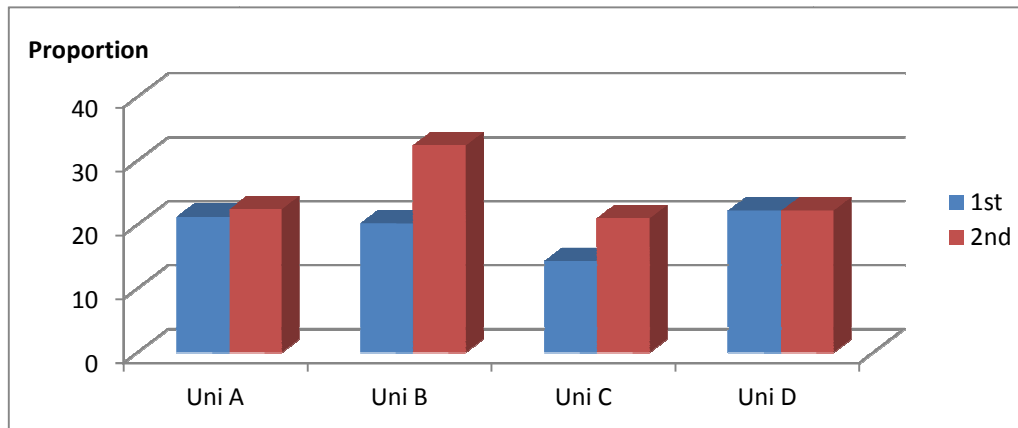


Figure 4.27. Shows changes in proportions of *lack of support* theme between 1st and 2nd rotations by the university attended as an undergraduate.

As in the first rotation, while the GRNs who had attended University B recorded the largest proportion of *lack of support* as a *problem*, this cohort conversely had the greatest proportion of GRNs who recorded that they experienced *no problems* (35.1%). University C GRNs who recorded the lesser proportion of *lack of support* as a *problem*, had the least proportion (10.5%) of GRNs indicating that they experienced *no problems* (Figure 4.28).

Figure 4.28. Comparison of 1st and 2nd Rotations, Ratios of Nil Problems by Undergraduate University Attendance

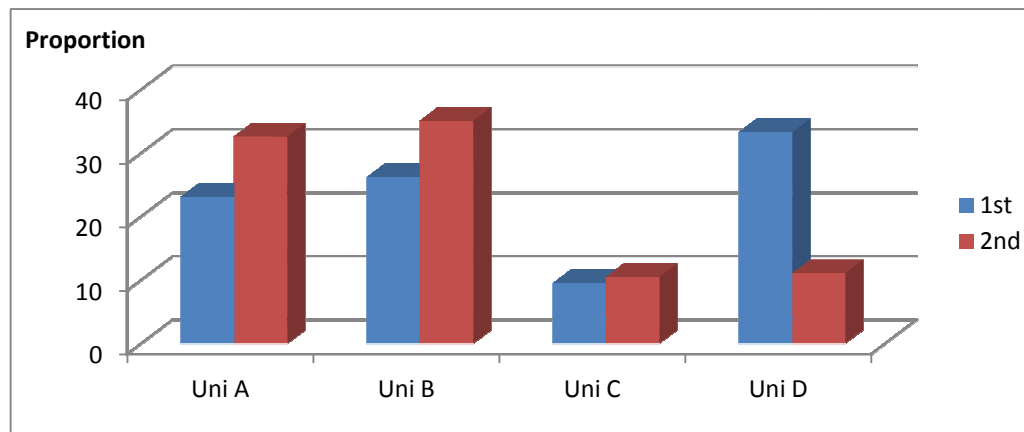


Figure 4.28. Shows changes in proportions of *no reported problems* between 1st and 2nd rotations by university attended as undergraduate.

There was an increase in comments related to poor communication, unprofessional behaviour and bullying, as well as graduates who felt that their second rotation was either boring, repetitive or was not adequately utilising their undergraduate education.

For their third rotation *lack of support* was once more the stronger theme of the areas that respondents felt were *problematic*, although not as commonly as in the second rotation. The more frequent themes are depicted in Table 4.62 with the numbers and proportions of all responding to the question compared. The first and second rotations are further illustrated in Figure 4.29.

Table 4.62. Third Rotation – Perceived Problems

Theme	N =	% of Total
Nil (no problems experienced)	27	37.0%
Lack of support	16	21.9%
Workload	5	6.8%
Lack of competence	7	9.6%
Busyness of the unit	3	4.1%
Poor skill mix of staff	1	1.4%
Bullying	2	2.7%
Minimised experience	8	11.0%

Note: Totals are not given for this table as some respondents indicated more than one theme in their response so are counted within each theme.

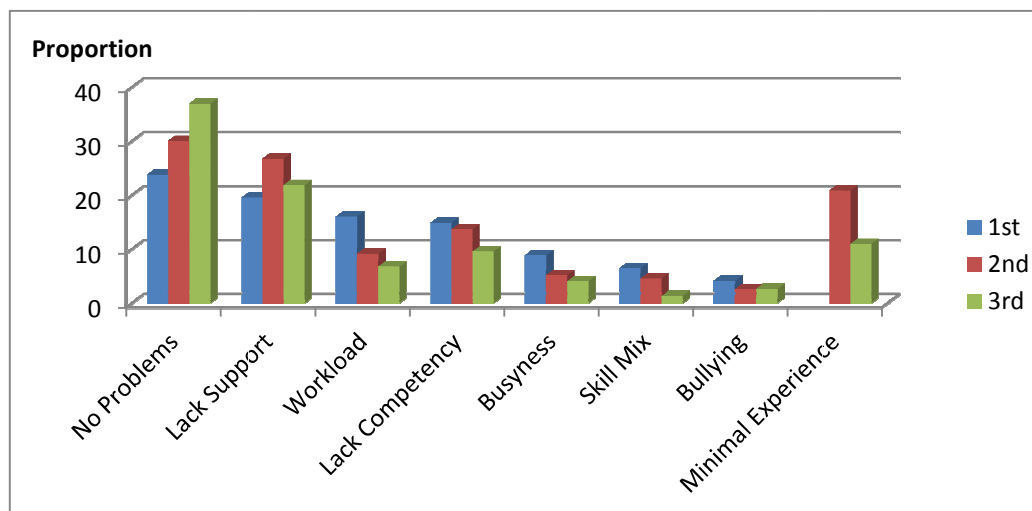
Figure 4.29. Comparison of 1st, 2nd and 3rd Rotations, Perceived Problems Themes

Figure 4.29. Shows changes in proportions of perceived *problem* themes between 1st, 2nd and 3rd rotations.

Themes such as *lack of competence*, *workload* and *busyness*, reported by the graduates as a perceived *problem* continued, but at much lower rates than the previous specialty rotations. An additional theme of *minimised experience* (11%) appeared in this rotation and was included to depict the reported perception that a

rotation did not provide an adequate amount of clinical encounters and learning opportunities. The responders included in this cohort were all in the younger age groups; half were at tertiary hospitals with the remainder in private or rural sectors. The GRNs felt the rotation lacked challenge, was boring or there were not enough patients for whom to provide nursing care. Two were in perioperative rotations and another two were in Critical Care units.

As with both the first and second rotations, a greater proportion of secondary sector responders were more likely to indicate that a *lack of support* was a *problem*, with more than double the average; and the least likely to report *lack of support* as a *problem* were those from rural organisations (Table 4.63).

Table 4.63. Third Rotation – Sector Respondents Reporting Lack of Support

Type of Sector	Total Responses	% Citing Lack of Support
Tertiary	35	22.9%
Secondary	11	45.5%
Private	15	13.3%
Rural	12	8.3%
Total	73	21.9%

Comparison of the ratios of total responses themed as *lack of support* between the first, second and third rotations illustrates a marked decrease in lack of support being perceived as a problem in private organisations and a moderate decrease in both tertiary and rural sectors (Figure 4.30).

Figure 4.30. Comparison of 1st, 2nd and 3rd Rotations; Ratios of Lack of Support Theme by Industry Sector

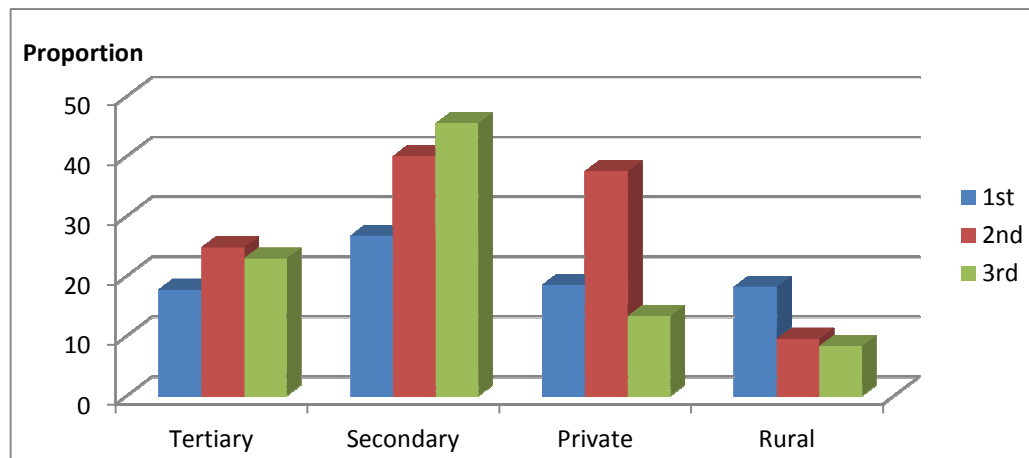


Figure 4.30. Shows changes in proportions of *lack of support* theme between 1st, 2nd and 3rd rotations by sector.

There was an increase in comments related to a sense of lacking *competency* for the specialty rotation, as well as GRNs who felt the rotation was not sufficient in offering *learning experiences*.

In the remaining specialty rotations, *lack of support* continued to feature strongly in the *problem* themes and similarly in the cause of *stress* themes. A new theme emerged in the fifth rotation related to *problems* and was coded *lack of respect*, with comments from older age-groups such as: “*lack of respect from younger staff; few staff not prepared to accept my judgement and treated me like a student*”.

4.6.3.8 Perceived Causes of Stress for Specialty Rotations

The responses to the question that asked *what caused most stress for you in this rotation* were again coded under more than one theme when more than one cause

was expressed. First rotation causes of *stress* as perceived by the GRNs are shown in Table 4.64.

Table 4.64. First Rotation – Theme Proportions for Perceived Causes of Stress

Theme	N =	% of Total
Nil (no causes of stress reported)	24	14.3%
Workload	27	16.1%
Lack of support	26	15.5%
Time management	24	14.9%
Lack of knowledge	18	10.7%
Poor communication	13	7.7%
Busyness of the unit	11	6.5%
Bullying	9	5.4%
Poor skill mix of staff	7	4.2%
Work-life balance	6	3.6%
Total	165	99.9%

The majority of responses relating to the *causes of most stress* were themed under *workload*, *lack of support* and *time management*. *Poor communication* was cited on several occasions and related predominately to colleagues (76.9%) and, on two occasions, to medical staff. Secondary hospitals had the greatest ratio of respondents who cited their *workload* was a major *stressor*, while those from tertiary organisations had the least (Table 4.65).

Table 4.65. First Rotation – Sector Respondents Reporting Workload Cause of Stress

Type of Sector	Total Responses for Perceived Stress	% of Respondents Citing Workload by Sector
Secondary	18	26.7%
Private	27	22.2%
Rural	24	18.2%
Tertiary	99	7.3%
Total	168	16.1%

As with causes of *problems*, the second most commonly mentioned cause of *stress* as perceived by the GRNs was a *lack of support*. The responses were again tabulated against the type of organisation where the respondent worked (Table 4.66). While *lack of support* was seen as a *problem* by a greater ratio of secondary hospital respondents, the largest ratio of GRNs who perceived *lack of support* was a major *stressor* was from the rural sector. Once more, tertiary hospital respondents had the smallest ratio of responders who indicated a *lack of support* was a cause of *stress*.

Table 4.66. First Rotation – Sector Respondents Reporting Lack of Support Cause of Stress

Type of Sector	Total Responses for Perceived Stress	% of Total in Sector Citing Lack of Support
Rural	24	31.8%
Private	27	14.8%
Secondary	18	13.3%
Tertiary	99	10.4%
Total	168	15.5%

Responses were similarly themed for the second specialty rotation, and again, due to the open-ended nature of the responses, were often coded under more than one issue (Table 4.67).

Table 4.67. Second Rotation – Theme Proportions for Perceived Causes of Stress

Theme	N =	%
Nil (no causes of stress reported)	40	26.1%
Workload	33	21.6%
Lack of knowledge	32	20.9%
Lack of support	26	17.0%
Patients / clients	17	11.1%
Time management	9	5.9%
Poor communication	8	5.2%
Poor skill mix of staff	7	4.6%
Busyness of the unit	7	4.6%
Bullying	6	3.9%
Work-life balance	5	3.3%
Patients dying	5	3.3%

Note: Totals are not given for this table as some respondents indicated more than one theme in their response so are counted within each theme.

As for the first rotation, the majority of responses relating to the *causes of most stress* were coded under the themes of *workload*, and *lack of support* (Table 4.66). However, *lack of support* was superseded by *lack of knowledge* in the percentage rankings, and further changes were seen with an increased proportion of *patients/clients* originating perceptions of *stress* (Figure 4.31).

Figure 4.31. Comparison of 1st and 2nd Rotation, Ratios of Stress Themes

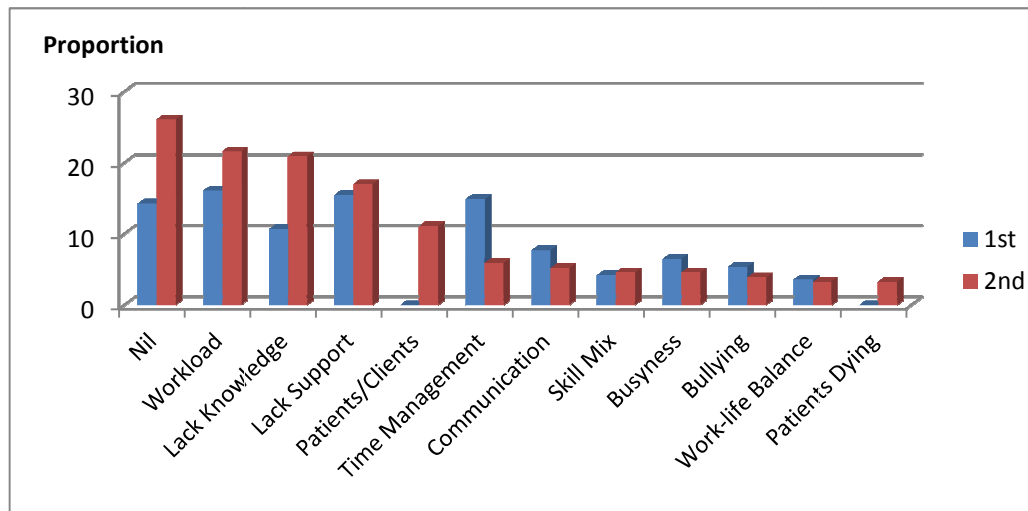


Figure 4.31. Shows changes in proportions of various stress themes between 1st and 2nd rotations.

The second rotation data related to *workload*, as cause of the respondents' stress, was analysed (Table 4.68), and when contrasted with the percentages of the first rotation responses, divergent findings are seen between the workplace sectors (Figure 4.32).

Table 4.68. Second Rotation – Sector Respondents Reporting Workload Cause of Stress

Type of Sector	Total Responses for Perceived Stress	% of Total in Sector Citing Workload
Tertiary	91	22.0%
Secondary	14	7.1%
Private	24	29.2%
Rural	19	15.8%
Total	148	21.6%

Figure 4.32. Comparison of 1st and 2nd Rotations, Ratios of Workload Themes in Relation to Stress

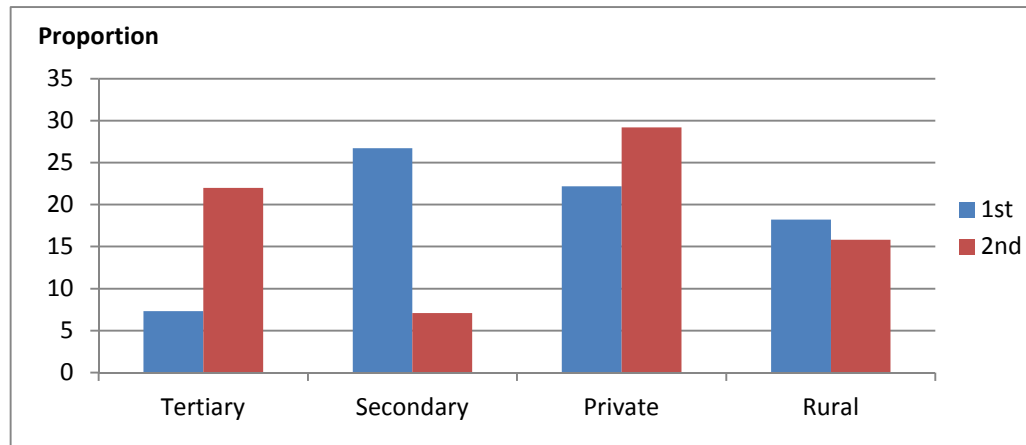


Figure 4.32. Shows considerable changes in sector proportions of *workload* related stress themes between 1st and 2nd rotations.

Unlike the first rotation, the second most commonly mentioned source of *stress*, as perceived by the graduates in their second rotation, was a *lack of knowledge*. Both the tertiary and secondary sector respondents had the highest ratio of respondents who reported a *lack of knowledge* contributed to *stress* (Table 4.69).

Table 4.69. Second Rotation – Sector Respondents Reporting Lack of Knowledge Cause of Stress

Type of Sector	Total Responses for Perceived Stress	% of Total in Sector Citing Lack of Knowledge
Tertiary	91	25.3%
Secondary	14	28.6%
Private	24	8.3%
Rural	19	15.8%
Total	148	20.9%

As *lack of support* was the second most common theme reported in the first rotation, the data from that rotation are shown for comparison against those for the

second rotation (Figure 4.33) and illustrate some differences between the data sets, predominately within the rural, private and secondary sectors.

Figure 4.33. Comparison of 1st and 2nd Rotations, Ratios of Workload Themes in Relation to Stress

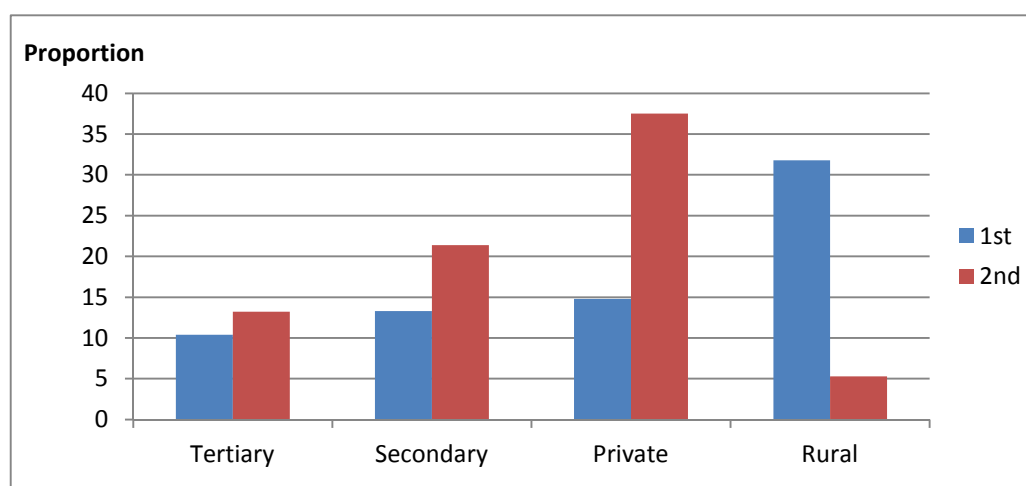


Figure 4.33. Shows changes in sector proportions of *workload* related stress themes between 1st and 2nd rotations.

Other *stress* related themes reported in their second rotation were *poor communication* (n = 6), all from the tertiary sector, with four in surgical and one each in medical and perioperative units; and *patients dying* (n = 4), also from the tertiary sector, with three of the specialty rotations in medical wards and the fourth a critical care unit.

Third rotation responses again showed an increase in the proportion of respondents who reported *nil* stress (Table 4.70).

Table 4.70. Third Rotation – Theme Proportions of Perceived Causes of Stress

Theme	Number	Percent
Nil (no causes of stress reported)	23	31.5%
Workload	5	6.8%
Lack of knowledge	10	13.7%
Lack of support	15	20.5%
Patients / clients	7	9.6%
Time management	0	0
Poor communication	4	5.5%
Poor skill mix of staff	3	4.1%
Busyness of the unit	4	5.5%
Bullying	4	5.5%
Work-life balance	1	1.4%
Patients dying	2	2.7%

Note: Totals are not given for this table as some respondents indicated more than one theme in their response so are counted within each theme.

Unlike the earlier rotations, in the third rotation, the foremost perceived cause of *most stress* was *lack of support*. The perception of *workload* as the primary contributor to feelings of *stress* had reduced, and there were no reports of *time management* considered to be an issue. The *patients / clients* contributing to perceptions of *stress* continued to be seen as a problem (Figure 4.34).

Figure 4.34. Comparison of 1st, 2nd and 3rd Rotations, Ratios of Stress Themes

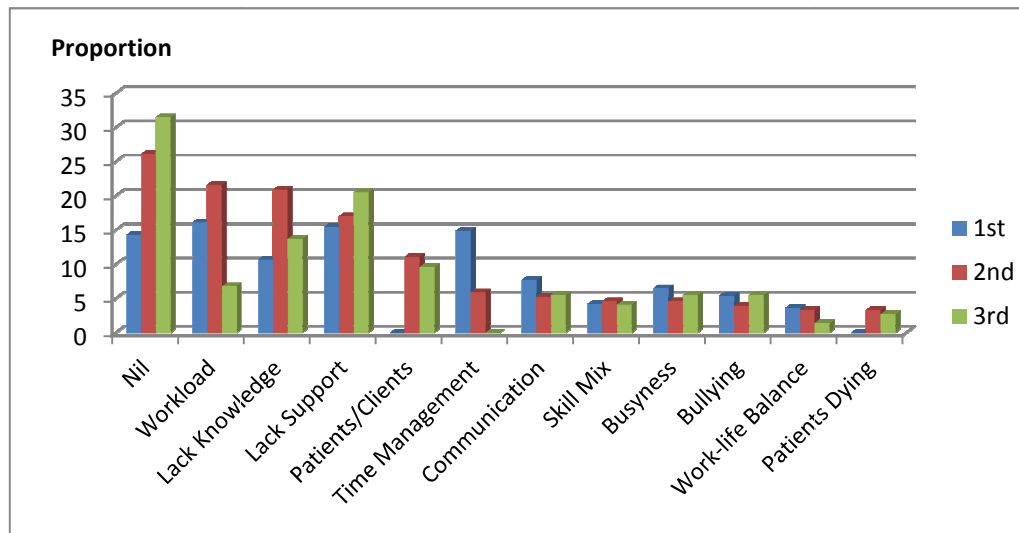


Figure 4.34. Shows changes in proportions of stress themes between 1st, 2nd and 3rd rotations.

4.6.3.9 Other Specialty Rotation Comments

Respondents were asked if they had any *further comment* they wished to make in regards to their individual specialty rotations. For this section the qualitative data were quantified into five categories ranging from *very positive* to *very negative*. Examples of *positive* comments included: “Fantastic rotation, great introduction to a busy post-operative ward, great team”, and “Loved it, chose to stay on this ward after the GNP”; while examples of *negative* comments included: “Most unenjoyable, worst experience, thought of quitting nursing for good”, and “Couldn’t wait for it to end”. For their first rotation, of the 72 respondents who took the opportunity to provide further information, 22 responses were coded *very positive* and an additional 22 as *mostly positive*. Only five responses were coded as *very negative* with a further 22 as *mostly negative*. Of the *very negative*, the sectors where the respondent worked were spread across each type. Tables 4.71 and 4.72 provide further breakdown of the responses in relation to the sector that the GRN worked in.

Table 4.71. First Rotation – Sector Type, Proportion of Positive Comments

Type of Sector	Total Responders	% of Total Positive Comments
Tertiary	99	30.2%
Secondary	18	26.7%
Rural	24	22.7%
Private	27	18.5%
Total	168	26.8%

Note: Includes both *very positive* and *mostly positive* comments and shows the proportion of all GNP participants within each sector expressing positive comments in their first rotation.

There were equivalent proportions of *positive* and *negative* themes from the GRN respondents from both the secondary and the private sectors.

Table 4.72. First Rotation – Sector Type, Proportion of Negative Comments

Type of Sector	Total Responders	% of Total Negative Comments
Tertiary	27	13.5%
Secondary	99	26.7%
Rural	24	18.2%
Private	18	18.5%
Total	168	16.1%

Note: Includes both *very negative* and *mostly negative* comments and shows the proportion of all GNP participants within each sector expressing negative comments in their first rotation.

The data related to the second rotation *further comments* were similarly coded into the range of *very positive* to *very negative* themes. Of the 74 respondents who took the opportunity to provide further information, 12 were coded as *very positive* and 28 as *mostly positive*. Only four responses were coded as *very negative* with a further 21 as *mostly negative*. Tables 4.73 and 4.74 give a further breakdown of the *positive* and *negative* responses in relation to the type of sector worked in. The ratio

of positively themed responses related to the additional comments from all sectors showed minimal change compared to those of the first rotation (Figure 4.35).

Table 4.73. Second Rotation – Sector Type, Proportion of Positive Comments

Type of Sector	Total Responders	% of Total Positive Comments
Tertiary	93	29.0%
Secondary	15	26.7%
Private	24	16.7%
Rural	21	23.8%
Total	153	26.1%

Note: Includes both *very positive* and *mostly positive* comments and shows the proportion of all GNP participants within each sector expressing positive comments in their second rotation.

Figure 4.35. 1st and 2nd Rotations, Additional Comments Ratios of Positive Themes

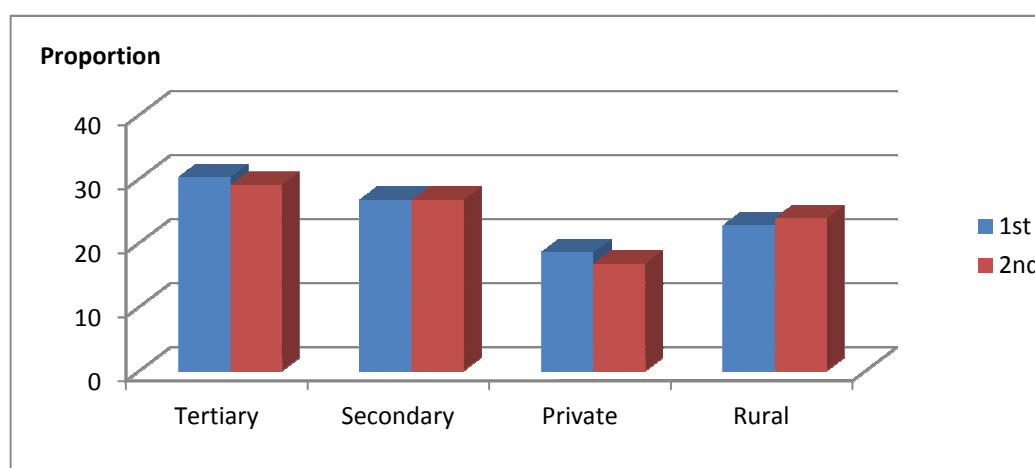


Figure 4.35. Shows changes in sector proportions of *positive comment* themes between 1st and 2nd rotations.

Table 4.74. Second Rotation – Sector Type, Proportion of Negative Comments

Type of Sector	Total Responders	% of Total Negative Comments
Tertiary	93	13.2%
Secondary	15	21.1%
Private	24	16.7%
Rural	21	21.4%
Total	153	16.3%

Note: Includes both *very negative* and *mostly negative* comments and shows the proportion of all GNP participants within each sector type expressing negative comments in their second rotation.

Again, there were minimal changes in the proportions of graduates providing a *negatively* rated response in the *further comments* amongst the tertiary, private and rural sectors. There was a moderate increase within the secondary sector and only a small reduction within the tertiary sector responses (Figure 4.36). Overall, the proportions of *positive* and *negative* comments have differed only marginally with less than a percentage point change between them.

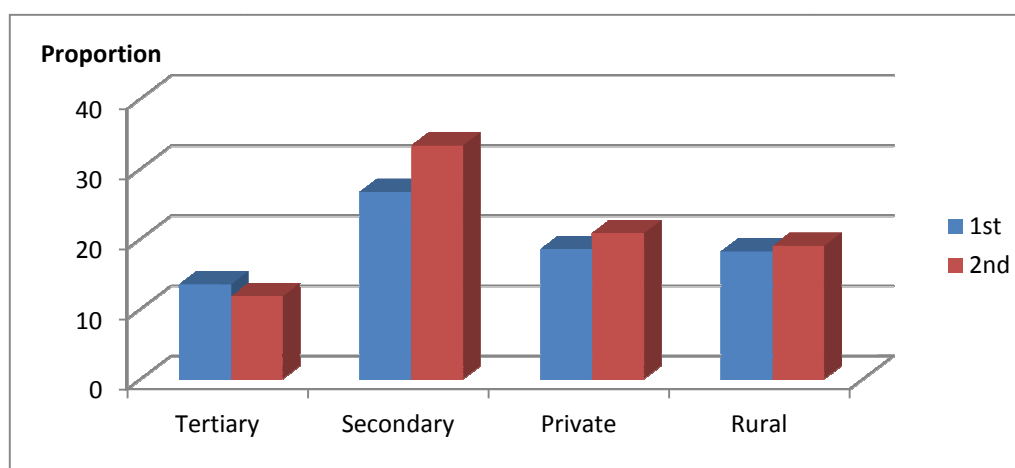
Figure 4.36. Comparison of 1st and 2nd Rotation, Ratios of Additional Comments Negative Themes

Figure 4.36. Shows changes in sector proportions of *negative* comment themes between 1st and 2nd rotations.

Of the third rotation GRNs (n = 35) who responded to the opportunity to provide *further comment* 16 were coded as either *very positive* or *mostly positive* and 13 as *very negative* or *mostly negative* (Tables 4.75 and 4.76). While Figures 4.37 and 4.38 suggest there were some differences within the ratios, caution needs to be adopted in making assumptions from these data due to the relatively smaller sample sizes of the latter rotations.

Table 4.75. Third Rotation – Sector Type, Proportion of Positive Comments

Type of Sector	Total Responders	% Positive Comment
Tertiary	19	47.4%
Secondary	5	0%
Private	4	25.0%
Rural	7	85.7%
Total	35	45.7%

Note: Includes both *very positive* and *mostly positive* comments and shows the proportion of all GNP participants within each sector type expressing positive comments in their third rotation.

Figure 4.37. Comparison of 1st, 2nd and 3rd Rotations, Ratios of Positive Themes in Relation to Additional Comments

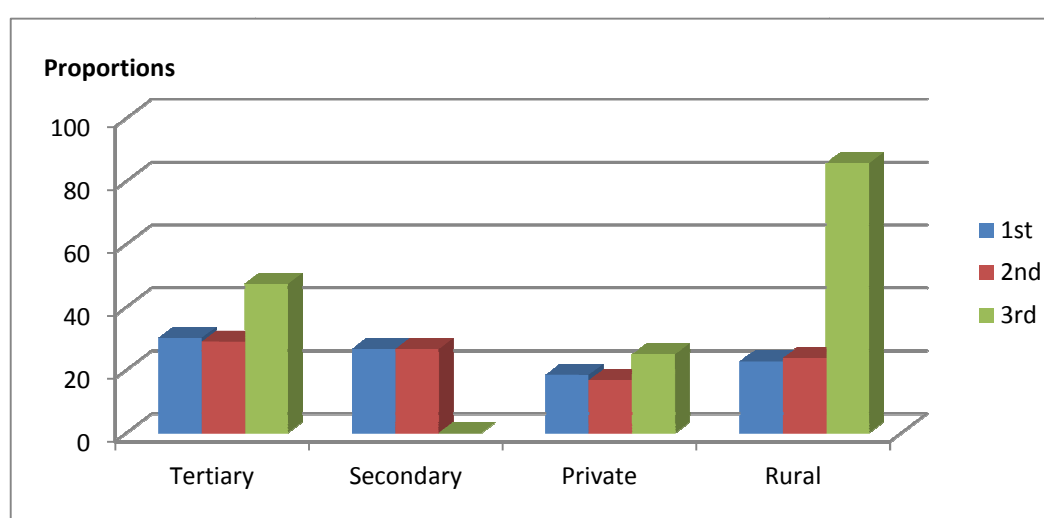


Figure 4.37. Shows changes in sector proportions of *positive comment* themes between 1st, 2nd and 3rd rotations.

Table 4.76. Third Rotation – Sector Type Proportion of Negative Comments

Type of Sector	Total Responders	% Negative Comment
Tertiary	19	36.8%
Secondary	5	40.0%
Private	4	75.0%
Rural	7	14.3%
Total	35	28.9%

Note: Includes both *very negative* and *mostly negative* comments and shows the proportion of all GNP participants within each sector type expressing negative comments in their third rotation.

Figure 4.38. Comparison of 1st, 2nd and 3rd Rotations; Ratios of Negative Themes in Relation to Additional Comments

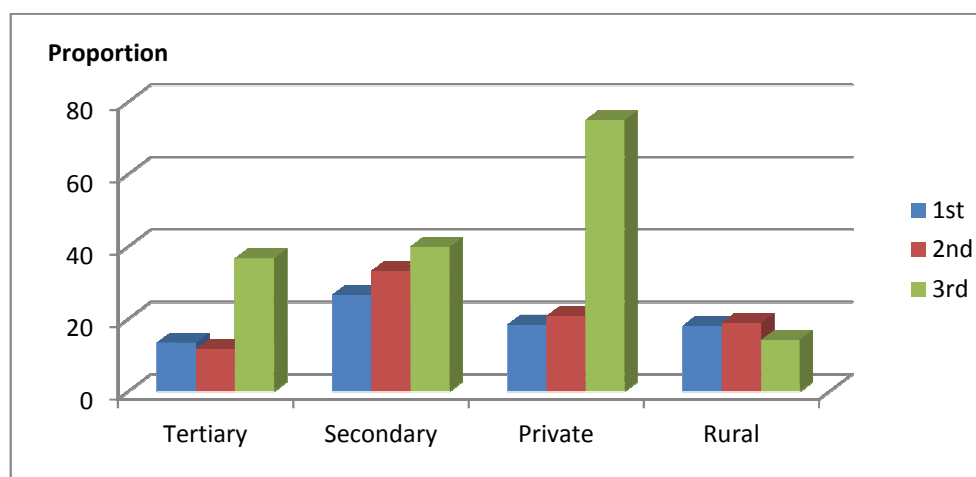


Figure 4.38. Shows changes in sector proportions of *negative comment* themes between 1st, 2nd & 3rd rotations.

