**RMIT**
UNIVERSITY

# Perceptions of factors that impact on the practice of acute care Victorian nurses, in response to an aging society. An exploratory descriptive study.

A thesis submitted in fulfilment of the requirements for the degree of Master of Science (Nursing)

Rachel Cardwell

GradCert. Nursing Practice Perioperative: Deakin University; BN:RMIT University; RN

School of Health and Biomedical Sciences

RMIT University

December 2016

**Declaration**

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis/project is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

Rachel Jane Cardwell

December 2016

# Acknowledgements

# Abstract

## Background

In Australia the future direction of healthcare delivery is driven by the demands of a rapidly increasing aged population. The healthcare systems response requires expertise, leadership and resources for progressively multiple and complex aged healthcare needs. The nursing skills, knowledge and attitudes required to meet these needs include: the ability to undertake comprehensive geriatric assessments, clinical teaching, family and caregiver support, mental health assessments, specific research, leadership capabilities and service development.

## Aims of the Research

The aim of this research is to explore the factors perceived by registered nurses (RNs) and enrolled nurses (ENs) that impact on the care provided to an increasingly aged population of patients in an acute care setting from one metropolitan hospital.

Two research questions informed this study:

1. In the current clinical context, what are the factors that RNs and EN identify as impacting on their patient care?

2. What are the perceived challenges nurses face when caring for aged patients in the acute care setting?

## Method/approach

This research was undertaken using qualitative methodology and an exploratory descriptive approach. Ten nurses (five RNs and five ENs) were recruited using a convenience

sample from a Melbourne Metropolitan Acute Care Hospital and participated in qualitative interviews. Data collected was coded and thematically analysed.

**Findings**

Two distinct themes emerged to represent the perceptions of the nurses: Practice environment and preparedness for practice. The practice environment theme included factors that contributed to the organisational characteristics of a work setting that aid or constrain professional nursing practice. These factors were identified as patient centred care, older adults over 65, multiple co morbidities, polypharmacy, tasks/time/paperwork and "catching up". Factors associated with preparedness for practice were identified as:  assessment skills, feelings of inadequacy, increased anxiety, prioritisation, learning on the job and EN transition to practice.

**Conclusions**

The participants identified that their ability to provide patient centred care is being challenged by multiple factors impacting on the contemporary work environment. These factors led them to revert to a 'task orientated' approach to their practice, which resulted in less than optimal mode of patient care. An increasingly aged population increases the likelihood of polypharmacy and multiple co-morbidities increasing patient acuity and further challenging nurses' ability to provide holistic patient care.

The prioritisation of patient care and increased anxiety often associated with specific nursing clinical requirements often leads to nurses experiencing feelings of inadequacy. As nursing is considered an applied profession, the ability to continue to 'learn on the job' was highly valued by the nurse participants.

# List of Abbreviations

| | |
|---|---|
| **ACSQHC** | The Australian Commission on Safety and Quality in Health Care |
| **AHPRA** | Australian Health Practitioner Regulation Agency |
| **AIHW** | Australian Institute of Health and Welfare |
| **ANMAC** | Australian Nursing and Midwifery Accreditation Council |
| **APRN** | Advanced practice registered nurse |
| **COAG** | Council of Australian Governments |
| **CIT** | Critical incident technique |
| **CPD** | Continuing professional development |
| **EN** | Enrolled nurse |
| **ICU** | Intensive care unit |
| **IV** | Intravenous |
| **NBV** | Nurses Board of Victoria |
| **NMBA** | Nursing and Midwifery Board of Australia |
| **NUM** | Nurse Unit Manager |
| **RN** | Registered nurse |
| **RPN** | Registered psychiatric nurse |
| **TAFE** | Technical and Further Education |
| **VET** | Vocational Education and Training |

# Table of Contents

# Chapter 1: Introduction and background to the study

## 1.1 Introduction

This chapter will introduce the study beginning with the focus of the inquiry, the research aim and questions. What follows is the justification for the study, setting into context the need to undertake this inquiry. This section will concisely examine the current challenges that face the Australian healthcare system in an aging society and the changing role of the practicing nurse within Australia to meet them. Contemporary practice has been shaped by the history of the Registered Nurse (RN) and Enrolled Nurse (EN) in the State of Victoria and Australia. As such a brief historical overview of nursing education in Australia between 1830 and 1980 that evolved to meet society's changing health is presented. Finally at the end of the chapter there is a synopsis of the chapters presented in this thesis.

## 1.2 Focus of Inquiry

In Australia, the future direction of healthcare delivery is currently informed by an aging population and associated demographics. The healthcare system response to this future direction requires expertise, leadership and resources as aging patients have increasingly multiple and complex healthcare needs. The scope of practice[1] required  for contemporary healthcare professionals to meet the needs of an aging population include: the ability to undertake comprehensive geriatric assessments, clinical teaching, family and caregiver support, mental health assessments, specific research, leadership capabilities and service development. Many of these clinical competencies and inherent knowledge requirements have previously been the sole domain of medical staff. Nevertheless, in the past decade, with

---

[1] The scope of practice is a term used by professions and regulators to describe the roles, responsibilities, process, procedures and functions that are permitted. It is shaped by a range of factors including education, competence and context (Schluter, Seaton, & Chaboyer, 2011; Kennedy, O'Reilly, Fealy, Casey, Brady, McNamara, Prizeman, Rohde & Hegarty, 2015).

the increased number and complexity of aged care patients a shift in nursing practice has occurred with some of these competencies becoming part of the role of various tiers in the nursing workforce.

This change in expectation about nurses' scope of practice raises questions about the impact on the work of registered and enrolled nurses who care for an ageing population in the acute care sector.

## 1.3 Aim of the study and research questions

This study aimed to explore and explain factors perceived by registered nurses (RNs) and enrolled nurses (ENs) that impacted on the care provided to an increasing aged population of patients in an acute care setting, in one metropolitan hospital.

Two research questions informed this study:

1. In the current clinical context, what are the factors that RNs and EN identify as impacting on their patient care?

2. What are the perceived challenges nurses face when caring for aged patients in the acute care setting?

## 1.4 Justification for the Study

In the Victorian healthcare sector during the last decade, there have been a number of notable changes to the nature of the workload for both the RN and the EN. The major driver for these changes has been an aging population, which has increased the healthcare complexity of presenting patients, therefore challenging current practices (Van Bogaert, Dilles, Wouters, & Van Rompaey, 2014; Lau, Willetts, Hood, & Cross, 2014). The percentage of Australians aged 65 and over in 2004 was 5.9%, this increased to 7.35% in

2014, with this number predicted to increase rapidly over the next decade as the cohort of baby boomers age (Australian Bureau of Statistics, 2014). Between June 2013 and June 2014 the number of people turning 65 rose by 118,700, this was an increase of 3.6% in just 12 months (Australian Bureau of Statistics, 2014). By 2042 it is estimated that 6.2 million Australians will be 65 years or older, this will be 25% of the Australian population. For those aged 85 and over, the growth is predicted to be even more significant, reaching 1.1 million by 2042 (Australia's Demographic Challenges, 2013). Because of this aging population, the contemporary healthcare system is changing and the roles of nurses within this system are reflecting this change (Australian Institute of Health and Welfare [AIHW], 2015; Eagar et al., 2010). The research reported in this thesis/ dissertation seeks to address the impact of the changing roles of nurses and recommend ways and means of overcoming the challenges involved. This section of the chapter will first outline the impact of an aging population on the hospital at the centre of this study before moving the focus to the impact on the nursing staff.

## 1.5 The study hospital

The metropolitan hospital at the centre of this study is a 300 bed facility, treating almost 70,000 patients in the emergency department annually (Northern Health, 2016). Six of the eleven wards manage acute care patients. Like many metropolitan hospitals it is located in a growth corridor where the local population is expected to increase by 64% or an extra 128,569 people by 2031 (Northern Health, 2012).

This research inquiry began in 2014, so to understand the context in which nurses practiced in an acute care setting and the impact of the aging population. Initially a review of 10 years of admission data from the study hospital was conducted. All data presented here was provided to the researcher by head officers of both the Admissions Record Office and the

Human Resources Department of the hospital after ethics approval was granted. Admission medical record data from patients over the age of 65 years, between 2004 to 2014 from one metropolitan Melbourne hospital were reviewed.

Between the years 2004 and 2014, a total of 147,886 patients aged between 65 and 108 were admitted to the hospital (see Figure 1.1).
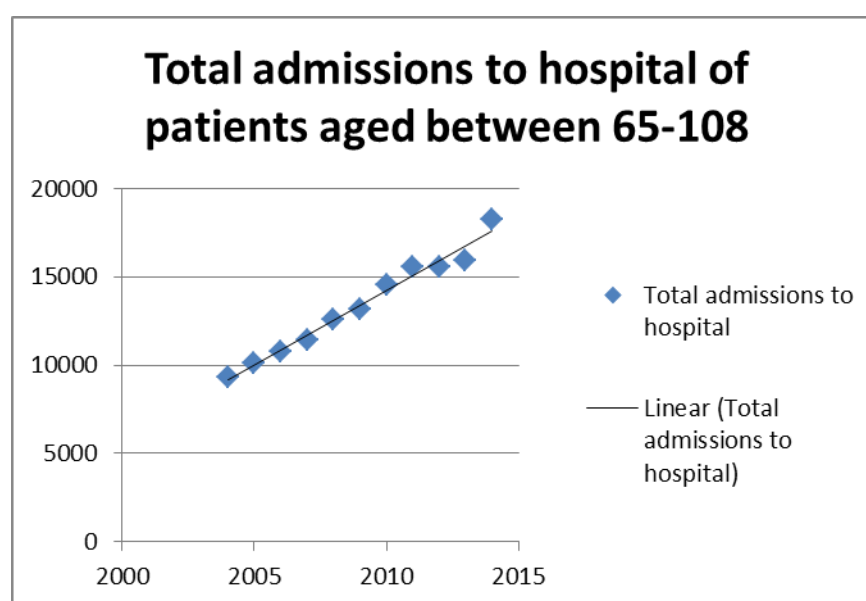


*Figure 1.1.* **Total admissions to hospital of patients aged between 65–108 (2014 figures).**

The number of admissions of patients over the age of 65 to this hospital is consistent with the national average where persons aged 65 years or older accounted for approximately 20% of all emergency department admissions in 2014-2015 (AIHW, 2015). In the study hospital those aged between 65- 76 had the largest growth in admissions. For example, during the 10-year period there were 7,075 patients aged 76-years admitted. Comparisons between 2004 and 2014 showed that for this age group there was a 270% increase during this time period (in 2004, 419 admitted compared to 1,149 in 2014 (see Figure AB.1 Appendix A)

The next three highest ages for admission were 81 (up from 322 in 2004 to 944 in 2014 = 290% increase), 66 (up from 405 in 2004 to 945 in 2014=230% increase), and 65 (up from 377 in 2004 to 911 in 2014 =240% increase) (see Figures AB.2–AB.4 Appendix A).

In 2004, 419 patients aged 75 and 240 patients aged 85 were admitted, increasing to 601 and 548, respectively, by 2014 (see Figure AB.3 Appendix A).

In 2004, 32 patients aged 95 were admitted, increasing to 38 in 2014 and in 2004, four patients aged 100 were admitted, increasing to nine in 2014 (see Figure AB.4 Appendix B).

As this study investigated the impact of the ageing population on health care provision, the admission rates of other population groups (i.e. people under the age of 65) will not be reported.

**1.5.1 Most common hospital admission conditions**

Of greater interest to this study was not that patients were admitted, but the types of conditions in which patients were suffering when they were admitted. The most common conditions for which patients were admitted to the hospital between 2004 and 2014 are reported in Figure 1.2.

**Most common hospital admission conditions 2004-2014**
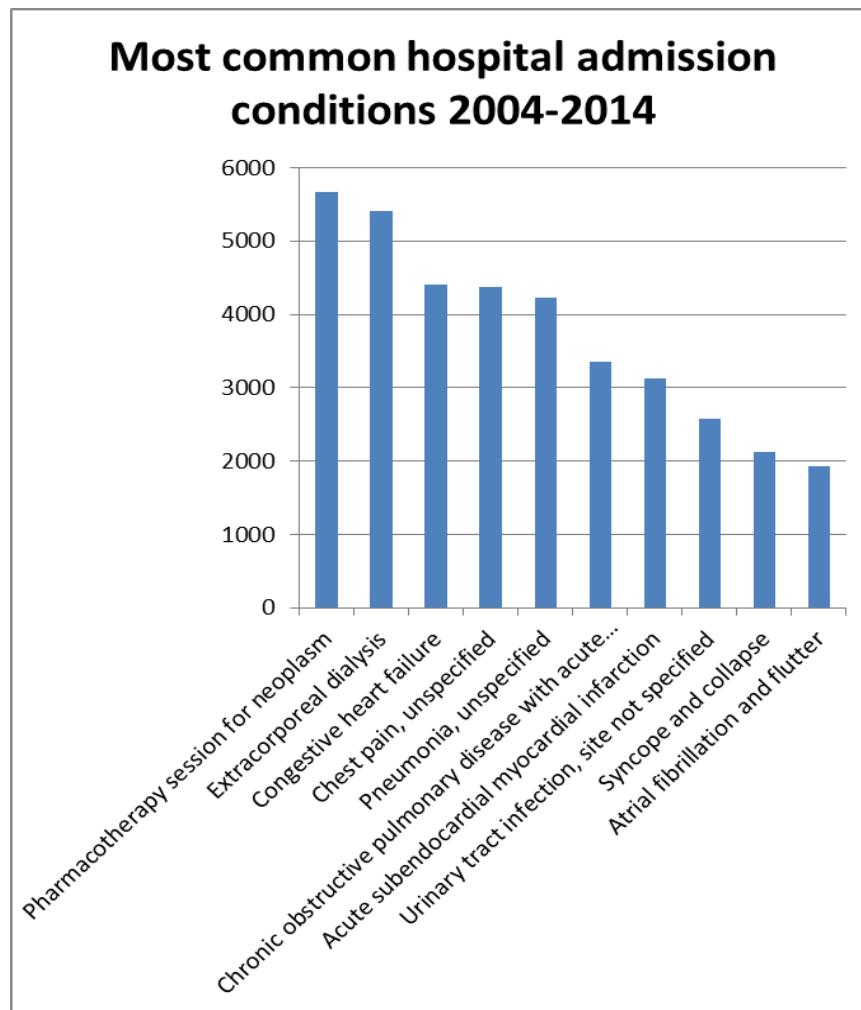
*Figure 1.2.* **Most common hospital admission conditions (2004–2014 figures).**

Of note is that between 2004 and 2014 the most common health condition that led to admission to the Emergency Department of the hospital was pharmacotherapy for neoplasm (pain management for pain associated with cancer), at 5,669 admissions. Extracorporeal dialysis (associated with kidney failure) was the next most common condition (5,412 admissions); however this could be explained by the fact that admission data was collected for each extracorporeal dialysis session, which in some acute facilities is classed as an outpatient admission. Congestive heart failure was the third highest condition, with 4,404 admissions. Three other primary conditions, all related to the cardiovascular system, were in the top 10 of admissions: chest pain (unspecified) (4,368); acute subendocardial myocardial

infarction (3,122); and atrial fibrillation and flutter (1,933). In total, 13,827 admissions between 2004 and 2014were related specifically to the cardiovascular system. Other common causes of admissions during that period were pneumonia (unspecified) (4,224), chronic obstructive pulmonary disease with acute lower respiratory infection (3,361), urinary tract infection (2,573); and syncope and collapse (2,130).