4.6.4 Benefits of the Graduate Nurse Program

Respondents were asked to briefly describe what they believed were the *beneficial* components of a graduate program in facilitating their transition to the role of RN. Again, written responses were themed to quantify the components the GRNs believed to be of *benefit*. Of the 148 who responded to this question, the largest group (45.3%) indicated that *study days* were the most *beneficial*, followed by *support* (35.8%) and *educators* (20.9%). Proportions of more common themes

expressed are grouped by the employment sector to demonstrate the perceived benefits of a GNP (Table 4.77 and Figure 4.39).

Table 4.77. Benefits of GNP – Common Themes and Industry Sector

Theme	Total Responses (n = 148)	Total Response %	Tertiary (n = 87) %	Secondary (n = 14) %	Private (n = 26) %	Rural (n = 21) %
Study days	67	45.3%	47.1%	42.9%	46.2%	33.3%
Support	53	35.8%	43.7%	35.7%	26.9%	19.0%
Educators	31	20.9%	23.0%	21.4%	23.1%	9.5%
Supernumerary days	28	18.9%	17.2%	7.1%	26.9%	19.0%
Rotations	21	14.2%	11.5%	35.7%	11.5%	14.3%
Identified as GRN	12	8.1%	10.3%	7.1%	3.8%	9.5%
Mentors	9	6.1%	11.5%	7.1%	11.5%	4.8%
Orientation	7	4.7%	8.0%	0	3.8%	0
Debriefing	6	4.1%	3.4%	0	7.7%	4.8%
Grad Coordinator	6	4.1%	5.7%	0	3.8%	0
Networking	5	3.4%	3.4%	0	3.8%	9.5%
Transition	5	3.45	3.4%	0	3.8%	4.8%

Note: Totals are not given for this table as some respondents indicated more than one theme in their response so are counted within each component.

Figure 4.39. Comparison of Sector and Themes Related to Benefits of GNP

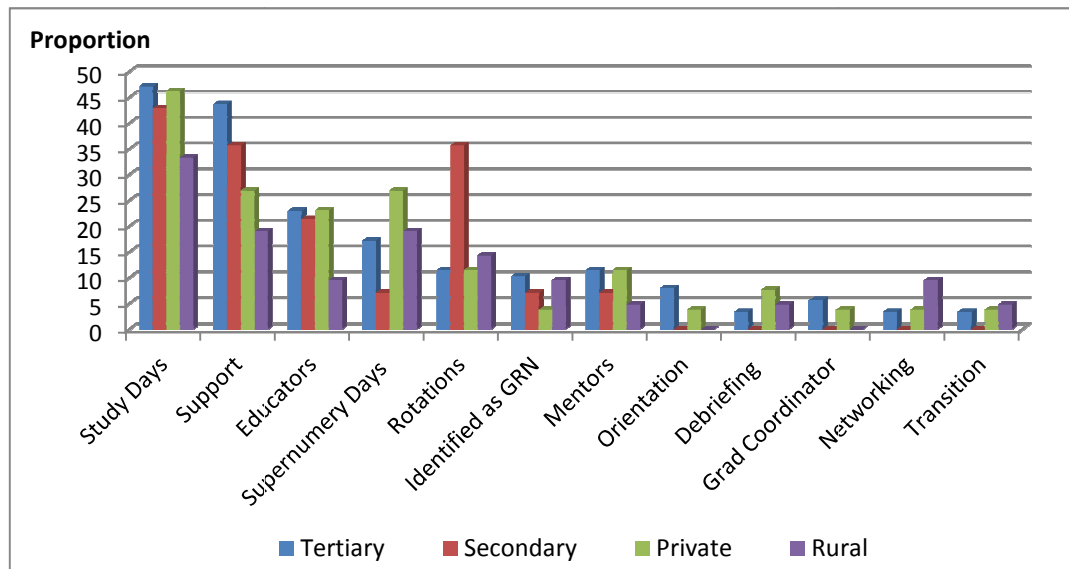


Figure 4.39. Shows proportions of themes of perceived *benefits* of GNP and organisation sector.

Respondents were asked if they believed there were any components of their graduate program they felt were *not* beneficial in facilitating their transition to the role of RN. There were 118 respondents who indicated *no*, and 50 who answered *yes*, to this question. When asked to provide details, the majority of reasons provided related to *lack of support* (36%), followed by *assignments* (32%), which included case studies respondents felt were not relevant, as well as ‘burdensome’ quality improvement projects, and a substantial clinical governance focus. A mixture of responses indicated *irrelevant* or *repetitive study days*, *staffing*, *workload* and *rotations* that were seen as non-beneficial; with each comprising a 6% (n = 3) proportion of the total *negative* responses (Table 4.78).

Table 4.78. Non-Benefits of GNP – Common Themes and Industry Sector

Theme	Total Responses (n = 50)	Total Response %	Tertiary (n = 24) %	Secondary (n = 4) %	Private (n = 11) %	Rural (n = 11) %
Lack of support	18	36.0%	29.2%	50.0%	36.4%	45.5%
Assignments	16	32.0%	20.8%	25.0%	36.4%	54.5%
Irrelevant/repetitive	3	6.0%	4.2%	25.0%	9.1%	0
Staffing	3	6.0%	4.2%	25.0%	9.1%	0
Workload	3	6.0%	4.2%	25.0%	9.1%	0
Rotations	3	6.0%	8.3%	25.0%	0	9.1%
Other	7	14.0%	29.2%	0	0	0

Note: Totals are not given for this table as some respondents indicated more than one theme in their response so are counted within each component.

The GRNs were asked how they believed the transitional program could be improved. Of the 168 respondents participating in a GNP, 47.8% either believed *no* improvement was required or did not give a response. Only slightly more (52.2%) believed there were ways the GNP could be improved. The most common theme for improvement was (more) *support* (38.7% of the total *improvement* themes) which included general, clinical and SDN support. *Program structure* (28.8%) was the next most common, with some suggesting fewer rotations, and as many proposing more; and several advocating an increase in the program length to allow additional rotations to the more specialised areas (Tables 4.79 and 4.80; and Figures 4.40 and 4.41).

Table 4.79. Improvements to GNP – Total by Industry Sector

Theme	Total Responses (n = 111)	Total Response %	Tertiary (n = 57) %	Secondary (n = 13) %	Private (n = 24) %	Rural (n = 17) %
No response	57	33.9%	43.6%	18.8%	14.3%	26.1%
No improvement	14	8.3%	6.9%	18.8%	7.1%	8.7%
Some improvement	97	57.7%	49.5%	62.5%	78.6%	65.2%
Total	168	100%	100%	100%	100%	100%

Table 4.80. Improvements to GNP – Industry Sector and Common Themes

Theme	Total Responses (n = 111)	Total Response %	Tertiary (n = 57) %	Secondary (n = 13) %	Private (n = 24) %	Rural (n = 17) %
Support	43	38.7%	35.1%	38.5%	37.5%	47.0%
Program structure	32	28.8%	31.6%	23.1%	25.0%	29.0%
Mentor training	17	15.3%	19.3%	15.4%	8.3%	18.0%
Communication	13	11.7%	10.5%	15.4%	12.5%	12.0%
Education	11	9.9%	15.8%	15.4%	4.2%	0
Networking	10	9.0%	12.3%	7.7%	4.2%	5.9%
Study Day relevance	8	7.2%	5.3%	7.7%	4.2%	18.0%
Debriefing	5	4.5%	5.3%	0	4.2%	5.9%
Feedback	3	2.7%	1.8%	0	8.3%	0

Note: Totals are not given for this table as some respondents indicated more than one theme in their response so are counted within each component.

Figure 4.40. Comparison of Sector and Proportions for GNP Improvement Themes

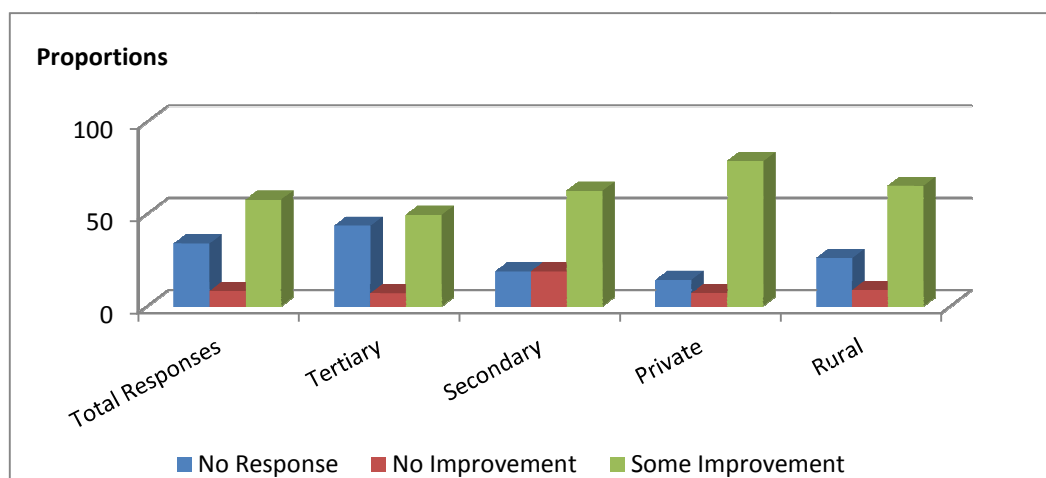


Figure 4.40. Shows organisation sector and proportions of responses related to GNP improvement.

Figure 4.41. Comparison of Sector and Themes Related to GNP Improvements

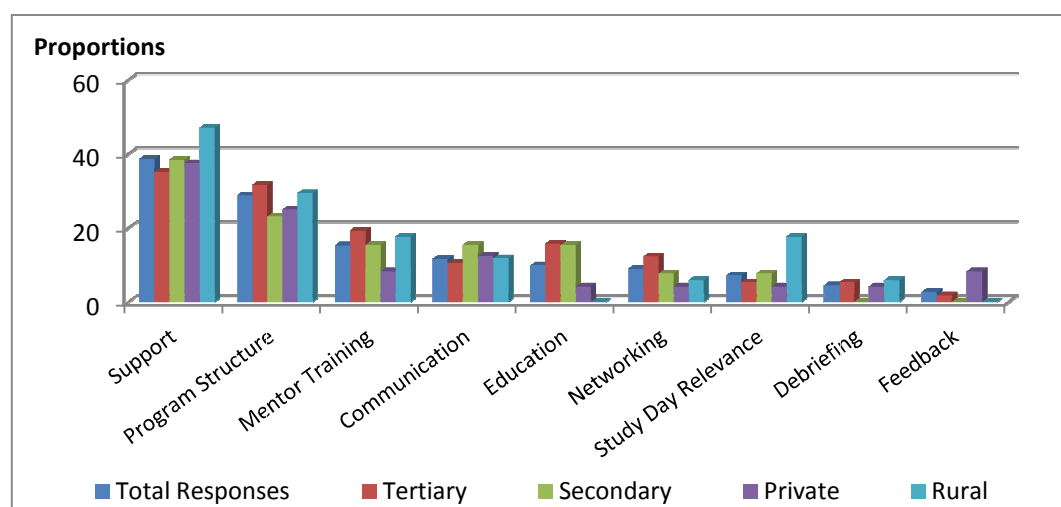


Figure 4.41. Shows proportions of themes by organisation sector and GNP improvement suggestions.

4.6.5 Formal Evaluation of Graduate Program

Four response options were offered for the question of undertaking a formal evaluation of the graduate program: *yes*, *no*, *haven't completed* (the program), or, *not applicable*. Of the 154 who responded to the question, 98 respondents (63.6%) had

completed a formal evaluation of their graduate program, 32 respondents (20.8%) had not, and 24 respondents (15.6%) had yet to finish their program (Table 4.81).

Table 4.81. Formal Evaluation of Graduate Program

Response	Total Responses (n=155)	Total Response %	Tertiary (n=89) %	Secondary (n=15) %	Private (n=25) %	Rural (n=22) %
Yes	99	63.9%	59.6%	64.0%	64.0%	72.7%
No	32	20.6%	19.1%	13.3%	28.0%	27.3%
Haven't finished	24	15.5%	21.3%	16.7%	8.0%	0
Total	155	100%	100%	100%	100%	100%

Note: Haven't Finished = the GRNs who indicated they had yet to finish their GNP, so had not yet evaluated their program.

Two responses were not included in this data as it was evident that they were both direct-entry participants into the Graduate Diploma in Perioperative Nursing that has an entirely separate governance and assessment structure to the GNP.

4.7 Graduate Nurse Program Influence on Career Pathway

Questions relating to the GRN's intentions following their transitional program were used to determine the impact their GNP experiences may have had on their future career choices.

4.7.1 Career Pathway Following Transition

Through a series of closed questions respondents were asked to indicate their career pathways following the program. The greater majority (56.4%) had stayed in either the last specialty rotation of their program, or returned to one they had experienced earlier in their program; only 14.7% indicated they had moved to a different organisation (Table 4.82 and Figure 4.42).

Table 4.82. Career Pathway Following Transition Program

Response	Total Responses (n = 150)	Total Response %	Tertiary (n = 86) %	Secondary (n = 16) %	Private (n = 25) %	Rural (n = 23) %
Last rotation	49	32.7%	34.9%	31.3%	24.0%	34.8%
Earlier rotation	40	26.7%	27.9%	25.0%	32.0%	21.7%
Same org, diff unit	28	18.7%	24.4%	18.8%	4.0%	13.0%
Diff org, similar unit	13	8.7%	5.8%	0	20.0%	13.0%
Diff org, diff unit	9	6.0%	0	18.8%	8.0%	17.4%
Other	2	1.3%	1.2%	0	4.0%	0
Non-nursing	2	1.3%	2.3%	0	0	0
Unemployed	7	4.7%	4.6%	0	0	0
Total	150	100%	100%	100%	100%	100%

Note: 'Response' column indicates where the GRN had specified was their intended career pathway following their GNP, for example, *Last rotation* means they stayed in their last specialty rotation of the program.

Diff = different; org = organisation.

Figure 4.42. Career Pathway Following Transition Program

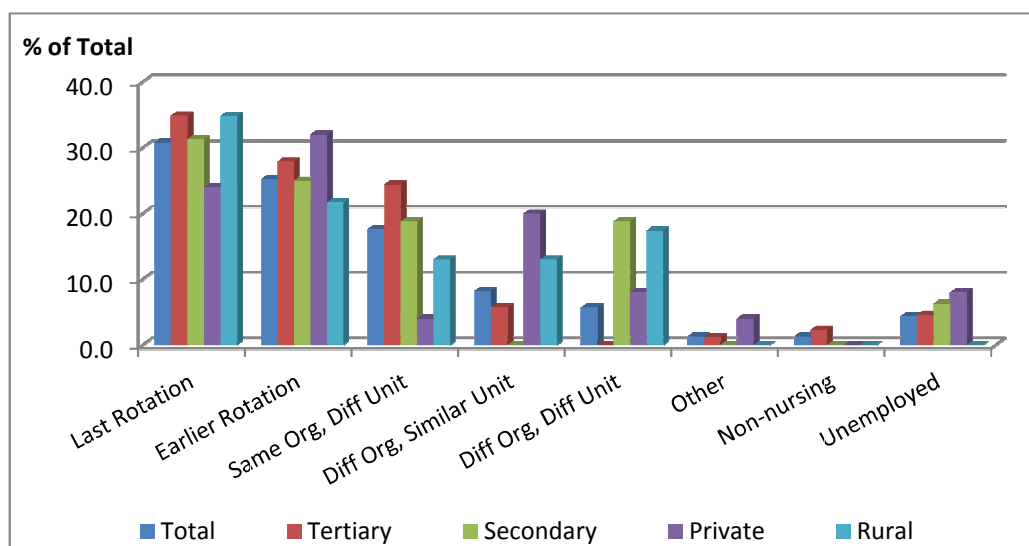


Figure 4.42. Demonstrates the proportions of graduate career pathway choices and Sector type.

Included in the data were three GRNs from Mental Health and two each from Aged Care and Community, some data of which has been included in other base

data, for example, *tertiary* Mental Health and *rural* Community; all seven remained within those specialties. Six percent of respondents were no longer in nursing; of those, 1.3% of were in non-nursing employment and 4.7% were unemployed.

Respondents were also asked to comment on how they felt that their graduate year experiences had influenced their choice of career path. The majority of responses were considered *positive*, particularly those from the rural sector (Table 4.83 and Figure 4.43). There were a few (n = 5) who indicated the Global Financial Crisis (GFC) had influenced the organisation's ability to offer them a position at the end of their program; this was most often in the private sector.

Table 4.83. GNP Influence on Career Pathway Themes

Theme	Total Responses (n = 123)	Total Response %	Tertiary (n = 74) %	Secondary (n = 13) %	Private (n = 18) %	Rural (n = 17) %
Positive experience	80	65.0%	73.7%	69.2%	44.4%	93.8%
Mixed experience	20	16.3%	10.5%	7.7%	11.1%	0
Negative experience	6	4.9%	7.9%	15.4%	11.1%	6.3%
GFC influence	5	4.1%	1.3%	7.7%	16.7%	0
Metro to rural	2	1.6%	2.6%	0	0	0
Pregnant	2	1.6%	1.3%	0	5.6%	0
Resigned	2	1.6%	2.6%	0	0	0
Other	3	2.4%	1.3%	0	11.1%	0
Total	123	100%	100%	100%	100%	100%

Figure 4.43. GNP Influence on Career Path Choices

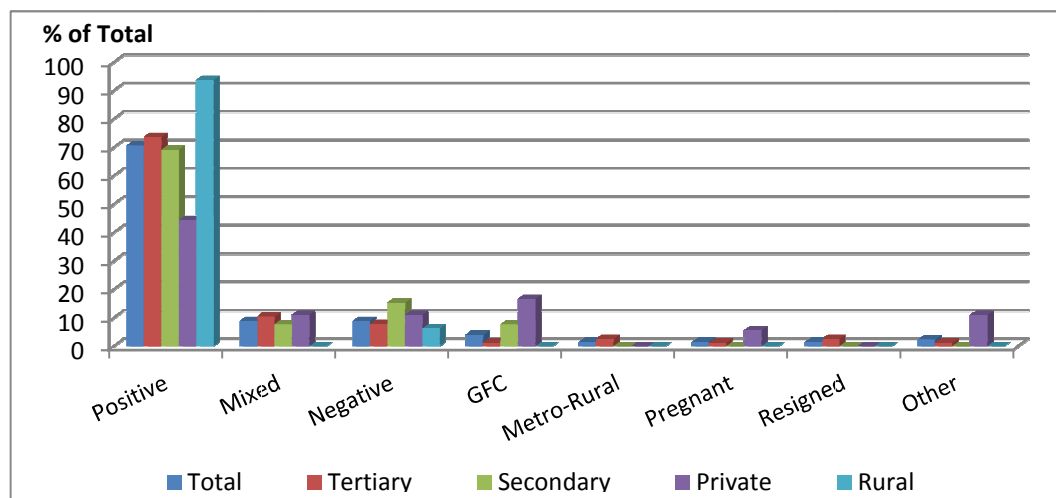


Figure 4.43. Demonstrates the sector type and the proportions of career pathways.

4.7.2 Influence of a Permanent Contract on Choice of Employment

Respondents were asked a series of questions related to an offer of a permanent contract at the commencement of their GNP, and related influences on their choice of venue for their program. Of the 165 who responded to the questions, 133 (80.6%) indicated they had been offered a permanent contract at the beginning of their program, and of these, 40.6% signified the offer had influenced their choice of sector for their transition program; 53.4% indicated that it had no influence, and the remainder did not specify either way. A further 9% indicated they had not been offered a permanent contract at the start of their employment but were offered permanency within the first year.

4.7.3 Five-year Professional Vision

Respondents were asked to indicate where they saw themselves professionally in five years' time. At least one-third saw themselves in a promotional position, with 27.5% as a Level-2 RN, 3.6% as a Senior Registered Nurse (SRN Level-3 and

above) or a Nurse Practitioner (SRN Level-7). Many planned further study (21.2%), and 2.1% planned to study for a medical degree. Almost 10% intended to pursue midwifery and 6.7% planned to work in rural areas. Equivalent proportions (3.6%) proposed to continue in either perioperative nursing or the critical care areas of ICU, coronary care, or emergency medicine. Only small numbers indicated their preference for Mental Health (2.6%) and Aged Care (2.1%).

4.8 Registered Nurse Integration, Final Comments

The final open-ended question of the survey asked the respondents if they had any further comments that may help identify how they felt about their integration into the workforce as a RN. Once more, the written responses were grouped according to the degree of *positive* or *negative* contexts, and included a *mixed* response. The individual groupings were compared in relation to the type of health care sector that the GRN worked in. There were 78 responses in total with the majority (37.2%) grouped as *positive*, and 26.9% *negative*. Where there were found to be a combination of both *positive* and *negative* comments (24.4%) the code of *mixed* was applied (Table 4.84 and Figure 4.44). The *other* comments (n = 7) were related to staffing, work-life balance and a single comment related to bullying.

Table 4.84. Further Integration Comments Related to Sector Affiliation

Theme	Total Responses (n = 78)	Total Response %	Tertiary (n = 40) %	Secondary (n = 11) %	Private (n = 14) %	Rural (n = 8) %	Other (n = 5) %
Positive	29	37.2%	47.5%	25.0%	33.3%	33.3%	0
Negative	23	26.9%	17.5%	16.7%	40.0%	66.7%	60.0%
Mixed	19	24.2%	25.0%	33.3%	20.0%	33.3%	20.0%
Other	7	9.0%	10.0%	16.7%	0	0	20.0%
Total	78	100%	100%	100%	100%	100%	100%

Note: Other 'Sector' includes GP and Community; Other 'Further Integration Theme' includes staffing, work-life balance and bullying and harassment.

Figure 4.44. Further Integration Comments Related to Sector Affiliation

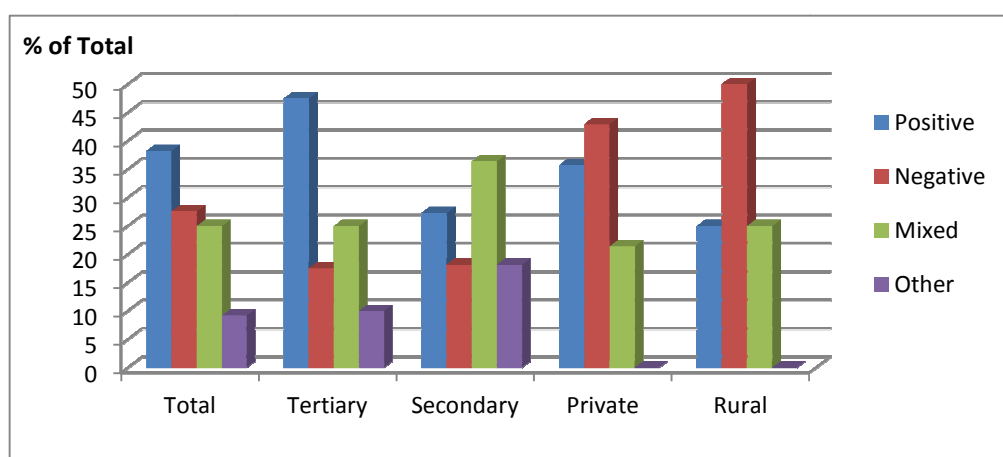


Figure 4.44. Demonstrates the proportions of further integration themes related to sector affiliation. Other 'Sector' includes GP surgeries and Community nursing.

The final *integration* comments were further interrogated to determine what relationships there were within the codes and the undergraduate university the GRN had attended for their nursing program (Table 4.85 and Figure 4.45).

Table 4.85. Further Integration Comments Related to Undergraduate University

Theme	Total Responses (n = 78)	Total Response %	Uni B (n = 35) %	Uni A (n = 28) %	Uni C (n = 10) %	Uni D (n = 3) %
Positive	29	37.2%	34.3%	46.4%	30%	33.3%
Negative	21	26.9%	22.9%	21.4%	40%	67.7%
Mixed	19	24.2%	31.4%	17.9%	30%	0
Other	9	11.5%	11.4%	10.7%	0	0
Total	78	100%	100%	100%	100%	100%

Note: Two respondents are not included in the university data as they indicated they were non-university graduates. Both were in the 50-plus age group and both gave a negative response and are included in the total. 'Other' includes a variety of comments unrelated to integration.

Figure 4.45. Further Integration Comments Related to Undergraduate University

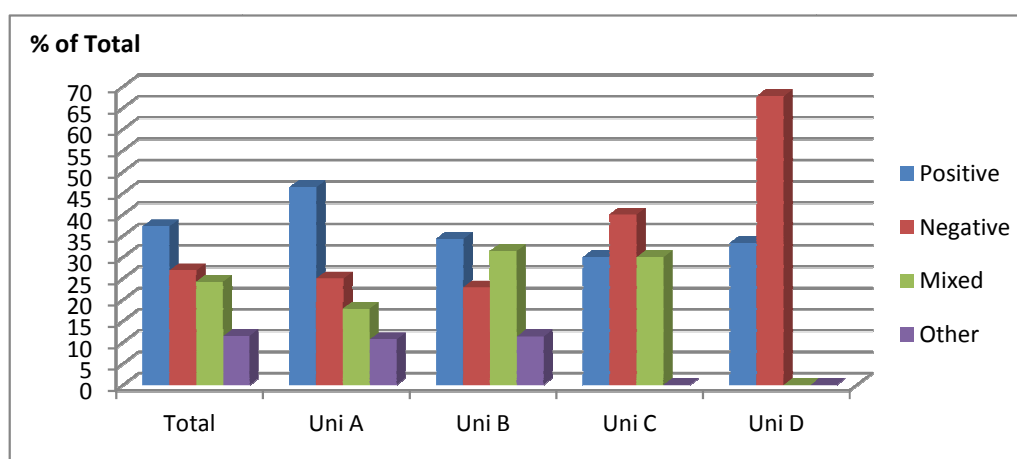


Figure 4.45. Demonstrates the proportions of further *integration* themes and affiliated university attended for undergraduate nursing program. 'Other' includes comments unrelated to integration.

As the total number of respondents from University D responding to the question regarding further integration comments was very small (n = 3) it would be imprudent to draw any conclusions from the data for that university.

4.9 Web-based Survey of Graduate Program Coordinators

When analysing the results of the newly graduated RN survey questionnaire, it became evident that elements of some questions may have been misinterpreted, such as when asked the number of graduate nurses working in a unit at the same time as the respondent. For this reason, this data has not been included in the previous section. In addition, data related to hours of work per week that would be considered full-time, suggested that the closed responses made available in the GRN survey may have been too restrictive. The secondary survey administered to the graduate nurse coordinators was incorporated, as per the mixed methods framework, to corroborate these aspects of the primary population responses. In addition, and to provide further information related to the graduate nurse transition programs within the different types of healthcare sectors, qualitative data was elicited to provide context surrounding GNP guidelines and recent, or planned amendments to their graduate nurse transitional programs. These data are presented in Appendix F.

Questions were asked that related to:

- the type of healthcare sector the respondent was from;
- the length of their graduate transition programs;
- the number of rotations within their transition programs;
- how many graduates would be assigned to an individual unit;
- the ratio of graduates to RNs on a typical ward or unit;
- the number of hours per week that the GRNs were typically contracted;
- levels of support available for the GRNs; and,
- number of graduates for which each support person was responsible.

4.9.1 Graduate Nurse Coordinators Survey - Quantitative Data

A total of 21 respondents of a possible 48 returned data, a response rate of 42%. One response appeared to be from a current graduate and so was withdrawn from the sample, giving a total of 20 graduate nurse coordinator respondents. The quantitative data indicates the sector origin of the responders; the length of the graduate program; number of specialty rotations; hours worked; maximum number of graduates per unit; graduate to RN ratio in a unit; and, the number of hours considered to be full-time (Tables 4.86 through to Table 4.90).

Table 4.86. Number of Organisations Indicating Graduate Program Length

Program Length	Metro Tertiary	Metro Secondary	Metro Private	Large Rural	Small Rural	Mental Health
6-12 months						1
12 months	1	4	1	3	2	
12-18 months	3		1	2		
24 months	2					
Total	6	4	2	5	2	1

Table 4.87. Specialty Rotation Length and Number by Organisation Sector

Number of Rotations	Metro Tertiary	Metro Secondary	Metro Private	Large Rural	Small Rural	Mental Health
2x3 + 1x6 months		2				
2-4x3 months						1
2x6 months + options	4	2	1	1		
4x6 months	2					
3x4 months			1		1	
Various - 7 rotations				4	1	
Total	6	4	2	5	2	1

Note: 2x3 + 1x6 months indicates there are two rotations of three months in length plus one rotation of six months.

Table 4.88. Full-time Hours by Organisational Sector

Full-time Hours	Metro Tertiary	Metro Secondary	Metro Private	Large Rural	Small Rural	Mental Health
40 per week	5	2		4	1	
38 per week		1	1	1		1
37 per week	1	1				
35 per week			1			
32 per week					1	
Total	6	4	2	5	2	1

The 32-hours per week indicated as full-time for the small rural sector is problematic as this amount of time is generally considered to be part-time hours. It is possible that the respondent was providing hours for a current graduate and did not fully understand that the request for what would normally be considered full-time hours.

Table 4.89. Number of Graduates per Unit by Organisational Sector

Number GRNs/Unit	Metro Tertiary	Metro Secondary	Metro Private	Large Rural	Small Rural	Mental Health
Max 7	1					
Max 5	3					
Max 4	1		1	3		
Max 3	1	3				
Max 2		1	1	2	1	1
Max 1					1	
Total	6	4	2	5	2	1

Note: This number may, or may not include Graduate Enrolled Nurses as well as GRNs in the 'Total Graduates'.

Table 4.90. GRNs per Unit and Ratio to Other RNs

GRN : RN Ratio	Metro Tertiary	Metro Secondary	Metro Private	Large Rural	Small Rural	Mental Health
1:1		1			1	
1:3	1	2	1	2		
1:4		1		3	1	1
1:5	3					
1:6	1					
1:10	1		1			
Total	6	4	2	5	2	1

Note: 1:1 means there is one GRN to one other RN in a unit at a time; 1:3 means there is one GRN to three RNs.

4.9.1.1 Graduate Support

Various categories of support roles were identified in the web-based survey and the responders were asked to indicate the Australian Nursing Federation Award (Australian Nursing Federation [ANF], 2010) salary level to determine the seniority of the personnel, and the number of graduates they were primarily responsible for. The majority (68%) of Graduate Coordinators were SRNs, with all tertiary, two of three secondary, one private and three of five large rural organisations indicating thus. One of the large rural and the remaining secondary and private organisations indicated the presence of a Staff Development Educator (SDE) at the same SRN level. A large rural, and one small rural, indicated the SDE to be Level-2, a level normally affiliated with the SDN position. All except the large rural organisation with the Level-2 SDE indicated the presence of a Level-2 SDN. It is possible that the role title of the large rural SDE may be incorrectly described by either the respondent, or the organisation. Only three tertiary hospitals indicated deploying a *clinical coach*, a relatively new role in the process of being assessed with a view to formalising the role in the future. It was evident, however, that two of these three

tertiary hospital respondents were from the same organisation. The *clinical coach* is discussed further in the following chapter. All respondents indicated the use of the *preceptor* role, with the majority (53%) performed by Level-1 RNs and only two indicating a Level-2 RN was the preferred designation.

4.10 Summary

This chapter has presented the results of both the primary postal survey questionnaire that was administered to the newly graduated RNs, and the second smaller, web-based survey of the graduate nurse coordinators. In the following chapter, the primary data from the newly graduated RN survey questionnaire, and the data from the web-based survey of the graduate nurse coordinators have been further integrated to provide a comprehensive description of graduate RN transition programs within a Western Australian context.

CHAPTER 5: DISCUSSION

5.1 Introduction

The previous chapter presented the research findings and briefly commented on these in general. This section adopts a detailed approach to these findings to provide deeper insight into contemporary practice in graduate nurse transition within the Western Australian context. The research questions framing this study are:

1. In what ways are novice Registered Nurses' experiences different today from those reported in the 2000 University of Western Australia study?
2. From the Graduate Registered Nurse's perception, how efficacious are graduate nurse programs in helping novice nurses to make the transition to competent practitioner?
3. What perceived effect does the Graduate Nurse Program have on predicted career longevity of newly graduated Registered Nurses?

The first section (5.2) of this chapter presents demographic information giving insight into the cohort. Such data is used to comment on relationships between age groups, gender, prior experience, undergraduate institutions, transitional choices and perceptions of transitional experiences. This was important to consider as the UWA (2000) survey questionnaire did not elicit data related to these elements, and such data has provided broader contrasts in relation to the newly graduated RN's experiences.

The second section (5.3) examines comparative data between the UWA and the present study. This section answers the first research question and considers the types of healthcare sector the respondents were employed in; the specialties within

those organisations that the GRNs were assigned for their GNP rotations; the level of competence, confidence and support the GRNs perceived they had gained from their GNP; the length of supernumerary time the GRN was allocated before being expected to take on a full patient load; their participation in night shifts; and the perceived influence the undergraduate nursing program had upon the GRN's transitional experience.

The third section of the chapter (5.4), the backbone of the study, comments on the efficacy of the graduate nurse program, and as such, answers research question two. Information considered relates to contextual relationships which include program structure, such as specialty rotation length, number, and contracted hours worked for each rotation; support levels from individual designations within the specialty; and descriptions of what the GRNs perceived were benefits, problems and stressors of each specialty rotation. Information gained from the newly graduated nurses was supplemented by that acquired from the graduate nurse coordinators. This section also includes a summative comment on the value of participating versus not participating in the GNP.

The final section (5.5) considers the career pathways that were selected following the transition program and answers research question three. The perceived influences of the GNP on pathway selection are also examined. Findings are significant in the sense that explanations provided may have a bearing on how the GNP is managed to address those areas that are less favoured. This section is followed by a brief chapter summary.

5.2 Demographics

To provide a basis for determining the current status of the Western Australian graduate nurse workforce, it was logical to elicit information related to age and gender in the current research, particularly given the aging and predominately feminine structure of the overall nursing workforce. In addition, prior experience in the health workplace would intuitively suggest that a novice RN may adapt more quickly to their new RN role. Consequently, and to enrich the research data, these elements were incorporated into the newly graduated RN survey questionnaire and, as expected, did provide interesting comparisons and relationships within many of the variables.