When considered as a whole this data suggests that the common aged related disorders such as cancer, cardiovascular and respiratory diseases are more often represented in acute hospital admissions. Another important factor to consider here in relation to context and the impact on the acute care nurses is that many of these patients while coded for one condition may also be treated for other age related disorders, such as diabetes, hypertension, muscular skeletal pain, neurological deficit and or obesity.  The complexity of providing nursing care to this aging population clearly will be presenting a challenge however before progressing an understanding of the role of the nurse practicing in this context is warranted. This literature concerning this topic will now be examined.


## 1.6 The contemporary Registered Nurse

The Australian Institute of Health and Welfare (AIHW) and the International Council of Nurses defines the RN as an individual who "encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings" (AIHW, 2013, p. 1).

An RN is a nurse who meets the requirements for registration by the Nursing and Midwifery Board of Australia, part of the Australian Health Practitioner Regulatory Agency (Australian Health Practitioner Regulation Agency [AHPRA], 2014) and is on a register that is maintained nationally (AHPRA, 2014; AIHW, 2013). The RN must complete the minimum educational requirement of a three-year Bachelor degree from a higher education institution

(AIHW, 2013). For the RN to maintain registration, evidence of 'recency of practice' must be demonstrated;[2] specifically, a minimum of three months of full-time practice hours over a five-year period and evidence of continuing professional development (CPD),[3] with a minimum of 20 hours per year required (AIHW, 2013).

## 1.7 The contemporary Enrolled Nurse

In Australia, the contemporary EN works under the supervision and direction of the RN to provide basic nursing care and can assist the RN with patient care in complex nursing settings (Australian Nursing and Midwifery Accreditation Council [ANMAC], 2013; AIHW, 2013). The ANMAC defines the EN as:

> … an associate to the registered nurse who demonstrates competence in the provision of patient-centred care as specified by the registering authority's licence to practice, educational preparation and context of care … enrolled nursing practice requires the enrolled nurse to work under the direction and supervision of the registered nurse as stipulated by the relevant nurse registering authority. At all times, the enrolled nurse retains responsibility for his/her actions and remains accountable in providing delegated nursing care (2013, p. 2).

The minimum educational requirement for an EN is a Certificate IV or Diploma from a vocational education and training provider, or equivalent. The provision of education for the ENs is upheld by ANMAC. The standards of practice required by an EN are outlined by the Nursing and Midwifery Board of Australia (NMBA).  Registration for ENs is upheld by the ANMAC. These standards outline a point of reference for entry to professional practice and are an indication that the practitioner has accomplished a level of practice that is safe and acceptable (McGrath & Anastasi, 2006; AIHW, 2013).

---

[2] 'Recency of practice' means that a nurse or midwife has recent experience practising their profession and their nursing or midwifery skills are up to date (AHPRA, 2012, p. 1)

[3] " CPD is the means by which members of the professions maintain, improve and broaden their knowledge, expertise and competence, and develop the personal and professional qualities required throughout their professional lives" (AHPRA, 2014, para. 4).

## 1.8 Training of nurses within Australia Between 1830 and 1980

In Australia in the late 1800s, the method of training[4] nurses was based on the Nightingale system (Cowling, 2015: Trembath, & Hellier,1987). Students were trained both clinically and theoretically, to provide for the service needs of the hospital in exchange for board, uniforms and a minimal wage. During this training, the nurses were moved throughout the hospital to gain various clinical experiences under the direct supervision of an RN (Matron) or a ward sister. This training system briefly focused on the theoretical components of nursing and provided a specific emphasis on the service needs of individual hospitals, the major learning environment being the clinical environment itself, in which the learning was done by doing. This apprenticeship system of training supported the needs of the hospital, which required a reliable workforce.

During the early 1960s, the Australian Government moved towards the standardisation of nursing training and regulatory structures with the introduction of a minimum standard of education that outlined specific hours required, both clinically and theoretically (McCoppin & Gardiner, 1994). During the 1960s and 1970s, investigations into the levels of education within these nursing apprenticeships led to the standardisation of two levels of basic nursing education: the RN and the EN (McCoppin & Gardiner, 1994; Halcomb, Salamonson, Davidson, Kaur, & Young, 2014). The historical development of education preparation and the associated roles of the RN and EN are critiqued in the next section of this chapter.

### 1.8.1 Education of Registered Nurses

In 1985, the first state-wide system of higher education for nurses came into effect, marking the end of the hospital training of RNs. By 1987, the first-year cohort of RNs

---

[4] The term 'training' nurses was utilised up until 1975, when *Goals in nursing: Part 1* was published, outlining strategies to achieve change to nursing 'education' (Australian Government, Department of Health, 2013).

graduated and entered clinical practice in Australia (McCoppin & Gardiner, 1994; Halcomb et al., 2014).

From 1989, reforms in the higher education sector resulted in colleges of advanced nursing education being amalgamated with new or existing universities. By 1992, the bachelor degree or postgraduate degree officially became the basic requirement for an RN, governed by the Nursing Board in each state or territory (Halcomb et al., 2014).

**1.8.2 Education of Enrolled Nurses**

The changes to EN training were even more striking. During the 1960s, the EN (originally named the nurse's aide) was introduced to the Australian healthcare system in an attempt to increase nursing-related services and reduce the rising costs of healthcare services (Jacob, Barnett, Sellick, & McKenna, 2013). Until 1987, this role was prescribed by Schedule F to the Nurses' Registration Act, recommending that the nurse's aide undertake a minimum of 75 hours of lectures with emphasis on set tasks including the lifting and positioning of patients, prevention of bedsores, the giving of bedpans, and mouth, hair and nail care (Halcomb et al., 2014; Jacob et al., 2013; Nurses' Registration Act, 1924). These 75 hours included 12 hours of lectures on medical and surgical conditions related specifically to nursing care and five hours of lectures on basic anatomy and physiology (Halcomb et al., 2014). This training was undertaken within teaching hospitals and nurses' aides were seen as trainees under the leadership and guidance of the RN (Jacob et al., 2013).

In 1987, the title of 'nurse's aide' was officially changed to 'state EN'. At this time, hospitals ceased to provide the theoretical component of this course, with this responsibility becoming the role of Colleges of Technical and Further Education (TAFE) (AIHW, 2003). This new system included 360 hours of theoretical learning over a 12-week period and 40 hours of clinical rotations within various clinical settings (Halcomb et al., 2014; Ryan, 2009; Ryan, 2010). Since 1987, the theoretical component for an EN has increased and in 2007, a

minimum of 500 hours of theory was required to complete the minimum standards set by the Victorian Nurses' Board (AHPRA, 2014) to obtain registration as an EN.

During the past decade, the levels of qualification for enrolled nursing have steadily increased, from an Advanced Certificate to a Certificate IV. Currently, the pathway for registration as an EN requires a diploma-level qualification offered in the TAFE or Vocational Education sectors (Australian Nursing and Midwifery Federation, 2009). In Victoria between the years 2002 and 2007, endorsements for oral medication administration were given to ENs who had undertaken medication administration certificates from approved programmes of study (Department of Human Services, 2001; Nursing and Midwifery Board of Australia, 2015). In 2006, further routes of medication administration—subcutaneous and intramuscular injection—were added to the EN endorsements. In 2008, the introduction of the National Scheme[5] ensured that all EN-approved programmes of study included relevant medication administration courses as part of the curriculum, acknowledging the increasing numbers of ENs, including all new graduates who had the prerequisite education to administer medications (Nursing and Midwifery Board of Australia, 2015). In 2007, intravenous (IV) medication, fluid and blood product administration endorsements were also offered to ENs. At the time of writing, these endorsements were still offered separately from the diploma courses and approved programs of study (Nursing and Midwifery Board of Australia, 2015) (see Appendix A).

---

[5] "The Council of Australian Governments (COAG) decided in 2008 to establish a single National Registration and Accreditation Scheme (National Scheme) for registered health practitioners. On 1 July 2010, the following professions became nationally regulated by a corresponding National Board: chiropractors, dental practitioners (including dentists, dental hygienists, dental prosthetists and dental therapists), medical practitioners, nurses, midwives, optometrists, osteopaths, pharmacists, physiotherapists, podiatrists and psychologists" (AHPRA, 2015, para 1).

## 1.9 Synopsis of Chapters

This thesis is presented in six chapters. This first chapter has outlined the aim of the study. It has given context to the changing demographic of Australia peoples and the impact of an aging society on the healthcare system. A historical overview of the education, definitions in relation to RNs and ENs as well as a clarification of key terms used in the study have been provided.

In Chapter 2, a review of contemporary research literature provides insight into the changes in nursing practice for RNs and ENs in response to an aging society. Gaps in knowledge of this field are identified.

Chapter 3 specifies and justifies the study's methodological approach and the methods used to address the research aim.

Chapter 4 presents the thematic analysis of interviews undertaken with both RNs and ENs in a Melbourne metropolitan hospital.

Chapter 5 presents a critical discussion of the research findings in relation to the current literature and the way the research objectives were addressed.

Chapter 6 includes conclusions drawn from the analysis and discussion of key findings in the contest of current literature and recommends policy, educational and clinical workforce strategies for implementation, as well as further research.

## 1.10 Summary

This chapter has introduced the study. It began with defining the focus of the inquiry, the research aim and questions. The background to the study, setting into perspective the need to undertake this inquiry was then discussed. An examination of the current challenges that face the Australian healthcare system in an aging society and the changing role of the

practicing nurse within Australia to meet these challenges have been reviewed. A brief

historical overview of nursing education in Australia between 1830 and 1980 and how it has

evolved to meet society's changing health has been presented. Finally, at the end of the

chapter a synopsis of the chapters presented in this thesis has been outlined.

# Chapter 2: Review of research literature

## 2.1 Introduction

A review of the literature related to the changing practice of Victorian nurses in response to an aging population is presented in this chapter. Consideration is given to methods and limitations of researching this multifaceted phenomenon. Finally, the gaps in the literature and associated methodologies are highlighted and provide a justification for the stated aim of this study and research questions.

## 2.2 Background to literature review

In the last decade, economic constraints and workforce shortages in the healthcare sector have required a change in practice for both RN and EN's in Australia (Lubbe & Roets, 2014; Schluter, Seaton, & Chaboyer, 2011). These changes have highlighted the ambiguity of the RN and EN's practice and the implications of this on the perceived quality of patient care and the education of both the RN and EN (Jacob et al., 2013; Chaboyer et al., 2008; Jacob, McKenna, & D'Amore, 2014).

## 2.3 Search strategy

An electronic search of the literature from 2004 to 2014 in the CINAHL, PubMed and Informit databases was undertaken. The search terms included: 'nursing practice', 'Division 2 nurses', 'enrolled nurse', 'registered nurse', and 'education and nursing diploma programmes', 'aging populations' and 'older people'. These terms were distilled out of the research questions informing the study. The database search identified 266 studies; however, only 15 articles correlated directly to the changing practice of the RN or EN. Five studies were international and six were undertaken within Australia, with only four of these studies

undertaken in Victoria. No studies correlated directly which examined the impact of an aging population to the practice of RNs and ENs.

A search of Government databases was also undertaken, using the same search terms. This search provided information on nursing practice of both the RN and EN (AIHW, 2009).

From a synthesis of the literature three distinct themes emerged: 'role confusion', 'increased workloads' and 'impact on the quality of patient care'.

### 2.3.1   Role confusion

As noted in Chapter 1, the role of the EN changed during the decade from 2004 to 2014 as the education and scope of practice of ENs evolved (Halcomb et al., 2014; Ryan, 2009; Ryan, 2010; ANMAC, 2013; AHPRA, 2014). These changes have led to Australian nurses reporting role confusion between RNs and ENs (Eagar et al., 2010). Nurses have expressed frustration at the lack of clarity of their scope of practices, particularly the overlapping of skills undertaken during nursing shifts (Eagar et al., 2010; Jacob et al., 2013). This role confusion is not unique to nurses in Victoria and has been found in other research undertaken both internationally and nationally (White et al., 2008; Pryor & Buzio, 2013; Eagar et al., 2010). Therefore, the literature in this chapter is presented first from an international focus, returning later to nurses' perceptions nationally and in Victoria.

A systematic review of international literature by Carney (2015) related to regulation of scope of practice of different levels of nurses suggested that a lack of regulation can lead to role confusion, due to misconceptions regarding the nursing scope of practice. Internationally, the regulation of scope of practice among differing levels of nurses has only been partially examined to date. Ireland is one country that has a regulatory scope of practice at a national level (Carney, 2015; Kleinpell et al., 2014). Carney (2015) undertook a literature review of over 510 journal articles published in CINAHL, PubMed and MEDLINE and on 30 websites between the years 2002 and 2013, which suggested that nursing care provided by

advanced nurse practitioners enhanced patient outcomes. However, the definition and regulation of 'advanced nursing practice' was not evident in many countries and 'patient outcomes' were not clearly specified. Carney (2015) also suggested that reoccurring concerns related to blurred boundaries between differing levels of nurses and clear role descriptions were obstructing the progression of the nursing profession worldwide. Internationally, ENs and health assistants in nursing continue to take on greater responsibility for clinical and administrative nursing tasks, and can overlap in skill mix with RNs and advanced practice nurses (Laurant et al., 2005; Sidani et al., 2006).

In 2007, a Canadian study undertaken by White et al. (2008) explored the meaning of 'scope of practice' as perceived by RNs, ENs and registered psychiatric nurses (RPNs), using a mixed-method approach. Their study incorporated qualitative (descriptive approach, semi-structured interviews focusing on perceived boundaries and overlapping of tasks by nurses and other health professions) and quantitative (demographic and corporate information) methods. Their research was undertaken in acute-care settings in two Canadian districts, Alberta and Saskatoon. It included 171 interviews of RNs (85), ENs (35), RPNs (11), patient care managers[6]/assistants in nursing[7] (19) and specialist nurses[8] (21). When referring to 'scope of practice', the key themes of 'assessment' and 'coordination of care' emerged. The RNs surveyed viewed assessment as being undertaken in relation to body systems (e.g., the respiratory or neurological system) and took into consideration aspects of patients' pain levels and the outcomes of medication administration (White et al., 2008). The nurses also perceived that the process of patient assessment was essential to the identification of changes

---

[6] Patient care manager: "… non-physician care managers working with physicians between patient encounters to improve clinical care, enhance care coordination, and reduce health care utilisation" (Hussain et al., 2015, p. 2).
[7] "Assistant in nursing: An unregulated healthcare worker employed in a diverse range of settings who may undertake aspects of personal care, healthcare tasks, and support for activities of daily living to assist Registered Nurses (RNs)" (Nurses Board of South Australia, 2002, p. 1).
[8] Advanced practice registered nurse (APRN): An RN with graduate preparation in a specific area of nursing (Royal College of Nursing, 2014).

in a patient's condition. ENs and RPNs viewed assessment as a 'task-orientated duty' such as 'assessing vital signs, hydration/elimination and glucose levels' (White et al., 2008, p. 49). In terms of coordination of care, RNs indicated that total care of the patient included advocating on behalf of that patient. While some ENs believed they, too, coordinated patient care, the majority of ENs and RPNs spoke mainly of coordination or discharging patients and the documentation needed for this process.

White et al.'s (2008) findings were consistent with research undertaken in the UK by Cowman, Farrelly, and Gilheany (2001) and Perry, Carpenter, Challis, and Hope (2003), which showed significant role confusion and apparent overlapping of nursing roles within the profession of nursing in acute-care settings. However, the number of RNs involved in White et al.'s (2008) research was disproportionate to the number of ENs, which could have contributed to the outcomes. White et al. (2008) contended that in a healthcare environment that is undergoing rapid changes, it is imperative to clarify the differing nursing roles. This includes the differentiation of accountabilities, nursing education and clinical nursing skills required for effective professional practice and job satisfaction, which they recommended for all levels of the nursing workforce.