5.2.1 Age Groups

A recurrent concern for the future of the nursing workforce is the ageing of its population. There is a general consensus that a focus on recruitment of newly graduated nurses will partially resupply the workforce as older nurses retire. However, in the current study, almost half the respondents (48%) were aged 30-years or older, and of these, more than half were aged 40-years or older, thus casting doubt on the replacement strategy. A large proportion (70%) of the 40-year old-plus cohorts indicated they had previous work experience as an Enrolled Nurse (EN), Assistant in Nursing (AIN) or Patient Care Assistant (PCA), compared with only 19% of the 29-year old or less age brackets. In a review of workforce modelling, Segal and Bolton (2009) found that participation of the older female in the nursing workforce had increased over the past few decades. They attribute this to a reduction in family size, and hence less time taken out for parenting; increased social supports for the working family; and, a greater number of women who were returning to the

workforce following initial child-rearing. These events may be factors contributing to the increasing older age-groups graduating as RNs as found in the current study.

Although the older graduate will have fewer years to give to the nursing profession, they should still be considered a worthwhile source of recruitment, especially considering that GRNs with prior experience as an EN are more likely to have a repository of knowledge and experience to assist in the transition to proficient practice (Gaynor, et al., 2007). An EN's conversion to the degree level of education also consolidates the RN-to-patient ratio to improve patient outcomes.

5.2.2 Gender

The Australian Institute of Health and Welfare (AIHW) recorded the national ratio of female to male nurses for the year 2008 as 90.3% females to 9.7% males, and for Western Australia (WA) as 90.9% females to 9.1% males. These data indicate that WA is marginally behind the national trend of improving the attraction of more males to nursing as a profession (AIHW, 2010b). In the current study, and as expected, females formed the greater majority of the gender mix (93.6% females to 6.4% males), but to a greater degree than is recorded for the State proportion.

In their submission to the National Review of Nursing Education in Australia, one of the recommendations made by the NBWA (2001) was to intensify the promotion of nursing, as a potential career, to males. The intent was to increase the proportion of males within the nursing workforce and to overcome the perception of nursing as a purely feminine profession; with an overall aim behind the strategy to increase the potential pool of nurse recruits and further increase nurse numbers. Duffield, et al. (2006) make the salient point that the reliance on mainly female

recruits to the nursing workforce is not sustainable. These authors warn that if the profession does not increase attempts to sign up more males to nursing as a career, then the industry is essentially halving its potential with regards to enlisting the projected number of nurses required to meet future workforce needs. In its '*Inquiry into nursing*' the Senate Community Affairs Committee (2002) *Recommendation 52* equally urged stronger marketing of nursing to males as a potential career. The fewer number of males in this study suggest that despite these recommendations, minimal gain has occurred in the past decade, and considerable effort is still required to encourage more of their gender into the Western Australian nursing profession.

5.2.3 Prior Experience

Data were collected from the newly graduated nurses to elicit what health related work experience they had prior to becoming a RN. This information gave insight into how this experience may have assisted the respondents in their transition from novice to proficient nurse, and how this might have influenced their career pathways.

Almost half (48%) of the respondents indicated that they had prior health related work experience as an EN or AIN and a further 17% had prior experience as an Orderly or PCA. Of the 58 respondents who indicated that they had prior experience as an EN, 40% did not participate in a formal transition program, and of these, half had returned to the unit that they were previously employed in. Among those respondents who did participate in a GNP, there was a much stronger agreement from those who had prior EN experience that the GNP had helped them feel more confident and competent, and that their undergraduate nursing education had prepared them adequately for their RN role, suggesting that prior healthcare

experience does aid the transition to the RN role. Despite this finding, there was also consensus amongst the EN experienced group that more practical skills training was needed during their undergraduate education prior to graduating. Kilstoff and Rochester (2004) advised against considering the newly graduated RN who had prior EN experience as being more practice ready than their counterparts, due in particular, to the increased complexity and the requisite for much greater critical thought processes in the RN role, a concept that was also supported in later research by Cubit and Leeson (2009). This may suggest that specialty units accepting GRNs who have prior EN experience should take into account the differences between the two roles, and regard the new GRN as they would any novice nurse new to the profession.

Western Australian universities and industry had recently introduced a model whereby nursing students, having successfully completed their second year of studies, were able to apply to register with the NMBWA as an EN. This practice was designed to assist the fledgling nurse, fiscally and in skills development; as well as assisting health care organisations in recruitment of new staff. This may account for the considerable number of graduate nurses with prior experience as an EN. The current study did not distinguish the number of years of previous healthcare experience, so it is feasible that those respondents who reported some transitional issues, despite previous experience, may be those with substantially less years of prior experience than the respondents who reported fewer issues. Since the amalgamation of the Australian States' and Territories' nursing registration boards, this option is no longer offered, as the NMBA now requires a nationally endorsed program of training for all EN registrations. Second-year Student Nurses still have the option to register at the level of an AIN if they desire paid nursing work and additional clinical experience during their undergraduate years.

5.2.4 Undergraduate Nursing Program

As the UWA (2000) survey questionnaire was conducted at a time when only two Western Australian universities offered an undergraduate nursing program, the source of tertiary nursing education was unlikely to be considered a relevant factor in the graduate nurse transitional experience, and was not recorded. Since that time, two more universities have graduated RNs. While each university's curriculum and content must meet minimum requirements to be accredited by the NMBA, there are often some differences in terms of program structure, as well as the duration and nature of clinical practice. Eliciting information from the GRNs in regards to the university they attended for their undergraduate nursing program aided in determining if there were any apparent differences in their transitional experiences, and future career intentions that might be associated with a particular academic institution.

The largest group of respondents indicated that they had attended University B as a nursing undergraduate ($n = 99$), followed by University A ($n = 68$); far fewer attended University C ($n = 24$); with the smallest group from University D ($n = 10$). The Schools of Nursing at both University B and University A have been established the longest, are consequently larger, and therefore able to offer more undergraduate nursing places, hence the greater proportions are understandable.

5.2.4.1 Participation in a Formal Transition Program Related to University

Of the total survey questionnaire respondents, 82% ($n = 168$) indicated that they had participated in a formal transitional program. University D had the largest proportion (90%) of nurses graduating from that university, who participated in a GNP; followed by University C (87.5%); University B (84.8%); and, the least

proportion of nurses graduating from a particular university to participate in a GNP was from University A (76.5%). It is possible the lower rates of participation in a GNP by nurses graduating from University A and University B may be due to the larger number of non-participants who had converted from an EN to RN choosing the more established universities for their conversion.

Of the 17.6% (n = 36) RNs who chose not to do a formal program, 64% had prior experience as an EN and a further 16% as an AIN or equivalent. More than half the respondents were aged 40-years and above, and all except one were female. The majority of respondents who did not participate in a GNP returned directly to the unit they had worked in prior to graduating. Other reasons given for not participating in a GNP were to enter into a Midwifery Graduate Program (n = 4) and maternity leave (n = 3). Eleven percent of respondents cited that they did not participate in a GNP because they required part-time work, with three quarters of these from University B. The perception that part-time work should exclude participation in a transitional program is of concern, as most organisations do offer the opportunity for GRNs to work less than full-time hours. This is discussed further in Section 5.4.3.2. Of those 11% requiring part-time work, three respondents recorded their current area of employment as a General Practice. Two respondents indicated the GNP had not appealed to them; one each from University A and University B; both these respondents had prior health care experience as an EN and AIN; one indicated current employment in rural health and the other in community care. The two respondents who indicated they had not continued with nursing as a career were each from University A and University B. Two respondents indicated they had difficulty finding employment as a RN as a result of having not done a GNP, which suggests that participation in a GNP is valued by employing agencies.

5.2.4.2 *Current Employment Sector Related to University*

The greatest proportion of graduates who chose to work in the tertiary sector was from University A (63.5%); and the largest ratio who chose the private sector for employment was from University D (44.4%). As their School of Nursing is located within an area where the closest employing organisation is a private facility, this large proportion of the University D graduates choosing to work in private healthcare is understandable. The remaining three universities have rural campuses that are in addition to their metropolitan sites. While the relationship of rural employment and university site attended is not able to be discerned from the data collected for this research, the data do indicate the largest proportion of respondents choosing the rural sector were from University A, followed by University B. The largest proportion choosing Mental Health was from University C; and the largest proportion of respondents choosing secondary hospitals were from University D. The data do not allow any interpretation of relationships between the individual universities' clinical placements and graduate preference for transitional program, but further exploration into possible links would be interesting.

5.3 **Comparative Data**

RQ 1: In what ways are novice Registered Nurses' experiences different today from those reported in the 2000 University of Western Australia study?

The comparative data for this research were primarily from the postal survey questionnaire administered to the newly graduated RNs in 2010, and that were based upon those of the UWA (2000) study. In the current research, of the population of 858 nurses who graduated and registered with the NMBWA as a RN for the first time in 2008, 24% (n = 204) responded to the questionnaire. Of that sample, 82% (n =

168) indicated that they had participated in a formal transitional GNP. This was a similar number of respondents to that used in the UWA (2000) study (n = 170). Consequently, in terms of sample size, it has provided a strong comparative base with which to answer the first research question.

The UWA (2000) study was administered to participants in public hospital graduate programs, consequently, new graduate RNs who either did not undertake a formal transitional program, or who transitioned in other areas, such as private, interstate, overseas, or were no longer in nursing, may not have been included in the data collection. As such, the UWA (2000) study might have been limited in the capture of all potential subjects. The current study included *all* nurses graduating from a university and registering with the NMBWA in 2008. This allowed the inclusion of the wider population and enabled greater understandings of those who either chose not to participate in a formal program, or who were no longer in nursing. There is also a larger population of newly graduated nurses in the current study, as recent years have seen more aggressive marketing of both the public and the private health industries in terms of recruiting nurses, and in particular, graduate nurses (N³ET, 2006). One aspect of improving nurse numbers is to focus on the novice nurse at the commencement of their career. Positive experiences at this early stage of a nurses' career have been shown to encourage longevity within the profession (Reeves, 2007).

5.3.1 Health Sector Employment Type

To elicit the type of organisation chosen for the newly graduated nurse's initial employment, a preliminary question was asked regarding the respondents' employment type at the time of the survey. The number of choices in the UWA

(2000) study was expanded for the current research from four to eight, so that a more clear illustration of where most graduates chose to work would be gained. The fact that the UWA (2000) study did not consider Mental Health, Aged Care or Rural Health as distinct fields of employment may have been a product of how the study instrument was administered, that is, it was distributed to GRNs within current programs at public metropolitan hospitals. However, as these additional sectors are deemed to be in greatest need of suitable nursing workforce recruitment, they were added to the choices depicting the types of employing organisation for the 2010 research instrument. A distinction was made in both studies between the public and private sectors as, due to funding source differences, and in terms of program structure, support personnel, and contract components such as hours worked, the GRN transitional experience is likely to be impacted upon. Other modifications in the current study were to distinguish between the larger, more acute tertiary sector and secondary hospitals, as well as large and small rural, as the resources are often quite different and consequently, so too are the GRN experiences.

Considering the tertiary sector is the largest employer of health professionals within the system, it is logical that the majority of graduates (58.4%) chose to work at a tertiary hospital. Traditionally, the tertiary sector has also been able to offer the greater number of graduate program places, plus a wider variety of specialty rotation experiences. It is conceivable as well, that novice nurses choose to practice for a time within a tertiary institution to gain the acute experience that will stand them in good stead for their future career choices. Conversely, secondary hospitals had the smallest proportion (9.6%) of graduates who indicated this sector as the location for their formal transitional program. Based upon both the GRN and graduate nurse coordinator surveys, comments suggest that diminished resources, in particular

related to support and program structure, may be a significant factor influencing the graduate choosing secondary hospitals for their transitional experience.

A considerable increase in the proportion of respondents employed in the private sector was revealed in the current study (19%) in comparison to those reported in the UWA (2000) survey (5.3%). The catalyst for this may be the more intensive advertising campaigns over the past few years to enhance the recruitment of a greater number of nurses to the private sectors, necessitated by the burgeoning shortage of nurses in the workforce, as well as an increase in the size of the private health sector. Another reason for the discrepancy in the data between the two studies is that the 2000 survey was aimed at GNP's in public hospitals and, as such, was unlikely to have captured the entire graduate nurse population.

In both surveys, Aged Care was an area that few respondents had chosen to work in. Despite the overwhelming evidence pointing toward a growing need for expansion of the Aged Care nursing workforce, the sector is still seen by many as less desirable to other streams of nursing (Belardi, 2012a). Importantly, and as a result of different funding streams between levels of Government, there are continuing disparities in workplace benefits between Aged Care (Federally funded) and public healthcare (State funded), and as such, remuneration, career structure and industrial agreements are not equitable (Smith, 2012). This is despite the Senate Community Affairs Committee (2002) making several recommendations to move towards better parity and improve the image of aged care nursing. Further, there have been numerous reports over the past decade calling for greater attention to these disparate issues and for reform to meet the already critical shortfall of suitably qualified nurses in the sector (Dragon, 2009; Neville, et al., 2008; Pinch, & Della,

2001; Valencia, Hannon, & Stein, 2005). Additionally, due to the Aged Care remuneration inequity, and consequent reduction in RN employment, often the only available undergraduate supervision in these facilities is limited to the subsidiary grades of nurses such as ENs, who lack the academic background to adequately mentor the university nursing student (Neville, Yuginovich, & Boyes, 2008), and hence, suitable undergraduate clinical exposure is often limited. Measures recently announced by the Commonwealth Government will go some way towards addressing the lack of parity between Aged Care resources and general healthcare provision, including the \$1.2 billion to attract and retain healthcare workers, and improve recruitment and retention incentives (O’Keefe, 2012). While this is good news for the future of the Aged Care sector, it will take strong leadership in all healthcare sectors to facilitate progress.

5.3.2 Types of Specialty Units Worked In

Within each healthcare sector, and depending on the organisation’s size and type, specialty units may range from specific, such as perioperative, to combined, such as medical plus surgical, or multiple, that may include medical, mental health, aged care, community and frequently more, in the one specialty rotation as is often seen in either secondary or rural sites. Although Mental Health, Aged Care, and Community are included in the employment sector type, more often, they form part of an employing agency, such as a unit within, or attached to a tertiary hospital, and consequently, are also included in the components of the specialty rotations.

The UWA (2000) study did not specify specialty choices; rather, the responses to the question were free text and consequently grouped for reporting purposes. Based on these groupings and contemporary literature, respondents in the current

study were given a choice of 12 specialties to indicate the area of nursing to which they were allocated for their GNP specialty rotations. To accommodate the units with combined specialties, the GRNs were able to select multiple options; and, should they have required it, an '*other*' category was also provided, representing specialties not covered in the survey. Ten respondents indicated *other*; however, half of these were able to be reassigned to one of the specified areas, and the remaining five worked in either endoscopy suites, or rehabilitation, which may have included a range of care, including joint replacement, acquired brain injury, spinal, or stroke rehabilitation; consequently reallocation to the specified areas was not appropriate.

The two studies under consideration showed very similar ratios of specialty rotations recorded for surgical and medical units. The UWA (2000) study grouped surgical and medical specialties together (68%), and reported the specialty units only at one point in time. As the current study collected data for each specialty rotation, and distinguished medical and surgical as two separate specialties, the data showed slightly different proportions for each rotation. The current study revealed that 35.3% of respondents who participated in a GNP spent their first specialty rotation in a medical unit, and 35.8% in a surgical unit; and in their second rotation 29.9% were in a medical specialty, and 39.7% a surgical area. These data would suggest that the preferred initial rotation is to a medical or surgical specialty to allow early consolidation of nursing knowledge and skills.

5.3.2.1 *Acute Care Specialties*

In the comparative data related to the specialty rotations that the respondents worked in during their transition programs, the acute areas of Critical Care and Perioperative demonstrated the greatest change. In comparison to the UWA (2000)

study, the present research showed there was a four-fold and three-fold increase respectively in the number of graduates working in these areas. As these are highly specialised areas, and often require a different skill set to the basics learned in their undergraduate preparation, there is some doubt as to the benefit, both to the graduate and the organisation, of placing novices in these areas at the beginning of their program. It is believed by some (Duchscher, 2009; Woods & Craig, 2005) that it may be of more assistance to allow the GRN to consolidate basic skills and to gain confidence and competence in the more routine areas, and then to take on the challenge of the specialised area as a second year graduate. In response to the smaller, web-based survey, many of the graduate nurse coordinators indicated that where these areas were offered as a specialty rotation, they were usually in addition to the initial 12-month program. This would suggest consensus with the notion of later experience in the more acute areas as the preferred model. The comments from some of the graduates who were allocated to a critical care area within their first 12-months suggests that an added degree of effort was required in comparison to their contemporaries in less acute specialties, and the rotation had the potential to be a more stressful experience. However, most comments also indicated that strong support systems were in place to ensure that the novice was ably assisted in adapting to the novel environment. The following comments illustrate not only the trepidation felt by one GRN, but also the appreciation generated from a supportive unit culture:

Weekly updates on new events and policies were great. Kept everyone up to date and issues could be looked at quickly – very approachable management. Loved my work and going to work. Friendly staff with a huge knowledge base. Always someone who could answer your questions using theory and policies to back up what they said. Felt very safe as everyone used the policies – no dodgy practices. (Paediatric critical care, tertiary.)

Facing unknown situation. Patient deceased after resuscitation.
(Critical care, tertiary.)

*Excellent education sessions from SDNs (Staff Development Nurses)
and CNs (Clinical Nurses). Great support from other nursing staff.*
(Critical care, tertiary.)

Due to the specialised nursing care required, these more acute areas of patient care also necessitate additional support systems for the GRNs to ensure that they are appropriately orientated to the specialty, thus impacting upon the unit staff's resources. Despite the heightened intensity of the experience for the GRN, the potential benefits of the positive encounters experienced by them in these specialties is further demonstrated by the large number intending a future career within the critical care areas. Of those responding to the question regarding future career intentions, 13.5% of the GRNs indicated that they were already working within these areas, or were considering specialising in them, with many also intending to undertake future studies within the specialty.

5.3.2.2 *Mental Health*

In the UWA (2000) study, 9.7% of respondents recorded a specialty rotation in Mental Health nursing. In comparison, the current study demonstrated a reduction by almost half that proportion with only 5.6% denoting a rotation to this specialty. Such an outcome is concerning given that Mental Health is an area of increasing need but seemingly diminishing resources (Procter, et al., 2011). Participants who were allocated to that specialty recorded mixed experiences, with some finding the encounter difficult, referring often to an apparent lack of undergraduate preparation, and others indicating a very positive experience; as is demonstrated in the following comments from the GRN respondents:

Not trained in mental health. Limited support or teaching.

Going to an acute 'lock-up' ward on my first rotation (caused most stress). As much as it was stressful, it was also a great learning experience.

Fantastic staff at ward level, sense of learning and achievement, feeling part of the team, lots of feedback from ward staff. A suicide of a patient I was allocated to in my third week (caused most stress).

To improve the number of nursing graduates who choose Mental Health as a viable transitional program specialty, the Sector may benefit from further partnerships with other organisations to develop a more attractive package for graduating nurses, such as the current combined programs already offered that enable a combination of specialties between acute care hospitals and mental health units. Consideration too needs to be given to an increased exposure during the undergraduate clinical placements. Additionally, and to lessen the trepidation felt by the GRN when confronted with the more acute mental health conditions, it would seem a modified introduction to the less acute areas of Mental Health would be beneficial, prior to exposure to the more intense situations.

Happell (2010) draws attention to the number of reports and inquiries that have been undertaken to investigate issues related to the nursing shortfall within Mental Health, particularly since the cessation of the specialist undergraduate program some years ago, and suggests that the mental health component in the current generalist program is insufficient to ensure a suitable number of recruits to the specialty. The proposed introduction of a national undergraduate clinical assessment tool (Crookes, et al., 2010) may go some way to ameliorating this discrepancy as, to enable the student nurse to meet the required competency for registration as a RN with the NMBA, sufficient exposure to the Mental Health specialty would be necessary.

It is also likely that marketing of Mental Health nursing requires review, with a view to encouraging more graduates to consider this area as a specialty experience option. The Nursing and Midwifery Office (NMO) manages the recruitment of GRNs to the Western Australian public GNPs, as well as some private GNPs via the Graduate Nurse Connect (GNC) consortium. The website that student nurses must access to apply for these programs lists available options in the order of generalist urban programs (including public and private); WA Country Health Service (WACHS) generalist programs; and finally, the Mental Health programs (Nursing & Midwifery Office, 2012). An interesting exercise would be to re-arrange the presentation order of these program areas so that the sectors that are most in need of recruits were listed first. Whether or not the number of Mental Health applicants increased could then be determined.

5.3.2.3 *Aged Care and Community Health*

Other areas that featured minimally in terms of specialty rotations in both the UWA (2000) survey, and the current study, included Aged Care and Community Health. Given the impetus to deliver more health care within the home or community, and the ageing of the population, this is of concern. As discussed, both these areas can be either as a stand-alone sector, or a specialty within a healthcare sector.

Segal and Bolton (2009) suggest that there is a shifting focus on health care into primary and community care and on preventative, rather than reactive medicine, and warn that this change will impact upon the demand for an increase of health professionals within these specialties. The WA metropolitan health services all have *Hospital in the Home* provisions that facilitate earlier patient discharge from hospital

and provide follow up treatment and nursing care within the patient's domicile. The WA Health Department (Department of Health, 2011) describes the Hospital/ Rehabilitation/ Mental Health in the Home programs as the provision of short-term nursing care for patients that do not require constant monitoring or inpatient treatment, within the comfort of their home. The initiatives are a means of reducing the burden on acute care institutes and providing the patients with a greater degree of control over their individual care. WA's Silver Chain service (community healthcare organisation) has also recently launched a Government funded Home Hospital initiative providing nursing care and assessment to a wide range of the metropolitan population (Silver Chain, 2012) and, again, has the potential to offer further opportunity for GRN experiences.

In the current study, most community based specialty rotations appeared to be within the rural sector where, due to the size of the smaller organisations, a mixture of specialties is often required to provide a sufficient level of experience to the novice nurse. Barriers to improving recruitment to these specialties are similar to those within Mental Health and include: resistance within the sectors to take undergraduate nursing student clinical placements that would otherwise allow interest in the specialty to develop; sufficient and suitable supervisory resources to mentor both, students and graduates; lack of defined career paths; and, an image of the specialties that is not congruent with an attractive future career within the profession (Dragon, 2009; Evans, 2005; Health Workforce Australia, 2011a; Nurses Board of WA, 2006; Pinch & Della, 2001). Like Mental Health, it would appear that Aged Care and community nursing are areas that need to be given a far greater focus in nursing workforce and recruitment planning to improve the attraction and retention of a suitable cohort of nurses to these burgeoning specialties.

5.3.2.4 Rural Nursing

Rural Health in WA covers the largest area within Australia, but with only 40% of the State's population residing in its 2.5 million square kilometres (Twigg & Duffield, 2009). Access to remote communities, attracting and retaining suitable healthcare providers, and provision of appropriate resources compound the issues experienced by the rural population, as do the greater health care needs of the predominately Aboriginal populations of the more remote areas (Armstrong, Gillespie, Leeder, Rubin, & Russell, 2009).

Despite the deficiencies described in the previous section, as the transition programs evolve, more diverse programs are being offered, an important step towards recruiting to areas that are under-resourced in terms of nursing staff. One such area is Rural Health where programs are offered either at a singular site or as part of a program, whereby the graduate is able to experience multiple areas throughout the WACHS. The effort involved in this, however, is reflected in the comment from one rural graduate nurse coordinator:

Other areas were also considered (for specialty allocation) e.g. Mental Health, Remote, Community, and Home Nursing, and Dialysis. These areas were often hard to recruit to because there was little exposure to these areas by staff. This also gave RNs a broader understanding of the facilities available in the community so when discharging patients they had an understanding of where their clients were going to and the problems they may encounter.

As with other areas, participation in Rural Health as a sector was not measured in the UWA (2000) study; however, it was measured in the specialty rotations. The earlier study showed a greater proportion of GRNs selecting a specialty rotation in Rural than did the current study (3.4% compared to 1.9%). However, when the individual specialty rotations are considered in combination with the organisational

sector, the ratio is far greater in the 2010 study (14.9%). This suggests that the multiple options available via the GNC are an attractive choice for the GRN.

Exposure to rural health nursing during undergraduate clinical placements has been identified as a positive factor in new graduates choosing this sector for their transitional programs (Courtney, Edwards, Smith & Finlayson, 2002), as does personal connection within the area (Nugent, Ogle, Bethune, Walker, & Wellman, 2004). The difficulty with rural placements, however, is the generalist nature of the nursing care required. As Francis and Mills (2011) describe, rural nursing requires a more diverse range of skills, than does urban practice. To provide comprehensive nursing care for the variety of ill-health presentations likely to occur within a rural site, and to enable treatment for the range of specialties likely to be encountered, a broader scope of skills and knowledge are required; hence the RN's scope of practice needs to be much more extensive. Further complexity is added with the unique social aspects of rural workplaces. A new graduate is likely to be required to work with people known to them socially; however, due to the nature of nursing workplace hierarchical structures, they may find themselves in awkward situations of conflict or professional dissonance, and without suitable avenues to appropriately debrief when required (Lea & Cruickshank, 2007). This would suggest that consideration needs to be given to alternative forms of communication with peers and mentors who are remote to the organisation, such as that offered by electronic networking.

5.3.3 Competence, Confidence and Support

The general intent of transitional programs is to assist the novice nurse gain confidence and competence in their nursing practice along their journey to proficiency. The GNP should enable the GRN to consolidate the skills and learning

gained during their undergraduate program and to apply these to real-life nursing situations (Hayman-White, et al., 2007; Levett-Jones & Fitzgerald, 2005). The provision of appropriate supportive systems to the novice nurse is aimed at ensuring that their transition will be more effectively and efficiently managed. A positive experience is more likely to influence positive perceptions of the organisation as an appealing workplace, and the profession as an attractive choice of career. Johnstone, et al. (2008) found that a supportive environment was strongly associated with more successful integration of novice nurses into a new clinical domain, and greatly assisted their acquisition of confidence and competence within their nursing practice. These authors also suggested, however, that there was little supportive evidence within the nursing literature to corroborate their findings, and encouraged further investigation into the benefits of a supportive clinical environment for new nursing staff. While some organisations within the current study appear to have achieved the goals of providing a favourable setting for new recruits, others seem to struggle with this, often seemingly due to a lack of applicable resources. Such resourcing issues were particularly evident among the secondary and rural sectors, and are further demonstrated in the ensuing discussions.

5.3.3.1 Graduate Program Competence and Confidence

Between the 2000 and the 2010 populations, there was little difference in agreement that the GNP made the GRN feel more *competent* and *confident*. Of the UWA (200) cohort, 90% *agreed* that they felt more *competent* following the program, as did 89% in the current study. There were 89% in the UWA (2000) study and 85% in 2010 who indicated the GNP had improved their *confidence*. However, there were considerable changes in the strength of agreement between the two studies, with almost 10% more of the 2010 study respondents *strongly agreeing* that

the program had made them feel more *confident* and *competent*. These findings suggest that the respondents of the more recent study were more in accord with the notion that the GNP assists the novice nurse to feel more confident and competent with their nursing practice. There were also major differences in the *disagreement* group, but only in relation to *competence*; where the proportion of respondents *disagreeing* that the GNP made them feel more *competent* was halved in the current research in comparison to the UWA (2000) study. The 2010 study inclusion of an option for an *unsure* response, allowing for a more neutral answer, may account for this difference, with 5.8% of respondents choosing this option. The proportions of respondents who *disagreed* that the GNP made them feel more *confident* were almost equal between the two study periods and remained relatively small. There were proportionately more in *disagreement* among the GRNs from the private and rural sectors and relates to findings discussed further throughout the following sections.

5.3.3.2 Preceptor Support

The NMBWA (2009) defined the term ‘preceptor’ thus:

Preceptor is the title that is used to describe an expert nursing or medical clinician who is a role model to the learner, demonstrating and personifying a competent nurse. The preceptor models the appropriate professional behaviours and ensures the development of a safe and competent learner (p. 1).

The predominant model within Western Australian GNPs is one where a nominated preceptor is allocated to the GRN to provide support and guidance to them.

Respondents to both GRN surveys described a mixture of very positive, and some less than desirable experiences, in regards to their preceptors. In the 2010 study, the response options related to preceptor support included a *mixed* choice to allow for a more neutral response alternative, and to provide a more eclectic description of the varying experiences between specialty rotations. As a consequence, a third of the 2010 respondents chose the *mixed* option in relation to preceptor support satisfaction. This resulted in the earlier UWA (2000) study showing a larger proportion of respondents (76.1%) who were *satisfied* with their preceptor support in comparison to the 2010 study (55.3%); but conversely, halved the proportion in the current study (11.2%) who reported *dissatisfaction* with their level of preceptor support compared to the UWA (2000) data (23.9%). The following sample illustrates the diversity of responses as reported by the GRNs in the current study:

Very unsatisfied on Medical rotation, very satisfied on Theatre rotation.
(Private.)

Very supportive and involved preceptor and SDN. (Tertiary.)

Without the wonderful support of general nursing staff, the grad year would have been worse. We did not have designated preceptors.
(Secondary.)

Good clinical preceptor, willing to teach. (Private.)

Note: this nurse later made the following comment: *My experience at this particular hospital made me feel less competent as an RN than I felt as a student. My confidence was destroyed, leaving me feeling disheartened by nursing and resigning. The hospital focuses on profits, rather than teaching and patient care. It is evident that staff members are unsupported, over-worked and therefore unwilling to teach.*

I did not have a preceptor to begin with, which was stressful for the first week as Recovery Room is a very specialised area. (Tertiary.)

Nil preceptor support on either rotations and minimal support from SDN on second rotation – presumed we knew everything. (Private.)

The skill-mix during this rotation often meant grads were ‘educating’ other grads; a severe lack of support. I was assigned a preceptor who worked two days a fortnight, therefore it was sometimes weeks between seeing her, let alone receiving feedback from her. (Tertiary.)

Note: this nurse later resigned to study for a non-nursing profession.

From the web-based graduate nurse coordinator data, it was clear that the organisations with a more defined program have stronger support systems in place, with ongoing assessments and feedback utilised to continually refine and improve their programs. A respondent from a tertiary hospital described one such change thus: “*we have implemented preceptor modules for the ward staff to ensure they are prepared for their role as preceptors to the new GRNs*”. Based on many of the GRN comments related to their preceptors, this is a commendable innovation and one worthy of consideration at all sites where GNPs take place. Particularly so, given that there were several inferences that the assigned preceptors did not always appear to have a clear concept of the purpose of the transition program, the graduate’s level of experience or competence, or indeed, what was required of them, as a preceptor, to support the novice nurse in their beginning practitioner role. In the current study, the tertiary hospitals rated the highest in perceived levels of *satisfaction* (60%) and lowest in *dissatisfaction* (4%) with preceptor support, and rural organisations the converse levels (32% *satisfied* and 21% *dissatisfied*). Such data suggest that the larger organisations are able to provide more suitable preceptor support than those that are less resourced. There was no similar breakdown of the data provided in the UWA (2000) study.

Consistent with the comments provided by the GRNs in the current research, are those from the literature that describe occasions where novice nurses have been paired with a preceptor who is described as too busy, absent, disinterested, or

unaware of the basics of the preceptor role (Johnstone, et al., 2008). Other studies (Adlam, Dotchin, & Hayward, 2009; Charlston & Happell, 2005; Clare, et al., 2003; Cowin & Jacobsson, 2003) described the need to ensure that novice nurse integration to the workplace is supported by experienced and knowledgeable colleagues, and in a process that is deliberate and based upon best practice. These studies also illustrate the positive impact on both the confidence and competence of the neophyte, and importantly, improved patient safety that good support can provide. The preceptor should provide a knowledgeable and exemplary role model to which the GRN can aspire to (Delaney, 2003). In addition, the allocated preceptor needs to be resourced adequately for the role in terms of training and education; and to enable them to sufficiently support the GRN. This could be managed by a reduction in the preceptor's workload responsibilities.

It would appear that in some organisations the preceptor role is not well defined and that the nominated nurse may or may not have received tuition in the role prerequisites, or the graduate's educational requirements. When the preceptor is unsure of what is expected of them in the role, and if they are under-resourced, there is often additional and unrecognised pressure placed upon those adopting the role. This in turn results in a less than satisfactory experience for both the GRN and the preceptor, and sub-optimal learning outcomes. Johnstone, et al. (2008) suggests that inappropriate allocation of preceptors, who were not fully engaged in the role, had a significantly detrimental effect upon the development of confidence, and the perceived competence of the novice nurse. At times the nursing related literature interchanges the term preceptor with 'mentor' and portrays an experienced colleague who is able to supervise and advise a nurse in a new environment (Myall, Levett-Jones, & Lathlean, 2008).

All graduate nurse coordinator respondents indicated the use of the preceptor model in their organisation, with the majority (53%) of the roles performed by Level 1 RNs and only two respondents indicating a Level 2 RN was the preferred level. While the position level of the preceptor is not necessarily important, the level of experience and clinical knowledge is, and as suggested, should be sufficient to be able to provide appropriate advice and constructive direction to the novice GRN.

5.3.4 Full Patient Load

When beginning in an unfamiliar clinical area, a reduction in responsibilities and workload is generally built into the initial period to enable new staff to better acquaint themselves with the environment, unit characteristics, and organisational policies and procedures. The intention of this supernumerary time is to lessen the risk to both the nurse, and the patient (Australian Nursing & Midwifery Council [ANMC], 2006). It is expected that as the graduate becomes more proficient, they are able to draw upon previous experiences and knowledge, and so adapt to a new area more quickly. Consequently, and as their competence and confidence increases, their supernumerary time is generally able to be reduced. This time would not be expected to be eliminated altogether, as each separate unit has varying degrees of clinical diversity, as well as different physical environments. Transitional programs generally stipulate the provision of adequate supernumerary days for the GRN to familiarise themselves with the unique clinical environment and the pertinent unit culture, policies and procedures. When supernumerary time is not available, the nurse is required to adjust very quickly and may be left feeling inadequate and highly stressed which may contribute to errors in patient care, compromise their learning, or prompt them to leave the nursing workforce (Morrow, 2009).

When compared to the UWA (2000) study, the amount of supernumerary time in the current research allocated to the GRN before being assigned a full patient load, showed substantial improvement (Figure 5.1). It is, however, of considerable concern that some novice nurses are still exposed to the stressful experience of being expected to “hit the ground running” (Usher & Mills, 2012, p. 19). In the current study, of the 18 respondents in their first specialty rotation who were required to take a full patient load either on their first day on the ward or unit, or following one day’s orientation, seven had no prior experience in healthcare. Eight had previous experience as either an AIN or a PCA; neither roles necessitate anywhere near the degree of responsibility that is required by a RN. Of those with no prior experience, four of the seven were from tertiary hospitals. The impact, and the negative concept the experiences evoke are evidenced in the following GRN comments:

Thrown in, everyone too busy – very stressful. (Secondary hospital, emergency department; full patient load from day 1.)