The Australian-based literature noted that Australia has two levels of registration for those within the nursing profession: the EN and the RN (Ryan, 2010, AIHW, 2003). Role confusion was identified by Jacob et al. (2013) as a hindrance in terms of the overlap between RNs' and ENs' workloads, causing an overlapping of skill mix and frustration among the nursing workforce in Australia. Pryor and Buzio's (2013) research supported this view. Their research used descriptive, qualitative methods to explore the perceptions of 23 participants (11 RNs and 12 ENs) from an independent rehabilitation centre that catered for inpatients and outpatient appointments. Two RNs with expertise in rehabilitation collected the data through semi-structured interviews and participant observations. The results revealed that much of the

17

EN's clinical shift was dedicated to direct patient care. Although the ENs understood they were to work under the direct instruction/supervision of an RN, many were independent and requested little support in undertaking their nursing roles.

Researchers found that role confusion among differing levels of nurses could lead to frustration, job dissatisfaction and possible horizontal violence (Saunders, Huynh, & Goodman-Delhunty, 2007; Rocker, 2008). These issues appeared to be further aggravated by the expanding roles/scope for ENs (Eagar et al., 2010), with a lack of clarity regarding the role of the nurse within healthcare teams creating confusion and stress. This, in turn, could lead to conflict in the work environment, with consequences for individual nurses and patient care. Eagar et al.'s (2010) qualitative study consisted of six focus groups involving RNs and ENs across three Sydney metropolitan hospitals. The nurses reported recurrent confusion with regard to scope of practice boundaries for both RNs and ENs, related to medication administration and the allocation of patients and workload. Eagar et al. (2010) cautioned that this study was purely exploratory, representing 'only a few nursing voices out of many thousand' (p. 93). They recommended that the role of the nurse and an understanding of scope of practice and practice boundaries needed further research in Australia.

### 2.3.2 Increased workloads

Internationally and nationally, there has been an increase in the aging population and in chronic diseases during the past decade (World Health Organization [WHO], 2014; Australian Bureau of Statistics [ABS], 2012; WHO, 2015). The general public expects quality care and accountability when they or their family members are admitted to a hospital or healthcare facility (Lubbe & Roets, 2014). The shortages of nurses and increased workload requirements may contribute to nurses performing tasks outside their scope of practice (Lubbe & Roets, 2014; Schluter et al., 2011). In response to the increasing health complexities of patients and nursing workloads, both internationally (Buerhaus et al., 2005;

Cho, Ketefian, Barkauskas, & Smith, 2003) and in the Australian context (AIHW, 2003;

Morphet, McKenna, & Considine, 2008), healthcare organisations have increased the

numbers of assistants in nursing and EN's employed in residential and acute-care settings

(Spilsbury & Meyer, 2005).

Lubbe and Roets (2014) used a retrospective quantitative method, in the form of a

chart audit, to randomly sample 157 of the 849 patient files in one of the largest private

hospitals in South Africa. Out of all the risk assessments undertaken, 80% were conducted by

ENs. Assessments of patient malnutrition and neurological dysfunction and the

administration of medication were frequently inaccurately scored when undertaken by ENs.

The 'Waterlow' risk assessment scale was used in the audit, showing a 50% risk for the

patients being assessed by an EN. This may have implications for both the patients under the

EN's care and the institution for which they are working. However, this study only focused

on one large, private hospital. Lubbe and Roets (2014) stated that the policies concerning

nursing care were similar throughout the hospital group, contending that the same result

could be replicated in other hospitals within the same group. Nonetheless, they conceded that

generalisation of the outcomes could not be presumed. They recommended that their research

should be repeated in both public and private hospitals, over a longer period of time.

In Australia, Schluter et al. (2011) undertook a study to examine scope of practice and

differing levels of skill mix as perceived by medical/surgical nurses working in two hospitals.

Their study focused on the fluctuating workloads of nurses, due to patient complexity as a

result of increased incidence of chronic disease and patient acuity. They also examined the

way ENs and RNs work within this environment. The researchers used a constructivist

methodological approach with critical incident technique (CIT)[9] as the key method of data

---

[9] "The critical incident technique is a type of data collection designed to solve problems in practice or
educational settings. It is not a methodology but a means of developing questions, focusing on people's

collection. The CIT provided data that allowed the researcher to explore the nurses' role within the acute hospital setting with a specific focus on scope of practice. Twenty RNs and four ENs were encouraged to focus on the role they undertook to meet the needs of patients within their care. The following five qualitative themes were extracted:

1. 'Good nurses work in proximity to patients providing total patient care' (p. 1214).

2. 'Safeguarding patients' involves activities undertaken by the nurses 'to both improve patient safety and reduce the likelihood of adverse events' (p. 1215).

3. 'Picking up the slack to ensure patient safety' (p. 1216) includes 'work that some else had forgotten to do, stopped doing temporarily, or ceased to undertake at all' (p. 1216) but was needed to ensure patient safety.

4. 'Developing teamwork strategies' included delegation, trading of tasks and valuing other healthcare professionals (p. 1218).

5. Staff preferred to deal with patients with physical needs only, favouring patients who did not have mental health issues or cognitive impairment.

The RN participants expressed difficulty with the concept of delegating care to other members of the healthcare team. A significant limitation of this retrospective study was that it relied solely on the nurses' recollections of events, some of which had occurred months prior to the study. Previous studies that have used recollection as a focus of data collection have shown that the ability of participants to recall specific events can change over time (FitzGerald, Seale, Kerins, & McElvaney, 2008; Schluter, Seaton, & Chaboyer, 2008), calling into question the applicability of results. Further, there may have been inherent bias as the researcher was employed at one of the hospitals as an RN; consequently, some

---

behaviour in critical situations in order to solve problems in task performance" (Holloway & Wheeler, 2003, p. 222).

participants may have been reluctant to provide specific details regarding their patient care. Utilising a researcher who is disconnected from the participants may help in acquiring information on concepts that the participants may take for granted (Irvine, Roberts, & Bradbury-Jones, 2008). Nonetheless, this research and the other studies reviewed consistently highlighted the relationship between workloads and role confusion.

### 2.3.3 Impact on quality of patient care

Politicians, health service leaders and researchers have continued to debate the relationship between different levels of nurses and their impact on quality of patient care and patient outcomes (Kane, Shamliyan, Mueller, Duval, & Wilt, 2007). The impact on the quality of care was reiterated in a Swedish study assessing patients' pain, skin integrity and nutrition and which domain that either the RN or EN role were associated with for these assessments (Bååth, Wilde-Larsson, Idvall, & Hall-Lord, 2012). They suggested that only RNs undertook a thorough assessment in each of these areas, even though the assessment tools were the same for both types of nurse. This was thought to be a result of the further education undertaken by the RN. However, a limitation with their research was that the assessments were undertaken by both RNs and ENs and there were no set boundaries regarding who was required to perform the assessment and in what way it was performed.

Nurses are often the first to witness the signs and symptoms of a deteriorating patient when they work on a general ward. The nursing roles are to detect, monitor and respond to the needs of a deteriorating patient (Chua, Mackey, & Ng & Liaw, 2013; Conway, 2007). Chua et al. (2013) undertook a Singapore-based study, also using the CIT to review the experiences of ENs with deteriorating patients and to identify approaches to improving their role when doing so in an acute-care setting. They interviewed 15 ENs (with a minimum experience of one year) who had had experience with a deteriorating patient. Content analysis was then used to analyse the data, revealing that further education was required for frontline

general ward ENs, specifically in the areas of recognising, responding to and taking responsibility for the deteriorating patient. As with the CIT study undertaken by Schluter et al. (2011), the retrospective nature of the data may have led to the data being inexact, deficient or distorted (FitzGerald et al., 2008; Schluter et al., 2008). Further, Chua et al.'s (2013) findings were not indicative of the entire EN population of Singapore, as the collection of data was restricted to only one acute hospital

## 2.4 Australian context

Although a substantial number of nurses working in Australia are ENs (AIHW, 2009), empirical evidence on their contribution to the healthcare system is limited (Pryor & Buzio, 2013). In Australia since 2008, ENs registered in Australia have been able to administer medications. This involves specific training related to safe administration of medications, timing of medication administration, side effects and contraindication, correct storage, handling and disposal of medications (Nursing and Midwifery Board of Australia, 2014a, 2014b). With this responsibly has come a debate about what repercussions, if any, there are on patient outcomes if an EN administers medications to patients in their care. A quantitative study by Kerr, Lu, Mill, and McKinlay (2012) used a cross-sectional research design in a healthcare organisation with three acute-care hospitals and two aged-care residential care facilities in Victoria, Australia. Their study examined incident reports related to medication errors by both ENs and RNs, from October 2009 to November 2009, over eight wards. A survey was then utilised to determine opinions regarding ENs administering medications. The data was analysed using descriptive statistics, chi-square analysis and Fischer's exact test. Of all the nurses surveyed, 75% supported ENs administering medications. However, RNs and ENs had differences of opinion in their understanding of accountability and responsibility when administering medications. A total of 47% of RNs believed that ENs did not understand

both accountability and responsibility, while 77.8% of ENs believed they had a full understanding of both; 35% of RNs perceived that ENs did not have adequate training prior to receiving endorsement to administer medications, but 73.7% of ENs believed that they did. Kerr et al. (2012) recommended further research to examine education related to the accountability and responsibility of ENs when administering medications. Their study had three main limitations. Firstly, more ENs than RNs participated in the study, which may have biased the results. Secondly, not all of the questions in the survey were answered and thirdly, studies that use self-reporting incidents of medication errors have been known to be inaccurate. Therefore, the trustworthiness of this data is under question (Kiekkas, Aretha, Karga, & Karanikolas, 2009).

In Australia, EN educational preparation and the expansion of their scope of practice has brought about considerable debate within the nursing profession, especially in relation to medication administration (Kenny & Duckett, 2005). A self-administered survey study undertaken by Fernandez, Griffiths, Aguilar, Tran, and Chester (2008) examined medication administration and the scope of practice and role of 167 RNs and 11 Nurse Unit Managers (NUMs) from a non-metropolitan healthcare facility and 87 RNs and seven NUMs from metropolitan hospitals in Victoria. The results found that 118 RNs and 12 NUMs thought the role was appropriate for ENs; six NUMs were unsure about ENs' medication administration roles and three did not support ENs administering medications, even if they had completed the endorsed training. There were no significant differences between the responses by those from metropolitan and non-metropolitan health facilities. However, this was a small study and therefore the results should be interpreted with discretion.

According to Gibson, Heartfield, and Cheek (2002), the increasing number of EN positions in the Australian healthcare sector in the past decade has put a strain on the relationship between ENs and RNs, particularly due to role confusion and its impact on

quality patient care. They contended that ENs may be over-utilised within healthcare settings and they may be undertaking complex nursing care tasks for which they are not fully qualified. Pryor and Buzio's (2013) research highlighted that ENs have been reported to the Australian and Midwifery Board of Australia for practising above or beyond their regulated scope of practice.

## 2.5 Victorian context

In Victoria between 2004 and 2014, increasing numbers of ENs have been employed within aged-care settings (Hoodless & Bourke, 2009; AIHW, 2012) and their roles have expanded to include medication administration, advanced patient assessment and wound care (Hoodless & Bourke, 2009; Senior, 2008). Senior's (2008) Australian study used exploratory descriptive design to capture nurses' attitudes towards role expansions within the profession with a questionnaire completed by 22 nurses (18 RNs and four ENs) working in acute-care settings in Victoria. Of the 22 participating nurses, 90% commented on the expansion of their nursing role since the Australian Government introduced general practice initiatives (Parliament of Australia, 2008). Two areas of role expansion were clearly identified: the increasing number of patients over the age of 75 years requiring nursing assessments (86.4%) and wound management (68.2%). Interestingly, Hoodless and Bourke's (2009) research suggested that the ENs undertaking these roles within aged-care facilities were aware of tensions in relation to hierarchy with RNs and felt that some RNs were confronted or threatened by their increasing responsibilities. However, this was only a small sample and further research with larger numbers of participants was recommended.

The association between skill mix, workloads and the impact of quality patient care has been researched previously using chart audits and administrative databases, with a limited focus on nursing activities and clinical skills undertaken by differing levels of nurses (Aiken,

Clarke, Cheung, Sloane, & Silber, 2003; Needleman, Buerhaus, Mattke, Stewart, & Zelevinsky, 2002). Chaboyer et al. (2008) undertook a structured observational study utilising a work-sampling process. RNs and ENs in four medical wards were observed for a two-week period, with 25 separate activities identified and grouped into four classifications: direct care of the patient, indirect care of the patient, activities related directly to the unit/ward, and personal activities. Observations of 114 nursing staff undertaking 14,528 separate activities were logged over 482 hours. Of these activities, 4,826 (33.2%) involved direct care of the patient; 6,870 (47.3%) involved indirect care of the patient; 872 (6.0%) related directly to the unit/ward; and 1,960 (13.5%) were personal activities. The study concluded that parallels exist between the role of the EN and the RN, supporting the argument that the role boundaries are not clearly delineated. However, given the differences in education and training undertaken by ENs and RNs, it was difficult to establish the level of knowledge that underpinned these activities.

There is little research to date, internationally or nationally, that examines the practice of the RNs/ENs; nor has there been any historical analysis of Victorian policy documents, nor in-depth qualitative research to examine the perceived changing practice of Victorian nurses and ways in which these may have been shaped as a response to the healthcare needs of an aging population.

## 2.6 Summary

This chapter presented a review of the literature related to the changing practice of Victorian nurses in response to an aging population. The gaps in the literature provided a path to justify the stated aim and research questions of this study.

# Chapter 3: Methodology and methods

## 3.1 Introduction

This chapter focuses on outlining the methodology and methods used in this study. It begins with a summary of methodology and qualitative research followed by justification for using an exploratory descriptive research design, together with the use of qualitative research method to provide the framework for the qualitative data collection. Ethics and ethical considerations pertinent to this study will then be outlined, followed by sampling methods (inclusion criteria), recruitment, data collection and the data analysis associated with the research processes.

## 3.2 Research Methodology

Research Methodology is the term used to describe the philosophical values and assumptions used to inform research practice (Holloway, 2008). Research Methodology impacts on the research question and the way in which data are collected and analysed (*methods*) (Holloway, 2008; Silverman, 2016). Qualitative research methodology focuses on values that human beings give to behaviours (Silverman, 2016).

## 3.3 Qualitative research

Qualitative research is principally exploratory research.  It is used to acquire an understanding of fundamental reason, viewpoints and incentives. It provides insight into the phenomenon being studied or enables the development of thoughts or hypothesis for prospective qualitative research.  Qualitative methodology is influenced by ontological and epistemological considerations. These are discussed below.