Again, no supernumerary time. The hospital tells you all these wonderful things (supernumerary time, study days, support) to get you to apply to their hospital and once you are employed you are on your own! (Secondary, medical; full patient load from day 1.)

Having one day orientation and no supernumerary days caused a lot of stress as I’d had no surgical experience. (Tertiary, surgical; second rotation.)

Wards were short staffed and you were expected to take full patient loads that were also classified as ‘heavy’. Staff were unable to help as they were too busy. (Large rural, medical/surgical; 1 day orientation, second rotation.)

Coming from a neonatal ward to adults – not much support. Feeling not safe to practice due to lack of experience. (Tertiary, surgical; 1 day orientation, second rotation.)

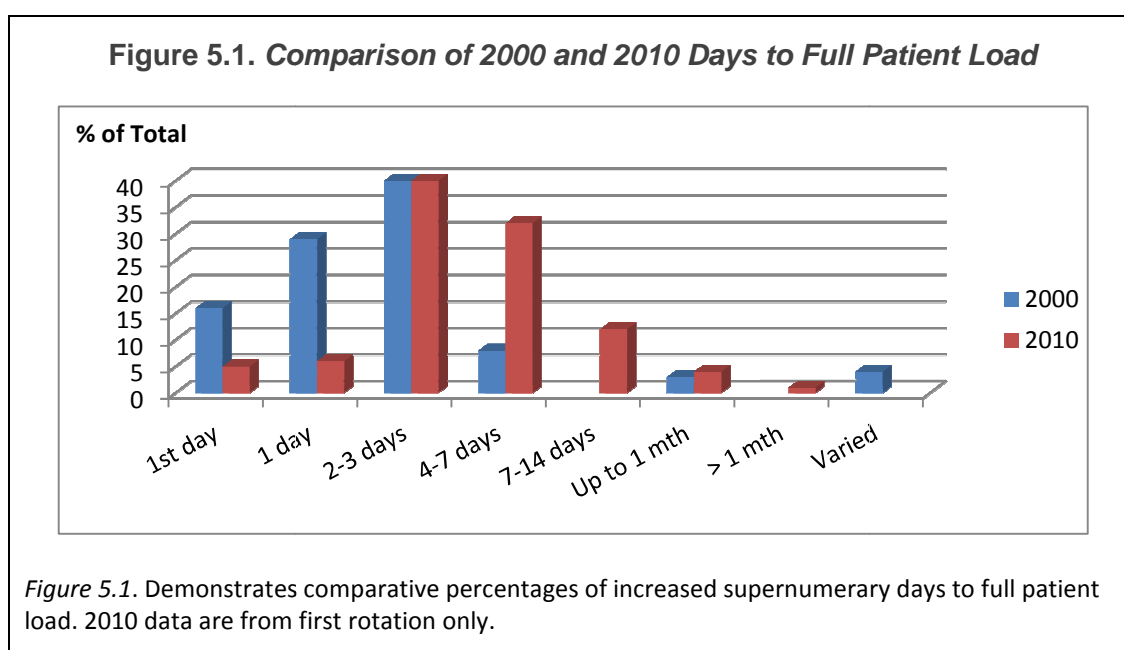
Understaffing and thus given full patient load on first day of work. (Private, medical; first rotation.)

*Would have liked to have more supernumerary time – 2 days not enough.
Felt I was thrown in the deep end! Did not feel confident, did not know
the run of the ward. (Tertiary, medical; full patient load from day 3.)*

In general, the literature does not prescribe specific periods of time for supernumerary practice; however, there is considerable support and evidence of the impact of suitable intervals between commencement in a new work unit and the allocation of a full workload. Reeves (2007) suggested a minimum of four shifts per specialty rotation, while Pinch and Della (2001) advocated that to facilitate integration into the workplace, and to gain familiarity with the related policies and procedures, a new nurse should be provided with at least five days of a reduced workload. It would appear that these periods of time should be at least a minimum in the initial routine specialty rotations, and further allowance made for those with more complexity.

While the Australian Nursing and Midwifery Council (ANMC, 2006) *National Competency Standards for the Registered Nurse* do not specify delineation of a period of time for the beginning practitioner to transition from complete novice to competent practitioner, *Standard 2.5* does require the RN, “Understands and practises within own scope of practice,” (p. 12). The difficulty complying with the standard arises when the novice is put into a position of power inequality and fears reprisal if they are seen to ‘rock the boat’ by voicing any concerns related to inappropriate allocation of assignments (Evans, 2005; Reilly, 2005). This is where the support of a good preceptor or SDN should be able to assist the GRN in negotiating a more suitable supernumerary period of time.

Despite the absence of supernumerary time for some GRNs, the comparative data between the UWA (2000) study and the current research demonstrates that there have been significant improvements to the time allocated before a novice nurse was expected to take on a full patient load. Far fewer in the latter study were expected to adopt a full patient load within the first days and many more were able to assimilate into their new area over the period of a week or more (Figure 5.1).



As the UWA (2000) study did not collect data related to the individual specialty rotations, there is no further comparative data related to supernumerary time. Within the current study, however, for each specialty rotation, there were progressive reductions to the amount of supernumerary time allocated to the GRN. In the GRN's second specialty rotation there was an increase in the number of respondents who were expected to take on a full workload within one-day in their new specialty, and a marked decrease in those who were allowed four to seven, or seven to fourteen days as a supernumerary staff member. The majority of respondents indicating that their supernumerary time for this rotation was up to, or

more than one month was for perioperative rotations, or other specialised areas such as paediatrics, Critical Care or the Emergency Department. Due to the unique and specialised nature of these areas, additional orientation time would be expected for any new staff member and even more so for the novice RN, so it is reassuring to see that this requirement is being acknowledged.

5.3.5 Performance Evaluation

Regular performance evaluation and feedback in any role is important. Constructive appraisal of work performance provides a review of achievements, identifies areas for improvement, presents opportunities for future learning and skills development, and offers an opening to discuss any areas of concern. Additionally, appropriate performance evaluation provides professional structure to an employee and assists in helping them to feel that they are valued, and that their contribution to an organisation is acknowledged (Duchscher, 2009). Research by Reeves (2007) into Victorian graduate nurse experiences found that a greater number of formal and informal performance assessments were directly related to higher satisfaction levels. Duchscher's study of newly graduated Canadian RNs described how graduate nurses looked to feedback from colleagues and supervisors to affirm the progression of their performance to competency (2009).

The majority of respondents (86.4%) in the 2010 study had their performance assessed within the first six months, whereas, the UWA (2000) study reported that 92.7% of the respondents were assessed within their first six-months of commencing the GNP, suggesting that evaluation of the GRN occurred slightly less often in the current research. However, when the 2010 data was separated into those respondents who did and did not participate in a GNP, the proportion of GRNs who were

assessed within the first six-months increased substantially, to 95.2%. In view of the aforementioned research into satisfaction levels related to performance assessment, these data would indicate the current cohort of GRNs would have predominately felt happy with their evaluation schedule.

To ascertain who was most involved in the performance evaluation, a second question was asked of the respondents to indicate the person, or persons responsible for their assessments. The UWA (2000) survey showed that almost three quarters of the assessments were completed predominately by the preceptor whereas, in the 2010 study, the primary person responsible for evaluation was the SDN. This variation is possibly due to organisations directing their GNP Government funding towards employing an increased number of SDNs, with the intent of providing more definitive and skilled support to the GRNs. Both surveys demonstrated a collaborative contribution in the evaluation process, with almost half the respondents revealing that more than one person was involved. The most common combination in the current study was the SDN and the GRN's preceptor. The benefit of a multiparty approach to assessing performance ensures a more objective evaluation of performance, and avoids individuals making purely subjective judgments.

5.3.6 Night Shift Participation and Preparation

To provide comprehensive care to patients within a hospital, some healthcare professionals are required to work a mix of shifts over the 24-hour period of a day. The time between evenings to dawn is generally a phase when minimal services and support are available to those working, and consequently, nurses on the out-of-hours shifts are required to be more independent and self-reliant with regard to knowledge, skills and resources. Research clearly demonstrates a direct link between decreased

RN experience levels and patient “failure to rescue” (Twigg, et al., 2011, p. 543). In the interests of patient safety the newly graduated nurse is therefore, generally given a period of grace prior to being rostered onto shifts at night. “This is especially serious in circumstances where junior medical officers and junior nurses are frequently the only professionals on duty throughout the night to care for patients” (Garling, 2008, p. 9). Expecting them to participate in the night shift roster any earlier may put the novice at risk of finding themselves in situations not only beyond their scope of practice and capabilities, but also without the supports that ought to be available to assist them in patient care (Evans, Boxer, & Sanber, 2008; Reeves, 2007).

In both the UWA (2000) and the current 2010 studies the GRN respondents were asked how long it was from the commencement of their program before they were rostered onto night shifts. In the earlier study the distribution between those who went onto night duty in less than six-months, and those who were given more than six-months before being rostered to these shifts, was almost even. The 2010 survey showed that two thirds of the GRNs had been rostered onto night shift in less than six-months from commencing their transitional program. The rationale for this earlier rostering to night duty is not able to be determined from this study, but would benefit from further inquiry. In the UWA (2000) study 42% of respondents did not do night duty in their graduate year while, whereas of the 2010 group, only 20.8% of nurses indicated they did not do night shift. It is possible that the increase in the latter study may be due to a greater presence of SDNs for the after-hours shifts, aimed at providing more appropriate support to the GRN when it is most needed.

In the current research, and to elicit a more detailed data set, the choices made available to indicate the time period before being rostered onto night duty were expanded from those provided in the UWA (2000) study, and included a *less than three-months* option. It is concerning that so many in the current study (20.6%) were rostered to night duty within their first three months of graduating, and over a quarter of those reporting that they felt they were not well prepared for the role. While it is acknowledged that staffing adequately for the night shift is often the most difficult for unit managers to achieve, it is disquieting that the novice nurse may be rostered to this shift, particularly so when they may not feel confident enough to dispute the decision with the more senior nurses who allocate them (Morrow, 2009).

Despite these concerns, over three quarters of the respondents in the 2010 study felt that they were sufficiently prepared for the responsibility of night duty, which is comparable to the UWA (2000) group, where only slightly fewer indicated that they felt well prepared. The most problematic area for the GRN in regards to night duty in the UWA (2000) survey was cited as lack of experience. In the 2010 study, only 20% of those who did night duty took the opportunity to comment on their preparation and of these, merely two respondents felt that they had insufficient experience for the role. The mix of comments regarding night duty in the 2010 study was comparable between both positive and negative, with many citing good support, or conversely, a lack of support provided while doing night shifts. Prior experience on night duty as an Enrolled or Student Nurse appeared to be a contributory factor in easing the GRN into the night shift. The earlier UWA (2000) study did not look at prior health care experience, so comparisons between the two studies relating to the effect that prior experience may have on the GRNs' perceptions of preparation for night shifts cannot be made.

5.3.7 Undergraduate Nursing Program Influences

The theory-practice gap that relates to deficits in the transfer of undergraduate knowledge and skills to the clinical workplace is well documented (Clare, et al., 2002; Delaney, 2003; Evans, et al., 2008; Fox, et al., 2005; Kelly & Ahern, 2009; N³ET, 2006). A study conducted by Reilly (2005) found that 99% of students who were about to graduate believed they were practice-ready for their imminent role as an RN; however, four-months into their new RN career this perception was reported to have altered considerably, although no quantitative degree of change was given in the study.

Almost three quarters of respondents in the 2010 cohort indicated that they felt they had received sufficient grounding for their role as a RN, contrasting significantly with those from the UWA (2000) study, where only 42.5% of respondents agreed that their undergraduate education had prepared them adequately for their RN role. These findings suggest that the undergraduate education has evolved favourably between the times of the two studies being considered.

Despite the more positive findings, there were still a number of respondents in the 2010 study who believed there were ways their undergraduate education could have been improved. Over half the respondents felt that additional practical experience during their undergraduate program would help them to more adequately prepare them for their role as a RN. This was followed by the view that more clinical information would be of benefit, such as responding appropriately to emergency situations, or the practical skills of dressing wounds or removing wound drains. Other themes were less common but did feature more strongly among respondents of a particular university, for example, those from University C would

have preferred more focus on pharmacology and the reality of the workplace, and both University A and University B believed more emphasis on time management would have been of benefit in easing their transition to practice. A sample of textual responses from the 2010 GRNs demonstrates these concepts. Their place of employment at the time of the survey, and the university attended for their undergraduate nursing program are indicated in the parentheses:

In depth learning about the responsibilities that awaits you as a RN so that patients have more confidence in you. (Tertiary, Uni A.)

It has been hard. To be an RN takes guts and hard, hard work. It could be made easier for transition from uni with more skills or a better grad program. (Secondary, Uni B.)

Pharmacology, physical assessments, pathophysiology related to surgeries. (Private, Uni A.)

More hands on clinical skills, some of the basic nursing skills I was 'expected' to know during the first two rotations were not taught at uni for example, insertion of nasogastric tube, or care of colostomy bags, etc. (Tertiary, Uni A.)

Clinical skills preparation – a truer idea of exactly what we are likely to encounter in hospitals, i.e., angry, frustrated patients and staff. Coping with stress and anxiety related to work. Coping with staff who aren't helpful. (Tertiary, Uni A.)

Teaching what variations in blood results mean. More on Allied Health, e.g., speech and dysphagia. More on pharmacology and conditions and diseases. (Tertiary, Uni C.)

Some units weren't really relevant or useful, e.g., communication unit – rambled a whole load of (stuff) that had nothing to do with communication within the work place or to patients. (Tertiary, Uni B.)

As a mature aged grad probably had a different perspective on things but feel more support is needed, as well as more practical experience as a student. University did not completely prepare me for the job. (Secondary, Uni B.)

It was very scary and daunting. Because we were new RNs it felt like we were expected to know everything. (Large rural, Uni A.)

More emphasis should be placed on the real work, not academic (stuff). Once you learn the formula of what they want to see, it really doesn't matter what you learn as long as you feed them the same rubbish. It was disappointing. (Small rural, Uni C.)

Give more beneficial units in final year that reinforce knowledge learnt. Not ethics and philosophy units – pathophysiology and pharmacology would have helped. (Tertiary, Uni C.)

Hands on procedures, i.e., IDC (indwelling catheter) insertion, complex dressings, drain removals. We required more clinical/workshop time and less book education. (Tertiary, Uni B.)

Knowledge of medications, knowledge of symptoms of disease (medical problems), communication skills. (Tertiary, Uni B.)

There has been protracted debate in the nursing literature in relation to the theory-practice gap, and little that suggests any imminent resolution. Most discussions, however, do recognise the inadequacy of current clinical preparation that is able to be provided to the undergraduate nurse in order to better prepare them for their RN role (Clare, et al., 2002; Dragon, 2009; Evans, 2005; Health Workforce Australia, 2011a; International Council of Nurses, 2009). The ever-increasing complexity of nursing makes it difficult for the content of the undergraduate curriculum to keep pace, or for educators to fit in additional contemporary components of education or clinical practice (Dragon, 2009). While it is recognised that the undergraduate nursing curriculum struggles to incorporate the totality of nursing subjects, and to find sufficient and suitable clinical placements (Belardi, 2012b; Usher & Mills, 2012), broadening the scope of nursing practice to these areas is a topic worthy of further consideration.

Concerned about the inconsistency of pre-registration programs within Australian Schools of Nursing, a team of leading nurse academics and practitioners, supported by a grant from the Australian Learning and Teaching Council, instigated

a project to develop a “...new nationally-agreed competency assessment tool for nursing graduates. The tool applies to Australian universities with nursing programs that lead to eligibility for nurse registration in all states and territories” (Crookes, et al., 2010, p.1). The development of the assessment tool was founded on the *National Competency Standards for the Registered Nurse* (ANMC, 2006) and the project team suggested that these national standards should more clearly define the responsibilities and desired levels of competencies of the beginning practitioner (Crookes, et al., 2010). Additionally, Health Workforce Australia (2011a) has reported findings that university nursing education is no longer contemporary or efficient in producing profession-ready graduates; and that despite intents to move towards competency-based assessments, academia has yet to consistently implement these changes. Despite these very promising reports, there is limited evidence of the assessment tool being finalised or adopted on the scale proposed. A pilot assessment tool is available from the referred web-site, but progress to national implementation of the tool is unknown.

5.3.7.1 *Higher Education Contribution Scheme Debt*

Just over three-quarters of responders in the UWA (2000) study indicated that they had an ongoing HECS debt, whereas only slightly more than one quarter of the 2010 cohort was still paying off their education liability at the time of the survey. It may be postulated that the newer generations of nurses, in particular those deemed to belong to the Y Generation, have parents who are more willing to provide financial support, in terms of payment of fees, than were those of a decade ago. Another prospect is that some universities may offer a greater number of scholarships for undergraduate studies than was previously available; however, endeavours to confirm this have not been successful. Those universities with the least number of

RNs graduating from them had the highest proportion of respondents with a HECS debt, with 50% from University D (n = 5) and 37% from University C (n = 9) indicating thus.

5.4 Graduate Nurse Program Efficacy

RQ 2: From the Graduate Registered Nurses' perception, how efficacious are graduate nurse programs in helping novice nurses to make the transition to competent practitioner?

The UWA (2000) survey questionnaire was conducted at a time when formal transition programs were still in the provisional stages of being established and, in many cases, unproven. A few programs had regulated rotations, while others were somewhat haphazard and still waiting upon evaluation to determine their feasibility (UWA, 2000). Current programs are predominately well planned and organised, consisting of specific specialties, lengths of individual rotations and designated support personnel. To better understand the differing experiences reported by the graduates, and to capture possible variations in their perceptions of emerging proficiency and industry support, the GRN survey questionnaire individualised the specialty rotations and sought extended, and additional textual responses.

5.4.1 Participation in a Graduate Nurse Program

Of those participating in a transitional program, and at the time of the current survey, 78% of respondents had completed their GNP, 15.5% still had the intention of completing, and 6.5% (n = 11) did not go on to complete their program. There was a variety of reasons cited for not completing their GNP such as an inability to do

shiftwork, bullying, perceptions of unfair workload distribution, and collegial attitudes towards novice nurses, as follows:

Having to work up to 10-days in a row at times, and insufficient staff to help with heavy patients, and high-care patients. (22-29 year-old, Uni B, Tertiary hospital, surgical, first rotation.)

Feeling of losing basics learnt at uni, support staff not at this hospital, even though part of the program; fast pace, babies dying. Realised I didn't want to pursue nursing at this time in my life, so I am working in retail while I am back at uni, still studying in a health profession. (22-29 year-old, Uni A, Tertiary, paediatrics, first rotation.)

I was being bullied by an older nurse and management did nothing about it and would not allow a transfer to another ward. (50 or over year-old, Uni B, Tertiary, medical/surgical, first rotation.)

Bullying in the workplace has been associated with increased turnover of nursing staff, and has also been linked with poorer quality of nursing care provision (Duffield, et al., 2010). Reports of bullying in nursing are common and, according to Dunn (2003), nurses eventually accept the practice in order to cognitively minimise the degree of stress caused, thus facilitating an ingrained culture. Supporting this view, Evans (2005) reported that some GRNs chose not to work in their preferred specialty due to the unit's reputation of a bullying culture. Comments related to bullying throughout the current study indicate that it remains enough of an issue in the workplace to negatively influence the novice nurse's tenure in the nursing workforce, and is discussed further in subsequent sections of this chapter.

The inability to work shiftwork was found to be an issue for some newly graduated nurses, predominately for reasons of child-care responsibilities and an associated lack of suitable social supports:

Was unable to do shift work during week due to being a sole parent with no other family. (30-39 year-old, Uni B, tertiary, medical, first rotation.)

I will most likely be doing casual shifts, 1-2 per week as I have started a family. I do want to maintain my skills and update my knowledge however. (20-29 year-old, Uni B, tertiary.)

Note: did not do GNP due to pregnancy.

Shifts versus family friendly (caused most stress). (30-39 year-old, Uni C, small rural, medical, first rotation.)

Dorion, et al. (2008) urged greater consideration and acceptance of nurses with family responsibilities, and found that the majority who left the workforce for child care commitments returned at a time when they were more able to. Reeves (2007) similarly called for greater flexibility in scheduling for nurses who rely on paid child care due to the majority of child care centres having operating hours that weren't congruent with nursing shifts. While it is not possible to cede to all requests for employees work-life balance and simultaneously provide comprehensive nursing resources, it is imperative that flexibility be considered within organisational planning of the nursing workforce (Department of Health, n.d.). This is particularly pertinent given that more than 90% of the nursing workforce is female, and of those, a large proportion is responsible for parenting. Further, with nurses being employed from other countries, many are without extended family support to enable them to commit to more work time.

A further two participants did not complete their program as they were accepted into other programs before their GNP had finished (Post Graduate Diploma of Midwifery and Graduate Diploma of Perioperative Nursing). Another two had resigned from the organisation and four had moved to different organisations where they believed their needs were better able to be met. Such data suggest that nurses are more likely seek workplace experiences that are cognitively harmonious, rather than tolerate discordant environs.

5.4.2 Graduate Nurse Program Length

Formal transition program length is determined by the employing organisation. Of the 86 records with complete data enabling the estimation of GNP length, 72 respondents (83.7%) signified participation in a 12-month program. Eleven participants (12.8%) indicated a 24-month program with nine of these at tertiary hospitals and the remaining two within private organisations. Three respondents reported an 18-month program, two in tertiary hospitals and one in a large rural establishment. The program lengths indicated by the GRNs corresponded with the data from the graduate nurse coordinators. Only graduate nurse coordinator respondents from the tertiary sector indicated that they offered a 24-month program. The 24-month program indicated by the GRN respondents from the private sector may have been from a site that was not a participant in the GNC consortium, and therefore, not included in the graduate nurse coordinator population. A 12-month program was nominated by the graduate nurse coordinators from all secondary and small rural sectors; and in one private and two large rural organisations an 18-month program was available. While the most appropriate program length is difficult to recommend from this study, many of the GRN comments related to the topic do indicate a preference that, in addition to the 12-month program, the option to participate in further specialty rotations would be desirable, as is depicted in the following GRN comments:

Possibly an extra rotation, to try a different area and broaden my scope. (Tertiary, medical and surgical rotations, 6-months each.)

Possibly have 2 x 6-month rotations instead of 4 x 3. In my case I did 2 x 3-month and 1 x 6-month – not by choice either. (Tertiary, surgical, medical and surgical rotations.)

Although it may be difficult for some GRNs with family commitments to consider additional specialty rotations at an alternative site, the option to gain further experience by way of an extended program at a larger organisation is worthy of consideration, and would enable a broader scope of practice, particularly for those GRNs at secondary or small rural sites.

5.4.3 Specialty Rotation Characteristics

For each specialty rotation of the GNP the GRNs were asked a series of questions that included the type of specialty; the length of stay in the specialty; the average hours they were contracted to work; the degree of support experienced from various unit personnel; and a final set of questions designed to gain an understanding of what they perceived were the most beneficial, or problematic issues during the rotation.

Of the 168 respondents indicating participation in a transitional program, the majority were allocated to either a medical or surgical unit or a combination of these two areas. Mental Health was also an area where a combination of specialties were worked, with half the respondents indicating thus, most commonly those from rural centres, secondary hospitals and some private organisations, where individual units may not be large enough to provide sufficient experience in a single specialty. While the multiple specialty allocation may enable the graduate to gain a wider variety of experience and exposure to more disease profiles, it is possible that there may be too many issues for them to attempt to master at once, and consequently, it does have the potential to overwhelm them, as is suggested in the following comments related to what areas the GRN found were problematic in that particular rotation:

Paediatrics, medical, surgical, mental health and high care patients all on one ward. (Large rural hospital.)

Lack of knowledge. Ward with medical, surgical, paediatrics, mental health patients in one location. (Large rural hospital.)

In the 'further comments' section this GRN stated: *It was a scary process, I hope it improves. I would not want other grads to have to go through it.*

Added to the complexity of dealing with multiple specialties within the one rotation, the GRN is also required to adjust to the unique social pattern and personalities of the new unit, thus potentially compounding the anxiety of the novice (Chang & Hancock, 2003). Where there is little alternative but to have multiple specialties within the rotation in some areas, it may benefit both the nurse and the organisation to ensure that appropriate levels of support were always available to the GRN to provide advice and direction.

5.4.3.1 Specialty Rotation Length of Stay

The majority of respondents (43.5%) indicated that their first rotation was of 13 to 25 weeks in length, closely followed by a period of 26 to 39 weeks for an initial rotation (34.5%). The data from the graduate nurse coordinators suggested that all tertiary hospital programs consisted of six-month rotations; the majority of the rural sector have multiples of two, three and four month rotations; and secondary hospitals generally indicated that a combination of two three-month, plus one six-month specialty rotation were the norm.

The length of stay for each specialty rotation is sometimes a contentious issue. While some studies suggest shorter, more regular rotations to be of benefit, others believe a longer length of time gives the graduate a greater opportunity to consolidate their learning and acquisition of competencies (Chang & Hancock, 2003; McKenna

& Newton, 2008). From the graduates' comments in relation to the rotation, it is feasible that both views hold merit. It appeared that if a rotation was in an area where there was little variety or challenge, a graduate was likely to become frustrated with not having more opportunities to put theory into practice, and so became bored or complacent with learning. Conversely, if there was much to learn in a specialty, and the novice was given only a limited time to consolidate this learning, they were more likely to become frustrated with missed opportunities to progress their development. This was more evident in the second rotation where there appeared to be an increasing number of graduates who felt the rotation was either boring, repetitive, or that they were not wholly utilising their undergraduate education. These views are depicted in the following comments related to what the GRNs found problematic during a specialty rotation:

Specific nursing care, not as much opportunity to practise general nursing skills. (Medical unit, tertiary hospital.)

Nursing duties very minimal, more on administrative duties, i.e., checking notes and calling in patients, answering phone calls. (Community, tertiary hospital.)

Boring in DOSA (Day of Surgery Admission) was boring and felt I did not learn anything. (Surgical unit, tertiary hospital.)

In-patient rate was a bit low. Did not have enough chance to practice a lot of aspects of paediatric nursing care. (Paediatric unit, large rural.)

Got bored! (Surgical unit, large rural.)

Longer length in each rotation. As soon as you got the routine you were shifted. (Surgical, midwifery, medical/surgical, medical rotations, 3-months each, private sector.)

It would seem that, in areas where the level of opportunity during a rotation may be limited in terms of learning and applying theory to practice, consideration

should be given to the inclusion of more stimulating experiences for the GRN to ensure that their enthusiasm is maintained. Conversely, in specialties that appear to be very intense for the graduate, support resources need to be at a sufficiently high level to assist the nurse at the first indication of them becoming overwhelmed, and to facilitate them in recognising appropriate learning opportunities. Johnstone, et al. (2008) suggested that at least three to four-month specialty rotations were preferred, as the GRN was then more likely to have time to familiarise themselves with the unit routine, and specific specialty skills prior to moving on to the next experience. Further, increased satisfaction levels have been found amongst nurses who were offered more than one specialty rotation, with the GRNs preferring a rotation length of approximately six-months (Reeves, 2007).

One reason for favouring longer, but fewer specialty rotations within a program, is that of the GRN returning to 'new' status at the beginning of each rotation, and thus being subjected to feelings of inadequacy once again. Additionally, there is a recognised period of 'down time' while the GRN is supernumerary, including the time taken from the preceptor's workload to support the GRN into the idiosyncrasies of the new unit. Reeves (2007) upholds the notion that this negative aspect of multiple rotations is clearly balanced by the benefits to the GRN, as they experience a broader range of clinical learning, and are exposed to more exemplars of professional leadership and role models, that in turn, provide a greater repertoire of knowledge upon which to base their critical decision making. Therefore, it would appear that specialty rotations should be at least four-months in length, and, in the initial year of transition, no more than six-months each.

5.4.3.2 *Average Contracted Hours per Week*

The number of those working fewer than full-time hours increased during their second rotation, indicating that following their initial commencement, some chose to decrease their average weekly hours to part-time. It is possible that to allow the novice to consolidate theory to practice, an initial period of full-time hours is required by most organisations before a GRN is able to reduce to part-time, however, no data from the graduate nurse coordinators indicated such. Hours that the graduates were contracted to work in their third rotation were similar to those indicated in the first and second rotations, with a further decrease in the percentage working full-time hours, and a corresponding moderate increase in the 20 to 29-hour bracket. Programs agreeing to part-time positions have recently become more common in an effort to accommodate both, those parents with child-rearing responsibilities, and the different work modalities of the younger generations who may prefer to work fewer hours than has traditionally been considered to be full-time (Jorgensen, 2003; Leiter, Jackson & Shaugnessy, 2009).

The responses from the graduate nurse coordinators indicated that most contracted hours for the GRNs were 40-hours per week. Two metropolitan hospitals (one tertiary and one secondary) indicated that GRNs' were contracted to 37-hours per week, and this was considered full-time. One private organisation's graduate nurse coordinator considered full-time as 35-hours per week. It would appear from the data that the equivalent of half of full-time (20-hours per week) is the minimum the GRNs were allowed to work. It is unclear from either the primary survey questionnaire, or the secondary web-based survey, whether those graduates working at half of full-time were required to lengthen their GNP in order to gain the basics of the transitional experience. Some organisations are reluctant to offer part-time GNPs

as they believe any extension to the time it would take for the novice to be deemed competent may discourage the GRN from continuing in the program, particularly when they witness their peers advancing at a more rapid pace (personal communication with SDN).

Considering the above, it is of some concern that of those graduates who did not participate in a GNP, the reason given by four respondents was a lack of part-time options. Individual organisations develop their own policies in this regard, and there is no overarching authority to deem otherwise. It is possible that those new graduates were not made aware of the organisations that do offer part-time positions in their transitional programs to enable them to make a more informed choice in regards to participating in a GNP. While it is imperative that contemporary nurse leaders consider the changing needs of newer generations of nurses, the impact that the increasing number of nurses who choose to work part time, and the effect that this will have on final Full Time Equivalent (FTE) numbers of nurses, must also be factored into future workforce planning.

5.4.4 Levels of Support

A sufficient level of support from colleagues, supervisors and mentors enables the new graduate to more easily translate theory into practice, and to develop the confidence and competence required for their new RN role (Johnstone, et al., 2008; Morrow, 2009; Myall, et al., 2008).

Lack of support has often been cited as a problem in transitional programs (Bartram, et al., 2004; Levett-Jones & Fitzgerald, 2005; Morrow, 2009) so it is encouraging to see that the overall levels of support, as perceived by the GRNs in the

current study, was portrayed primarily as *Very Good* to *Extensive*. Between the first and consequent specialty rotations, the data depicting the degree of perceived support of the GRNs from the Program Coordinator and the Clinical Nurse Manager/ Specialist/ Consultant showed some improvement, most often in the rural and private sectors. This general improvement over time may be attributable to the GRN becoming increasingly confident within their role, and in contributing more to the unit as a productive member of staff. Conversely, the perception of support from the SDN appears to have diminished in consequent rotations, more often within the secondary and private sectors. It is likely that at the commencement of their first rotation, the initial SDN support given to the GRNs is quite intensive, but able to be tapered off as the GRN's confidence and competency increases. Additionally, there are often new intakes of GRNs who, at the beginning of their term, would require the same concerted levels of support from the SDN as did their predecessors. This would account for the reduction in the perceived levels of support from the SDN in consequent rotations. The following comments are indicative of how appreciative the GRN is when provided with appropriate levels of support:

Excellent education sessions from SDNs and CNs. Great support from other nursing staff. (Critical care unit, tertiary hospital.)

Excellent staff assistance when required; exposure to medical, surgical, paediatrics (paediatrics) and midwifery on the private ward. (Medical, surgical, paediatrics, private hospital.)

Great staff, very supportive, good skill mix, plenty of experienced, senior staff. (Medical ward, private hospital.)

The CN and ward coordinators were very good, patient and helpful. Staff very helpful and supportive. (Surgical ward, tertiary hospital.)

All staff were extremely welcoming and supportive, working in a rural hospital gave a broad overview of many nursing scenarios. (Surgical, community, rural, emergency, perioperative; large rural hospital.)

By the third rotation, the incidence of reported *occasional or negligible support* shows a marked increase across all categories. The surmised rationale for this, as previously referred to, suggests that the support personnel may be focusing the majority of their attention on new intakes of graduate nurses. It is also likely that an assumption has been made by the ward or unit staff that by the third rotation, the GRN will have gained a moderate level of proficiency and therefore, not require as intense support as that needed in the initial stages of transition. This concept is supported by comments related to the GRNs' perceptions of growing competence and confidence and that is discussed in the following sections.

5.4.4.1 *Staff Development Nurse Support*

The SDN role is one that has responsibility for the clinical training and education of nurses within a specified area of an organisation, in particular, those new to the organisation or profession. A dedicated resource to support the GRN is obviously important to GRNs. This is demonstrated within their comments below, in response to how GRNs believed their transition program could be improved, and suggesting that SDN support should be increased:

An increased SDN role on ward at first when beginning rotation – then there is always someone to point you in the right direction. (Secondary hospital.)

More SDNs. (Tertiary hospital.)

I was employed during a transitional time at the hospital where there were no staff development people employed. At the time this impeded my experience and education. (Private hospital.)

Having extra support and encouraging SDNs to be more available and willing to help their graduates. (Secondary hospital.)

More active SDNs who are actually on the ward, not just in their office. (Secondary hospital.)

Senior staff may be perceived by junior nurses as not always being present in a clinical capacity. When nurses take on roles that carry more responsibility, the position obligation increases, as does the accountability and associated administrative tasks. This time taken away from clinical duties may lead others, who are unfamiliar with the role requirements, to perceive an incumbent is not fully engaging in the workload and is often expressed as in the comment above.

An option of *other* was included in the choices to indicate the source of support proffered to the GRNs was, and when chosen by them, was shown to be mainly from fellow graduate nurses; these were either as part of the ward staff, or via graduate nurse networks, suggesting that peer support was highly valued by the GRN.

5.4.4.2 *Clinical Coach*

Among the tertiary hospital GRN respondents, *clinical coach* featured strongly within the comments related to *other* designated sources of support. Graduate nurse coordinator respondents from two tertiary hospitals described deploying a *clinical coach*, a relatively new role that is still in the process of being developed and formalised, and consequently, one for which there is a dearth of literature available. The clinical coach is described as a trained mentor and available exclusively to new graduates within the first few weeks of their transition. The clinical coach does not have patient responsibilities, is paid at the level of a second tier RN (Level-2), and assists the SDN role in supporting the graduates, and in guiding them to attain the core competencies necessary to enable them to be deemed to have achieved the program requirements. Formal review of the role has shown that GRNs experience lower levels of anxiety and stress and integrate into the workplace more quickly when there is a clinical coach presence (Webb, 2011). Once the graduate has

assimilated into their first unit, the attention of the clinical coach is able to be reduced. The clinical coach role would appear to fulfil a good deal of the initial support needs of the novice nurse, suggesting that for those organisations offering transition programs, implementation of the role would be a worthwhile concept. The position is a temporary role so it has fewer financial implications, and as such, would benefit sites that are less well resourced. Additionally, as appointment to the role is temporary, the competitive recruitment process to it would ensure the position applicants remained cognisant with contemporary transition practices.

Clinical coach used at [xxxx]. A senior nurse was assigned to all grads and did not have a patient load. (Medical ward, tertiary hospital.)

We had a clinical coach and graduate support people who touched base; extra people just for our rotation. (Surgical ward, tertiary hospital.)

A recent concept in the literature related to support, particularly in connection to Mental Health nursing, is that of *clinical supervision* (Brunero & Stein-Parbury, 2008; Taylor & Harrison, 2010), and appears to be a similar role to that of the clinical coach. Clinical supervision is described as a method of assisting the novice nurse to develop their competence and confidence through a process of reflective practice, whereby time with an accomplished colleague is made available to discuss recent clinical experiences in a supportive and non-threatening environment (Taylor & Harrison, 2010). While the notion has merit, the recurrent theme of insufficient resources within the nursing workplace for even rudimentary mentorship may pose a dilemma for industry. As such, the clinical coach may be a more appealing option.

5.4.4.3 Graduate Nurse Program Coordinators

The GNP Coordinator is responsible for bringing together the components of a transition program. This generally involves marketing of the program to

undergraduate nurses within the universities; recruitment of potential graduate nurses via the GNC consortium; liaising with specialty units for GRN placements; development of program guidelines; and negotiating for appropriate supports to be in situ for all the elements of the program. The role may also include organising study days for the GRNs, training for preceptors, and assuming the role of mentor to the GRNs within their organisation. In their discussion of graduate nurse residency programs Poynton, Madden, Bowers, and Keefe (2007) describe the role of the program coordinator in relation to providing knowledgeable guidance and support, while also presenting as a role model and confidante to the novice nurse. Research by Cubit and Ryan (2011) found that the consistent presence of a graduate nurse coordinator was able to modify the stress and anxieties of new GRNs by enabling more timely debriefing sessions within a safe, non-threatening environment. These researchers suggested that the graduate nurse coordinator was able to take on the role of a mentor, and in doing so, allowed the preceptor to take on a more supervisory role and to provide clinical direction and constructive advice when required.

While the majority of graduate nurse coordinators appeared to be at a SRN level, some of the secondary and rural graduate nurse coordinator respondents indicated the position was held by an incumbent on a lesser level. It is postulated that the more senior level of coordinator or educator would be better placed to determine program deficits and initiate change. The following graduate nurse coordinator comments indicate some of the issues that are faced by the less resourced sectors in relation to managing graduate nurse transition programs, and how a more senior level of nurse may be better placed to manage these:

First year I have acted as GNR (Graduate Nurse Recruiter) so I am learning as I go. (Small rural.)

Our program will be under review at the end of this year. Our difficulty for our program is having a dedicated person, being in the (semi-remote area) if staff resign it takes awhile to recruit. This has led to some difficult times in the past. (Large rural.)

We are hoping to have fulltime GNP Coordinator that can travel to smaller hospitals. (Large rural.)

(In response to guidelines governing GNP) I can't answer this as the program is run from (distant hospital over 1,000 kilometres away); we are allocated grads at XX as part of their rotation. They work only on our general ward and are allocated a preceptor. We work through their (the GRN) WACHS (Western Australian Country Health Service) transition to practice workbook, and follow the ANMC (Australian Nursing & Midwifery Council) Competency Standards. (Small rural.)

These comments would appear to support the notion that a more appropriate level of senior nurse would be in a stronger position to negotiate resources and adherence to program guidelines. Health Workforce Australia (2011b) call for reform in the way health leaders and managers are educated, suggesting that while most are clinically knowledgeable and skilled, many may lack the essential leadership qualities that will ensure appropriate structures are established, and innovate solutions applied to emerging problems. A graduate nurse coordinator with strong leadership characteristics will be more able to provide appropriate direction and education, as well as acquire the resources necessary to ensure the GRNs' transition is strongly supported.

The tyranny of distance within the WACHS is seen through multiple aspects of delivering an appropriate healthcare service, from attracting suitable and sufficient medical, nursing and allied health staff, to being able to provide specific clinical expertise to the smaller populations when required. The advent of video conferencing and other electronic means of communication have assisted in reducing the void somewhat, however, its use assumes the technology and access is readily

available, but in some of the more remote areas of the state, this is not always the case (Newman, Martin, McGarry, & Cashin, 2009). Consequently, regular contact and support with senior staff may, at times, be ad hoc and somewhat less than is desirable (Lea & Cruickshank, 2007). As implied by the above comments, many of the programs in the smaller rural sites are governed by larger organisations, and often from a considerable distance away. In terms of the best use of resources, this would appear to be an efficient concept. However, it behoves these organisations to ensure that their communication facilities and support structures are used optimally, and that the GRN is provided with the best possible opportunity to develop into a competent and confident practitioner. Similar resource limitations are apparent in some of the metropolitan secondary hospitals.

5.4.4.4 *Aspects of Support*

Supportive comments also featured strongly in areas that the GRNs perceived were *benefits* of the specialty rotations and demonstrate that the *support* was proffered from a variety of sources:

Very high acuity, quick turnover, excellent support, great communication with allied health staff and between medical team.
(Medical ward, tertiary hospital.)

Extensive preceptor support. (Perioperative, private hospital.)

The importance of adequate support to the transitioning graduate nurse cannot be underestimated. Critical thought affecting clinical judgement can only be developed through knowledge acquisition and exposure to clinical experiences (Fero, Witsberger, Wesmiller, Zullo, & Hoffman, 2009; Reilly, 2005). Subjecting novice nurses to unsupported clinical situations beyond their scope of practice has been shown to diminish patient safety (Garling, 2008; Johnstone, et al., 2008; Morrow,

2009), and influence a nurse's decision to maintain tenure within the nursing workforce (Heath, 2002; Takase, 2010). These issues and their ensuing effects are clearly demonstrated in the following GRN comments:

I would have learnt a lot more about critical thinking with some support. (Medical, tertiary.)

Note: in her consequent rotations, this nurse wrote: *fantastic education enhanced learning experience.*

(Support) varied from poor to excellent, depending on staff/SDN/CNS on the ward/department. (Medical, aged care, mental health, secondary hospital.)

Note: this nurse commented in 5-year vision as: *not sure if I will still be nursing.*

Management was unsupportive, huge patient loads, unfair rostering; grads not welcome at staff in-services. (Medical/palliative, secondary hospital.)

Note: this nurse commented in 5-year vision as: *working - ? where. Bit over nursing already.*

Acuity of patients relative to my experience. Inadequate staffing. Not knowing what I was doing and not having other staff who were willing to help. The skill mix during this rotation often meant grads were 'educating' other grads – a severe lack of support. (Surgical, tertiary.)

Note: This nurse chose to remain in his next rotation: *I have stayed in the Unit because it was an easier workplace than the first rotation. It is a better supported unit; they have catered to my time availability as I have returned to university to study in a different field. I always knew that I wouldn't be a nurse on the wards forever, but I envisaged doing it for approximately a decade. I now feel that as soon as I can find another profession within my field of study, I will leave nursing and probably not return to the job.*

High work load, very complex patient histories, no support, staff too busy, too many ENs and not enough RNs in Regional areas. Felt like you were dropped into nursing and you had to sink or swim. Unsafe for patient's care. (Medical/surgical, large rural hospital.)

Note: this nurse commented in her third rotation: *only myself on shift dealing with A&E (Accident and Emergency) patients with limited knowledge.* Following completion of her GNP she chose to work in a different organisation and a specialty where she had previously felt supported.

These comments clearly demonstrate the importance of strong and consistent support systems; the effect it has on the GRN, their perceived delivery of safe patient care, their overall concept of the nursing profession, and their intention to remain within it. It is imperative that the nursing profession ensures that all newly graduated nurses are proffered adequate and appropriate support and, more importantly, that areas known to be lacking in sufficient resources, such as the rural sector, are provided with the means to provision these. As depicted in the following graduate nurse coordinators' responses, it would appear that procuring resources to provide suitable support to the novice nurse is a difficult and ongoing challenge in a number of the rural and secondary sectors.

Would prefer my only job was GNP coordinator so I could find the time to introduce more innovations and changes. (Metropolitan secondary.)

Our difficulty for our program is having a dedicated person. Being in the (location), if staff resign, it takes a while to recruit. This has led to some difficult times in the past. (Large rural.)

GRN respondents from tertiary hospitals provided more positive responses in regards to overall support systems and program structure. This outcome correlates with the more structured systems that were described by the graduate nurse coordinators from this sector. Data from the graduate nurse coordinators indicated that all tertiary hospitals had a combination of senior level graduate nurse coordinators and educators (SRN), supported by staff development nurses, and in many cases, clinical coaches at a midway seniority grade (Level-2). Some of the graduate nurse coordinator respondents from secondary and smaller rural organisations indicated only a mid-grade nurse was available as the senior coordinator and/or educator. Given that support and guidance of the graduate, and the unit staff working with them has been shown to have a positive impact upon the

transitional experience of the novice nurse (Cubit & Ryan, 2011), it is important to consider the benefits that a more senior nurse may have in facilitating this.

Organisations need also to ensure recruitment and retention of suitable nurses as support resources.

5.4.5 Benefits of Specialty Rotations

Following the set of closed questions related to each rotation, open-ended questions were asked to elicit what the GRNs perceived were the benefits, problems and stressors that they had encountered within that particular specialty, with a view to gaining some insight into their experiences, and how they felt these had impacted upon their transition. Comments regarding the perceived *benefits* of the GRNs' first rotation related predominately to the *learning* of new knowledge; and the acquisition of *clinical* skills; followed by the *support* received; and the development of *time management* skills, as is demonstrated in their textual responses:

Great opportunity to develop time management skills and improve on basic nursing skills, i.e., IVABs (Intravenous Antibiotics). (Medical unit, tertiary hospital.)

Fantastic staff at ward level, sense of learning and achievement, feeling part of the team, lots of feedback from ward staff. (Mental health, tertiary organisation.)

Practicing basic care, confidence building with medications and communication. (Rehabilitation unit, tertiary organisation.)

Good grounding, managed good time management skills. Became competent with narcotic administration post surgery. (Surgical unit, secondary hospital.)

Looking after technology dependant patients, basic respiratory assessment skills improved. (Paediatric medical unit, tertiary hospital.)

Learnt to deal with stress, learnt small bits about lots of things. (Aged care, rural.)

Gaining surgical knowledge, for example, PCAs (patient controlled analgesia pumps), epidurals, drains, dressings. (Surgical unit, tertiary hospital.)

Lots of dressings, IVABs, basic nursing care (skills increase), team nursing – good when partnered with experienced nurse not when with a non-medication competent EN with 10 patients on IVABs. (Medical unit, private organisation.)

In the second rotation, the majority of graduates (56.5%) again indicated that the process of *learning* was the greatest *benefit*; followed by comments that were themed as *clinical* (41.3%), *support* (34.8%) and *time management* (8.7%). While the ranking of the most common responses in the second rotation were the same as the first, the percentage of the whole number of responses increased for all, with the exception of *time management*, which decreased by more than half from that of the first rotation proportion. This suggests that, by the second rotation, the novice nurse has begun to overcome the challenge of managing, and more effectively prioritising, a full patient workload, hence the reduced focus upon *time management*. Textual responses from their second rotation experiences demonstrate that acquiring further knowledge and clinical skills were perceived as important to the GRN:

First-hand view of challenges in community. Very flexible time management needed. (Community health, large rural.)

Learnt a lot of clinical skills such as insertion of NGT (nasogastric tube), IDCs (indwelling catheters), plenty of opportunities on surgical ward (Surgical ward, private hospital.)

Another busy ward exposed to everything quickly, makes you learn quickly. The staff development nurse was very proactive and hands on. She spent time with each of us discussing our patients each shift and suggested learning opportunities to develop our skills and knowledge. (Surgical ward, tertiary hospital.)

Types of patients, complex co-morbidities, care of dying patient, oncological / haematological malignancies. (Medical ward, tertiary hospital.)

Great support from ward staff. Well structured and outlined. Provided with education plus, plus, plus. (Surgical ward, tertiary hospital.)

Third rotation respondents once more, found *learning* to be of the greatest benefit, with an equivalent proportion of related responses as for the second rotation. *Support* moved to the second most common theme (29.7%) and *clinical* shifted to a lesser ranking (21.9%) with *time management* remaining the same (8.7%) as shown in the respondents' comments:

It required me to develop a set of nursing skills that was normally neglected in a medical setting. (Mental health unit, secondary hospital.)

Acute setting mental health learning to identify patients that may go unnoticed on wards. (Mental health, tertiary hospital.)

Getting a good grounding in all cardiac, metabolic and other medical conditions. Knowledge of commonly used drugs. (Medical ward, secondary hospital.)

Builds nursing skills very well, ability to work independently. (Perioperative unit, tertiary hospital.)

By the third rotation an additional theme of *confidence* had become evident with 7.8% of respondents indicating it to be a *benefit* of that rotation. This finding supports the theory that for the novice nurse to develop self-assurance in their nursing practice, the path to proficiency requires sufficient time to build upon basic knowledge and skills, as is revealed in the following GRN textual data:

Increasing confidence, learning to manage surgical lists. (Perioperative unit, tertiary hospital.)

Getting to be more confident in dealing with sick cardiac patients. Working independently, very good environment. (Critical care unit, tertiary hospital.)

Great staff! Always willing to help if available. Improved my time management skills and self criticism (critique). (Medical unit, large rural hospital.)

These comments clearly suggest that growing levels of confidence and nursing skills are achieved with each new rotation, a concept supported by similar research (Evans, et al., 2008; Reilly, 2005; Reeves, 2007). Whether the same levels and rates of confidence and competence would be gained by those who chose not to participate in a GNP is not able to be determined from this study, but is worthy of further research.

5.4.6 Problems and Stressors of Specialty Rotations

To enable registration as a RN with the NMBA, the newly graduated nurse must possess the basic knowledge and competencies relative to the profession. However, and as discussed previously in relation to the theory-practice gap, the dichotomy of thought between academia and industry can result in expectations that do not match reality. This often results in the novice nurse encountering issues and confronting experiences that are not found in most other professions. For many GRNs the transition from the relative safety of the theoretical arena to practice is a highly stressful experience, and many fear they lack the knowledge or skills to safely deliver appropriate nursing care (Goh & Watt, 2003; Levett-Jones & Fitzgerald, 2005). Furthermore, expectations by unit staff that GRNs should be fully practice-ready may be unrealistic. Such expectations add not only to the degree of anxiety experienced by the novice, but may reflect poorly on the organisation as a supportive environment (Morrow, 2009; Reilly, 2005). Adequate and timely support, particularly in the initial stages of transition to practice, have been found to directly impact on the sense of confidence and developing competence of the newly graduated nurse (Johnstone, et al., 2008).

5.4.6.1 Perceived Problems

In their initial specialty rotation, GRN responders who were in a secondary level hospital were more likely to indicate that a *lack of support* was considered a *problem*, with 26.7% denoting thus. Respondents from tertiary hospitals were the least likely to report a *lack of support* as a *problem*. Further breakdown showed that more than half of those who depicted *lack of support* as a *problem* (57.6%) were aged less than 30 years, and almost half of these (48.5%) had not indicated any prior employment in a health related occupation. Such data suggests that those GRNs who are older, and those with prior health care experience may perceive support levels in a more positive light than those who are younger, and without the benefit of previous exposure to the healthcare environment. Those who had attended University D as an undergraduate nursing student showed a slightly higher proportion of respondents (22.2%) who indicated problems related to a lack of *support* than did those from other universities, with University A showing 21.2%, University B 20.2%, and University C the least (14.3%). These differing levels of perceived support may also be related to the health sector the GRNs were employed in, as the greater proportion of University D graduates indicated employment in the private sector and those from University C were predominately within the tertiary sector. Conversely, University D also had the greatest proportion of respondents indicating that they had *no problems* in their first rotation and University C showed the lesser proportion of graduates (9.5%) indicating they had *no problems* during their first rotation. It needs to be noted however, that these two universities had the least number of nurses in the total graduate nurse research population, and therefore, any conclusions drawn from the data need to be viewed with caution. The following statements of perceived

problems seem to suggest, once more, that appropriate support was an important factor in shaping the GRNs' perceptions of their transitional experiences.

Assigned preceptor was part-time, then went on holidays so no set preceptor - was an issue in terms of support which is crucial in this first rotation. (Surgical ward, secondary hospital.)

Staff not always supportive and grads often given most difficult patients. (Medical unit, secondary hospital.)

Having little or no support from program coordinator and no staff development at times. (Medical unit, private organisation.)

Nurse manager very critical, occasionally abusive. Other staff too busy to help. Usually the only feedback you get was when you did something wrong. (Surgical ward, private hospital.)

High numbers of graduate nurses, ward staff not very helpful, negative staff morale. (Surgical unit, tertiary hospital.)

Lack of 1 or 2 support people that were dedicated to transition period and assessments. (Surgical, community, emergency, periop, large rural hospital.)

Research by Bartram, et al. (2004) found that job satisfaction increased and stress decreased when there was positive support given to the GRN from nursing colleagues and supervisors, a finding that was supported by Tervo-Heikkinen, et al. (2008), who also discussed the concept that an increase in nursing practice standards corresponded with a reduction in adverse patient events.

Three respondents cited they had felt they were not wholly using their knowledge and skills gained during their undergraduate education. All three had indicated their undergraduate nursing program was at University A; were in the 20 to 29 year-old age bracket; female; and had not specified prior health care experience before graduating. The age group and lack of prior health care experience may be relevant in terms of contributing to the theory-practice gap and consequently feeling

that there was dissonance between the knowledge they had acquired in university, and their ability to apply it to the workplace. The specialties they were assigned to for their first rotation were paediatrics, rehabilitation and mental health, all of which are somewhat more challenging than most specialties, and therefore, may not have received sufficient exposure to them during their undergraduate years. Two of the three GRNs indicated future careers in nursing, however, the third had resigned during her graduate program to pursue a non-nursing degree:

Feeling of losing basics learnt at uni, support staff not at this hospital, even though part of program. (Paediatrics, tertiary.)

Note: this nurse indicated a future career plan '*not in nursing*'.

Felt that I didn't consolidate knowledge learnt at uni as that was more focused on medical and surgical nursing. (Mental health.)

It was boring, no use of uni knowledge; lack of some education for looking after 'ward outlier' patients (Patients who do not fit the unit specialty profile). (Rehabilitation.)

In subsequent rotations, there were greater proportions of respondents noting that they had *not* experienced *problematic* areas. The primary theme depicted by those respondents who did report areas they felt were *problematic* was again *lack of support*, and was more commonly reported in their second rotation than in their first. As discussed previously, this may have been as a consequence of support staff considering the GRN required less support than in their earlier rotation, and the initial level of support shifting to new intakes of graduate nurses. *Busyness, lack of competence, poor skill-mix* and *bullying and harassment* continued to be reported by the graduates as perceived problems, and at a similar rate to that of the first rotation. Additionally, themes of *poor communication* (6.5%) and *unprofessional behaviour* (5.6%) emerged in this rotation, which may indicate an emerging awareness of the less favourable aspects of some organisational cultures. Again, those who believed

they were *not using skills* learned in their undergraduate nursing program (2.8%), or where the work was *repetitive or boring* (4.7%) were apparent. The issue of *program structure* began to feature in this rotation with 4.7% (n = 5) indicating thus, as depicted in the following comments:

Complex assignments while trying to learn a completely new area.
(Perioperative, private hospital.)

Not enough study days. (Medical unit, large rural hospital.)

Lack of supernumerary time. (Surgical unit, tertiary hospital.)

Lack of adequate supernumerary time. (Medical / surgical unit, large rural.)

In their second rotation, those GRNs who had attended University B as an undergraduate nursing student indicated the highest proportion (32.4%) of problems related to *support* in comparison to the other universities; University A attendees indicated 22.4% had *support* related problems, University D demonstrated no change from the first rotation (22.2%), and University C again, showed the least, but with somewhat more (21%) than that reported in the first rotation (14.3%). The University B cohort indicated the greatest (35.1%) and University C the least (10.5%) proportion of their graduates denoting that they had *no problems* during their second rotation. Some the issues the GRNs felt were a problem during their second specialty rotation are depicted in the following comments:

Lots of GRNs but not always enough senior staff. (Surgical ward, tertiary organisation.)

Some staff members expecting and pressuring graduates to do more work than they can handle. (Medical unit, secondary hospital.)

Not trained in mental health. Limited support or teaching. (Community mental health, large rural hospital.)

No clinical coach available due to budget restrictions. (Surgical unit, tertiary hospital.)

Adjusting from the way RNs worked in the country as opposed to the city, as in communication with colleagues and issues regarding clients. (Domiciliary, small rural hospital.)

Ward very heavy and busy, sometimes no actual support staff, so you had to rely on ward staff and they were busy too. (Surgical ward, tertiary hospital.)

Further exploration into the number of undergraduate clinical placements, and their type and duration may reveal plausible associations between them and the resultant transitional perceptions of the novice nurse.

While possibly indicative of an evolution in graduate confidence and assertiveness with colleagues, plus a greater awareness of what is, and is not, acceptable behaviour in the workplace, the increase in comments related to *poor communication, unprofessional behaviour and bullying* is of concern:

The ward was a basket case, poorly run. Many practice issues on this ward. I could feel myself becoming increasingly depressed and deskilled. (Medical / surgical unit, private hospital.)

Note: this nurse transferred to a different private hospital to complete a second GNP year but was clearly affected by the negative experience in her second rotation.

Some of the staff were unprofessional and unwelcoming in our first month. (Medical unit, tertiary hospital.)

Bitchiness between staff, arrogant surgeons to deal with. (Medical/ surgical unit, private hospital.)

Nurse Manager was difficult to approach, did not respect rostering requests and personal needs. (Medical/ surgical unit, tertiary hospital.)

Some doctors are very rude to nurses and you constantly had to chase them up to do things. (Medical and surgical unit, tertiary hospital.)

It is possible that those charged with managing difficult behaviours in the workplace are not sufficiently skilled in negotiating this difficult process, and consequently, the negative culture remains unchanged, as is suggested in the above GRN comments.

Only a few respondents (n = 8) indicated that they had participated in a fifth specialty rotation. Although the cohort was small, a new theme emerged related to *problems* and was coded as *lack of respect*:

Some staff not prepared to accept my judgement, treated like a student.
(Emergency, large rural.)

Lack of respect from younger staff. (Medical, surgical and emergency,
large rural.)

As both these respondents were of the 50-plus age category, it is conceivable that their perceptions could suggest that the graduates were beginning to develop a sense of identity and competence as they became more proficient in their RN role, or alternatively, may stem from a generational gap. Leiter, et al., (2009) suggest that the differing values held between the generations have the potential to generate conflict within the workplace and that the older graduate nurse may find it confronting to take direction from a possibly much younger, albeit more clinically experienced, colleague.

5.4.6.2 *Perceived Stress*

As well as seeking information related to what the GRNs had perceived as problematic areas within a specialty, a second question asked ‘what caused the most *stress* for you in this rotation?’ The rationale for including a separate question in relation to the difficulties encountered by the GRNs was based upon research by Evans (2005) suggesting that some experiences may be perceived as a problem but

are not always considered a stressor, and vice versa. This notion was evident in the current research where *workload* emerged as the leading cause of perceived *stress* as reported by the GRNs; as opposed to *lack of support* that was the more prevailing theme of perceived *problems*. Notwithstanding this, *lack of support* still featured strongly amongst the *stressor* themes.

While in the first and second rotations comments related to *workload* and *lack of support* formed the majority of the *stressor* themes, in the third specialty, the more common theme emerged as *lack of support*. It is feasible that as the GRN became more proficient, and was able to manage assignments more effectively, the perception of heavy workloads eased. The secondary hospitals had the greatest ratio of respondents citing a perception that their *workload* was a major *stressor*, and respondents from the tertiary organisations had the least. It is possible these disparities reflect inadequate nurse-to-patient ratios in the smaller sites. Concepts of *workload* causing *stress* are described in the following GRN comments:

Work routine. Caring for critically ill patients. All machine settings, ECG monitor, ventilator, blood test reading, all requiring a lot of study.
(Critical care, tertiary hospital.)

Poor skill mix on ward. Stress amongst staff and manager, pressure from manager on staff. (Surgical ward, private hospital.)

Patients going septic quickly, palliative patients and their family.
(Surgical ward, tertiary hospital.)

The heavy workload and greater expectations on my inexperience caused my health to suffer. (Medical unit, secondary hospital.)

Physical demands of lifting, rolling patients often without enough staff to assist. (Medical ward, private hospital.)

Thrown in – everyone too busy – very stressful. (Emergency unit, secondary hospital.)

The rural sector had the largest proportion of respondents who perceived that *lack of support* was a major *stressor* and is consistent with previous discussions related to areas perceived by the GRN as *problems*. As was found in the section that related to perceived *problems*, the smallest proportion of respondents where *lack of support* was considered a cause of *stress* was from the tertiary hospitals.

In the consequent rotations, and unlike the first rotation, the second most commonly mentioned source of *stress* was a *lack of knowledge*. When tabulated against the type of organisation that the respondent worked in, both the tertiary and the secondary sectors demonstrated the largest proportion of respondents reporting a *lack of knowledge* had contributed to *stress*. This emerging perception may be related to a growing self-awareness within the GRNs as they begin to develop basic skills in critical thinking and, as a consequence, recognise the enormity of the knowledge scope that the profession of nursing encompasses. Their undergraduate education is aimed at providing the foundation upon which the novice nurse will build their clinical knowledge and skills, and that will lead them to ongoing competence and proficiency. Consequently, the learning acquired in the undergraduate nursing education is often of a different nature than that experienced in an ongoing industry setting (McKenna & Newton, 2008). The following GRN comments are indicative of the stress experienced in attempting to apply their skills and knowledge to rapidly changing clinical situations:

Learning how to deal with machine alarms and dealing with ‘crashing’ patients. (Medical unit, tertiary hospital.)

Patients’ conditions can change so quickly and critical thinking (needed) plus, plus, plus. Have to be fully alert and knowing what to do. (Critical care, tertiary hospital.)

Lack of experience, feeling unsafe to practice. (Surgical unit, tertiary hospital.)

The novice is required to quickly and consistently develop new skills and learn to be assertive in communicating with not only the patient, but with colleagues as well, including those who may appear less than receptive to a junior member of staff (Delaney, 2003). On several occasions, poor *communication* was cited as an issue causing *stress* and related mostly to colleagues and, on two occasions, to medical staff. Such occurred predominately in the tertiary sector (n = 6), with four respondents working in surgical and one each in medical and perioperative units:

The staff being hard to communicate with. (Same day unit, tertiary hospital.)

Strong personalities amongst staff; conflicting advice. (Perioperative unit, tertiary hospital.)

Lack of staff, increased workload. Destruction of confidence by other staff. (Surgical ward, private hospital.)

Being excluded from ward meetings because 'I'm a grad'. Lack of support by ward staff. (Surgical ward, tertiary hospital.)

Novice nurses often struggle with coming to terms with the demands of their new RN role. Such a stressor may be compounded when senior, and apparently more experienced nurses demonstrate hostile or dominant behaviours (Duchscher, 2009). Most people have a natural desire to want to feel part of a group and socialisation forms part of adaptation to a new environment (Turner, 2009). Occasions of unfair allocation of workload and/or unsociable shifts (weekends and evenings) were cited by the GRNs in the current research and are issues that have also been reported in other studies of graduate nurse transition (Evans, 2005; Lea & Cruickshank, 2007). When there are perceptions of unfair work allocation, or

communications, GRNs are generally reluctant to speak up due to a desire to be part of the unit culture; for fear of ridicule; or being made to feel incompetent (Duchscher, 2009; Evans, et al., 2008). Additionally, older, non-university educated nurses are often likely to be implicated in issues related to poor communication (Kelly & Ahern, 2009; Leiter, et al., 2009). Conversely, the experienced, knowledgeable nurse is in a prime position to mentor and support the novice nurse through these experiences and many of the comments in other sections clearly demonstrate this to be the case. It is feasible that these occurrences of seemingly poor communication and workload allocation may have been ameliorated if a suitable mentor was available to intervene on the GRN's behalf.

The importance of an appropriate mentor with whom the GRN is able to debrief and perhaps, improve their experiences during their GNP is highlighted in some of the responses reflecting the graduates' stressful situations. The following comments rather succinctly demonstrate the variety of issues the GRN may experience transitioning from novice to competent nurse.

Drug errors I made! (Surgical unit, tertiary hospital.)

Struggling with whether or not nursing was for me. (Day procedure unit, tertiary hospital.)

Note: this nurse left the profession to study a different, health related career.

Nature of the ward, very distressing and sad sometimes. (Medical ward, tertiary hospital.)

Not having someone to talk to when needed. (Medical unit, secondary hospital.)

The seriousness of some situations. (Emergency department, tertiary hospital.)

Difficult events experienced in the workplace create stress and anxiety. Open disclosure and frank discussion are important tools to reduce the emotional impact of these experiences and to monitor that coping strategies are appropriate. Informal opportunities to debrief are often unavailable to healthcare workers due to the increasing busyness of their workloads, but alternatives, generally in the form of counselling, such as Employee Assistance Programs, are usually made available. In the current study, many GRNs found that the study days were an opportunity to network with fellow graduates and rated this opportunity highly, particularly in terms of being able to discuss their experiences. It may be of benefit to the novice nurse to ensure adequate provision of regular, informal networking opportunities, where they are able to share their experiences in a more relaxed and supportive environment (Welding, 2011); or alternatively, make certain that they are fully cognisant of how to source support systems should these be required. In an effort to facilitate an informal communication network for GRNs, the NMO has recently explored the option of developing a facebook page to enable discourse between nursing peers. This is still to be finalised (R. Newton, Marketing & Events, NMO, WA Health Department, personal communication, May 28, 2012).

Formal debriefing is particularly important for staff involved in sentinel events where a patient has experienced either serious outcomes from the provision of medical care, or indeed, has deceased. The emergent theme of patient death as a stress inducer came primarily from the GRNs who were working in the tertiary sector. Many of the associated specialty rotations were in either medical wards or critical care units, locations where there are a higher likelihood of such events occurring. Witnessing a person's end of life of is always confronting and is an

experience that is difficult to prepare for, particularly when the patient has yet to experience life to any real extent.

Emotionally coming to terms as a young nurse that children get sick and die. (Paediatrics unit, private hospital.)

In my first week on my own, 3 patients that I had (looked after) passed away, there was no form of debriefing for me. (Medical unit, tertiary hospital.)

On a very busy ward with very sick patients and many deaths. (Medical unit, tertiary hospital.)

Learning about nursing management for stroke patients as it wasn't something I had come across. Plus it was my first time I had nursed a palliative patient who then died during my shift. (Medical unit, secondary hospital.)

In a US study of transition experiences, similar distress was experienced by graduate nurses when they were first confronted with the issue of death and dying (Delaney, 2003). The author of that study concluded that death and dying, and developing strategies to cope with the event, was a topic that required more attention and further discussion in the undergraduate curriculum. An education package would seem a valuable option and was described by Thompson (2007) as including formal clinical experience within a hospice facility that involved pre and post briefing within a protective environment. Debriefing following a patient's death enables those who have been involved in the patient's care to explore coping strategies, and to help manage the emotional distress that is part of witnessing such an event. It would appear that appropriate measures for assisting the GRN to deal with such stressful situations may be lacking in some organisations.

The third specialty rotation data demonstrated an increase in comments related to a sense of lacking *competency* and may be indicative of the GRN developing their

ability to self reflect and to better understand the complexity of the role of the RN. Deficits in understanding the needs of the novice nurse in some sectors were also apparent, as is demonstrated in the following GRN comments:

Sense of a lack of training to be prepared for the area of mental health nursing. (Mental health unit, secondary hospital.)

Initially working out drug dosages much smaller than before. (Paediatric unit, private hospital.)

With limited critical care experience; looking after critical patients can be stressful at times. (Critical care, tertiary hospital.)

Only myself on shift. Dealing with A&E (Accident and Emergency [Department]) patients with limited knowledge. (Third rotation, large rural hospital.)

The final comment is of concern. The graduate nurse coordinator from a large rural organisation indicated that towards the latter stage of their program the graduate was the only RN on a shift. As the graduate would still be consolidating knowledge and skills at this stage, this poses a significant risk to the organisation in terms of safe patient care, as well as placing considerable stress upon the nurse as is demonstrated by the following comment.

Not having enough experience to work in accident and emergency. (Emergency Department, first rotation, large rural.)

Note: in relation to night duty, this nurse also commented – *I did not believe I had enough experience to have the responsibility of working night duty as I, being the RN, was working with mainly (only) ENs.*

Graduate nurse coordinators from both a metropolitan secondary and a small rural hospital indicated that their graduates often worked with only one other RN. This is likely to create situations where the graduate has the entire responsibility for a unit, for example, in times of meal breaks, or short leave taken by the other RN, and is forced to exceed their scope of practice (Duchscher, 2009; Lea & Cruickshank,

2007). Morrow (2009) states that “patient safety must be at the fore when planning and implementing nursing human resource allocation, including the support of fledgling nurses into the staff mix” (p. 283). When there is a deficit in nurse staffing levels, expecting an inexperienced nurse to take on additional responsibilities only exacerbates the hazardous situation (Cowin & Hengstberger-Sims, 2006; Evans, et al., 2008; Garling, 2008); and has already had dire consequences within the Australian healthcare context where this has occurred (Death caused by unsafe staffing levels, 2008; Record of Investigation of Death, Ref No: 12/12, 2012).

In subsequent rotations, the proportion of responses in relation to *stress* comments recorded as *nil* increased to 31.5%. The *patients/ clients* originating perceptions of *stress* were seen as a concern. It is feasible that, as the graduate becomes more competent and confident, they are allocated more complex patients to care for, including those who have little respect for the ‘zero tolerance to abuse’ directives. The WA Health Department has long advocated a policy of no tolerance to abuse of staff by patients and/or their relatives. Their policy and guidelines stipulate the necessary regulatory requirements to ensure that training and controls are in place to manage and minimise workplace aggression and violence, and to ensure staff are safe in their workplace (Department of Health, WA, 2004). The following comments suggest that despite these measures, such experiences are still stressful to the nurse involved:

The unpredictability and volatility of patient mix upon the ward. (Mental health, secondary hospital.)