### 3.3.1 Ontology

Ontology is a branch of philosophy representing the nature of 'being' what is known about reality and how it is measured (Holloway, 2008). Ontological considerations take into account the social realities of human existence (Robonson & McCartan, 2016) There are many ontological standpoints  from which reality can be considered, these range from the idea of a single demonstrable reality outside of the human mind, to the belief that numerous, socially constructed realities can be in existence (Willis, 2007).  Many philosophers including Kant, Husserl and Leibnitz have discussed the complexities of an objective social reality existing externally to the individual or human mind, and the aim of their inquiry is to find inference that explain such a tangible reality (Holloway, 2008; Avis, 2003Willis, 2007). However, philosophers' belief in a single reality notably limits the understanding of human behaviours, which can be seen as multifaceted and consisting of multiple realities. Because this study seeks to understand the factors perceived by RNs and ENs that impact on the care provided to aging patients in the acute care setting, it could not be progressed using a foundation of one single verifiable reality. By acknowledging the existence of multiple socially constructed realities, developing a cohort of rich knowledge about these complex human phenomena is allowed.

### 3.3.2 Epistemology

The word 'Epistemology' stems from the Greek word 'episteme' meaning knowledge (Cambridge Dictionary, 2016). It is the notion that knowledge has its origins in philosophical thought. Epistemological deliberations are governed by beliefs regarding the source and nature of knowledge (Holloway, 2008).  Epistemology gives explanation for the methodology used in research. In research, concepts of ontology and epistemology are intertwined; theories of knowledge invention are connected directly to beliefs governing the nature of the knower and the state of reality.

This research will seek to investigate the self-perceived reality of the participants who have contributed their "knowing" to the research questions.

The notion of disregarding preconceived ideas in the search for objective fact would limit the development of comprehensive and meaningful knowledge about the phenomenon of RNs' and ENs' perceptions that impact on the care provided to patients in the acute care setting. Perceptions that impact on the care provided to patients in the acute care setting constitute a multifaceted phenomenon.

## 3.4 Exploratory descriptive approach

An exploratory descriptive approach was used to inform the sampling technique and selection of participants who constituted a cohort of RNs and ENs employed within acute care wards in one metropolitan Melbourne hospital (Flick, 2014; Bourgeault, Dingwall, & Vries, 2010).

Exploratory research endeavours to explain why and how there is a relationship between two or more facets of a situation or phenomenon. Such a design seeks to explore an area in which little is known or to examine the possibilities of starting a particular research study (Holloway, 2008; Flick, 2014). Descriptive research allows the researcher to describe the phenomenon being examined. Holloway and Wheeler (2003) recommend that those researchers who adopt this methodology should remember that 'descriptive research centres on the way in which human beings make sense of their subjective reality and attach meaning to it' (p. 7).

## 3.5 Research Method

The following section focuses on the ethics of this research project and discusses the process of data collection and analysis.

## 3.6 Ethical Issues

Ethical approval for this project was obtained from the RMIT University Low-risk Human Ethics Committee prior to commencement of the data collection phase. Further ethics approval was granted from the Northern Health Low-risk Research Ethics Committee 17/02/15 LR EC00423 59.2014.

With any research, consideration of ethical issues such as informed consent, confidentiality, anonymity, benefits and risks, and revelation and dissemination of the research findings must be taken into account (Flick, 2014). Streubert (1999) stated, 'The protection of study participants is important regardless of the research paradigm' (p. 167).

### 3.6.1 Informed consent, confidentiality and anonymity

Prior to the commencement of research, informed consent was obtained from both the RN and EN participants (see the consent form in Appendix E). The researcher provided the participants with both oral and written information about the study during the recruitment stage. Participants' consent was obtained by signing a consent form that stated that they understood the reason for and the process of the research project and included permission for the interview to be audio-recorded. The purpose of the research, the risks and benefits of participation in the research and the dissemination of the results of the research were all clearly described to the participants prior to the commencement of any interviews.

The participants were informed that only the researcher would have access to the interview recordings and identified transcriptions. The participants' identities were to be kept confidential, with each participant's name in the transcripts replaced with a code and number.

All participants were notified that participation was voluntary and they could cease their participation in the research at any point and if it was possible at that stage, identifiable data would be removed from the data pool. No one requested this. Any questions regarding the research were explained by the researcher prior to the participants giving their consent.

**3.6.2 Risks and benefits of the research.**

The risks associated with qualitative interviewing are linked to the need to balance the benefits of any discoveries made against any potential risks to the participants (Flick, 2014). Qualitative interviewing may bring about self-reflection, reassessment or release and self-disclosure. The researcher took into account the well-being of the participants and made provisions for any lack of clarity or resultant discomfort (Flick, 2014). For example, 'debriefing' for a participant was provided if required, as well as emotional and psychological support by referral to another source (Flick, 2014; Streubert, 1999). Steps were taken to ensure that the participants were given an opportunity to be open and honest with the researcher (Flick, 2014; Atkinson & Hammersley, 1994).

Qualitative interviewing has the potential to reveal the complex links between people and their environment and it can help researchers to recognise and analyse unexpected issues (Streubert, 1999; Atkinson et al., 2001). Another significant benefit of qualitative interviewing is the representation of the participants' behaviours, attitudes and ideas. Because of its subjective nature, qualitative interviewing was useful in uncovering and analysing the relevant viewpoints and emotions revealed in this study.

## 3.7 Recruitment

The study was undertaken in a major metropolitan Melbourne hospital.

Convenience sampling was employed to recruit the RNs and ENs. The rationale for utilising this sampling method was based on the researcher's ability to access the participants and establish a degree of interaction and trust with them within the set period of the thesis requirements. Sandelowski (2004) cautioned that convenience sampling carries the risk of bias, as the sample is not representative of the entire population.

The inclusion criteria for the study participants were as follows:

- must hold a current certificate of registration with the Australian Nursing and Midwifery Board of Australia as either an EN or RN

- must be between the ages of 22 and 65

- must be working in a setting that provided care to acute care clients.

The exclusion criteria were as follows:

- nurses who did not hold the necessary education qualifications

- nurses who had previously undertaken postgraduate studies in geriatric care.

A flyer advertising the intended study was developed (see Appendix C), approved by the Hospitals Ethics Committee and distributed throughout the targeted wards (n=6) of the hospital. The sample table below outlines the participants' data.

| Gender | Male 1 | Female 9 | | | |
|---|---|---|---|---|---|
| Registered | RN 5 | EN 5 | | | |
| Age | 22-35 4 | 35-45 5 | 55+ 2 | | |
| Time working in a setting that provides care to aging clients? | 0-1 year 0 | 2-5 years 4 | 5-10 years 2 | 10-15 years 2 | 15+ years 2 |
| Additional related nursing qualifications | 1 Post graduate certificate in cancer nursing 1 Post graduate certificate in critical care | | | | |

*Figure 3.1* **Participants data information.**

## 3.8  Data collection and analysis

Figure 3.2 summarises the timeline, data collection and analysis process undertaken for this research.
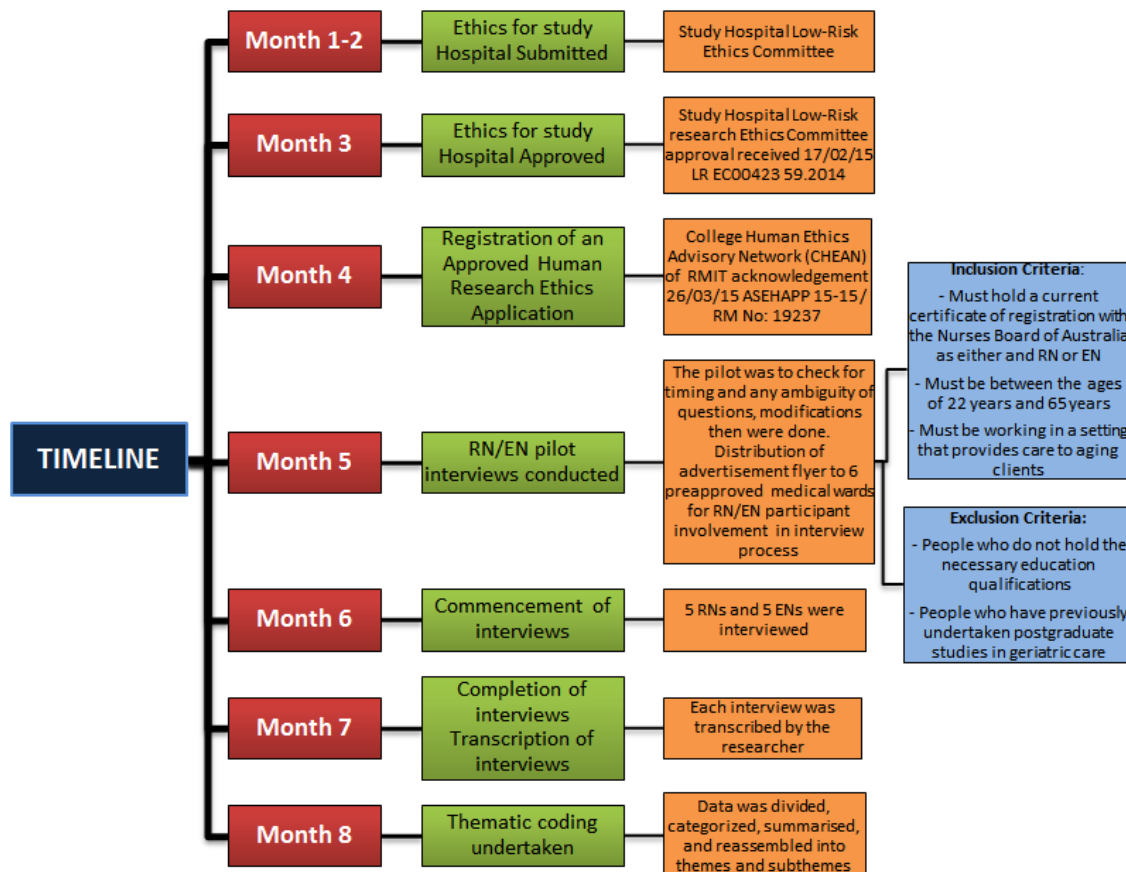


*Figure 3.2*. **Flow chart - Research Timeline.**

### 3.8.1 Setting and timing.

The interviews took place at a location of mutual convenience, such as the participant's home or an interview room at the healthcare facility. Interviews were conducted over a period of six weeks, with each interview lasting between 29 minutes and 1.5 hours (see Appendix D, the semi-structured interview guide.

**3.8.2 Semi-structured interview guide.**

A semi-structured interview guide was developed from the findings of the literature review. Information gathered through the qualitative interviews provided the researcher with the participants' self-perceptions of the topic being investigated (Hanson, Balmer, & Giardino, 2011). This approach led to the discovery of the participants' viewpoints and beliefs through reflecting on their realities and resultant actions, derived from the interviews (Holloway & Wheeler, 2003).

**3.8.3 Approach to data collection.**

Once participants granted their permission all interviews were recorded on a portable voice recorder. Holloway and Wheeler (2003) stress the importance of recording the interviews to keep important words or information that could be lost when relying only on written interview notes. Further to this, non-verbal behaviours during the interview were recorded in field notes which also provided an audit trail of the researcher's actions during the process of data collection. The interviews began with a brief warm-up conversation. The sheet of personal demographic questions was distributed prior to each interview, for each participant to complete (see Appendix D).

**3.8.4 Piloting the interview guide.**

A pilot interview with one EN and one RN who were independent from the main study and who fulfilled all the eligibility criteria was undertaken prior to the main data collection phase of the research project. The purpose of the pilot was to check for timing and any ambiguity in the questions, which were then modified as a result of this feedback. These modifications included the removal of two ambiguous questions: 'What do you understand is your current scope of practice?' and 'What facilitators to your scope of practice do you foresee in regard to employment in the future?' Two questions were reworded more simply: Question 3: 'What ways do you see your current scope of practice is reflected in your current

33

registration requirements?' was changed to 'What does your workload mostly consist of during a shift?' and Question 5: 'What barriers to your scope of practice do you foresee in regards to employment in the future?' was changed to 'What limitations do you find in your nursing practice?'. This pilot interview data was later collapsed into the main study.

**3.8.5 Saturation.**

Saturation refers to the reappearance of information uncovered in previous interviews which also validates previously collected data (Manojlovich et al., 2015; Guest, Bunce, & Johnson, 2006). When using qualitative interviewing technique, if on-going data collected confirms concurrent themes previously raised, this is known as saturation. Saumure and Given (2008) defined saturation as, 'The point in data collection when no new or relevant information emerges with respect to the newly constructed theory' (p. 196). Saturation of themes was achieved once five interviews with RNs and five interviews with ENs has been conducted, with emergent data in the latter interviews showing no new themes.

## 3.9 Qualitative interviews

Qualitative interviewing is used to allow participants the chance to discuss issues that are significant to them. This close interaction between the interviewer and participants provided the opportunity for direct description of the culture, community and group (Holloway & Wheeler, 2003; Creswell, 2012; Campbell, 1955). Qualitative interviewing is based on the building of rapport with the participants. It is an interviewing technique that requires openness on the researchers' part, to encourage a balanced relationship between the researcher and the participants (Flick, 2014).

Unlike other methods, qualitative interviewing using a semi structured interview guide puts the researcher in a position to shape the content of the interview and when required, refocus to ensure the research questions are addressed (Braun & Clarke, 2013). This

approach to qualitative interviewing was built on the premise that when rapport was achieved with the research participant, an extensive and honest response would follow. A well conducted interview can provoke strong emotional content, delivering a richness of detail and description (Flick, 2014; Braun & Clarke, 2013).

In the current study qualitative interviewing allowed for the exploration of Australian RN and EN participants' understandings of reality regarding factors that impact on care given to older adults in an acute care environment (Flick, 2014).

## 3.10 Thematic Analysis

Thematic analysis was chosen to identify, analyse and report patterns or themes that emerged within the data of this research (Braun & Clarke, 2006). Transcription of each interview was undertaken upon completion of each interview. Reading and rereading of each transcript occurred prior to coding. Microsoft Word™ review function was used to code sections of text. A coding grid was developed and relevant data inserted into table columns.

Thematic coding was used to document or classify passages of text or images that were linked by a common theme, allowing the researcher to establish a 'framework of thematic ideas (Gibbs, 2007). Data was divided, categorised, summarised and reassembled into themes that identified the important concepts and patterns of an experience within the data set (Given, 2008). The result of this thematic analysis was a depiction of patterns and the main design that joined them (Given, 2008). Braun and Clarke (2006) describe this form of thematic analysis as systematising and categorising the collected data set in rich detail.

Marks and Yardley (2004) described a theme as a 'specific pattern found in the data in which one is interested' (p. 57). Thematic coding enabled data reduction, which enriched and abstracted the data through the addition of analytic insights and inquiries used.

### 3.11 Quality

### 3.11.1 Rigour

Rigour establishes the quality of research outcomes and this affects the understanding of the investigated experience and the use of those outcomes in future research (Holloway & Wheeler, 2003; Fereday & Muir-Cochrane, 2008). Macnee (2004) described rigour as, 'both a strict process of data collection and analysis, and a term that reflects the overall quality of that process in qualitative research' (p. 254).

The rigour of qualitative research is governed by the credibility, dependability, transferability and conformability of the research undertaken (Holloway & Wheeler, 2003; Hanson et al., 2011). Holloway and Wheeler (2003) stated, 'The most important of these is credibility' (p. 254). The development of rigour in this study is reviewed in the following sections.

### 3.11.2 Credibility

Credibility is defined as the truth of outcomes in representing the participants' insights into their lived experiences (Holloway & Wheeler, 2003). To provide this credibility, all of the interviews were audio-recorded and non-verbal behaviours during the interview process were written down as field notes, to provide precise explanations of the participants' perceptions of their lived experiences. Member checking was conducted by the thesis supervisory committee on a sub-set of transcripts to identify whether the transcripts were a true reflection of the interview that had taken place and that the thematic analysis reflected the data collected

### 3.11.3 Dependability

Dependability is defined as the need for the researcher to take into account the ever-changing framework within which research occurs. The researcher described the changes that occurred within the healthcare setting and the way these changes affected the researcher's

approach to the study. To achieve dependability within the research, an audit trail was utilised to track the decision-making pathway of the researcher and a record was taken of non-verbal cues to provide clear evidence of the way the researcher reached conclusions (Holloway & Wheeler, 2003).