To deal with difficult families of the patient. (Surgical unit, tertiary hospital.)

Difficult patients and learning how to manage them effectively. (Medical unit, tertiary hospital.)

Overall, and throughout the consequent rotations, the GRN responses have demonstrated a maturing professional, a concept that could be interpreted as an indication of a successful transition from novice to proficient nurse.

5.4.7 Additional Perceptions from Specialty Rotations

At the end of the section for each specialty rotation, a final open-ended question asked for any further comment that the graduates wished to make in regards to their rotation. For ease of grouping, these comments were coded on a five-point Likert-type scale from *very positive*, to *very negative*. First rotation responses were predominately *positive* (61%), implying that the GRNs overall outlook related to their first transitional experiences is optimistic and conducive to affirmative experiences.

I thoroughly enjoyed my first placement of my graduate program.
(Medical ward, private hospital.)

Loved it. Chose to continue on this ward after grad program. (Surgical unit, secondary hospital.)

I was made very welcome and supported well by the SDN and other staff during this time. (Surgical ward, secondary hospital.)

Excellent support, good rapport amongst staff, all very supportive.
(Domiciliary placement, community health.)

It was a great ward and I now work there full-time. (Surgical ward, tertiary hospital.)

It had been a very positive, productive and beneficial start of my career.
(Perioperative unit, tertiary hospital.)

These comments clearly show that positive experiences are conducive to retention within the workforce, and in particular, to those areas where the encounter has occurred (Johnstone, et al., 2008; Morrow, 2009). Much of the literature related

to graduate nursing transition tends to focus on the negative viewpoint. The current research has shown that the greater majority of transitional experiences are, on the whole, much more positive than other studies imply (Chang & Hancock, 2003; Evans, 2005; Kelly & Ahern, 2009), and as such, these aspects should be the focal point of future planning and the development of guidelines for transition programs within WA.

Only five responses of the *additional* comments were coded as *very negative* with a further 22 as mostly negative (37% total negative). Of the *very negative*, the spread of designated workplace was from across all organisational categories, which would suggest that the experience was more likely related to the individual, rather than the sector.

Our ward was very understaffed and nurses expected to pick up the slack. I had workers comp injury here. (Medical unit, private hospital.)

Felt like you were dropped into nursing. You had to sink or swim, unsafe for patients care. (Medical / surgical, rural.)

Was not preceptored, made to feel a nuisance. Staff were not friendly. (Medical unit, small rural.)

A small proportion of the responses that indicted the GRNs had encountered both *positive* and *negative* aspects of their specialty rotation were themed as a *mixed* experience, as is shown in the following:

I've enjoyed this rotation and have learnt a lot of skills. Need more support from senior staff. (Medical ward, tertiary hospital.)

Very supportive SDN. Not rostered on with Preceptor – it is a waste of time being assigned one. (Medical and surgical, tertiary hospital.)

High acuity and turnover = increased stress. Often dreaded going to work. Often staying back. Great, friendly staff, excellent graduate program support – would come and help when called. (Medical unit, secondary hospital.)

It provided a good entry point to nursing, however staffing shortages and management decisions proved a dangerous combination. (Medical unit, secondary hospital.)

For their second specialty rotation, 74 respondents took the opportunity to provide *further information*; 12 of these were themed as *very positive* and an additional 28 as *mostly positive*. While this was slightly less than that recorded for the previous rotation, there were also moderately fewer coded as *very negative* or *mostly negative*. Between the specialty rotations, the GRN responses from the tertiary and private sectors showed minimal change in the proportions, however, there was a considerable increase in the *positive* responses from the rural sector and a small decrease in those from the secondary hospitals. Without additional data it is difficult to speculate as to why this has occurred. It is possible that in the initial stages of their program the GRNs in rural areas may have felt more isolated from their peers, and as they progressed in their transition, assimilated more easily into the team. Again, the responses demonstrate the favourable impact that positive experiences have upon the GRN's concept of their nursing role:

Fantastic education enhanced learning experience. (Surgical ward, tertiary hospital.)

I thoroughly enjoyed my second rotation and would be interested in returning to this area in the future. (Surgical unit, tertiary hospital.)

Weekly updates on new events and policies were great. Kept everyone up to date and issues could be looked at quickly – very approachable management. Loved my work and going to work. Friendly staff with a huge knowledge base. Always someone who could answer your questions using theory and policies to back up what they said. Felt very safe as everyone used the policies – no dodgy practices. (Paediatric critical care, tertiary hospital.)

This was a fantastic ward to develop nursing skills. My preceptor would check my observations were complete, my drugs were correct and offer help in any patient deterioration. (Surgical ward, tertiary hospital.)

Fantastic rotation. Great introduction to busy post-operative ward, great team. (Surgical ward, small rural hospital.)

I loved it. I like mental health. (Mental health unit, private hospital.)

Loved it, and it's where I'm staying. (Perioperative unit, tertiary hospital.)

Conversely, some experiences were not so conducive to a constructive experience and led a few to thinking about leaving the program. Takase (2010) found that thoughts, and verbalisation of intent to leave, were early signs of nursing staff turnover, and that such incidents are often exacerbated by work overload and even workplace injury. Ongoing issues with insufficient human and material resources, that are a necessity for any nurse to effectively and safely provide optimum patient care, are depicted in the GRNs' comments:

I couldn't wait for it to end! (Surgical ward, tertiary hospital.)

Highly stressful rotation. (Medical ward, tertiary hospital.)

Very bad SDN. I got sent to another ward my second week I was there and got another back injury – not the right equipment for heavy patients. (Medical / surgical, private hospital.)

The most un-enjoyable rotation. Worst experience leading to thoughts of quitting nursing for good. (Surgical ward, tertiary hospital.)
Note: this nurse continued, enjoyed the next rotation, and did not resign.

Of the 73 GRNs who completed a third specialty rotation, only slightly more than half took the opportunity to provide *further comment*. Of these, 16 were themed as either *very positive* or *mostly positive*, and 13 as *very negative* or *mostly negative*; the remaining texts were considered to contain *mixed* responses. The responses continued to demonstrate the influence that the GRN's experiences had on their perception of the specialty rotation relative to the magnitude of that experience:

I really enjoyed this rotation and would like to specialise in nephrology nursing. (Dialysis unit, large rural hospital.)

Have only been here about 3 weeks – the 2 SDNs have been amazing and very supportive and thorough. (Medical unit, tertiary hospital.)
Enjoyed this rotation. (Surgical unit, private hospital.)

The staff in the critical care area are much more supportive than on the wards. (Critical care, tertiary hospital.)

I really enjoyed this rotation and feel it helped me so much in my next rotation. (Perioperative, tertiary hospital.)

Absolutely impossible to get study days to the point where I considered transfer to another hospital! Even though we are entitled to them. (Medical unit, secondary hospital.)

A very negative experience so far, permanent staff very ‘clicky’ and exclude grads. (Surgical ward, tertiary hospital.)

My preceptor left in my second week. I paged my SDN four times over my next two shifts, I went to her office and her pager was off. I was given a new preceptor who worked nights and was an RN I had gone through uni with but who had chosen not to do a grad program! (Surgical unit, tertiary hospital.)

The absence of the SDN related in the above comment is of concern and, as discussed in Cubit and Ryan (2011), deprives the GRN of an important resource in terms of support and assistance to integrate into the unit. Additionally, the experience level of the newly assigned preceptor appears to be inadequate. Many respondents cited that units were often too busy for the GRNs to be released from them in order to attend scheduled study days. This restriction is obviously disadvantageous to the novice’s further development of clinical knowledge, and also reduces their opportunity to network with fellow graduates; a concept that has been discussed as important to the novice’s successful integration and psychological wellbeing (Adlam, et al., 2009). Inability to share their experiences with their peers

is also likely to detrimentally influence their opinion of the unit as being supportive to them.

5.4.8 Benefits of the Graduate Nurse Program

The GRN survey questionnaire respondents were asked to briefly describe what components of their graduate program they believed were the most *beneficial* and facilitated their transition to the role of proficient RN. Of those responding to this question the largest group (45.3%) stated that *study days* were the most *beneficial*, followed by *support* (35.8%) and then *educators* (20.9%). This combination of themes suggests that a robust program structure that includes appropriate guidance, ongoing and relevant learning opportunities, and professional exemplars is appreciated by the graduate nurse and is seen to be helpful to them progressing during their transition to proficiency. The related responses also indicate the importance of suitable and strong support systems to demonstrate that the organisation genuinely desires the novice to develop into a confident, competent and compassionate practitioner. As previously alluded to, these positive components of the current GNP should be emphasized and developed to further enhance future programs.

In addition to the positive elements, respondents were also asked if they believed there were any components of the graduate program that they felt were *not beneficial* in facilitating their transition to the role of RN. The greater majority (70%) of respondents indicated that there were no components of the GNP that they felt were *non-beneficial*. While these results are very heartening, the *non-beneficial* components identified by the respondents still need to be considered; with an aim to develop strategies to overcome the issues, and to continually improve processes and

graduate experiences; as well as to maximise the retention of nurses within the workforce.

The majority of *negative* response themes were related, once more, to a *lack of support*, followed by (too many or unrelated) *assignments* and included comments questioning the relevancy of clinical governance as a subject at a novice level of learning. The data does not allow any indication if, by clinical governance, the graduates are referring to quality improvement, as in reality, the terms relate to similar, but different aspects of improving practice. A knowledge of quality improvement principles is usually a criterion in nursing job descriptions for selection purposes, and hence, should be included in the GNP curriculum; whereas, knowledge of clinical governance principles would be generally considered a requisite for more senior levels of nursing. Of the total *negative* responses to beneficial components of the GNP, there was a mixture of *irrelevant* or *repetitive study days, staffing, workload* and *rotations* all with similar ratios of responses, as follows:

Spending so much time in the day procedure unit. Too many assignments for the program – only added to the stress. (Large rural.)

Inflexibility, unreasonable working hours. (Private.)

Very poor course coordination never saw our supervisor, had to chase for information, emails, phone, etc., very frustrating. (Small rural.)

There were a lot of study days that covered the same material over and over again, which became quite tedious. (Tertiary.)

The stuff about clinical governance in first year. Also the ancient books and performance evaluation – identical to work done as students. (Private.)

The fact that this particular hospital takes on too many graduates and then no jobs at the end of program. Too much of a workload with assignments – too stressful in first year out. (Secondary.)

The transition to nursing was a waste of time. Clinical governance highly irrelevant to a grad nurse trying to learn. (Secondary.)

Lack of support and direction on site. Withdrawal of program rotations vital to all round care in the rural setting. (Large rural.)

Overall, there was a greater proportion of *negative* responses from the non-tertiary sector, and in particular, the rural and private sectors. It needs to be noted however, that when considering these findings, data related to the private sector are inclusive of private tertiary, secondary and rural organisations, and may consequently suffer from similar resource issues as public sector organisations of similar size.

5.4.8.1 Graduate Nurse Program Improvements

When asked for suggestions of how they believed the GNP could be improved, almost half the respondents indicated that either *no* improvement to the GNP was required, or did not give a response. The most common theme for improvement was (more) *support* which included general, clinical and SDN support; this was followed by *program structure*, with some suggesting fewer rotations, and as many proposing additional rotations; and several respondents advocating an increase to the program length to enable additional rotations to the more specialised areas.

Train grad nurses with skills – don't put grad nurses under so much pressure to do something to fill criteria if there is not funding to provide support. (Secondary.)

Improve communication between staff and staff development – what they need to do as a preceptor. (Tertiary.)

More supernumerary shifts. A graduate program that can continue for 2 years and a chance to work in the critical care areas. (Tertiary.)

More support for those graduates located at different hospitals - as we tended to be forgotten about. (Tertiary.)

Clear guidelines prior to grad program would have helped me understand work-load, as this was very stressful. More education for staff members (preceptors, etc) to help increase communication between grads and staff, e.g., staff unaware of requirements. (Secondary.)

Definitely need full-time staff development/preceptor/go-to person. Supernumerary time for new work areas needs to be complied with. (Large rural.)

Do what they say they offer: more support, more development, supernumerary days, zero-tolerance to bullying and action it. Better skill-mix and better rostering – it was a relief to finish the grad year – you feel you are not part of the team (only there temporarily) and therefore get all the (worst) patients and (worst) loads. (Secondary.)

Increase staff development nurse role on ward at first when beginning rotation – then there is always someone to point you in the right direction. All graduate nurses should be invited to presentations by other graduate nurses to learn from each other. (Secondary.)

Offer the option for a 3rd rotation. The feedback we get feels very generic – for example, we passed competencies, followed protocols – it would be nice to have an interview or review session to talk about the plusses and minuses and how to work on the things that need more attention. I feel senior staff are quick to blame but rarely give feedback. (Tertiary.)

I believe there should be more clinical supports when graduates first start. Someone to be there to answer any little questions, so as to not make coordinators' and other nurses' workloads huge! (Small rural.)

More staff development nurses; more of an introduction into the hospital systems; nurse who coordinated program was too busy – wore too many hats. (Tertiary.)

More study days to complete ward competencies, i.e., ALS (Advanced Life Support), epidural, IVI (intravenous infusion), and catheter competencies – all had to be done in our own time! (Large rural.)

More in-depth analysis and teaching of pathophysiology of disease processes - enables nurses to think 'outside of the box' when planning interventions. (Tertiary.)

Once more, respondents from the non-tertiary areas were the predominate group to advocate improvements, with 79% from the private sector believing that there were ways the program could be improved, and 60 and 65% respectively, of the

secondary and rural sector respondents suggesting ways that they believed their transitional experience could have been enhanced. Further *improvement* themes included:

- appropriate training of preceptors, with clear guidelines of the expectations and limitations of the GRNs who were allocated to them;
- better compliance with supernumerary time;
- patient allocation, workload and rostering that is more appropriate to the GRN's level of experience;
- improved feedback and review sessions; and
- an option of additional program time to allow rotations to the more specialised areas.

Interestingly, many are reflective of the UWA (2000) study recommendations that are summarised in section 1.3 of the first chapter. If these components that the GRN believe are conducive to a supportive and beneficial transitional program were clearly articulated, they would provide a sound framework for a constructive guide to those who are charged with managing such programs, and for facilitating the progression of the novice nurse to a skilled and knowledgeable practitioner.

5.4.8.2 *Program Evaluation*

Feedback in relation to transition programs is generally sought from the GRNs via formal evaluations, either during and/or at the end of a program. This feedback is important for organisations to enable them to determine the effectiveness of their program, and to allow identification of areas requiring improvement. Further, measurable evidence of program efficacy tends to substantiate program funding.

Sites most likely to have formal evaluation processes in place were from tertiary (88%) and secondary (86%) organisations. Those less likely to have provided evaluation of their GNP were respondents from the private and rural sectors, with 70 and 73% of respondents respectively indicating thus. Reeves (2007) research into Victorian graduate nurse transition programs reported the majority of GRN respondents had evaluated their programs highly and that this related to higher levels of satisfaction.

5.4.8.3 Graduate Program Guidelines

The graduate nurse coordinators who participated in the web-based survey were asked to provide a brief outline of the guidelines that they used to govern the administration of their graduate nurse transitional programs (Appendix F).

There is little doubt from their responses that the graduate nurse coordinators intend to provide a positive experience for the nurses transitioning from novice to proficient practitioner within their organisations. However, it would appear from the feedback of both the graduate nurse survey questionnaire, and the graduate nurse coordinator web-based survey, that comprehensive and objective guidelines relating purely to the aspects of graduate nurse program structure, management and assessment are lacking. This is a considerable oversight by organisations in ensuring their transitional programs are well executed and that they wholly facilitate the development of a competent and professional nursing workforce that is available to provide optimal health care to the population of WA. It is also of concern in the current financial environment that suitable measures of fiscal accountability, in relation to the Government funding for GNPs, are not readily apparent.

5.4.8.4 *Transition Programs Innovations*

To determine what innovations or strategies may have contributed to the further development of their respective transitional programs, the graduate nurse coordinators were asked to describe what changes have either been made, or are planned to improve their graduate programs. The responses were generally comprehensive and insightful, with the majority of information from the tertiary sectors, and are presented in Appendix F. Some of the metropolitan secondary hospitals appeared to have a less structured approach to their transition programs, and fewer resources than the larger tertiary sites, but did give the impression that they were committed to support the graduate nurse where they were able to. The small sample, and limited information from the private organisations reduced the ability to draw any definitive conclusions, however, both graduate nurse coordinator respondents indicated a partnership with a university that enabled their GRNs to gain the Graduate Certificate in Clinical Nursing at the completion of their transition program. The feedback from the rural sites was the most informative in relation to the tyranny of distance and the resultant lack of support for the graduate nurse coordinators to implement the changes that they would have liked to.

The breadth and detail of the innovations, as described by the tertiary hospital graduate nurse coordinators, and in comparison to the more seemingly reactive changes put forward by the secondary and rural sectors, would appear to demonstrate how an evidence-based approach is able to provide a more robust and structured framework with which to design a successful transition program. It is obvious that the greater the graduate nurse coordinator and staff development input there is into the GNP, the more positive the experiences the nurses have in their transition phase.

The following comments show the different experiences of GRNs who did, and did not have supportive SDNs and graduate nurse coordinators:

Staff on the ward gave you great support and easier patient loads to begin with; clinical coaches and supernumerary days, lots of in-services, encouragement and positive feedback from staff. (Metro tertiary.)

Level of support I received at xxx Hospital was excellent. Staff development nurses were extremely helpful as were my mentors/preceptors. (Metro tertiary.)

Monthly seminars organised by grad coordinators, presence of clinical coaches during 1-2 weeks post orientation, self directed learning packages and ward based assessments (were benefits of GNP). (Metro tertiary.)

PDNs (Professional Development Nurses), CNMs (Clinical Nurse Managers) and some staff did not offer adequate support on 2 of my rotations. (Metro secondary.)

Not beneficial at the time, but the lack of a program coordinator encouraged self direction and motivation. (Large rural.)

Lack of support, full patient loads from day-1 on each ward (told we had 2-days supernumerary on each ward), so no orientation. Lazy and unapproachable staff development nurses. (Metro secondary.)

Program coordinator and staff development had little input. (Large rural.)

Once more, these comments clarify how important the support of program coordinators, SDNs and preceptors are to the GRN, and how they appear to appreciate the ability to assimilate into a new environment when suitable supernumerary time and appropriate learning opportunities are provided.

5.4.9 Final Registered Nurse Integration Comments

The final open-ended question of the newly graduated nurses invited further comments from the respondents to assist in identifying how they felt about their

integration into the workforce as a RN. Equivalent proportions of those who had participated in a GNP, and those who had not chosen this option to transition, responded to the invitation to comment. The responses were once more coded on a five-point Likert-type scale of *very positive* to *very negative* to determine trends. While the greater proportion of responses (37.2%) was deemed *positive*, only slightly fewer were considered *negative*. However, when separated into the groups of GNP participants and non-participants, the comparisons were quite distinct. Of those respondents who had participated in a GNP, 41% of their responses were deemed *positive*, and 28% *negative*; the remainder were coded as *mixed* as the responses were felt to contain both positive and negative elements. Of those respondents who did not participate in a GNP, only 21% of their responses were *positive*, while 36% were themed as *negative*, with the remainder considered to be *mixed*. A small portion of comments were related to staffing, work-life balance and a single comment recounted bullying. The following sample demonstrates how difficult it was for some of the newly graduated RNs to transition from novice nurse to competent practitioner:

Hard work! Enjoyable at times, stressful at times. Underpaid! Feel I definitely would have been more confident and felt more able to deal with the pressure if I had spent more time on the ward and less in the classroom (as an undergraduate). (Tertiary hospital, Uni B for undergraduate program.)

Thank you for doing this survey! It feels great to be heard for once. It has been a scary bumpy and unsupportive time. If I didn't have a passion for nursing, I probably would have changed professions. (Private organisation, Uni C for undergraduate program.)

First 6-weeks of first rotation quite stressful in getting used to everything – a bit freaked out with the responsibility of someone's life and how poorly written some med (medication) charts are. (Tertiary hospital, Uni B for undergraduate program.)

Coming back into Australia looking for work having not done a graduate program, I found it very hard to find work. (GP, Uni A for undergraduate program – non-GNP.)

Some ward/units welcome graduates and support them well, while others fail to see that without graduates the profession will die. There are still quite a few RNs, CNs and CNSs that ‘eat their young’ - who do not want to support graduates, and if you are placed with these, you will see that the retention rate falls. (Tertiary hospital, Uni B for undergraduate program.)

Found it quite a harrowing experience at times knowing a patient’s life was in my hands. (Tertiary hospital, Uni A for undergraduate program.)

As I had prior experience as an EN I was fortunate – I believe I would have left the profession otherwise as (there was) no educator/preceptor. (Private organisation, Uni D for undergraduate program – non-GNP.)

The work is much harder than I ever thought. It’s very tiring and shift work makes it difficult to get into a routine. (Private organisation, Uni C for undergraduate program.)

The staff in the wards are generally helpful and wonderful, but I have seen what bullying has done to friends and myself. I noticed that some of these bullies really have no idea how badly they criticize others. There should be an intervention program or something to help these people to recognise and change their behaviour. While they are fantastic at managing a ward, they lack skills to manage people. (Tertiary hospital, Uni A for undergraduate program.)

The grad year was a bit brutal for me. I only survived due to the effort put into the study with babies at home. Recognise, and always did, the crucial importance of experience. Currently, I feel much more part of a team, able to assist and equally able to ask for help as needed, without damage to identity as an RN. This is partly due to my experience but also very good morale on the ward. (Tertiary hospital, Uni A for undergraduate program.)

Conversely, the positive comments related to the novice nurse’s integration into the workforce provide strong evidence that when commencing in their new role of responsibility and professional development, good program structure and support are greatly appreciated by them; and endorses the effort and resources invested in transitioning them to the profession of nursing:

The graduate program is a great concept as it provides you with a helping hand and more support and education throughout your first year. I also believe it is beneficial to incorporate a medical and surgical rotation into the graduate program to diversify the graduates' learning experience. (Tertiary hospital, Uni B for undergraduate program.)

The grad program has made me a much better nurse by increasing my exposure to different hospital settings. (Tertiary hospital, Uni A for undergraduate program.)

I am very proud of the profession I have chosen, and would recommend it to anyone if they have a desire to learn, but it is an ongoing life-long commitment to learning. Graduate programs need to be in a place to allow new nurses to grow and learn before leaping into an area of choice. Get the basics down first. (Tertiary hospital, Uni A for undergraduate program.)

I have enjoyed the transition from student to graduate to Registered Nurse. It has been stressful at times, but overall very rewarding and challenging. I now preceptor students and it is enjoyable to help them through their practical experience and offer advice for their own transition. (Private organisation, Uni A for undergraduate program.)

Thank you for this further study into the experiences of my peers of their graduate programs. I feel that this contributes to a perception of nursing as a profession. (Tertiary, Uni C for undergraduate program.)

It is lovely to have so much support from most of the staff within my hospital, which made my transition from student to Registered Nurse a lot easier and less pressured. (Secondary organisation, Uni B for undergraduate program.)

I am happy that my grad year was completed in a large public tertiary hospital, as talking to fellow students it appears that much more support has been offered than in private hospitals, or smaller hospitals. (Tertiary hospital, Uni B for undergraduate program.)

It was lovely to hide under the title of 'graduate' – felt protected and not really judged. It was a good grad program with a lot of support on the first rotation from staff and SDNs. Now I'm glad I've lost the grad bit from my name badge! (Private organisation, Uni C for undergraduate program.)

These comments clearly demonstrate the maturing of the novice nurse into a confident practitioner. In addition, it is plainly apparent that the notion of the newly

graduated nurse being assisted by a structured program, and supportive organisation throughout their interim transition is a worthwhile investment in achieving proficiency in their nursing skills, and ongoing education.

5.5 Career Pathway Following Transition

RQ 3: What perceived effect does the Graduate Nurse Program have on predicted career longevity of newly graduated registered nurses?

The general intent of a GNP is to provide suitable supports to the newly graduated nurse and facilitate their transition to becoming a proficient member of the nursing workforce. The transition period is an opportune time to nurture the novice nurse and to encourage their retention within the profession. To answer the final research question, two sections of the GRN survey questionnaire elicited information from the respondents to determine what influence the graduates' transitional experience may have had on their choices related to their current or intended career pathways, and to their five-year professional vision.

5.5.1 Career Pathway Intention / Choices

In response to the question pertaining to their intended pathway following the GNP, 56% of the GRN respondents indicated that they had stayed in either the last specialty rotation of their program, or returned to one that they had experienced earlier in the program; and a further 17.6% had stayed within the organisation, but chose to work in a unit different to those they had experienced in their GNP. Only 13.9% of those responding to the question had moved to a different organisation; suggesting that a formal GNP has a positive influence upon a novice nurses' intention to continue tenure with the transitional organisation. Of those who had

moved to a different organisation, the greatest proportion was from the private (28% of all private respondents) and rural (30%) sectors. The least likely to move to a different organisation were from the tertiary (6% of all tertiary respondents) and secondary (13%) sectors. Many of those who changed organisations had reported issues pertaining to a lack of support, work overload, and poor attitudes that had been demonstrated to them by colleagues and senior staff. This would suggest that these types of issues, already discussed extensively in the previous sections and further depicted in the comments below, are indeed a significant factor in influencing the retention of nurses within a workplace.

When asked to comment on how they perceived their graduate experiences had influenced their choice of career path following their program, the majority of GRN respondents, particularly those from the rural sector, gave a response that was generally positive. There were some, however, who described suboptimal experiences and how these had resulted in them choosing a less preferred option. The parentheses contain the GRN's chosen pathway, or intended pathway following their transitional program:

Gave me a chance to discover what area of nursing I enjoyed. Gave me an opportunity to experience different areas of nursing. (Same organisation, earlier rotation, private.)

Being able to experience the different areas of work meant being able to discover which areas I enjoy working in, and which units would work in well with my family life. (Same organisation, earlier rotation, tertiary.)

I am determined to continue with paediatric nursing. I loved my graduate program and think it's a great way to introduce new nurses to the profession. In the next year I am looking into a course to further my knowledge in NICU (neonatal intensive care unit) nursing. I don't know if I'd still be in nursing without the support and ability to experience different wards in my graduate years. (Unemployed – travelling, tertiary.)

Widened my vision; enhanced my knowledge; gained more confidence; ability to deal with different situations; realised how hard (it is) to be a nurse. (Last rotation, tertiary.)

Graduate year has cemented together my training and made me more confident and competent in my work practices. (Last rotation, secondary.)

No choice – we were given a position where there were vacancies and we had experience in. (Last rotation, secondary.)

Having a good grad program with wonderful support from the coordinators helped me decide where my future in health care was. Experiencing all aspects of hospital care in a location close to my residence also helped. (Same organisation, earlier rotation, secondary.)

I found it very beneficial as it has given me the confidence and competence to work in other tertiary hospitals. (Different organisation, similar unit, tertiary.)

Had no choice, was all that was offered or would otherwise have been unemployed. Was out of work for 3-months. (Same organisation, different unit, tertiary.)

My graduate year has driven me toward moving into the public sector post this rotation. I have been unable to leave sooner due to lack of jobs and so have had to remain in a 3-year grad program to retain a job. My time in this program has not allowed me to rotate into the areas of nursing I had requested, so I am still unsure of the career pathway I am yet to take. I have not been supported through this decision process either and have been forced to double up on areas I have already gained experience in. (Different organisation, different unit, private hospital.)

No influence at all. I have gained a grad certificate which is good – what I learned from the program was little. I had no support at all from L&D (learning and development). This program is not set up to help nurses – it is money for L&D and (university). No support or compassion at all to people as nurses – would never recommend it. (Different organisation, different unit, secondary hospital.)

My graduate experience influenced my choice of ward, because I feel I did not get the experience of a surgical ward. Also the staff on the medical ward were helpful and easy to get along with. I felt confident enough to give my best on the medical ward. When I was given the DPU (Day Procedure Unit) as my surgical rotation I did ask if I could split it to 3-months DPU, 3-months surgical – this was not possible, I was told that there were a lot of graduates to place. I still feel I missed out. (Same organisation, earlier rotation, tertiary hospital.)

Did not enjoy A&E (accident and emergency) as I had limited knowledge and sometimes complex patients, no support. Loved aged care before I started my RN and I did not want to keep disliking my job, so I went back to Aged Care as a RN, which I enjoy. (Different org, different unit, large rural.)

I would have loved to have stayed on in theatres or my last rotation; however, I had to move state. I will look for a job in similar areas to my last rotation. I confidently worked in a fast paced surgical ward in a tertiary hospital; I can work anywhere and be confident in my skills. (Unemployed, tertiary.)

My final surgical rotation made me want to leave the profession. I received very high grades in my grad program and was offered a job in PACU (post anaesthesia care unit) which usually requires a longer nursing history. I was very concerned about my skill development on my final rotation, and realised in situations I was placed in I was the only RN working, therefore, I was responsible for all of the patients should there be any patient events. (Same organisation, earlier rotation, tertiary.)

It is evident from the feedback that, overall, transition programs do allow the graduate nurse to consolidate their learning; experience different aspects of nursing; and determine their preferred areas of practice. The majority of those nurses who indicated a preference for returning to a prior specialty rotation, or to remain in their current area had described positive experiences during their GNP. Of the seven GRN respondents who participated in Mental Health, Aged Care and Community specialty rotations, all remained within those areas, strongly suggesting there is merit in encouraging graduates to experience these specialties, with a view to ultimately improving recruitment of nurses to them. As such, it would be reasonable to suggest that a good program does have an affirming influence upon the novice nurse in retaining them within the workforce; in their developing into confident and proficient RNs; and in positively shaping their nursing career path.

It was disappointing to see that 6% of the GRN respondents to this section were no longer in nursing, with 1.3% (n = 2) in non-nursing employment and 4.7%

(n = 7) unemployed. Extrapolating these proportions to the whole newly Registered Nurse population for 2008, these figures account for a total of 51 novice RNs no longer in the nursing workforce. While the majority of attrition is explicable, some reasons may be industry related:

No job available due to health budget cuts. (Secondary hospital.)

Travelling this year. (Tertiary hospital.)

Currently on maternity leave. (Tertiary hospital.)

Spent 5-months volunteer work overseas after my grad program. (Private sector.)

Moving interstate and looking for work. (Tertiary hospital.)

The Health Workforce Australia's (2012) report *Health Workforce 2025*, forecasts that WA will experience a shortfall of at least 12,000 nurses by the year 2025. While in this study the number of novice RNs opting out of the workforce early in their career equate to only a small proportion of this target, it is still an opportunity lost if the profession fails to do all it can to optimise their retention. Added to this is the concern that not all nurses graduating as a RN from Australian universities are able to find suitable positions. At a '*Health Australia Forum*' in Adelaide, Head of the University of South Australia's School of Nursing, Professor Helen McCutcheon, expressed concern that in some Australian states there were a lack of sufficient positions available for newly graduated nurses, and that this situation indicated a substantial lack of foresight and planning between the Federal and State governments, as well as national nursing workforce bodies (Health Workforce Australia, 2011a). This would suggest that while the nursing industry is aware that there is an issue in regards to suitable employment options for transitioning novice nurses, there may be more that can be done by the industry in

terms of provision of sustainable opportunities to ensure longevity of these nurses within the nursing profession.

5.5.2 Permanent Contract Influence on Choice of Employer

Organisations differ with regards to offering a permanent contract of employment to a newly graduated nurse. In the past, some employers offered contracts only for the term of a transitional program, whereas others saw the offer of a permanent position as an additional marketing tool. In recent years, however, and as a result of the GFC, some organisations have reduced the number of novice nurses that they employ. The number of graduate positions available has consequently decreased, and as such, permanent contracts are sometimes no longer an option (Nursing & Midwifery Office, 2009). This change in circumstances is reflected in some of the respondents' feedback given in relation to position availability following their program. Eighty percent of respondents were offered a permanent contract at the beginning of their program, and half of these were positively influenced by the offer when choosing the organisation for their transition. A further 53.4% indicated that the offer of a permanent contract had no influence upon their choices:

Only able to get part-time contract, not full-time. (Tertiary.)

No graduates were offered permanent contracts following grad program due to rumoured jobs freeze. One grad out of the 6 took a permanent position at the hospital prior to the program finishing. (Private.)

My grad program has a guaranteed permanent position at the end – very important in the current (jobs) climate. (Tertiary.)

No permanent jobs available due to: increase of English nurses being brought over for recruitment; health budget cuts have affected (hospital) being able to employ more staff. 1 out of 6 grads got a job. (Secondary.)

I was not offered a permanent contract because I was on a temporary visa. (Tertiary.)

Although at the end of my student (midwife) role there were no positions, had to continue for 3-months on an extended student contract until a position became available. Stressful for that time waiting for confirmation. Now I have position. (Secondary.)

Offered only if I gained permanent resident status. (Private.)

It would seem that the offer of a permanent contract is an important factor to many nurses when seeking employment. The current financial climate pressures organisations to further reduce establishment budgets and, as such, may influence the numbers of nurses who would seek the security of guaranteed employment.

It is evident from the GRN comments that there are a number of graduate nurses employed from overseas on a temporary visa status, which implies the need to recruit nurses from further afield. It appears a waste of resources when nurses from abroad incur the expense and emotions associated with moving to a new country and then find the need to search for alternative employment. This is a matter requiring further investigation, especially considering the personal and the organisational investment in their education and development to the point of novice practitioner. Their novice status may also restrict their opportunities of applying for alternative nursing positions, as, before committing to further visa nominations, many organisations prefer new nursing recruits to be able to demonstrate a reasonable degree of prior nursing experience.

5.5.3 Future Professional Pathway

When asked to indicate where they saw themselves professionally in five years time, several respondents envisioned themselves in a promotional position, with 27.5% indicating a preferred post as a Level-2 RN, and 3.6% as a Senior Registered Nurse (Level-3 and above) or a Nurse Practitioner (SRN Level-7). In a study of

newly qualified nurses in Canada, Dearmun (2000) found that thoughts of promotion or changing to a new, more challenging position commonly occurred in the latter part of the graduate's first year. With almost a third of the GRN respondents looking to higher level positions in the current research, the data would seem to concur with this observation. Additional findings indicated that many GRNs (21.2%) planned further study, and another 2.1% intended future study in a medical degree. Almost 10% of the respondents aimed to pursue midwifery, and 6.7% of respondents planned to nurse in rural areas. Many of these latter respondents indicated their current employment in non-rural areas, so it would appear that this is a future intention and, as such, will improve the numbers who have already chosen this sector in which to work. Equivalent proportions of respondents proposed to continue in their current specialties of either perioperative nursing or critical care areas of ICU, coronary care, or emergency medicine (3.6% each). Disappointingly, only small numbers indicated their preference for Mental Health (2.6%) and Aged Care (2.1%). It is possible the reason so few have chosen these areas for their ongoing career is, as previously discussed, an initial lack of marketing to student nurses and exposure to the specialties during clinical practice; and a consequent reduction in exposure during their RN transitional program.

To promote areas of need as suitable options for nursing career choices a feasible strategy would be the provision of vocational guidance. This could occur during both the undergraduate nursing program as well as the GNP. There are a multitude of career options within the profession that are available to nurses, but many nurses may not be aware of these. The NMO is responsible for promotion of nursing as a profession, and has made considerable progress in advancing the image of nursing, as well as in developing some excellent pathways for nurses with which

to enhance their professional experience and further develop their proficiency.

While most universities invite the NMO to inform student nurses of the available options pending graduation, some student nurses remain unaware of these resources, presumably due to non-attendance at such presentations (personal communication, student nurse, 29 May 2012).

5.6 Summary

This chapter has discussed the findings of the research into graduate nurse transition programs in WA in response to the research questions. Establishing the basic demographics of the graduate RN has enriched components of the research data by providing demonstrable links between age-groups, and prior healthcare experience. The research has compared the contemporary novice RN's transitional experiences with findings of the UWA (2000) study upon which this study has been based. In addition, the perceived efficacy of the GNP in facilitating the GRN's transition to competent practitioner, and consideration of how the GNP might influence the GRN's future career pathway has been discussed.

In general, transitional programs for newly Registered Nurses within WA appear to have improved considerably in the last decade or so in regards to the available supports, the range of specialty experiences available, and the benefits perceived from participation in a formal program. It is clear that a positive transitional experience has a valuable influence on the professional future of the novice RN and their retention within the nursing workforce. The study has also revealed opportunities to further improve the graduate nurse transition pathway, and to provide a benchmark for successful and safe progression for the nurse from a

novice to a proficient and dependable practitioner. It is of vital importance that novice nurses are aided in their transition to proficiency in the most sustainable way.

The following chapter draws conclusions from this discussion and, proffers recommendations for future graduate nurse transition programs within WA.

CHAPTER 6: CONCLUSION & RECOMMENDATIONS

Somebody asked: “You’re a nurse? That’s cool; I wanted to do that when I was a kid. How much do you make?” The nurse replied: “How much do I make? I can make holding your hand seem like the most important thing in the world when you’re scared; I can make your child breathe when they stop; I can help your father survive a heart attack; I can make myself get up at 5 a.m. to make sure your mother has the medicine she needs to live; I work all day to save the lives of strangers; I make my family wait for dinner until I know your family member is taken care of; I make myself skip lunch so that I can make sure that everything I did for your wife today is charted; I make myself work weekends and holidays because people don’t just get sick Monday to Friday. Today, I might save your life. How much do I make? All I know is; I make a difference.” (Anon, 2012).

Nurses do make a difference, and improve the well-being of patients, and even more so when well supported to becoming proficient and competent practitioners.

6.1 Introduction

The intent of this research has been to compare the findings of a survey questionnaire, sent to newly graduated RNs in 2010, with those from a similar study conducted 10-years previously by the University of Western Australia (2000). For the purpose of further expanding the data, and to aid in determining the efficacy of formal transitional programs within the Western Australian nursing context, the current study took the opportunity to elicit additional information to that requested in the 2000 study. The new data expanded on the GRNs’ transition perceptions, and aided in further discerning how the programs might influence the career paths of the novice nurse, and their continuing tenure within the nursing workforce. In the convention of mixed methods research, and to acquire corroborating evidence, a small web-based survey of graduate nurse coordinators was incorporated into the

research. This allowed further validation of the research findings, and expansion of the knowledge of contemporary graduate nurse transition programs within WA.

Findings from the comparative component of the study are discussed (6.2) and include information related to the current undergraduate nursing programs. The next section (6.3) proffers the majority of the recommendations and a table of key components based on the findings is provided (Table 6.1). These findings provide evidence upon which guidelines for future RN transition programs may be established. The third research question is addressed in the section (6.4) related to career planning. Recommendations from this research are summarised (6.5) and further concepts for consideration generated from the findings are presented in section 6.6 and summarised in 6.7. An outline of the study limitations and the generalisability of the research findings are presented in the next two sections (6.8 and 6.9). Finally, a summary of the chapter provides a synopsis of the research, conclusions and recommendations (section 6.10).

6.2 Comparative Studies

The findings of this research have clearly demonstrated the positive influence that a supportive and well structured transition program has on the novice nurse's journey to proficiency. The comparative data suggest that graduate nurse transition programs have evolved over the past decade.

6.2.1 Key Findings of Comparative Studies

The foremost findings in the comparative studies were that:

- There was a substantial increase in the proportion of the 2010 study respondents who felt their undergraduate nursing program had adequately

prepared them for their role as an RN when compared to the UWA (2000) study. However, there were still many who felt that there were deficiencies in their undergraduate program, particularly in the areas of adequate clinical practice, for example, Mental Health; some basic nursing care skills; and further clinical topics such as pharmacology and pathophysiology.

- The vast majority of GRNs in both studies believed their GNP had made them feel more confident and competent in their RN role.
- Consistency of Preceptor support continues to be variable. In the current study, satisfaction with the degree of Preceptor support provided throughout their program was generally mixed. The model obviously works well when there are strong paradigms of Preceptor training and support, however, falls short when the nominated Preceptor is unsure of the expectations and requirements of the role, or is not consistently available to the novice nurse especially in the early, more vulnerable stages of their transition.
- Supernumerary time at the commencement of new specialty units is important to ensure the GRN practices within their scope, and patient safety is not jeopardised. While there were considerable improvements in the allocation of supernumerary time between the two study periods, there were still instances of insufficient time allocation that warrant concern and require addressing to ensure patient safety is not compromised.
- Despite a greater proportion of GRNs in the current study allocated to the night shifts in less than six months of commencing their program, there was greater consensus from them that they felt adequately prepared for the experience. Prior experience as an EN appeared to mitigate the experience for the GRN.

- Undergraduate preparation of the RN would appear to fall short in some areas of meeting the needs and expectations of the graduating nurse.

6.2.2 *Undergraduate Education*

Much has been written about the inconsistent perception of nursing that is conveyed to the student nurse during their undergraduate education and the often stark ‘reality’ that they experience upon entering the workplace (Crookes, et al, 2010; Dearmun, 2000; Duchscher, 2009; Wolff, et al., 2010). *Reality shock* is a term that is used to describe the disparity between what the new GRN is expecting to experience in the transition from student to graduated nurse, and what these novice nurses actually encounter when entering the nursing workforce. Cowin & Hengstberger-Sims (2006) suggest that this initial phase of the transition is when the GRN is feeling powerless and confused, and is when the novice is most vulnerable in terms of their intention to remain within the profession.

The concept of the divide between the academic arena and the workplace that is termed the *theory-practice gap* was evident in many of the responses from the GRNs, particularly among those related to causes of perceived problems and stress. Amongst the responses that related to how the GRNs believed their undergraduate education could be improved, there were a number of comments associated with insufficient opportunities for practical experience, in particular Mental Health; as well as deficits in some clinical topics such as pharmacology, and pathophysiology. Benner, Sutphen, Leonard and Day (2010), concur with the need to provide more contemporary education to the undergraduate nurse:

To practice safely and effectively, today’s new nurses must understand a range of nursing knowledge and science, from normal and pathological

physiology to genomics, pharmacology, biochemical implications of laboratory medicine for the patient's therapies, the physics of gas exchange in the lungs, cell-level transport of oxygen for the acutely ill patient, as well as the human experience of illness and normal growth and development – and much more (p. 1).

Other GRN comments implied that the undergraduate education was, at times, inadequate in preparing the nurse for their role in terms of the responsibility placed upon them; the difficulty of shiftwork; dealing with difficult personalities; and the reality of patient morbidity and mortality.

Further shortfalls in the undergraduate preparation of the GRN seemed to be insufficient exposure to certain specialties, in particular, Mental Health, Community Health, and Aged Care. The consequence of this was fewer nurses who chose these areas for specialty rotations. Benner, et al. (2010) suggest that the emphasis on acute care during undergraduate training detracts from recruitment to the areas of nursing that are increasing in focus, namely, home care, community and school health; and in Australia, Aged Care, Mental Health and the rural sector. While it is recognised that the undergraduate nursing curriculum struggles to incorporate the totality of nursing subjects, and to find sufficient and suitable clinical placements (Belardi, 2012b; Usher & Mills, 2012), broadening the scope of clinical practice to these areas during the undergraduate nursing program is a topic worthy of further consideration.

The ever increasing complexity of nursing makes it difficult for the undergraduate curriculum content to keep pace, or for educators to fit in additional contemporary components of education or clinical practice (Dragon, 2009). There

have been recent calls from professional bodies to extend the undergraduate nursing degree to a four-year program (Belardi, 2012b) and, based upon the outcomes of the current research, have merit. Such a move would allow further consolidation of the theory-practice continuum, plus it would provide for improved curriculum content in relation to those topics that both, the graduate and the nursing industry considers are currently lacking.

Recommendation 1: Universities that offer undergraduate nursing programs should consider extending the length of their programs to facilitate inclusion of an extended range of clinical experience; a focus on more common clinical skills; and an increased exposure to the specialties of Aged Care, Mental Health, Community Nursing and Rural Health.

Despite these apparent failings related to the theory-practice divide, there were many positive findings in relation to the GNP that suggest, on the whole, the GRNs' undergraduate experiences had contributed positively to their transition from undergraduate student to novice nurse, and ultimately, to proficient practitioner.

6.3 Contemporary Graduate Nurse Programs in Western Australia

This research has demonstrated that investment in a well structured, supportive transition program for newly graduated nurses is a worthwhile venture to ensure the provision of a competent and proficient RN workforce for the future of WA health. What has been made clear by the research is the need for the nursing profession to formalise guidelines and performance indicators for the conduct of transition programs. As well as providing robust program structures, such guidelines will support comprehensive improvements in areas that have been identified as lacking and provide accountability for associated government funding.

6.3.1 Key Findings from Contemporary Graduate Nurse Programs

The findings from the contemporary GNP component of this study include:

- Areas such as Mental Health, Domiciliary Nursing, Community Health and Rural Health are underrepresented in GRN subscription to these sectors.
- Strong and consistent support to enhance the positive experience and development of the GRN is not always available or adequate.
- Preceptor education and training appears to be ad hoc and in some cases, nonexistent, thus potentially compromising the basic support needs of the novice nurse.
- Current GNP guidelines appear to be inadequate and inconsistent in providing a framework for a robust program for the novice nurse transition to competent practitioner.
- Occasions of bullying are apparent in some areas.

6.3.2 Increasing Options for Areas of Need

It is evident from this research that since the UWA (2000) study, there has been a reduction in the participation rate in the specialty of Mental Health. Other sectors that were poorly represented within the GNP specialty options were Aged Care, Community Health, and Rural Nursing. Similar to the Mental Health options, collaborative arrangements to increase the opportunities for the novice nurse to experience a greater variety of these specialties should be considered. This would aid in further developing skills within these specialties and improve recruitment of the necessary nursing workforce to them. Within the urban health services there are usually associated *Population Health Units* that provide primary education and care to the populace, with the intent to improve health, and thereby reduce the burden

upon secondary health services. These primary health services are also associated with child health centres, maternal and parenting education, and school health. Aged Care and Community Health are areas with which appropriate negotiations would open up greater opportunities to improve access to the specialties and additional options for the GRN transitional experience. Feedback from the GRNs indicated that although some of their specialty rotations were not their preferred option, they did become their area of choice to continue working in following their program. This suggests that exposure to the specialties may generate a preference to work within them.

To ensure access to appropriate support resources in terms of suitable preceptors and SDNs, robust processes and shared arrangements would need to be incorporated into the development of such partnerships. More importantly, sectors that are known to be lacking in sufficient resources, such as secondary hospitals and the rural sector, ought to be provided with the means to provision that support. Hayman-White, et al. (2007) describe GNPs “as an essential strategy for the development and sustainability of the nursing profession. A central goal of these programs is to promote the recruitment and retention of a suitable qualified and experienced workforce” (p. 197).

Recommendation 2: Options to develop collaborative programs between sectors that experience limited recruitment should be considered with a view to improving GRN subscription to them, and thereby improving numbers of proficient nurses in the specialties. These sectors include Aged Care, Domiciliary Nursing, Community Health, and Rural Nursing.

Additionally, a greater focus on the marketing of these specialty sector programs may benefit recruitment of a larger cohort of nurses to these sectors. Rearrangement of the available program choices on the GNC website to better emphasise those sectors with the least subscription may be a worthwhile exercise.

Recommendation 3: Consultation should occur with the GNC consortium regarding the feasibility of rearranging the presentation order of the graduate programs available so that those sectors most in need of recruits were listed first; and to then determine if there is any effect on the choices made by the newly graduated nurses in choosing where they place their first preferences for their graduate program.

6.3.3 Graduate Nurse Support

The overall feedback from the GRNs reinforced that adequate and appropriate levels of support have a positive effect on the transitioning nurse. The qualitative comments in particular, demonstrate the importance of strong and consistent support systems.

6.3.3.1 Preceptor Support and Training

Preceptor support has been described as essential to the new nurse to enable socialisation into a unit, and to help reduce the feelings of fear and trepidation that are reported by many graduates when they are first confronted with the responsibility of their new role; and in tempering their intentions to leave the workforce (Delaney, 2003; Evans, 2005; Hayman-White, et al., 2007). Increasingly, busy work units; poor staffing skill-mix; and lack of awareness of the importance of the preceptor role

to the GRN integration are some of the reasons cited why a number of preceptors are unable to fulfil their obligations to the new staff member (Levett-Jones & Fitzgerald, 2005; Patterson, Bayley, Burnell, & Rhoads, 2010). Most literature relating to the difficulty of providing suitable preceptor support describes a need to address the factors that prevent adequate fulfilment of the role and include:

- Decreasing the preceptor's workload to enable them to allocate time and energy to the novice nurse (Evans, et al., 2008; Pinch & Della, 2001);
- Specific incentives to reward preceptors for the additional impost required of them in relation to an already busy and stressful workload (Cowin & Jacobsson, 2003; Senate Community Affairs Committee, 2002); and
- Appropriate preparation for the role in terms of education (Adlam, et al., 2009).

The notion of an appropriate remuneration system to provide an incentive for preceptors including organisational recognition, workload reduction, financial or other means, has long been proposed, but seldom instigated (Charlston & Happell, 2005; Pinch & Della, 2001; Senate Community Affairs Committee, 2002).

Recommendation 4: The nursing industry and nursing leaders consider a model whereby preceptors are adequately resourced and rewarded for taking responsibility for guiding the novice nurse.

The preceptor must possess a suitable level of experience and clinical knowledge within the specialty to impart appropriate standards of nursing practice. Appropriate training packages might need to be developed at State level and mandated for current and potential preceptors.

Recommendation 5: Any organisation facilitating graduate nurse transition programs should have standardised education modules and ongoing support for the GRN preceptors. Guidelines for these modules ought to emanate from the GNC consortium to ensure that they are consistent and robust. Additionally, the consortium ought to be responsible for monitoring compliance with the guidelines.

6.3.3.2 *Clinical Coach*

The recent introduction of the ‘Clinical Coach’ model in two of the metropolitan tertiary hospitals involved in this study appears to be a very successful approach to providing consistent and exclusive support to the very new GRN. The role is implemented only during the initial phase of transition, so is a cost effective means of supporting the neophyte nurse, as well as the SDN and ward staff during this intense stage of GRN transition.

6.3.4 *Graduate Nurse Program Guidelines*

The findings from this research have shown how imperative it is for suitable and appropriate education and training to be provided for those involved in the development of the novice nurse. Clear guidelines need to be articulated and communicated to all concerned parties, to ensure that they are fully aware of the vulnerability of the newly graduated nurse. It would therefore be prudent for health services involved in formal transition programs to develop comprehensive guidelines, as well as performance indicators for their programs. As the WA Nursing and Midwifery Office manage the GNC consortium and related funding, this Office would seem to be the most appropriate for generating guidelines and for provisioning a centralised governance framework.

Recommendation 6: The Nursing and Midwifery Office coordinates the development of graduate nurse transition guidelines that clearly states minimum standards for programs. These guidelines ought to contain performance indicators that would enable evaluation of program effectiveness.

Table 6.1 provides suggested guidelines that may be used as the genesis of any prospective publication. This has been conceived on the basis of the GRN feedback and the literature.

Table 6.1. Suggested Transition Program Guidelines

Component	Parameter	Comment
Program length	12-months minimum	First 6-months in surgical or medical specialties to consolidate Undergraduate learning.
Additional options	6 or 12 months	Available for unique specialty areas such as Critical Care – possibly linked to Post Graduate Certificate.
Minimum contact hours	1,600 hours	Includes ward/unit time and study days. Any time less than this to be added to the length of the program.
Specialty rotation length	Minimum 4-months; Maximum 6-months	Allows for unit induction and consolidation of experience. Minimises clinical stagnation.
Supernumerary time	Minimum 4-days; Minimum 2-days; Minimum 2-weeks	For first rotation, and following unique specialties; For consequent rotations; For unique specialties e.g. critical care, perioperative.
Support	First rotation 1-month; Consequent rotations; Independent advocate	Minimum preceptor 1:1 and SDN constantly available; Minimum preceptor 1:1 first month; SDN available; Senior and experienced person identified that is able to campaign for the GRN if necessary.
Supervision	For entire program	Minimum experienced RN always available; First-year GRN should NEVER be the only RN on the ward/unit.
Preceptor	1:1 for first month of rotation	Must be experienced and competent in specialty; have formal training and assessment in role requirements; understand GRN's competency levels and learning needs; quarantined time for clinical review; network with other preceptors; appropriate remuneration.
Study days	Minimum 10 per year	Early focus on personal skills building. Attention to time management; stress management; interpersonal skills including communication and assertiveness training; pharmacology and pathophysiology revision; clinical technology; basics such as complex wound dressings, IDC insertion, wound drain removal; <i>minimal</i> assignments.
Networking	Peers; Specialty experts	Available for informal debriefing; Avenue for advice, mentoring, advocacy.
Performance assessment	Minimum 3-monthly; Collaborative approach (SDN, Preceptor, supervisor)	Ensures the GRN is progressing satisfactorily; identifies issues prior to becoming problems; confirms learning needs are being met. Collaborative approach to avoid personal and subjective judgements.

Component	Parameter	Comment
GNP Coordinator	Minimum SRN level	More senior level facilitates negotiation for resources and adherence to guidelines.
Supervisors and Managers	Change bullying culture	Need to have adequate education and training to manage and avoid bullying cultures. Need sufficient executive support to implement change.
Recognition of prior learning	Previous EN or AIN experience	All GRNs ought to have the same learning opportunities and support regardless of prior roles.
Career Advice	Central Advice Bureau	GRNs ought to have access to comprehensive advice to assist in planning their future within the nursing workforce, inclusive of employment opportunities, further education, and pathways to senior positions.
Program Evaluation	At the completion of each program	All GRNs formally evaluate the GNP. Needs to be a standardised process enabling measurement of Key Performance Indicators, such as satisfaction levels with support and supervision provided, program structure and adequacy of specialty rotations and learning experiences.

6.3.4.1 *Work-Life Balance*

The WA Health Department has mandated that health services consider the need to be flexible with work hours in order to accommodate people with competing responsibilities, such as child or parental care (Department of Health, n.d.).

Although only a few instances were identified in this research, there were still RN graduates who felt they were disadvantaged when they were unable to secure part-time positions, and as such, more part-time options ought to be made available.

Notwithstanding the need to cater for fewer hours for some graduates during their GNP, it should be recognised that a minimum duration for the transition program should be prescribed to ensure that part-time GRNs were equally exposed to the vital learning experiences as are their full-time counterparts. It is suggested that this minimum should be set at 1,600-hours clinical and study time.

6.3.4.2 *Supernumerary Time to Full Patient Load*

It is imperative for staff and patient safety, that organisations recognise the significance of adequate supernumerary time for new and inexperienced staff. The supernumerary times should reflect the varying degrees of complexity for specific specialties. For example, more time would be required for critical care areas than would be necessary for general nursing areas. These times would also take into account the GRN's previous specialty rotation experience, for instance, if the GRN had their first specialty rotation in a perioperative unit then their consequent rotation would require as much supernumerary time as if their following rotation were their first. This is due to the vast differences in clinical application between the two specialties, thus having fewer transferrable knowledge and skills.

Recommendation 7: Guidelines for graduate nurse transition programs need to be specific in the amount of supernumerary time allocated to the novice nurse for each specialty rotation to allow suitable orientation to new areas of work.

6.4 Career Pathways

The data from this research strongly suggested that the GNP did have a positive effect in terms of influencing the GRN to remain within the nursing workforce and in forming their intended career trajectory.

6.4.1 *Key Findings*

- A perception of feeling supported and valued in the initial transition phase appears to have a positive influence on the GRN's career path choices.
- The GNP appears to have a positive effect in terms of influencing the GRN to remain within the nursing workforce and in particular, those areas that they have experienced during their GNP.

- Opportunities to seek advice regarding career options following the GNP appear to be lacking.

6.4.2 Career Advice

While the majority of GRNs indicated that the GNP had positively influenced their choice of future career direction, there was evidence that a more formal process of consultation may have been beneficial in guiding their choices. A number of GRNs commented on either having to accept a position they were not particularly keen on, or not being able to find a nursing position following their program. A better network throughout the State would assist GRNs in identifying employment opportunities following their transition to practice.

Such a network could present alternative career path options for those areas that are less standard, but still provide exciting career development opportunities, for the GRN to consider. These may include careers in child health, remote area nursing, Nurse Practitioner roles, and a myriad more that the novice nurse may not be aware of, or know how to access the pathways that would facilitate progression to these and other options.

Recommendation 8: Opportunities to access career advice should be provided to the GRN towards the end of their transition, either at site, or through the Nursing and Midwifery Office. This could be facilitated by the GNC consortium.

6.5 Summary of Recommendations

For ease of reference, the recommendations proposed throughout this chapter, are replicated below:

Recommendation 1: Universities that offer undergraduate nursing programs should consider extending the length of their programs to facilitate inclusion of an extended range of clinical experience; a focus on more common clinical skills; and an increased exposure to the specialties of Aged Care, Mental Health, Community Nursing and Rural Health.

Recommendation 2: Options to develop collaborative programs between sectors that experience limited recruitment should be considered with a view to improving GRN subscription to them, and thereby improving numbers of proficient nurses in those specialties. These sectors include Aged Care, Domiciliary Nursing, Community Health, and Rural Nursing.

Recommendation 3: Consultation should occur with the GNC consortium regarding the feasibility of rearranging the presentation order of the graduate programs available so that those sectors most in need of recruits were listed first; and to then determine if there is any effect on the choices made by the newly graduated nurses in choosing where they place their first preferences for their graduate program.

Recommendation 4: The nursing industry and nursing leaders consider a model whereby preceptors are adequately resourced and rewarded for taking responsibility for guiding the novice nurse.

Recommendation 5: Any organisation facilitating graduate nurse transition programs should have standardised education modules and ongoing support for the GRN preceptors. Guidelines for these modules ought to emanate from the GNC consortium to ensure that they are consistent and robust. Additionally, the consortium ought to be responsible for monitoring compliance with the guidelines.

Recommendation 6: The Nursing and Midwifery Office coordinates the development of graduate nurse transition guidelines that clearly states minimum standards for programs. These guidelines ought to contain performance indicators that would enable evaluation of program effectiveness.

Recommendation 7: Guidelines for graduate nurse transition programs need to be specific in the amount of supernumerary time allocated to the novice nurse for each specialty rotation to allow suitable orientation to new areas of work.

Recommendation 8: Opportunities to access career advice should be provided to the GRN towards the end of their transition, either at site, or through the Nursing and Midwifery Office. This could be facilitated by the GNC consortium.

When compared to the Summary of Transition Program Recommendations (Table 1.1) from Chapter One, the similarity of the above recommendations suggests that implementation is a complex process. However, the opportunity to maximise the graduate nurse transition experiences, and to ultimately improve the numbers of appropriately qualified, experienced nurses in the workforce needs to be availed.

6.6 Further Concepts for Graduate Nurse Programs

Findings from this research also suggest that further options to improve graduate nurse transition within the Western Australian context ought to be considered.

6.6.1 Out of Hours Support and Supervision

It is important that senior staff consider the level of support, and the service areas that are available within an organisation outside regular hours (for example, weekend or night shift), and the impact this can have upon decision making related to unpredictable patient-related events. The graduate nurse may also be in the vulnerable position of seeking a permanent contract and may not wish to be perceived in a less than favourable light by resisting being rostered to shifts he/she is not clinically comfortable with.

Concept 1: Where the GRN is rostered to a shift outside regular operating hours, there ought to be adequate support, in terms of experienced preceptors and/or SDNs, to provide a safe environment for both the novice nurse and the patients assigned to their care.

6.6.2 Collaborative Models of Support

All metropolitan public hospitals in WA are part of an ‘area’ Health Service, and as such, include at least one tertiary hospital, plus the secondary, and some community and mental health units. By the nature of their size, the tertiary hospitals have access to more appropriate resources, and as such, are in a better position to offer a more collaborative liaison with their smaller ‘area’ sites. In addition, the graduate nurse coordinator respondents from the tertiary sites were the only ones to describe any form of transition program structures. Smaller hospitals do not have the economy of scale of the larger and tertiary organisations, however, one possible solution is to work towards developing stronger partnerships between the tertiary and other organisations. Given innovative planning, area Health Services ought to be able to provide improved partnerships and opportunities for not only the graduate nurses, but also to those involved in their transition. A suggested scenario is one whereby a GRN is able to do the majority of rotations at a tertiary site, and a single

rotation at a secondary hospital or primary health service. This will provide a broadness of experience and improved choices for future career paths. Overall coordination of these collaborative rotations would come from the better resourced senior level program coordinator at the tertiary site.

Concept 2: Health Services ought to consider an area-wide model of graduate nurse transition programs. This would include options for the GRN to participate in specialty rotations at both tertiary and secondary sites. Coordination of the model would come from the larger sites.

Such an initiative would enable professional development on several different levels, particularly for those coordinating and providing graduate nurse support mechanisms. The initiative might also provide improved succession planning for those areas that find it more difficult to recruit suitable personnel. In addition, such collaborations have the potential of allowing the sectors with better resources to augment those areas struggling to either attract, or provide the required clinical supports for the GRNs.

Concept 3: An area-wide model of graduate nurse transition programs would include options for the program coordinators and SDNs to experience both levels of health provision. Cross-pollination would provide opportunities for staff from the smaller, secondary sites to further develop their programs, personal skills and professional portfolios.

The GNC consortium provides an ideal forum for member sites to network, share concepts, contribute to program innovation, and initiate change. Additionally, those members with evidence of successful transition processes are in a prime position to offer constructive support and advice to the sectors that have less substantive frameworks.

6.6.3 *Rural Resources*

The tyranny of distance within the WACHS impacts the attraction of suitable and sufficient medical, nursing and allied health staff. It also makes it difficult to provide specific expertise to the more rural populations when required. The advent of video conferencing may assist in this regard. As such, it behoves smaller organisations to ensure that the optimal use of communication facilities is employed to provide the GRN with the best possible opportunities to enable them to develop into a confident and competent practitioner.

Concept 4: Rural sites that provide graduate nurse transition programs must have adequate and constant access to appropriate communication systems to ensure that the graduate nurse is supported at all times.

The current combination of options available to the graduand nurse for rural rotations provides for a variety of experiences and generally includes a larger regional site. GRN comments indicated that, due to resource limitations in the smaller sites, there were times when support was not readily available, and the learning opportunities were limited. To overcome this concern, rural sites could be linked to a metropolitan tertiary site where the GRN would spend their first rotation, consolidating basic nursing skills, and prior to subsequent rotations at their preferred rural site. This model may also encourage a greater number of graduates to choose rural nursing as an option.

Concept 5: Rural sites that provide graduate nurse transition programs consider partnerships with metropolitan tertiary hospitals to provide an initial consolidation of nursing skills for the GRN, prior to subsequent rotations at rural sites.

Such a partnership might include opportunities for the rural graduate nurse coordinators to spend time at the metropolitan site to provide opportunities for further professional development. In addition, options for the metropolitan graduate nurse support staff to spend time within rural sites could also be considered. This would facilitate opportunities for providing leave relief, assist in the provision of more consistent support for the GRN, and improve exchange of program innovations and initiatives.

Comments from rural GRNs indicated that a means to better network with colleagues and senior, experienced nurses would enhance their transitional experiences. Such opportunities would allow them to participate in discussion forums and explore possible solutions to any perceived problems by informal debriefing. One such option would be a social network site that allowed interaction between the GRNs regardless of their location, as well as options to consult expert practitioners should the GRN feel the need.

Concept 6: Controlled networking sites are enabled with a view to making it possible for GRNs with less access to peers and support to have equal opportunities to participate in discussion forums, and to seek advice from senior nurses.

6.6.4 Transition Program Improvements

While the overall impression from the GRN feedback was positive, it is evident from the variance in program models that the current nursing transition programs within WA may benefit from further reform. One option might be to model the GNP on the intern programs adopted by other professions, such as Medicine. Such a model would include robust and comprehensive guidelines, as well as a more structured and secure platform from which the novice nurse could safely develop the

required competencies and confidence. Such a concept would accord a guaranteed protective environment for the GRN's transition and provide consistency in the way novice nurses are guided to proficiency, as well as ensuring greater accountability from program providers.

Concept 7: Nurse leaders consider the notion of remodelling the first year of transition, from undergraduate to Registered Nurse, by recommending the first year of professional practice become a compulsory year of supervision.

6.6.5 Nursing Roles

Amongst the GRNs it was evident that a greater understanding of the different nursing roles, particularly those involved in supervision, would facilitate not only a better clarity and appreciation of the roles, but would also help to reduce some of the misconceptions, and perhaps provide more realistic constructs for junior nurses upon which to base their career planning (Dearmun, 2000). Many junior nurses who aspire to promotional roles appear to have very little concept of the particular position responsibilities and may be merely attracted to the additional prestige and remuneration. Such confusion might be further exacerbated by the increase in the number and variety of nursing roles and titles; a position that accords with similar findings from other studies (Duffield, Chang, Fry, & Stasa, 2011; Reeves, 2007).

6.7 Summary of Concepts

As with the recommendations, the concepts for further improvements to the graduate nurse transition program are summarised below:

Concept 1: Where the GRN is rostered to a shift outside regular operating hours, there ought to be adequate support, in terms of experienced preceptors and/or SDNs,

to provide a safe environment for both the novice nurse and the patients assigned to their care.

Concept 2: Health Services ought to consider an area-wide model of graduate nurse transition programs. This would include options for the GRN to participate in specialty rotations at both tertiary and secondary sites. Coordination of the model would come from the larger sites.

Concept 3: An area-wide model of graduate nurse transition programs would include options for the program coordinators and SDNs to experience both levels of health provision. Cross-pollination would provide opportunities for staff from the smaller, secondary sites to further develop their programs, personal skills and professional portfolios.

Concept 4: Rural sites that provide graduate nurse transition programs must have adequate and constant access to appropriate communication systems to ensure that the graduate nurse is supported at all times.

Concept 5: Rural sites that provide graduate nurse transition programs consider partnerships with metropolitan tertiary hospitals to provide an initial consolidation of nursing skills for the GRN, prior to subsequent rotations at rural sites.

Concept 6: Controlled networking sites are enabled with a view to making it possible for GRNs with less access to peers and support to have equal opportunities to participate in discussion forums, and to seek advice from senior nurses.

Concept 7: Nurse Leaders consider the notion of remodelling the first year of transition, from undergraduate to Registered Nurse, by recommending the first year of professional practice become a compulsory year of supervision.

6.8 Study Limitations

Although not critical to the research per se, the researcher remained cognisant of certain limitations of the study. These are identified in what follows.

6.8.1 UWA (2000) data

The raw data from the UWA (2000) study was not available, and the methodology and analysis not readily apparent from the report utilised for comparison to the 2010 data. As a result, some loss of data comparison may have occurred in relation to the UWA (2000) data that was grouped together for reporting. For example, 4.4.3.2 describes how in the earlier study a breakdown of categories of responses was given within the *disagree* and *strongly disagree* groups, but in the ‘perceived confidence gained from a GNP’ responses were grouped together, thus limiting the ability to fully compare the degrees of disagreement.

6.8.2 2010 Survey Questionnaire Response Rate

While in general terms the response rate of 24% is considered slightly above average (Sax, et al., 2003) a higher response rate may have produced slightly different trends. Although a higher response would have been desirable, it is unlikely that this would have significantly altered the resultant outcome.

6.8.3 Comparative Data Time Differences

Between the UWA (2000) and the 2010 study period various factors would have influenced the two study populations. As well as the maturation of the graduate nurse transitional programs as a result of the UWA (2000) recommendations, political and social changes will have influenced the program structures, frameworks, and funding. While such time-lag variances are inevitable when comparing groups, refinement of the question response options and processing of the data helped mitigate many of these, for example, providing individual response options for support personnel.

6.9 Generalisability of the Study

While the current study was confined to nurses graduating from university and registering with the NMBWA in 2008, the similarity of GNPs within Australia support the general intent of the findings, and thus the recommendations being generalised to a National nursing population. International programs have many similar concepts and, consequently, components such as minimum supernumerary time, and levels of support, ought to be easily adapted to other graduate nurse transition programs. Other characteristics, such as the suggested collaborative arrangements of programs, might require further adaptation to local requirements if they were to be considered for international programs.

6.10 Future Research

Data related to the undergraduate program experiences was limited in this study as it was not the focus of the research. To further determine if differences in undergraduate nursing program structure between the universities may influence the

experiences of the transitioning nurse would require a wholly different study. Such information would, however, provide valuable context to the transition experiences of the graduating nurse and is worthy of consideration for future research.

6.11 Summary

This chapter has identified the key findings from the research into graduate nurse transition programs within Western Australia. From these findings, eight recommendations have been developed that will provide a framework for establishing consistent and contemporary guidelines for local Graduate Registered Nurse transition programs. Further options to improve graduate nurse transition experiences within the Western Australian context have also been considered in the form of seven ‘concepts’.

Limitations to the research have been considered, as has the potential for generalisation of the study findings to other populations and opportunities for future research.

The novice RNs’ experiences *are* different today when compared to those reported in the UWA (2000) study, in that the GNPs are much more structured, and the GRNs are more satisfied with their efficacy. It should be recognised that due to the increase in the complexity of nursing science, the undergraduate education is no longer able to comprehensively prepare the student nurse for instant nursing practice. In such an environment, transition programs become crucially important.