### 3.11.4 Transferability

Transferability denotes the degree to which the results of qualitative research can be transferred to another context or setting. Macnee (2004) defined transferability as: 'the extent to which the findings of a qualitative study are confirmed or seem applicable for a different group or in a different setting from where the data was collected' (p. 405).

In the current study, it was argued that other nurses could learn from the findings of this research and that it may inform other settings, but it would not necessarily be transferable or generalisable (Vaismoradi, Turunen, & Bondas, 2013).

### 3.11.5 Confirmability

Confirmability denotes the degree to which the research outcomes can be confirmed or validated by others (Streubert, 1999; Vaismoradi et al., 2013). This process of confirmability requires an audit trail that demonstrates a clear linkage of data to their sources and member checking (Holloway & Wheeler, 2003). In this study, six weeks after the collection of data and following early thematic analysis participants who were able to attend were invited to a session to provide generalised feedback related to the first level of data analysis that emerged from the transcripts. While some minor modifications were made to some sub- themes (e.g., the sub theme of 'disconnection' was retitled as 'feelings of inadequacy' and the sub-theme of 'working outside scope of practice' was retitled 'on the job training'), the other themes remained unchanged.

## 3.12 Summary

This chapter has outlined the qualitative approach used in this study. The methodological approach was discussed first, followed by the research methods used. Ethics, and ethical considerations have been examined and adherences outlined. Finally sample selection, data collection, data analysis technique, and the process used to ensure rigour has been discussed.

# Chapter 4: Findings

## 4.1 Introduction

In this chapter, results from the ten nurse (five RNs/five ENs) interviews are presented and examined. The chapter begins with a brief outline of the demographic details of the EN and RN participants, followed by the presentation and justification of the themes and subthemes that were identified from the analysed interview transcripts.

## 4.2 Participant demographics

The five RNs who participated in the interviews were all female aged between 35 and 45. Their nursing experience and duration or employment varied: two had worked in nursing for over 15 years; while the other three had 10–15 years, 5–10 years and 2–5 years, respectively. Two of the RNs had a postgraduate certificate, one in cancer nursing and one in critical care.

Of the five ENs who participated in the interview process, four were female and one was male. Three were aged 22 to 35 and two were aged above 55 years. Three of the ENs had two to five years' experience; the other two had five to 10 years and 10 to 15 years' experience. None of the ENs interviewed had any further nursing-related certificates or qualifications. (See Figure 3.1 Participants data information).

## 4.3 Thematic categories and subthemes.

Two distinct themes (presented in Table 5.1) emerged from the thematic analysis of both the RN and EN interviews. These will now be examined with their associated subthemes. The key themes identified out of the participant data were as follows:

- Practice Environment

- Preparedness for practice

The subthemes, derived from these themes give greater depth of description of the themes.

| Themes | Subthemes |
|---|---|
| PRACTICE ENVIRONMENT | - patient centred care<br>- older adults over 65<br>- multiple co morbidities<br>- polypharmacy<br>- tasks/time/paperwork<br>- catching up |
| PREPAREDNESS FOR PRACTICE | - assessment skills<br>- feelings of inadequacy<br>- increased anxiety<br>- prioritisation<br>- learning on the job<br>- EN transition to practice |

**Table 4.1**

## 4.4 Practice environment

The practice environment theme combined all the aspects that contribute to the organisational characteristics of a work setting that aid or constrain professional nursing practice.

There were six subthemes that were collapsed into the main theme of the practice environment as seen in Table 4.1. These consisted of patient centred care; older adults over 65; multiple co morbidities; polypharmacy; tasks/time/paperwork and catching up.

**4.4.1 Patient centred care**

The vision statement for the Melbourne metropolitan hospital where this research was conducted discusses the role of the heath care provider as being one who is passionate when caring for patients, dedicated and focused on patient centred care, progressive, always looking to improve patient care and collaboratively working together as a team to provide the best possible outcomes for all patients.  In addition to meeting the expectations of the vision statement, nurses participating in this study were expected to adhere to their professional standards which clearly express that nurses are to practice patient centred care by engaging in therapeutic professional interactions with individuals (Northern Health, 2015).

Given the vision expected to guide all employers and the professional practice standards, it is not unreasonable to believe that all nurses should have a working understanding of what it means to provide patient centred care. This is understood to be, caring for the whole person, taking into account not only the physical condition but the emotional and spiritual repercussions of illness when caring for the patient.  So, while the hospital's vision statement gives focus to drive healthcare actions and a depiction of optimal nursing care, the nurses interviewed in this study suggested that the rhetoric and reality of practice is in conflict.   Nurses in this study felt they were struggling to make a connection on a human level to their patients in the time available to them, believing their job was not patient centred as the rhetoric that guides their practice advocates.  As suggested by RN 3 who reflected:

> "There is little connection to humanism and the person. If I had more time
> to spend with my patient I could find out what they need and want instead

of me telling them what they need and what is going to happen, and what we need to do with them.  It is about getting to know them." (RN3)

RN 5 also shared her perceptions about the lack of emotional connection with her patients and how the expectations of nurses had shifted away from the person to be illness focussed.

> "The hospital system works like a factory and we are the workers standing at the conveyor belt getting them in and getting them out. I remember the days when you had time to sit with your patient and ask about their families, talk and build rapport.  I don't think we will see that luxury again.  I've said before I used to think nursing was a people occupation, now I am not so sure." (RN5)

EN 3 reiterated these feelings.

> "Most of your patients are not independent, so you spend more time on them and that will get you behind with giving meds (medications) and everything else. Sometimes I just see them as a job to be done instead of a person."  (EN3)

The nurses participating in this study considered that there was a need to connect to the patients on a deeper level other than just one of a clinical nature, and perceived that this connection was imperative to understanding their patients, their needs and being able to give quality care.

### 4.4.2 Older adults over 65

For the nurses interviewed in this study the complexity of patients being cared for in acute care units is perceived to be connected to the aging population.  Without exception all of the nurses interviewed mentioned the increasing aging population of their patients, and were of the opinion that patients were living longer and coming into hospital sicker and sicker.   EN 1 remarked that the majority of patients she was seeing admitted to the acute care wards were over the age of 65 years.

"They are all above 65.  Three out of four are probably older than that.
You would get the odd one that is young, yep, but the majority are over
65. Sometimes you will get even older; the oldest I have seen is 99.
Sometimes you will get all over 80, but the majority of the time they are
all over 65.  I have worked on nearly all wards here and it is all the same."
(EN1)

Two of the nurses, RN 1 and RN 5 reflected on the increasing number of admissions coming

straight from nursing homes.

"We are seeing a lot more admissions from nursing homes in the past 10
years." (RN1)

"People seem to be living longer and many wards of hospitals are
becoming nursing homes." (RN5)

### 4.4.3 Multiple co morbidities

Perceptions of the increased complexity of patients admitted to this hospital were

expressed by all nurses participating in this study. They all commented on how the patients

that are admitted to hospital now are very ill and have multiple health co morbidities.  The

nurses interviewed who had over ten years of experience were all of the opinion that

contemporary practice was challenged by the fact that patients were a lot sicker than they

were in years gone by, and that their patients' expectations of care and treatment had risen. In

addition to this, advances in treatments and assessment modalities has resulted in sicker

patients being managed in the ward rather than specialty areas. For example, RN 5 with over

ten years' experience recalled that patients were often so complex that years ago they would

have been admitted into ICU (intensive care unit) and not admitted to a ward to be nursed.

"These poor girls who are coming out now are graduating and working on
a ward with the sickest of sick patients. Patients that 10 years ago would
not have even seen the ward.  They would have been in ICU (intensive
care unit)." (RN5)

Two of the participants discussed how they felt the more junior nurses were in need of

a lot more knowledge than they themselves had when they graduated.  RN 5 and RN 3

articulated that junior nurses today needed so much more knowledge in regards to multiple
patient morbidities, and they believed they often struggled with their patient load as a result.

> "Now it is standard to have very very complex patients on the wards. I do
> at times feel for them (the junior nurses), it is a huge responsibility and
> often I see the stress and anxiety etched on their faces. I would probably
> not recommend nursing to my daughter or granddaughter to pursue."
> (RN5)

> "I am also finding that I am getting a lot of patients that would have been
> in high dependency unit previously are now ward patients and you are
> expected to look after four of them. Patients are now not coming in with
> one thing; it is at least six things. Junior nurses don't have the knowledge
> for this kind of care" (RN3)

The participants talked about their perceptions of not feeling as prepared as they could
when working with patients that had multiple complex health conditions. RN 3 further
suggested:

> "My training prepared me for nursing but it was the level of comorbidities
> which I wasn't prepared for." (RN3)

Time on clinical placement is a prerequisite for nursing registration (see chapter 2);
this placement time is allocated to differing environments including aged care, mental health,
acute care, and the specialty nursing environments. EN 1 expressed the need for more
placement time during her diploma program to be spent in the acute hospital environment,
believing this would better prepared nurses for the complexity of patient nurses are faced
with in the hospital environment.

> "More time in hospital, we EN's get a lot of time in aged care and we need
> more time in acute environments, which would help. You see the chronic
> complexities in aged care. Diabetes, obesity, you see all the chronic things
> but you don't see the acute things, when you go to hospital you see all the
> acute things plus the chronic stuff, it's like double barrel, so we need more
> time in hospitals on clinical. That's obviously why they are in hospital
> 'cause they're sicker and need that acute care." (EN1)

When discussing the complexity and morbidity of the patients being cared for, participants spoke about preparing future nurses for the reality of nursing by incorporating more case studies into undergraduate studies to get students to critically think about the realities of nursing patients with multiple complex heath conditions.  RN 2, RN 3 and RN 4 echoed these insights by voicing the need for more case studies to be used in undergraduate studies.  They reflected that these case studies should be focused on the realities of patient conditions and complexities being seen within contemporary hospital settings.

> "The curriculum consisted of what we need to know but perhaps if there were a different delivery, like more case study, so you had more of a reality, like '50yr old, morbidly obese, type 2 diabetes patient with arthritis and gout', and then actually study these patients, the diagnosis, medications, nursing management and everything and actually hone in on these complicated patients we are having to really look after." (RN 2)

> "Go out to the hospital, see what is really going on here and bring these patients case studies back to class room.  Then they can learn how to look after older patients with heaps of problems, look at each patient and say, how would you care for this one?" (RN3)

> "I think it is scenarios with patients with multiple comorbidities that would have made a difference. Scenarios, case studies being taken directly from the hospitals so you have actual real life cases and drum that into the students, this is real life, not just something the lecturer has made up. Because you only learn by doing it, you might have a patient with 9 comorbidities and what they were admitted for is actually not as serious as their comorbidities." (RN4)

### 4.4.4 Polypharmacy

The term polypharmacy denotes the use of five or more medications prescribed to one patient (Hajjar, Cafiero & Hanlon, 2007). It is estimated that 50% of all Australians between the ages of 65-74 and 67% aged 75 years and above report taking five or more medications on a daily basis (Morgan, et al., 2012). Administering and understanding medications is a large part of a nurses' role.  With very ill and complex patients come multiple medications.

RN 1 and RN 4 commented that when patients are on more medications, the more time it takes to administer these.

> "You spend so much time administering medications because they have 3 drug charts per patient." (RN1)

> "Meds (medications) is a huge task I do, yesterday one of my patients had six drug charts, do you know how long this takes?" (RN4)

Nurses need an understanding of each medication they administer to patients, and have a duty of care to demonstrate the correct knowledge when educating patients about their medications. The nurses in this study discussed the time and stress associated with patients with multiple drug administration charts. They talked about the complexity of patient conditions leading to complex medication administration regimes. Nurses were anxious and at times overwhelmed, not only by the amount of medications their patient required, but with what those medications actually did. EN 3 reflected on the need for further education related to polypharmacy to be taught in diploma level nursing studies, and for this teaching to focus on both the pharmacokinetics and pharmacodynamics of the medications being administered in relation to specific patient conditions.

> "Medications, knowing my medications, knowing them all, interactions with them all. They did teach us what to do before giving meds (medications), like I might need to check vital signs before giving some meds (medications) and interactions but there are so many, I still find it hard to get my head around them." (EN3).

RN 1 and RN 2 reiterated these statements expressing the view that knowledge of polypharmacy and complex patients is not something that should be saved just for postgraduate studies but taught in undergraduate studies and in workplaces, as this is what nurses working in acute care wards were being faced with every day.

> "We need more education on polypharmacy for the aging patients because that is certainly a big issue." (RN1)

"Most patients are on a dozen medications at least. We need more complex cases and training for nurses in undergrad, don't save the complex patient stuff for a post grad degree; nurses are struggling with complex patients on the ward every day." (RN2)

EN 3 expressed an understanding that they felt that their polypharmacy knowledge was limited and that this was impacting on patient care, even putting them at risk.

"The drug charts give me problems, trying to understand every drug and what every medication is and they (the patients) have multiple drug charts. The problem is sometimes they have 3 to 5 drug charts and when you get busy you don't have time to look them up, and I think this contributes to problems, I think, I can't believe more people don't die." (EN 3)

### 4.4.5 Tasks/time/paperwork

The nurses in this study were aware that there was a person at the centre of their care, but somehow this had become a secondary focus to ensuring tasks were completed. Getting tasks done was a clear priority without exception for all nurses interviewed. All of the nurses interviewed discussed how each and every shift was focused on multiple tasks that had to be done for and to the patient. Tasks such as vital sign observation; personal care; wound care; medication administration; getting the patients ready for appointments, and procedures and endless paperwork including charting, constant documentation and discharges was something they felt was a priority during nursing shifts. RN 1 and EN 3 described a typical nursing shift being taken up with:

"Obs [observations], washes, medications, getting your patients ready for some procedure or test. It is very task focused." (RN1)

"Meds [medications], obs, showers, dressings as well, then depending on what is going on with our patients, you might have wounds, people going for operations, paperwork and then post op (post operation) stuff. There is a lot of tasks, a lot." (EN3)

All of these tasks can take a lot of time during nursing shifts because it is not just one patient that is allocated to the nurse. As per the enterprise agreement that guides all Victorian state nurses' practice, the nurses from the hospital in this study had a ratio of one nurse to four patients.  RN 3 and RN 4 gave insight into what a typical nursing shift primarily consisted of during any given day, whilst caring for their four patients:

> "A number of things; your patient contact and just your general nursing tasks for them, it's, medications for four, IV (intravenous) fluids for four, procedures, tests all of these things." (RN3)

> "Some days it can be mostly personal care, antibiotics, if I have four patients who are neutropenia and febrile, I will have four lots of IVs (intravenous) anti's (antibiotics) for each.  Its' also fixing what the Doctors want." (RN4)

The nurses participating in this study communicated feeling time poor during their shifts.  They expressed having to get their heads around multiple patient conditions and the tasks that needed to be done during shifts.  In discussions around the lack of time during a shift to complete all tasks participants expressed feeling time constrained with the amount of tasks that needed to be completed. Views expressed by EN 4 and RN 1 recognised how this professed lack of time was impacting on patient care.

> "I'd like more hours in the day.  I think the biggest thing I need is more time. More time to get my thought processes around all the conditions the patients have." (EN4)

> "Time, time constraints, so you have four medically complex patients and you don't have the time then to do your proper assessments because they are physically so complex."  (RN1)

The perceived pressure to get lists of tasks done before the next shift commenced was identified as a real limitation to their nursing care.  The participants discussed the time taken up on doing tasks was reducing the time they could have to undertake other nursing activities, such as physically assessing their patients or spending time with them to assess the impact

and effectiveness of their interventions . RN 1 revealed being focused on completing tasks within time was impacting on other aspects of patient care.

> "Shifts seem to be focused towards getting tasks done, and things like proper patient assessments seem to go by the wayside because you don't have time to do them and those skills then don't have a chance to refine and your confidence goes down." (RN1)

Participants interviewed implied that the feeling of not having enough time was felt throughout all wards and by every nurse. EN 2 remarked that when other nurses did need help to complete a task it was hard to find a colleague who actually had the time to assist.

> "…some staff just won't help you, they say they don't have time and you just think, man I can't do it, I can't get it done, but you just keep going and try. I think we are all in the same situation." (EN2)

Time management issues were also discussed by the participants in relation to the complexity of the patients in their care. Each nurse without exception reported how the complexity and comorbidities of their patients was high, and that at times things got missed. For instance, EN 1 revealed how the complexity of her patients was impacting on the management of their care.

> "If I there is four really complex patients, time management is a problem. As much as you can manage it, you run out of time, there is not enough time. If all four are really, really complex they generally need all things done at the same time and it is just really, really hard to do it all. I let slide showers and stuff like that if I run short of time. I prefer them to have meds and stuff like that, and to have all their medical stuff done and the shower can get done later on. If need be, sometimes I don't worry about it." (EN1)

Whereas EN 3 reflected that while time management was an issue during her shifts she linked this with her lack of theoretical knowledge and ability to prioritise assessment over interventions to address the patients' health conditions.

> "I struggle with time, time management. It may be my lack of knowledge that gets me behind time because we are not taught to prioritise as an EN. I mean we are taught to prioritise as in, which shower needs to be done

first, which patient smells and needs to be changed, but not assessments.  I
was not taught to look for what patient needs an assessment or what
patient do I think is at risk of a change in their condition?" (EN3)

Contributing to the number of tasks, time constraints and time management issues is the amount of paperwork that needs to be completed on a daily basis for each patient. Patient care has a lot of related paperwork and one role of the nurse is to make sure all interventions are timely and accurately recorded in the clinical records. The obligation to ensure that care is documented contributed to EN 2 and RN 5's reflections on the amount of time spent during a shift doing paperwork.

"Going through appointments, this takes time.  This is the stuff I didn't
learn in school, like organisation of appointments for patients. Paperwork.
I struggle to get everything done in a shift, it's pretty hard to do everything
including discharges, and paper work and all the stuff you need to do for
your patients." (EN2)

"I would have to say mostly undertaking tasks like paperwork.  Vital
signs, medications, charting, documentation, meetings with allied health."
(RN5)

### 4.4.6 Catching up

Nursing older, sicker, medically complex patient leads to an increase in tasks that need to be accomplished and decrease in time that then can be spent communicating with patients. This is leaving nurses feeling like that are constantly rushing and trying to catch up on what needs to be done during their shifts.  Feelings such as scrambling to catch up on work during shifts were expressed by the nurses. As exemplified by RN 4 and EN 3's reflections.

"The patients have so many conditions they often have multiple health
teams looking after them, plus palliative care, plus OT (occupational
therapy), sometimes I am just scrambling to make the changes requested."
(RN4)

"The multiple tasks, getting my heads around the multiple tasks and falling behind. Being able to catch up, trying to catch up, that's how I spend my days" (EN3)

Rushing and running were terms used to describe everyday shifts by EN 4 and RN 2, as they reflected that their days start and end hurrying to get things done.

"Planning around what seems like a million tasks. From the moment I hit the floor, it is like a race. Most days I feel tired before I start, sometimes the motivation is just not there, but I suppose you can say that of any job really." (EN4)

"There are endless admissions and discharges. Getting patients ready for procedures, medications and four complex patients, I feel like I am just running on my shifts to get work done." (RN2)

This constant rushing and trying to catch up can direct focus away from the actual person and patient centred care. As EN 5 reflects.

"They are old, they are really sick and if I rush a patient to get them to the bathroom they are just going to fall over, you have to rush around the patient, not rush the patient." (EN5)

## 4.5 Preparedness for practice

Enrolled and registered nurses embark on differing levels of education and training in order to register and work within the Australian health care setting (see Chapter 2). The aim nursing education is to prepare the nurse for professional practice. As the Australian health care system looks towards managing an aging population the healthcare environment is shifting and nurses need to be equipped to evolve with it. There were six subthemes that were collapsed into the main theme of the preparedness for practice as seen previously in table 4.1. These consisted of assessment skills, feelings of inadequacy, increased anxiety, prioritisation, learning on the job and EN transition to practice.

### 4.5.1 Assessment skills

Patient assessment is an important skill for nurses to ensure patient safety and quality

of patient care.  Physical assessment skills are not only taught at undergraduate levels of

nursing training but also are reinforced in the clinical environment. But like any skill if they

are not used the confidence to deploy them is reduced until such a time that the nurse deems

others more capable of undertaking them.  EN 3 reflected.

> "I do no assessments on my patients. I may do a head to toe assessment; I
> am looking at the patient to see if anything is out of place, you're looking
> for anything you might think is out of the norm.  I would not feel confident
> to do an advance respiratory assessment on somebody on a shift, definitely
> not.  I would not feel confident to pick up respiratory distress or problems
> at all in my patient." (EN3)

RN 3 also reflected on the fact that some of the nurses preferred the doctors to

physically assess the patents as they did not have the confidence to be able to pick-up or

report if a problem was found.

> "I think if you asked a lot of the nurses on the ward to do a head to toe
> assessment they wouldn't have the confidence to do it because they leave
> that job to the Doctors and over time have lost the ability to do it. I don't
> know how we can change this." (RN3)

EN 1 reiterated these perceptions suggesting that she did not feel confident in

undertaking basic physical assessments on patients and identified that her anatomy and

physiology knowledge was not as strong as it should be.

> "We had labs every week in EN and we do assessment skills but they were
> kind of an over view.  I feel not so confident in doing an advanced
> assessment on a patient, like   a respiratory one, I would probably just call
> a MET call if I thought something was wrong. In EN we go into
> assessments but they kind of skim the surface." EN1)

However, EN 5 reflected.

> "I am not completely 100% confident but I am certainly I would get
> maybe 80% of an assessment right.  But I do read my patients notes and if
> they say my patients have crackles or wheezes in a certain lung, I will go
> and listen to it. This is how I have learnt; otherwise I would not know what

is normal.  I did the EN step course; they touch on assessments, full head
to toe assessment."  (EN5)

All five of the RNs participating in this study identified that patient assessment skills were important and they had an understanding that it was part of their nursing role, however they admitted to not undertaking them as they thought they ought to. All five RNs reflected.

"It is the norm in the wards to not listen to chests because it's just, 'do the
obs [observations], wash the patients, do the meds', there is no time."
(RN1)

"We lack physical assessment skills as nurses, we know them but don't
use them or don't have the confidence to use them as we should.  I don't
like to think about it, but I do think it puts the patients at risk." (RN 2)

"Are we missing things with older patients?  Yes we are.  Assessment
skills are something I think we lack as nurses." (RN3)

"Every time we meet a new patient we should do a head to toe assessment,
I know we should do our own assessment on them, do I do this? No not as
often as I should, I just don't have the time." (RN4)

"When I have students I encourage them to do patient assessments, I push
the importance of knowing your patients and assessing their conditions to
effectively care and plan, but as I say, I am ashamed to admit there are
times when this does go to the wayside and I think, "the Drs will follow
this up", I'll get my other work done." (RN5)

**4.5.2 Feelings of inadequacy**

Within society nursing is depicted as a "caring profession" and arguably this may be seen as what attracts people to the profession. The top ten caring behaviours, stemming from nursing literature are listed as; attentive listening, comforting, honesty, patience, responsibility, providing information so the patient can make an informed decision, touch, sensitivity, respect and calling the patient by name (Venes, 2013). For nurses these actions depict what caring for patients entails. However, the nurses interviewed in this study report finding it a challenge to have the time to exhibit all of these behaviours. For these nurses their feelings of being overwhelmed by patients' complexity, the amount of tasks that need to be

completed during the shift and the time they had to complete these tasks means that they have less time to care. There were limitations on the time participants spent talking, reassuring, building rapport and supporting their patients. EN 3 reflected on this, and described it as resulting fin them feeling inadequate as a nurse.

> "I've been out for over five years and I wouldn't say its basic nursing on a ward. Patients are requiring so much care in a really short amount of time. You get to the end of your shift going, 'what have I achieved? With the amount of tasks that you have to do, the amount of time you have is nowhere near enough. It is as simple as that. That just breads feelings of disheartenment and failure, because you are getting to the end of your shift and you are handing over things that you feel you should have done. Then you leave work feeling like you haven't achieved anything or not what you needed to achieve." (RN3)

These perceived negative feelings not only had an impact on the patients under the care of these nurses, but on the nurses themselves as they grappled with the emotions of feeling inadequate in their role as a nurse. EN 4 and EN 5 reflected on not being able to complete everything that was needed to be done and make a connection with the patients. This process of task prioritisation, fostered feelings of self-blame, and reduced self-worth because of not being able to accomplish everything during the shift that they thought they should have been able to.

> "I used to worry, go home and worry that I didn't know enough, patients are coming in with diseases and conditions and having treatments I had no idea about. Now I don't bother, I know what I know and what I don't know I ask. Just because you have been nursing a long time doesn't mean you know everything." (EN4)

> "Look most of the time we tend to put the blame on ourselves if we can't get stuff done, we just go away and think, well my time management was not working for me today, but in reality, on some shifts, even the most organised hard worker could not possibly get everything that is required of us done." (EN5)

RN 1 agreed with these perceptions, having herself felt overwhelmed in the first years of nursing that has now resulted in them having an understanding and empathy for new

nurses dealing with complex patients and the lack of confidence in their abilities and knowledge.

> "In my first year of nursing I remember being pulled aside by the unit manager because I wasn't getting through the work and I wasn't doing the work properly and it was because I just lacked skills and I lacked confidence, I just couldn't pull it together. I feel well prepared well now because I have ten years' experience, if you asked someone on my ward that is only two years out, I know that they are going to say "I get bombarded and I feel overwhelmed with someone who has five different comorbidities on the handover sheet". I see it every day." (RN1)

RN 5 expressed perceptions that the nurses delivering care and those being cared for had a limited interconnection and articulated a desire to experience a human connection at a greater level with patients other than just the physical interaction of doing tasks to them.

> "It is too hard and at times it corrodes your soul and breaks your heart. I got into nursing to make a difference to people's lives and some days I feel I just have not done that. But I get up the next day and keep coming back. What else am I going to do? I've been at it a long time." (RN5)

### 4.5.3 Increased anxiety

Caring for patients is a huge responsibility for the clinical nurse. With the complexity of patient care increasing, so do the levels of anxiety being felt by nurses working shifts. Feelings of anxiety seemed to be centred on nurses' knowledge of patient conditions, pharmacology and assessment skills when caring for patients. The perceived anxiety expressed by the nurses was linked to knowledge deficits and self-confidence in their role as a nurse. Feeling the pressure to complete tasks for which their education had failed to provide the level of skill brought with it the anxiety of knowing that their deficits may impact on the quality of care and safety of the patients. EN 3 reflected.

> "One thing I'll say is I registered as an EN without feeling confident. I did not what so ever even touch some things I had been taught in school, then had to do them in my first shift. Like IV (intravenous) therapy, I got my registration without even touching a real IV therapy line or patient. I'd

55

never given it on placement. I'd given it on a dummy but not a real patient." (EN3)

A lack of EN education or training was perceived as impacting on the quality of patient care, with these participants reflecting on their early years of work and the anxiety being directly related to feeling underprepared. EN 3 further discussed.

"I went straight to agency and bank, and I was like URRRR oh my God, what the hell...I don't know what I'm doing. I was like a stunned mullet. It is frightening and stressful, you have to pay attention to detail with every patient, but especially those with multiple diseases it is really stressful. What I find really stressful are medications, so for example you have to make sure that the one medication you need to give at a time is given, so you can't wait and others have meds due at the exact same time and this is stressful. Polypharmacy is stressful." (EN3)

RN 2 also reflected on the undergraduate training they received and the anxiety and stress felt within the first five years of work.

"I remember struggling in my early years, looking after mainly elderly cardiac patients, having angiograms and trying to keep up with obs [observations] and not having the confidence in pathophysiology and trying to link what was happening to my patients. I don't believe that my training prepared me well, I remember struggling in my early years, looking after mainly elderly cardiac patients, having angiograms and trying to keep up with obs and not having the confidence in pathophysiology and trying to link what was happening to my patients. I didn't get my expertise until later when I went on to study critical care. My confidence has increased with age and experience but the stress and strain I remember feeling in my first 5 years of nursing was HUGE." (RN2)

RN 4 reflected anxiety and stress related to conscience

"I did feel anxious when I first started nursing, these days. I have learnt to just take the day as it comes. I have learnt I am just one person and I just do what I can get done. I have been told to use gravity [IV] lines but I won't, I am just not confident in getting the rate right, and the staff say, "just guess" and it's like, "I'm not f..king guessing". When you're a nurse with a conscience I think it's worse, my husband always says, "while you're freaking out about a mistake you could have made, I guarantee others are making them, they are just not acknowledging them". (RN4)

Nurses interviewed in this study reported asking for help when struggling and either being brushed aside for lack of time or told to just make things up to get through, RN 5 reflected that this situation brought feelings of distress and anxiety as the nurses knew it would negatively impact the quality of care being given to their patients.

> "We are all under pressure to get work done and sometimes when a young one comes up and needs a hand or clarification, it is easy to just brush them aside because we don't have the time. I know I have at times been guilty of this." (RN5)

### 4.5.4 Prioritisation

Nurses are taught from very early on in their undergraduate studies to prioritise patients' needs. They were taught to assess their patents and give care in order of urgency. The nurses in this study described struggling with this concept as many needs seemed to be as pressing as each other. They expressed concerns that their patients had multiple problems with their health and on admission to the hospital often their existing comorbidities would be so complex there would be no clear order of priority.

> "You've got patients with hypertension, they have diabetes, they have this, and they have that. The cases we got in EN [training] were very basic, that's not reality. (EN3).

> "It hard to prioritise some days when every patients needs are as pressing as the next patient." (RN4)

> "I think what really gives you a hard time is time management and when I work bank at the …. (hospital) I feel like I get all the crap patients and can't get everything done. It's easy to say you need to prioritise your patients but if they are all bad how do I do that? I just have to start." (EN2)

A nurse's time during shifts should to be managed in order of patient priorities, and these priorities will depend on the knowledge, skills and attitude of the nurse taking care of these patients. What the nurse values as important in regards to patient care will be a clear priority.

However, if the nurse has a knowledge limitation when caring for patients this can impact on the quality of care given. This dilemma and realisation that a knowledge deficit was an issue was captured in a reflection by EN3:

> "I have my lists of tasks I need to get done, that's what I go with. I mean don't get me wrong, if someone was blue I would go there first, they would probably stand out from the crowd. I struggle with the prioritising my patients in this way." (EN3)

If a nurse had fewer years of experience and limited theoretical knowledge of patients' conditions, diagnosis and anatomy and physiology they tended to focus on the more physical needs of the patient, such as: personal care, vital sign observation, medication administration or toileting. If the nurse was more experienced and confident the priority of needs shifted to focus on patient assessment and identifying which patients were at risk of deteriorating during a shift.