The GRNs in this study have indicated that a robust GNP is conducive to a successful transition to competent practitioner in terms of improving confidence and

competence. Adequate and appropriate support in terms of suitable preceptors and knowledgeable SDNs and program coordinators has been the single most consistent theme for satisfactory transition. Development of partnerships between those sectors that have demonstrated successful transition programs, and those which have shown less success is seen as being highly beneficial. To ensure all nurses graduating from universities as an RN are appropriately supported in becoming competent practitioners, a mandatory period of transition is recommended. This transitional period requires State-wide consistency to ensure uniformity of practice and the attainment of standards.

In addition, the findings have demonstrated that the GNP positively influences the GRN career pathway, and their tenure within the nursing workforce. Nevertheless, for most novice nurses there is a deficit in knowledge of how to find appropriate advice on how best to further their nursing career, and as such, the development of a career advice network is indicated.

This research has been a rewarding process and has identified issues, and developed recommendations to facilitate continuous improvements in nurse transition programs. The research also contributes to the body of knowledge into health workforce, and nursing recruitment and retention. As such, it has the potential to inform planning, funding and education policies.

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APPENDICES



INFORMATION SHEET

Graduate nurse transition programs in Western Australia: A comparative study of their perceived efficacy.

Dear Colleague

I am a Professional Doctorate of Nursing student at The University of Notre Dame Australia (Fremantle Campus) researching the efficacy of Graduate Registered Nurse programs and their influence on retention of nurses within the nursing workforce.

My study population is all Registered Nurses who have graduated from a university School of Nursing and registered with the Nurses and Midwives Board of Western Australia (NMBWA) during the year 2008. On my behalf, the NMBWA has generated a list of these graduates and will be forwarding you a survey questionnaire in the near future. This method has been used to ensure your response anonymity.

The questionnaire is designed to collect information from you about your experiences following graduation from your nursing course. Even if you have not continued in nursing, this information is still valuable to assist me in forming a true picture of current trends with graduates and the novice nursing workforce.

It is envisaged the research will be completed within 12 months and results from the final thesis written up for publication in relevant journals. If you would like notification of any publications as a result of this research, my contact details will be included in the information sheet of the questionnaire.

I would like to assure you that all the information gathered for this study will be held in strict confidence. All efforts will be made to ensure that only fair and unbiased reporting occurs.

Data will be stored securely as per University regulations in the School of Nursing at The University of Notre Dame Australia for five years.

I thank you in anticipation for supporting this important area of research into developing best practice programs for transition from graduate to competent Registered Nurse.

Kind regards,

Ms Ce Kealley
Researcher

Dr Jenny Prentice is supervising this project. If you have any queries regarding the research, please contact Dr Prentice by email at Jenny.Prentice@health.wa.gov.au or me directly on 0417 944 776 / email: ckealley@student.nd.edu.au

If participants have any complaint regarding the manner in which a research project is conducted, it may be given to the researcher or, alternatively, to the Executive Officer, Research Office, The University of Notre Dame Australia, PO Box 1225 Fremantle WA 6959, phone (08) 9433 0941.



THE UNIVERSITY OF
NOTRE DAME
AUSTRALIA

Graduate Registered Nurse Transition Survey Questionnaire

Dear Colleague,

You would recently have received notification from me about the attached survey questionnaire. As described in my previous letter, I am a Professional Doctorate of Nursing student at The University of Notre Dame Australia, Fremantle Campus, researching the efficacy of graduate registered nurse programs and their influence on retention of nurses within the nursing workforce.

This questionnaire is designed to collect information from you about your experiences following graduation from your nursing course. Even if you have not continued in nursing, this information is still valuable to assist me in forming a true picture of current trends with graduates and the novice nursing workforce. Completion of the questionnaire should take approximately 20 minutes.

It is envisaged this research will be completed within 12 months and results from the final thesis written up for publication in relevant journals. If you would like notification of any resultant publications my contact details are included at the end of this page and the questionnaire.

Your contribution will assist in developing recommendations for transition programs to ensure new graduates receive the optimum experience in their journey to becoming competent registered nurses delivering the best possible care in whichever field of nursing they choose.

I would like to assure you that all the information gathered for this study will be held in strict confidence and all efforts will be made to ensure that only fair and unbiased reporting occurs. Data will be stored securely as per university regulations in the School of Nursing at The University of Notre Dame Australia for five years.

I thank you in anticipation of supporting this important area of research into developing best practice programs for transition from graduate to competent registered nurse.

Please return the questionnaire in the envelope provided by the 31st March 2010.

Kind regards,

Ms Ce Kealley
Researcher

Dr Jenny Prentice is supervising this project. If you have any queries regarding the research, please contact Dr Prentice by email at Jenny.Prentice@health.wa.gov.au or me directly on telephone: 0417 944 776 or email: ckealley@student.nd.edu.au.

If participants have any complaint regarding the manner in which a research project is conducted, it may be given to the researcher or, alternatively, to the Executive Officer, Research Office, The University of Notre Dame Australia, PO Box 1225 Fremantle WA 6959, telephone: (08) 9433 0941.

APPENDIX B: Graduate Nurse Survey Questionnaire

Instructions

Please complete this survey by 31 March 2010 and return in the enveloped provided to:

Ce Kealley
C/- Nurses & Midwives Board of Western Australia
Locked Bag 6
East Perth WA 6892

To complete the questions fill in the circle for the appropriate response with a BLACK pen. If you make an error, strike through the error and fill in the circle corresponding to your chosen response.

Please provide comment where indicated.

Remember, even if you have not continued in nursing, or if you did not do a graduate nurse program, your information is still important to this research to give an indication of the number of graduating nurses and their various career paths.

Provision has been made for up to five rotations during a graduate program. If you had none or less than five, follow the instructions to proceed to Question 21 on page 13.

If you had more than five rotations during your graduate program, indicate this on the last page of the questions relating to the fifth rotation on page 10.

Once again, I thank you for taking the time to complete this important part of research into how newly graduated registered nurse transition programs can be improved.

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

1 Gender
 Male ☐ Female ☐

2 Age
 21 or under ☐ 22–29 ☐ 30–39 ☐ 40–49 ☐ 50 or over ☐

3 Health care experience prior to graduation (tick as many as applicable)
 Enrolled nurse ☐ Assistant in nursing ☐ Patient care assistant ☐ Orderly ☐
 None ☐ Other (please specify)

4 At which university did you complete your undergraduate program? (tick as many as applicable)
 Curtin ☐ Edith Cowan ☐ Murdoch ☐ Notre Dame ☐
 Other (please specify) Name State/country

5 What type of health care organisation are you currently employed in? (tick as many as applicable)
 Tertiary hospital ☐ Secondary hospital ☐ Large rural hospital ☐ Small rural hospital ☐
 Community ☐ Private sector ☐ Mental health ☐ Aged care ☐
 Other health care
 Non-health care

6 What type of health care organisation did you work in during 2008? (tick as many as applicable)
 Tertiary hospital ☐ Secondary hospital ☐ Large rural hospital ☐ Small rural hospital ☐
 Community ☐ Private sector ☐ Mental health ☐ Aged care ☐
 Other health care
 Non-health care

7 During your first year post registration, did you participate in a formal 'graduate program'?
 No ☐ **Why was this?**

 ► Please skip the following questions on programs and go to Question 21 on page 13

Yes ☐ Please complete questions 8–20 about the program you have participated in

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

8 What month and year did you commence this program? (tick one)

January 08 ☐ February 08 ☐ March 08 ☐ April 08 ☐ May 08 ☐ June 08 ☐
 July 08 ☐ August 08 ☐ September 08 ☐ October 08 ☐ November 08 ☐ December 08 ☐
 January 09 ☐ February 09 ☐ March 09 ☐ April 09 ☐ Other (please specify)

9 Have you completed this program?

Yes ☐ **Please tick when at Question 10**

No ☐ **Do you expect to complete it?**

Yes ☐ **Please tick when at Question 10**

No ☐ **Why is this?**

Please go to Question 11 on page 5

10 What month and year did you (or do you expect to) complete this program? (tick one)

July 08 ☐ August 08 ☐ September 08 ☐ October 08 ☐ November 08 ☐ December 08 ☐
 January 09 ☐ February 09 ☐ March 09 ☐ April 09 ☐ May 09 ☐ June 09 ☐
 July 09 ☐ August 09 ☐ September 09 ☐ October 09 ☐ November 09 ☐ December 09 ☐
 January 10 ☐ February 10 ☐ March 10 ☐ April 10 ☐ May 10 ☐ June 10 ☐
 Other (please specify)

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

11 Please Identify ALL relevant components of each rotation of your program.

If you did not participate in a program, please go to Question 21 on page 13

First rotation

a Type of unit (tick as many as applicable)

Medical	<input type="checkbox"/>	Surgical	<input type="checkbox"/>	Community	<input type="checkbox"/>	Mental health	<input type="checkbox"/>	Midwifery	<input type="checkbox"/>
Paediatric	<input type="checkbox"/>	Domiciliary	<input type="checkbox"/>	Rural	<input type="checkbox"/>	Emergency	<input type="checkbox"/>	Peri operative	<input type="checkbox"/>
Critical care	<input type="checkbox"/>	Aged care	<input type="checkbox"/>	Other (please specify)	<input type="text"/>				

b Length of stay (tick one)

Less than 8 weeks	<input type="checkbox"/>	8–12 weeks	<input type="checkbox"/>	13–25 weeks	<input type="checkbox"/>	26–39 weeks	<input type="checkbox"/>	40–52 weeks	<input type="checkbox"/>
More than 52 weeks	<input type="checkbox"/>	Other (please specify)	<input type="text"/>						

c Average number of graduate nurses in unit during your stay including yourself

d How many hours were you contracted to work per week (on average) in this rotation?

38–40	<input type="checkbox"/>	30–37	<input type="checkbox"/>	20–29	<input type="checkbox"/>	Other (please specify)	<input type="text"/>
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e What level of support did you receive from each of the following in this rotation?

	extensive	very good	average	occasional	negligible	not applicable
Program coordinator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff development nurse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clinical nurse manager/ specialist/consultant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preceptor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ward/unit nursing staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f How long did you work in the unit before you were given the responsibility of a full patient/client load in this rotation?

Full load from day 1	<input type="checkbox"/>	1 day	<input type="checkbox"/>	2–3 days	<input type="checkbox"/>	4–7 days	<input type="checkbox"/>	7–14 days	<input type="checkbox"/>
Up to 1 month	<input type="checkbox"/>	More than 1 month	<input type="checkbox"/>	Other (please specify)	<input type="text"/>				

g What areas were beneficial with this rotation?

h What areas were problematic with this rotation?

i What caused the most stress for you in this rotation?

j Do you have any other comment you would like to make about this rotation?

If this was your only rotation, please go to Question 13 page 11 otherwise, continue over page

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

11 *continued*—If you did not participate in a program, please go to Question 21 on page 13

Second rotation

a Type of unit (tick as many as applicable)

Medical ☐ Surgical ☐ Community ☐ Mental health ☐ Midwifery ☐
 Paediatric ☐ Domiciliary ☐ Rural ☐ Emergency ☐ Peri operative ☐
 Critical care ☐ Aged care ☐ Other (please specify)

b Length of stay (tick one)

Less than 8 weeks ☐ 8–12 weeks ☐ 13–25 weeks ☐ 26–39 weeks ☐ 40–52 weeks ☐
 More than 52 weeks ☐ Other (please specify)

c Average number of graduate nurses in unit during your stay including yourself

d How many hours were you contracted to work per week (on average) in this rotation?

38–40 ☐ 30–37 ☐ 20–29 ☐ Other (please specify)

e What level of support did you receive from each of the following in this rotation?

	extensive	very good	average	occasional	negligible	not applicable
Program coordinator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff development nurse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clinical nurse manager/ specialist/consultant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preceptor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ward/unit nursing staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify) <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f How long did you work in the unit before you were given the responsibility of a full patient/client load in this rotation?

Full load from day 1 ☐ 1 day ☐ 2–3 days ☐ 4–7 days ☐ 7–14 days ☐
 Up to 1 month ☐ More than 1 month ☐ Other (please specify)

g What areas were beneficial with this rotation?

h What areas were problematic with this rotation?

i What caused the most stress for you in this rotation?

j Do you have any other comment you would like to make about this rotation?

If this was your last rotation, please go to Question 13 page 11 otherwise, continue over page

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

11 continued—If you did not participate in a program, please go to Question 21 on page 13

Third rotation

a Type of unit (tick as many as applicable)

Medical <input type="checkbox"/>	Surgical <input type="checkbox"/>	Community <input type="checkbox"/>	Mental health <input type="checkbox"/>	Midwifery <input type="checkbox"/>
Paediatric <input type="checkbox"/>	Domiciliary <input type="checkbox"/>	Rural <input type="checkbox"/>	Emergency <input type="checkbox"/>	Peri operative <input type="checkbox"/>
Critical care <input type="checkbox"/>	Aged care <input type="checkbox"/>	Other (please specify) <input type="text"/>		

b Length of stay (tick one)

Less than 8 weeks ☐ 8–12 weeks ☐ 13–25 weeks ☐ 26–39 weeks ☐ 40–52 weeks ☐
 More than 52 weeks ☐ Other (please specify)

c Average number of graduate nurses in unit during your stay including yourself

d How many hours were you contracted to work per week (on average) in this rotation?

38–40 ☐ 30–37 ☐ 20–29 ☐ Other (please specify)

e What level of support did you receive from each of the following in this rotation?

	extensive <input type="checkbox"/>	very good <input type="checkbox"/>	average <input type="checkbox"/>	occasional <input type="checkbox"/>	negligible <input type="checkbox"/>	not applicable <input type="checkbox"/>
Program coordinator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff development nurse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clinical nurse manager/ specialist/consultant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preceptor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ward/unit nursing staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify) <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f How long did you work in the unit before you were given the responsibility of a full patient/client load in this rotation?

Full load from day 1 ☐ 1 day ☐ 2–3 days ☐ 4–7 days ☐ 7–14 days ☐
 Up to 1 month ☐ More than 1 month ☐ Other (please specify)

g What areas were beneficial with this rotation?

h What areas were problematic with this rotation?

i What caused the most stress for you in this rotation?

j Do you have any other comment you would like to make about this rotation?

If this was your last rotation, please go to Question 13 page 11 otherwise, continue over page

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

11 *continued*—If you did not participate in a program, please go to Question 21 on page 13

Fourth rotation

a Type of unit (tick as many as applicable)

Medical ☐ Surgical ☐ Community ☐ Mental health ☐ Midwifery ☐
 Paediatric ☐ Domiciliary ☐ Rural ☐ Emergency ☐ Peri operative ☐
 Critical care ☐ Aged care ☐ Other (please specify)

b Length of stay (tick one)

Less than 8 weeks ☐ 8–12 weeks ☐ 13–25 weeks ☐ 26–39 weeks ☐ 40–52 weeks ☐
 More than 52 weeks ☐ Other (please specify)

c Average number of graduate nurses in unit during your stay including yourself

d How many hours were you contracted to work per week (on average) in this rotation?

38–40 ☐ 30–37 ☐ 20–29 ☐ Other (please specify)

e What level of support did you receive from each of the following in this rotation?

	extensive	very good	average	occasional	negligible	not applicable
Program coordinator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff development nurse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clinical nurse manager/ specialist/consultant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preceptor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ward/unit nursing staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify) <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f How long did you work in the unit before you were given the responsibility of a full patient/client load in this rotation?

Full load from day 1 ☐ 1 day ☐ 2–3 days ☐ 4–7 days ☐ 7–14 days ☐
 Up to 1 month ☐ More than 1 month ☐ Other (please specify)

g What areas were beneficial with this rotation?

h What areas were problematic with this rotation?

i What caused the most stress for you in this rotation?

j Do you have any other comment you would like to make about this rotation?

If this was your last rotation, please go to Question 13 page 11 otherwise, continue over page

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

11 continued—If you did not participate in a program, please go to Question 21 on page 13

Fifth rotation

a Type of unit (tick as many as applicable)

Medical ☐ Surgical ☐ Community ☐ Mental health ☐ Midwifery ☐
 Paediatric ☐ Domiciliary ☐ Rural ☐ Emergency ☐ Peri operative ☐
 Critical care ☐ Aged care ☐ Other (please specify)

b Length of stay (tick one)

Less than 8 weeks ☐ 8–12 weeks ☐ 13–25 weeks ☐ 26–39 weeks ☐ 40–52 weeks ☐
 More than 52 weeks ☐ Other (please specify)

c Average number of graduate nurses in unit during your stay including yourself

d How many hours were you contracted to work per week (on average) in this rotation?

38–40 ☐ 30–37 ☐ 20–29 ☐ Other (please specify)

e What level of support did you receive from each of the following in this rotation?

	extensive	very good	average	occasional	negligible	not applicable
Program coordinator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff development nurse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clinical nurse manager/ specialist/consultant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preceptor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ward/unit nursing staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify) <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f How long did you work in the unit before you were given the responsibility of a full patient/client load in this rotation?

Full load from day 1 ☐ 1 day ☐ 2–3 days ☐ 4–7 days ☐ 7–14 days ☐
 Up to 1 month ☐ More than 1 month ☐ Other (please specify)

g What areas were beneficial with this rotation?

h What areas were problematic with this rotation?

i What caused the most stress for you in this rotation?

j Do you have any other comment you would like to make about this rotation?

If this was your last rotation, please go to Question 13 page 11 otherwise continue over page

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

12 Did you have any further rotations?

No ☐ Yes ☒ Please give details

[illegible]

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

- 13 What components of the graduate program do you believe were beneficial in facilitating your transition to the role of registered nurse?

- 14 Were there any components of the graduate program do you believe were NOT beneficial in facilitating your transition to the role of registered nurse?

No ☐ Yes ☐ Please give details

- 15 Are there any ways you believe the program could be improved?

- 16 How much do you agree that the graduate program made you feel more **COMPETENT** in your clinical practice?

Strongly agree ☐ Mostly agree ☐ Unsure ☐ Mostly disagree ☐ Strongly disagree ☐

Please add any comment you have on this (optional)

- 17 How much do you agreed that the graduate program made you feel more **CONFIDENT** in your clinical practice

Strongly agree ☐ Mostly agree ☐ Unsure ☐ Mostly disagree ☐ Strongly disagree ☐

Please add any comment you have on this (optional)

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

18 Did you undertake a formal evaluation of your graduate program?

Not applicable ☐

19 Please indicate below your career pathways/intentions following the program:

☐ Please specify why

20 Please comment on how you feel your graduate year experiences have influenced your choices above:

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is a vertical margin line on the left side, creating a narrow left margin. The paper appears to be from a notebook or a standard sheet of stationery.

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

21 During the first 12 months as a registered nurse, how satisfied were you with the precepting/support you received?

Very satisfied ☐ Mostly satisfied ☐ Mixed ☐ Mostly dissatisfied ☐ Very dissatisfied ☐ N/A ☐
experience

Please add any comment you have on this (optional)

22 How long did you work before commencing night duty?

Less than 3 months ☐ 3–6 months ☐ 6–9 months ☐ 9–12 months ☐ Haven't done ☐
night duty

23 How well do you believe you were prepared for the responsibility of night duty?

Well prepared ☐ Somewhat prepared ☐ Poorly prepared ☐ No preparation ☐ N/A ☐

Please add any comment you have on this (optional)

24 How often was your performance evaluated?

At end of each placement ☐ Monthly ☐ Every 2–3 months ☐ Every 4–6 months ☐
Every 7–12 months ☐ At completion of employment ☐ Never ☐
Other (please specify)

25 When evaluating your performance, who was most involved? (tick more than one if applicable)

Preceptor ☐ Staff development nurse ☐ Clinical nurse ☐ Unit manager ☐ Clinical nurse specialist ☐
Other (please specify)

Please add any comment you have on this (optional)

APPENDIX B: Graduate Nurse Survey Questionnaire

Please complete this form as clearly as possible in black ink to assist us in the electronic data capture of responses

31 Where do you see yourself professionally in 5 years time?

32 Do you have any further comments that may identify how you feel about your integration into the workforce as a registered nurse?

Thankyou very much for taking the time to participate in this survey.

Please place your completed form in the stamped, self-addressed envelope provided and return as soon as possible to me at:

Ce Kealley
C/- Nurses & Midwives Board of Western Australia
Locked Bag 6
East Perth WA 6892

Focus groups—your participation would be appreciated

To help clarify areas of this survey, I intend to conduct a series of focus groups within the next 2 to 3 months to enable expansion on the discussion points above. If you would be interested in the opportunity to contribute further by participating in one of these groups, please email me with your expression of interest and contact details at ckealley@student.nd.edu.au before 31 March 2010. A certificate of participation will be given to be included in your professional portfolio.

Thankyou again for your valuable assistance with this important area of research.

Kind regards

Ce Kealley, RN, BSc(HP), M(HSM), MRCNA



Graduate nurse transition programs in Western Australia: A comparative study of their perceived efficacy.

Dear Colleague

You would have recently received correspondence and a questionnaire from me in regards to my Professional Doctorate of Nursing research at The University of Notre Dame, Fremantle Campus. I am researching the efficacy of Graduate Registered Nurse programs and their influence on retention of nurses within the nursing workforce.

The questionnaire is designed to collect information from you about your experiences following graduation from your nursing course. Even if you have not continued in nursing, this information is still valuable to assist me in forming a true picture of current trends with graduates and the novice nursing workforce.

If you have already completed and returned this questionnaire I thank you very much.

If you have yet to complete this questionnaire, I urge you to do so as soon as possible to enable supporting this important area of research into developing best practice for programs for transition of undergraduate to competent Registered Nurse and enhancing the future of the nursing workforce.

Your contribution will assist in developing recommendations for transition programs to ensure new graduates receive the optimum experience in their journey to becoming competent Registered Nurses delivering the best possible care in whichever field of nursing they choose.

It is envisaged the research will be completed within 12 months and results from the final thesis written up for publication in relevant journals. If you would like notification of any publications as a result of this research, my contact details will be included in the cover sheet of the questionnaire.

I would like to assure you that all the information gathered for this study will be held in strict confidence. All efforts will be made to ensure that only fair and unbiased reporting occurs.

Data will be stored securely as per University regulations in the School of Nursing at The University of Notre Dame Australia for five years.

I thank you in anticipation of supporting this important area of research into developing best practice programs for transition from graduate to competent Registered Nurse.

Please return the questionnaire in the envelope provided by the **31st March 2010**.

Kind regards,

Ms Ce Kealley
Researcher

Dr Jenny Prentice is supervising the project. If you have any queries regarding the research, please contact me directly on 0417 944 776 / email: ckealley@student.nd.edu.au or Dr Prentice by email at Jenny.Prentice@health.wa.gov.au.

If participants have any complaint regarding the manner in which a research project is conducted, it may be given to the researcher or, alternatively, to the Executive Officer, Research Office, The University of Notre Dame Australia, PO Box 1225 Fremantle WA 6959, phone (08) 9433 0941.



INFORMATION SHEET

Graduate nurse transition programs in Western Australia: A comparative study of their perceived efficacy.

Dear Colleague

I am a Professional Doctorate of Nursing student at The University of Notre Dame Australia (Fremantle Campus) researching the efficacy of Graduate Registered Nurse programs and their influence on retention of nurses within the nursing workforce.

My study population is all Registered Nurses who graduated from a university School of Nursing and registered with the Nurses and Midwives Board of Western Australia (NMBWA) during the year 2008. On my behalf, the NMBWA generated a list of these graduates and forwarded a survey questionnaire in March 2010. The questionnaire was designed to collect information about the GRN experiences following graduation from their nursing course.

Some of the resultant data requires detail clarification and, as such, I would be very grateful for your assistance in this. The attached link to a Survey Monkey questionnaire will enable collection of the additional information I require to more comprehensive report the study findings.

It is envisaged the research will be completed within the next few months and results from the final thesis written up for publication in relevant journals. If you would like notification of any publications as a result of this research, my contact details will be included in the information sheet of the questionnaire.

I would like to assure you that all the information gathered for this study will be held in strict confidence. All efforts will be made to ensure that only fair and unbiased reporting occurs. Data will be stored securely as per University regulations in the School of Nursing at The University of Notre Dame Australia for five years.

I thank you in anticipation for supporting this important area of research into developing best practice programs for transition from graduate to competent Registered Nurse.

Kind regards,

**Ms Ce Kealley
Researcher**

Dr Jenny Prentice is supervising this project. If you have any queries regarding the research, please contact Dr Prentice by email at Jenny.Prentice@health.wa.gov.au or me directly on 0417 944 776 / email: ckealley@inet.net.au, or, ce.kealley@health.wa.gov.au, or, ckealley@student.nd.edu.au

If participants have any complaint regarding the manner in which a research project is conducted, it may be given to the researcher or, alternatively, to the Executive Officer, Research Office, The University of Notre Dame Australia, PO Box 1225 Fremantle WA 6959, phone (08) 9433 0941.

APPENDIX E: Graduate Nurse Coordinator Web-based Survey

[SURVEY PREVIEW MODE] Graduate Nurse Program (GNP) Coordinator Survey Page 1 of 3

Graduate Nurse Program (GNP) Coordinator Survey

Exit this survey

100%

*** 1. Please indicate the type of healthcare organisation you belong to.**

- ☐ Metro Tertiary
- ☐ Metro Secondary
- ☐ Metro Private
- ☐ Large Rural
- ☐ Small Rural
- ☐ Mental Health
- ☐ Aged Care
- ☐ Community
- ☐ Other (please specify)

*** 2. How long (in months) are the GNPs in your organisation? (if you have more than one type of program, please indicate each type).**

*** 3. How many rotations does a Graduate Registered Nurse (GRN) have in your GNP? (Please indicate if different number for different types of programs)**

*** 4. What number of GRNs would be assigned to a single ward or unit for a rotation? (Please give range, in particular, maximum number that would be placed in one area).**

*** 5. What would the normal ratio of GRNs to other RNs be on a typical ward or unit? (Again, if necessary, please give range).**

http://www.surveymonkey.com/s.aspx?PREVIEW_MODE=DO_NOT_USE_THIS_LINK 3/09/2012

APPENDIX E: Graduate Nurse Coordinator Web-based Survey

[SURVEY PREVIEW MODE] Graduate Nurse Program (GNP) Coordinator Survey Page 2 of 3

6. Please indicate the types of support personnel available to your GRNs; the Award level of the support person; and the approximate number of GRNs each support person is responsible for.

	Available	Award Level	Number GRNs per Indiv
GNP Coordinator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Staff Development Nurse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Staff Development Educator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Clinical Coach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Preceptor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Mentor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Other (please specify)			
<input type="text"/>			

***7. How many hours per week would a FULL-TIME GRN be contracted for?**

***8. Please give a brief outline of what guidelines govern your GNP?**

***9. Please give a brief outline of what changes/innovations you have applied, or plan to apply, to your GNP?**

10. Please provide any further comment or information you feel may be useful to this survey. This is the final question - thank you so much for your time in assisting me with my research.

http://www.surveymonkey.com/s.aspx?PREVIEW_MODE=DO_NOT_USE_THIS_LL... 3/09/2012

APPENDIX E: Graduate Nurse Coordinator Web-based Survey

[SURVEY PREVIEW MODE] Graduate Nurse Program (GNP) Coordinator Survey Page 3 of 3



Done

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Graduate Nurse Coordinators Qualitative Data

Graduate Program Guidelines

Graduate nurse coordinators were asked to provide a brief outline of what guidelines they used to govern the administration of their GNPs. The purpose of this question was to determine if any organisations had specific objectives with which to measure the outcomes of their programs. No respondents indicated an ongoing method of prescribed program review; however, one tertiary organisation did indicate the intention to formally evaluate their program in the near future. This same organisation appeared to have the most comprehensive framework and set of performance indicators. According to the respondent, these were based upon evidence-based practice and developed through a process of ongoing focus groups that were held regularly with relevant stakeholders. Another tertiary hospital indicated the use of graduate program and human resource guidelines but did not specify anything further. The same organisation expressed the intent to implement a formal framework of support for nurses at their organisation. Two respondents, one from a tertiary and the other from a metropolitan secondary organisation did not appear to understand the request *please give a brief outline of what guidelines govern your GNP*. This suggested that there may not have been specific frameworks in place with which to ensure the graduates are given the best transition opportunity possible.

As should be the case with all nursing practice, most graduate nurse coordinator respondents discussed the use of the Australian Nursing and Midwifery Council, National Competency Standards (ANMC, 2006) to direct their assessment

APPENDIX F: Graduate Nurse Coordinator Qualitative Data

of novice nurse practice. Both the private organisations, two of the secondary, and four of the rural graduate nurse coordinator respondents indicated that they conducted their graduate program in conjunction with a university, in order to offer a Graduate Certificate in Clinical Nursing. Both the large and the small rural organisation's graduate nurse coordinators indicated that their transition program guidelines came from the WA Country Health Service (WACHS) GNP coordinator. They also suggested their greatest issue was a lack of resources that impacted upon their ability to provide standard support across all sites.

Recent or Planned Changes and Innovations to the Transition Program

To further understand local innovations and strategies that have been shown to improve their GNPs, information was sought from the graduate nurse coordinators in regards to what changes have either been made, or are planned for their transitional programs (Table App F.1).

Table App F.1. Program Innovations and Changes

Sector	Changes/Innovations
Tertiary	<p>Reviewing study content and delivery.</p> <p>Looking at making all assessment documents electronic.</p> <p>Developing grad face-book page.</p> <p>Investigating changing selection procedure away from interviews.</p>
Tertiary	<p>Regular online surveys (Monkey) to identify:</p> <ul style="list-style-type: none"> - changes required in tutorial or study day content; - graduate satisfaction with the amount of time I work and visit them in the clinical area. <p>Implemented preceptor modules for the ward staff to ensure they are prepared for their role as preceptors.</p> <p>Implemented simulation education into each of the GRN study days - finding GRNs are much more confident in their roles in emergency situations.</p>
Tertiary	<p>GNP Framework devised in 2007 from a series of focus groups with graduates and key participants of previous programs (SRNs, SDNs etc).</p> <p>Hospital resourced development and implementation of framework encompassing key themes from the focus groups and mirrors the gold standards identified in the literature.</p> <p>Changed orientation format.</p> <p>Changed associated supports in the immediate transition period.</p> <p>Introduced professional development study days aimed to develop professional aspects of the graduate (Leadership/ Communication/ Career Planning/ Preceptorship).</p> <p>Clinical development seminars centred on specialty clinical knowledge, skills and learning from error.</p> <p>Graduate nurses now rotate to 57 different areas across 5 hospitals (all areas bar ICU and Midwifery).</p> <p>Developed guidelines for performance management, recruitment and retention, based on best practice and industry standards.</p> <p>In 2008 we introduced a graduate nurse program SDN service that provides a unique service across all specialties and shifts; enables ward supports or graduates, to make a referral for further support. Allows the graduate to receive timely support when required (in the odd chance the ward support is unavailable). Ensures communication between the graduate program, the graduates and the ward staff who support them.</p> <p>Review the program 3 times a year with the graduates.</p> <p>Aim to employ a research consultant to do a formal evaluation at 5 years (2012).</p> <p>In the process of introducing a further addition to the framework: patient safety. This will enable all educational content of the graduate nurse programs to centre on patient safety by learning from human error and RCA (root cause analysis). We envisage this will create more awareness of safety for patients and promote a culture of disclosure whereby we can continue to learn from our errors.</p>

APPENDIX F: Graduate Nurse Coordinator Qualitative Data

Sector	Changes/Innovations
Tertiary	Implemented clinical coach role. Currently developing hospital-wide support model for all nurses.
Secondary	Changed recruitment process to assessments, scenarios and interviews. Evaluate each program and alter it accordingly. In 2012 will increase to 10 RNs twice per year. Use reflective worksheets to identify very early on those that do not have ability to critically think and problem solve and can support them to achieve it much sooner.
Secondary	Main change has been working in partnership with Uni C since 2009.
Metro Private	Three-year development program opportunity for Certificate in Clinical Nursing in partnership with Uni C paid by hospital. Electronic provision of all learning and orientation requirements. Recovery Room, Critical Care and ICU as rotation options in second year. Two rather than 3 intakes of grads in 2012.
Metro Private	Have taken full and part-time grads in the past but we are trying to attract all full-time placement in the future. Grad Certificate through Uni C.
Large Rural	More dedicated time from staff educators. One week supernumerary for first rotation.
Large Rural	Hoping to have full-time GNP coordinator that can travel to smaller hospitals.
Large Rural	Due to feedback the rotations through Medical/Surgical, ED, Theatre, Maternity, Palliative Care, Mental Health, and Coordination at a smaller site will remain. Breadth of experience in GNP a drawcard.
Large Rural	Monthly networking tutorials for our grads in our region (4 sites) via videoconference. Coordinate 5 face to face study days - clinical skills days. All grads attend the regional resource centre for the study days.
Large Rural	In 2007 our rotations were set in either med/surg or paed's as a result of lack of Clinical support, skill shortage; e.g. in ED etc. - had dropped to 2 grads for that year. Reintroduced other areas to be competitive with other grad programs. Input from all CNM of areas as to what kind of supernumerary time they would feel comfortable with before the grad could then be counted on as staff - helped in opening areas that had been closed. A business case was then put forward to Management. Other areas were also considered e.g. Mental Health, Remote, Community, and Home Nursing, and Dialysis. These areas were often hard to recruit to because there was little exposure to these areas by staff. This also gave RN's a broader understanding of the facilities available in the community so when discharging patients they had an understanding of where their clients were going to and the problems they may encounter.
Small Rural	More supernumerary time if possible.

Further Comment from Graduate Nurse Coordinators

An option was given for the graduate nurse coordinators to provide any further comment they felt may have been useful to the survey. Some valuable comments were proffered by the secondary and rural areas, and in general indicated that a lack of resources was often a shortcoming in attempting to deliver a supportive and comprehensive transitional program (Table App F.2).

Table App F.2. Further Comments from Graduate Nurse Coordinators

Sector	Comments
Secondary	We have good retention but many grads don't want to do extra studies and quite a few are mature grads who want part-time and are loyal and local people. Doing post graduate study in the first year of clinical practice pushes many too hard. Working full-time and learning and consolidating everything they need is massive and they're not at uni where they can just take their time.
Secondary	Would prefer my only job was GNP coordinator so I could find the time to introduce more innovations and changes.
Large Rural	Our difficulty for our program is having a dedicated person. Being in the (Area), if staff resign, it takes a while to recruit. This has led to some difficult times in the past.
Small Rural	Feedback from the grads indicates that travelling to different sites is unsettling, rotating to different wards and areas is acceptable but changing hospitals is more stressful than they anticipated. <i>Note: this area has up to 10 rotations per program.</i>

These, and the comments in Table App F.1, helped guide development of the Recommendations and Concepts in Chapter 6.