> "I feel pretty prepared, but what starts to make it a bit more problematic is when I have all four of them that have so many things going on. That's when I start to become underprepared because don't have time to know them super well." (RN3)

### 4.5.5 Learning on the job

Nursing is a practice based profession and all of the nurses interviewed expressed clearly that they believed nursing was a career that was really learnt on the job. The participants recognised that there is an abundance of information that needs to be retained when it comes to nursing, as nurses are responsible for patient lives. Many of the nurses interviewed talked about their confidence, skill levels and competence in taking care of patients increasing with each passing year. EN 4 reflected.

> "Things have changed from when I first started nursing. Things are so much busier now your patients are a lot more work and a lot heavier than I ever remember, and your time just seems to disappear. With nursing it is like any practical job, your confidence and knowledge grow with each year." (EN4)

EN 5 reflected that their knowledge base of nursing skills, patient conditions and comorbidities, diagnosis and procedures is continually being built upon the more time that is spent in nursing.

"Patients have multiple conditions, but how do you teach that? These things you don't really grasp until you hit the floor and are immersed into it, and I think this is something you learn with time." (EN 5)

Confidence was spoken about in terms of learning on the job and time spent in the workforce. EN 4 and RN 1 revealed that skills that were learnt in the university setting were not consolidated, sometimes not practiced or truly understood until they were undertaken in the clinical environment. Once the skills were performed in the clinical environment an increase in their confidence occurred.

"I feel well prepared well now because I have ten years' experience. (RN1)

RN 4 and RN 5 mirrored these perceptions stating:

"I think this this job is really on the job training." (RN4)

"These days I take each day as it comes, I deal with what I can and I would say I am pretty adapt to handling any given situation. But that is experience and skills I have learnt along the way." (RN5)

### 4.5.6 EN transition to practice

The enrolled nurses interviewed in this study had a few differing perceptions as compared to the registered nurses when it came to transitioning to practice. ENs participating in this study expressed less confidence in their educational preparation and once they had graduated felt less confident within the workforce. EN 3 reflected.

"It's freaky you get registered and on your first shift you have to hang a line and give IV therapy and you've never done it. You can't compare a dummy or a bit of foam to a patient." (EN3)

Many expressed concerns with regards to the level of theoretical knowledge learnt prior to employment and believed that many times they had just skimmed the surface in relation to patient conditions, pharmacology and patient assessment skills.

"I feel like I am lacking in the depth of knowledge of how every comorbidity works, health and diagnosis and treatments. As a div 2 [enrolled nurse] you just know how to take a blood sugar but you are taught you're just taking it for diabetes but you don't get taught the different types of diabetes and what diabetes is all about. I just use to go in, do my tasks and go home, now I think div 2 needs more education in conditions, but you know if I say that you should go and just do div 1 [registered nurse]. I can do a task and get stuff done but my knowledge is not there." (EN2)

EN participants believed they needed more time in the acute environment prior to graduating and commencing employment, feeling they spent too much time in the aged care environment which resulted in them not practicing many skills they had learnt.

"My EN training didn't cover complex health issues with older patients. It was just basic stuff it wasn't with multiple conditions; we might have learnt one patient with one condition, and out in the hospital we are not seeing one pt. with one condition. The training was like an overview." (EN3)

"In my training we covered the aging patients with dementia, a lot of personal care and ADL's [activities of daily living]. No complex stuff at all. I'm studying the diploma now to get my IV endorsement and they have kind of covered complex stuff but not in depth." (EN5).

You don't get taught what it is and what it does to the body. You don't get taught the hidden stuff about patients, like the pathophysiology of how stuff works. The knowledge was not deep enough. I just feel like I skimmed the surface in the knowledge we learnt." (EN2)

"I work with a guy who has been a div 2 for 17 years, he is great with his time management and tasks but he has no knowledge of what is really going on with the patients, this is dangerous and I worry that if something goes wrong am I going to be able to even tell? and then, could I do something about it?" (EN2)

There was also a sense that the ENs believed they had the same fundamental knowledge as RNs working on the wards and it was not until they got into the acute care setting and actually began to work that it became apparent that their knowledge was limited and they knew this was impacting the quality of care they were giving to their patients.

> "ENs say they know as much as the RN and it's not until they go and do extra study to they say 'oh man' I really don't know enough." (EN2)

> "I remember in my training they said, "Oh, you know they will eventually phase out div 1's [RNs] and div 2's [ENs] will be at the same level".  I think a lot of ENs think RN study is a waste of time, you do the extra study for no reason, we all do the same stuff. It's scary; patients' lives are in my hands with limited knowledge.  Often I say, I can't believe more people don't die."  (EN3).

> "The girls who go on to study their RN often face a big shock.  They will come to work and say, "Oh, my God, I didn't realise how much I didn't know until I was exposed to it". It's often the way, they come out thinking they have the same knowledge level as an RN and when they actually study to become one, they have a fear that they have actually been working blind." (RN5)

## 4.6 Summary

This chapter has presented the saturated thematic analysis of the interviews conducted with 10 nurses (5 RNs/5 ENs) who were employed within the metropolitan Melbourne hospital in which this study was undertaken. The participant responses were analysed and collapsed into two strong themes the practice environment and preparedness for practice. The themes and subthemes will be further discussed in Chapter 6 in light of the current literature and with consideration to the research questions.

# Chapter 5: Discussion

## 5.1 Introduction

This chapter discusses the key findings of the study in the context of the current literature. The two research questions which sought to identify factors that RNs and ENs believe impact on their care, and the perceived limitations nurses face when caring for aged patients in the acute care setting will also be addressed. The findings have clearly evidenced factors that participants identified as impacting on their provision of care in the practice environment. These findings identified two emergent themes; the practice environment and preparedness for practice which will now be discussed.

## 5.2 Practice environment

The theoretical foundation of the practice environment originates in sociology and is frequently linked to nurse work outcomes, quality of care, and patient safety - including incidences of adverse events, all of which contribute to the organisational characteristics that support or limit professional nursing practice (Numminen, et al., 2016; Lake, 2007). The thematic analysis undertaken for this study revealed twelve sub-themes (discussed in Chapter 4) which were collapsed into two main themes, the first of which was the practice environment.

The practice environment reflects the nurses' perceptions of the reality of undertaking patient centred care when caring for an increasing aging population. The finding of thematic analysis revealed that the aged population has resulted in patients now presenting to acute care settings with multiple co morbidities, complex health issues and polypharmacy needs. These factors were perceived to effect the nurses' practice environment, directly impacting patient centred care.

### 5.2.1 Patient centred care - Rhetoric and reality

One of the primary goals within nursing is to improve quality and safety outcomes for patients by focusing on patient centred care (The Australian Commission on Safety and Quality in Health Care [ACSQHC], 2010). The rhetorical focus on patient centred care stems from a requirement for nurses to demonstrate sincere respect of each individual person (Rigby, 2014). Crucial to this is the understanding that therapeutic relationships are fundamental to meeting the needs and goals of individual patients. Patient centred care requires individual nurses to be well versed in the knowledge of physical, emotional, social and spiritual aspects that encompass patients and their lived environment (Hussey & Kennedy, 2016). Current literature reveals overwhelming evidence in support of patient centred care and that patient centred care should be the driving force to provide safe and effective patient care in the 21st century (National Voices, 2015). Nonetheless this can only be achieved if patients are involved in all levels of their individualised care (Mathers & Paynton, 2016).

The thematic interviews conducted during this study revealed nurses have a clear understanding of what is required of them (the rhetoric) to deliver patient-centred care. However, the reality was that in the acute care environment, there was a perceived inability to implement this. These findings are supported by the literature with research suggesting that patient centred care is not being implemented 'at scale' in any meaningful way' (Mathers & Paynton, 2016, para 3).

According to Moore *et al* (2016) nurses are struggling to manage the increasing demands of the aging patient with multiple health complexities in an environment where it is perceived that assessment of patient's actual needs are primarily driven by medical or organisational needs, rather than utilising a person centred care model. This is contrary to one

of the foundational pillars of patient centred care as espoused by Perez *et al*., (2013) who suggest that focus should be on the importance of building relationship and rapport with patients, not as what occurs in reality which is focus on the medical needs or tasks that need to be undertaken for the patients.

The participants in this study have identified similar barriers to delivering patient centred care, perceiving they had limited time to develop rapport and relationship with patients. In addition, both RN's and EN's suggested that this lack of time impacted on accurate patient assessments which resulted in problems not being identified or missed. The nurses suggested that their shifts were primarily focused on the medical needs of patients, pushing aside the patient's emotion, social and spiritual needs.

**5.2.2 Aging profile of patients**

The realities of acute care nursing practice with the concurrent challenge of the aging patients, who present to hospital sicker, with multiple comorbidities and polypharmacy, have all been explicitly identified in the literature (Australia Institute of Health and Welfare, 2016; Van Bogaert, Dilles, Wouters, & Van Rompaey, 2014; Lau, Willetts, Hood, & Cross, 2014).

The demographic data collected in this research undertaken in a metropolitan Melbourne hospital have highlighted the reality of the aging population. In addition the profile of medical diagnostic data attests to the reality of patients being cared for with multiple health comorbidities and increased complexity. This data mirrors research undertaken by the Australian Government profiling the Australian population which suggests that the projected number of Australians aged 65 and over will grow to 6.2 million in 2042, and by 2042 almost 25% of all Australians will be over the age of 65 (Van Bogaert *et al*., 2014; Lau *et al*., 2014; Australia's Demographic Challenges, 2013). The Australian Government Productivity Commission's (2013) report titled *An aging Australia: Preparing for the future*, anticipated that the total population of Australians will increase to

approximately 38 million by the year 2060, with those aged over 75 years increasing from 6.4% of the populace to 14.4%. Australians are also expected to live longer lives, with the life expectancy of a person born in 2012 projected to be greater than 94 years for females and 92 years for males (Australian Government Productivity Commission, 2013).

The admission data obtained from the Emergency Department of the metropolitan Melbourne hospital suggested a threefold increase in the number of patients over the age of 65 being admitted to the hospital within the 10-year period between 2004 and 2014. Of the 10 nurses (5RNs and 5ENs) who participated in the study, all reported that their patients were usually all over 65 years of age on any given day, and that they believed the population was getting older and sicker with each year.

The admissions data from the participating hospital suggested that the number of aging patients had increased dramatically within the 10-year period, with 251 patients aged 80 being admitted to the Emergency Department in 2004 increasing to 762 in 2014—a 117% increase. In 2004, the number of patients aged 90 who were admitted to the Emergency Department was 165, increasing to 207 in 2014—a 25% increase. Those admitted to the same facility at the age of 100 had increased from four in 2004 to nine in 2014—a 125% increase.

These data concord with the perception that patients were becoming increasingly complex with multiple medical conditions. In the majority of shifts, a patient allocation of four would include patients with multiple complex conditions and comorbidities. Participants in this study believed this meant there was not enough time to undertake the necessary physical assessments of patients, develop the rapport required for patient centred care and they had to forgo looking up and understanding the pharmacodynamics and pharmacokinetics of the multiple medications they would be required to administer. The data also revealed that the nurses perceived time restraints in this complex environment lead to task focussed care of these increasingly complex medical patients.

This is reiterated in the literature, with multiple studies suggesting that the increasing complexity of patients can increase the nursing workload and put patient safety at risk, increasing the likelihood of adverse patient events and poor patient outcomes (Lubbe & Roets, 2014; Schluter et al., 2011; Buerhaus et al., 2005; Cho et al, 2003; Aydin, Donaldson, Stotts, Fridman, & Brown, 2015).

### 5.2.3 Lack of time and task focussed care

Lack of time and time constraints were themes mentioned by all 10 nurses participating in the study. Interestingly, the time restraints were not specifically related to the need to manage their time more effectively to complete work throughout their shifts, but were perceived by the participants to be commonly linked to patient acuity and the complexity of the patient needs, with an associated increase in workload. This finding is supported in the literature with nurses reporting heavier patient loads related specifically to increased patient comorbidities and complex health issues lead to insufficient time to provide adequate care to their patients and critical tasks such as pain medication administration, and personal hygiene are not done (Duffield, Roche Williams & Clarke, 2016; Duffield et al., 2009).

Further, all participants perceived that as a result of a lack of time that the nursing role became predominantly focused on the accomplishment of tasks, fostering feelings of depersonalisation and a lack of personal connection when delivering care. The literature suggests this to be an accurate depiction of contemporary health care environments, with numerous research papers suggesting that hurried or missed patient care is associated with adverse patient events and emotional disassociation for the person receiving the nursing care (Knopp-Sihota, Niehaus, Squires, Norton, & Estabrooks, 2015; Jourdain & Chênevert, 2010; Altun, 2002).

In addition and related to the lack of time the thematic analysis of the qualitative results from this research suggests that nurses working as either RNs or ENs perceived that their practice was focused predominantly on nursing tasks.

All 10 nurses participating in this study discussed undertaking 'tasks' in relation to patient observations or the taking of vital signs, the administration of medications, completing documentation, meetings with allied health and attending to patient hygiene needs. All the nurses suggested that their workload was very task focused, believing there was a strong orientation towards knowing what tasks need to be undertaken and when, but without the knowledge as to why these tasks needed to be done.

This finding also has implications for the well-being of patients as nurses have expressed concerns that in the current health care environment they have not got the time to provide patients with quality emotional care (Department of Health, 2013).

## 5.3 Preparedness for practice

The fundamental aim of nursing education is to prepare nurses for professional practice within the health care environment. The thematic analysis undertaken for this study revealed six themes (discussed in chapter 4) that were collapsed into the second main theme of preparedness of practice. As discussed in chapter 2 RNs and ENs undertake varying levels of education and training in order to register and work within the Australian health care setting, all with the same educational goal of preparing the nurse for professional practice. These six subthemes included assessment skills, feelings of inadequacy, increased anxiety, prioritisation, learning on the job and EN transition to practice.

### 5.3.1 Undertaking patient assessment skills

Throughout the EN interviews, participants discussed their perception (to differing degrees) of feeling inadequate when negotiating multiple medication charts for complex

patients with multiple medical conditions, in addition they indicated a lack of confidence to undertake advanced assessments on patients within their care. These expressions of inadequacy to meet the demands of an aging population with complex and comorbid conditions in acute hospitals are echoed in the literature. Studies by White *et al.* (2008), Bååth *et al.* (2012) and Chua *et al.* (2013) have emphasised that thorough assessment, delivery and coordination of care and medication administration can increase positive patient outcomes, depending upon the level of study the nurse has previously undertaken. Hofler and Thomas (2016) reiterate this argument in relation to new graduate nurses, discussing the challenges new nurses face with increasing numbers of patients with complex and multiple comorbidities being admitted to hospital causing them to feel stressed and fatigued, believing they not yet have the skills of have not been mentored in the care of such complex patient conditions.

### 5.3.2 Workloads leading to feelings of inadequacy and anxiety

Perceived feelings of inadequacy were linked to being overwhelmed by time constraints and workload, by four of the RNs (RN1, RN2, RN3, RN5) and four of the ENs (EN2, EN3, EN4, EN5) suggesting that this emotion also led to a sense of disheartenment. These perceptions reiterate repeated research findings about nurse burnout. Maslach and Leiter (1997) seminal authors on burnout stated:

> 'Burnout is the index of the dislocation between what people are and what they have to do. It represents erosion in values, dignity, spirit, and will— an erosion of the human soul. It's a malady that spreads gradually and continuously over time, putting people into a downward spiral from which it's hard to recover'(p. 17).

Increased workloads have been shown to relate directly to emotional exhaustion among nursing populations, leading to pessimism and psychological distress. This in turn causes a reduction in professional nursing efficiency (Hayes, Douglas, & Bonner, 2015; Greenglass,

Burke, & Fiksenbaum, 2001; Bakker, Killmer, Siegrist, & Schaufeli, 2000). Feelings of inadequacy and anxiety amongst nurses can lead to moral distress. Corley (2002) describes moral distress as an emotional disparity nurses' encounter when they feel they are unable to do what they believe is required of them.  Jameton (1984) clarifies that moral distress becomes apparent when a person knows the right thing to do but restrictions seemingly enforced by institutions render the right course of action virtually impossible. Hofler and Thomas (2016) also discuss this in their research, addressing fatigue from perceived increased workload demands contributing to nurses self-identifying as experiencing 'burnout' leading to a disconnection with their patients and colleagues. These authors concluded that stressed nurses experience a sense of detachment from their patients that leads to poor work performance, which in turn can be linked to serious patient safety issues.

Similarly in this study nurses perceived they often left their shifts believing they could have done more for their patients while wrestling with complex emotions specifically related to how they should have cared for their patients.  These participants further identified an understanding that their lack of knowledge related to their patient care could in fact have the potential to do harm.  However, they also expressed perceptions that when they left their shifts physically and emotionally they felt they did not have the capacity to do any better.

**5.3.3 Nursing education**

The qualitative thematic analysis suggested that education will need to play a key role in future employment opportunities for both RNs and ENs within Victoria. With the over-65 demographic consistently requiring increased levels of medical care, all five RNs said they believed that important aspects of nursing older people were being missed during delivery of nursing care. While for the ENs this was particularly relevant and they reflected that they were inadequately prepared, with statements alluding to the lack of an in-depth knowledge related to comorbidity.  The themes of polypharmacy in the older patient, advanced

69

systematic assessments and the need for education to be specifically targeted towards the aging patient with multiple health conditions and complex comorbidities were repeatedly discussed.

Themes emerging from the analysis revealed that all participants wanted a 'more reality-based' training when undertaking nursing education. These submissions recommended the importance of conceptualisation the reality of what is seen in hospitals, by implementing case-study-driven assessments that included multiple patients with multiple health complexities. Also facilitation of simulation-based case studies specifically aimed at the aging patient with multiple health comorbidities was identified as being a useful strategy to implement.

The benefits of undertaking of case-based studies and simulation to meet the theory practice nexus has been widely researched (Liaw et al., 2015; McCaughey & Traynor, 2010; Medley & Horne, 2005). These include: the opportunity for nursing students to develop critical thinking skills, critical patient assessment skills, and teamwork and reflection skills, all of which are undertaken in 'real time'. Students reported that simulation is a beneficial and realistic experience prior to assuming responsibility for real patients out in society (Liaw et al., 2015; McCaughey & Traynor, 2010; Medley & Horne, 2005; Feingold & Calaluce, 2004).  Literature further suggests that unfolding case studies based on the realities of change face of the acute care setting can only enhance the competency levels of nurses and improve patient care outcomes (Armstrong, 2016; Benner, Sutphen, Leonard, & Day, 2010). This is reiterated by research undertaken by Bryant, (2016) who suggests aligning teaching between the classroom, nursing laboratories and the clinical working environment will only enhance the nurses' ability to discern critical aspects of patients' conditions and deliver more competent care.

## 5.4 Summary

In this chapter, the research objectives raised in Chapter 1 have been responded to. The qualitative findings of the thematic analysis have been compared and contrasted with the local and international literature.

# Chapter 6: Conclusions

## 6.1 Introduction

This concluding chapter summarises the results of this research and presents the strengths and inherent limitations of the study. Potential areas of further research that have emerged from the findings of this study are also presented.

## 6.2 Results of the study

The results of this research showed that between 2004 and 2014, the demographic and medical diagnostic profile in the metropolitan Melbourne hospital surveyed was one of an aged population with increasingly multifaceted health conditions and numerous chronic health complexities. This finding was consistent with the Australian Bureau of Statistics, (2014), as outlined in Chapter 1.

Consistent with the aim of the study, the participants identified two major areas where their clinical practice is being challenged is in the practice environment and their preparedness for practice. The participants identified that their ability to provide patient centred care is being challenged by multiple facets of the contemporary work environment leading them to revert to a "task orientated" approach to their practice, the least optimal mode of patient care. An increasingly aged population increases the likelihood of polypharmacy and multiple co-morbidities increasing patient acuity further challenging their ability to provide holistic patient care.

The prioritisation of patient care and increased anxiety often associated with specific nursing clinical requirements, often leads to feelings of inadequacy. As an applied profession the ability to "learn on the job" has taken on a whole new meaning for the participants.

The participants' beliefs about their clinical environment were at odds with the reality of their experiences. The study findings suggested that new approaches to the assessment and modes of delivery of nursing education are urgently needed to provide safe and effective professional nursing care for increasingly aging populations.

## 6.3 Strengths

The results of this study add to the increasing evidence on the complexity of the gap between the expectations of contemporary professional nurses, as prepared by their educational institutions, and the reality of their clinical workforce demands in the context of the aged population within the healthcare setting in this participant group.

## 6.4 Limitations

This study had several limitations. Firstly, the data collection was limited to only one metropolitan Melbourne hospital. Secondly, this qualitative research involved a relatively small number of participants and although saturation was achieved, the knowledge obtained can only serve to begin to inform the profession about this phenomenon. A third limitation faced by the researcher was that the researcher was, in fact, already an RN and as such, influenced by pre-existing standards of nursing practice and hospital organisational culture. This challenge was mitigated by a reflective examination of the beliefs that had already been internalised by the researcher. Although this process was effective, it does not exclude the possibility of subjective bias or potential influence on the focus group recruits.

## 6.5 Areas for further research

The results of this study provide contextual and initial baseline data that could be built upon by further investigation, extending the scope and time frame for measuring outcomes. Future research could consider the following:

- Continuing the study over a longer period and with a larger, purposive sample of experienced RN and ENs in other acute-care facilities in Victoria to explore the emergent themes in more depth.

- Whilst undertaking the literature review in preparation for this research, the issue of 'role confusion' was highlighted. Whilst this group of participants did not identify role confusion as an issue for them, given the changing roles within the RN/EN cohort it may well deserve further investigation in the future.
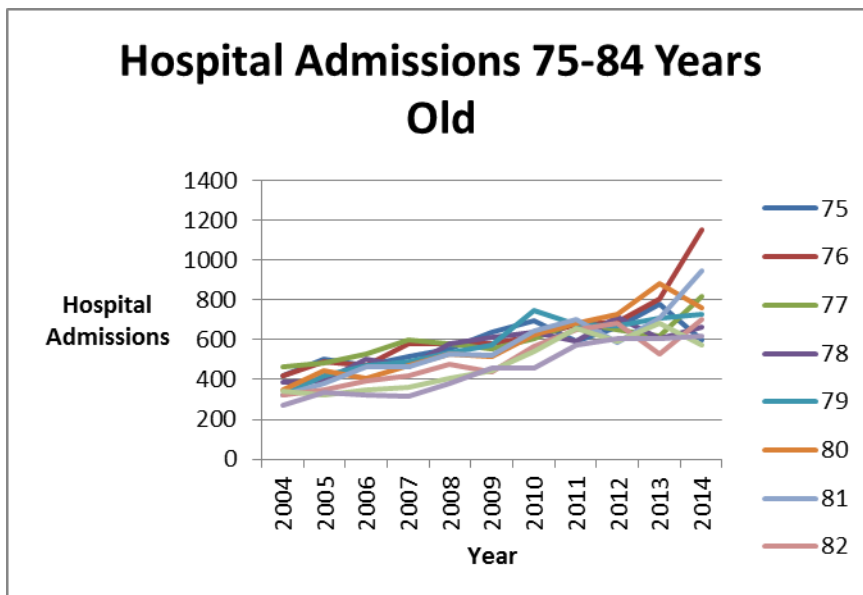
## 6.6 Conclusion

This chapter is the last of this thesis and has summarised the key findings, strengths and limitations of the study. Potential areas of research that have emerged from this study have also been examined and presented.
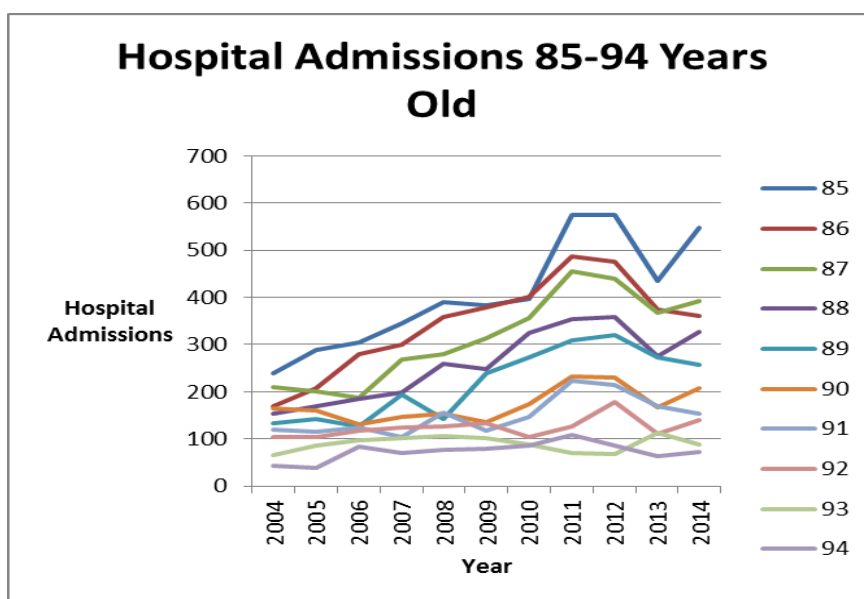
# Appendices

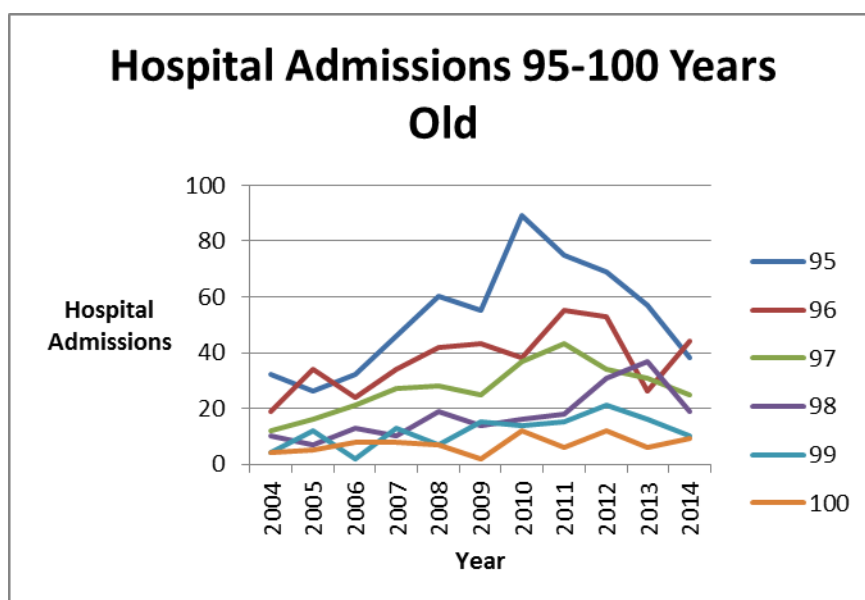## Appendix A: Hospital Admissions of patients 2004-2014
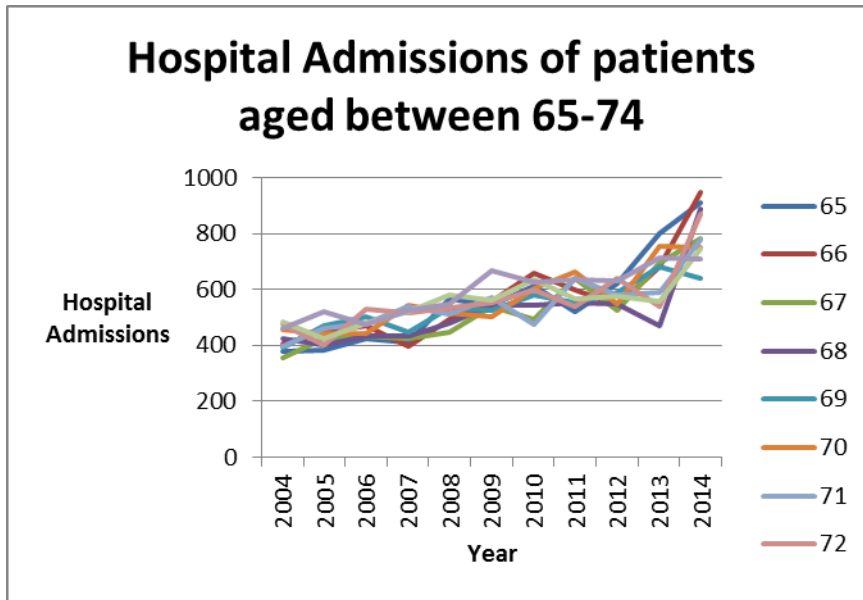


*Figure AB.1.* **Hospital admissions for those aged 65–74 (2014 figures).**



*Figure AB.2.* **Hospital admissions for those aged 75–85 (2014 figures).**

*Figure AB.3.* Hospital admissions for those aged 85–94 (2014 figures).



*Figure AB.4.* Hospital admissions for those aged 95–100 (2014 figures).

# Appendix B: Timeline of Division 2 Nurses

Table A.1

*Timeline of Division 2 Nurses (Enrolled Nurses) 2001–2007 Milestones*

| Year | |
|------|--|
| 2001 | Release of the report Nurse recruitment and retention report endorsing medication administration by Division 2 (EN) nurses Formation of the Department's Steering Committee |
| 2002 | Report issued to the Minister for Health by the steering committee |
| 2003 | Steering committee's recommendations recognised and acknowledged— that: the Nurses Act 1993 and Drugs, Poisons and Controlled Substances Regulations 1995 should be modified the guidelines *Delegation and supervision for RNs and extended scope of practice for the Division 2 nurse* should be released from the Nurses Board of Victoria the guidelines *Extended scope of practice for Division 2 nurses to administer medication* should be released from the Nurses Board of Victoria medicines endorsement courses accredited by National Board of Victoria (NBV) should commence the first Division 2 nurses should become endorsed. |
| 2004 | Modification of The Nurses Act 1993 and Drugs, Poisons and Controlled Substances Regulations 1995, to provide the legislative right for endorsed Division 2 (EN) nurses to administer medicines, including schedule 4, 8 and 9 poisons, in Victoria |
| 2005 | Nurse Policy Branch financed nine health services to enhance the scope of practice related to practice capacity for Division 2 nurses |
| 2006 | Subcutaneous and intramuscular medication administration added to endorsed Division 2 nurse practice 200-hour training programme (previously a 190-hours accredited programme) introduced NBV Code of Guidance – pursues amendments to the Drugs, Poisons and Controlled Substances Act 1981 |
| 2007 | 'Scope of practice' definition developed by the Nurses Board of Victoria Codes of guidance revised New Health Training Package (HLT07) published, encompassing Certificate IV Diploma Advanced Diploma-level qualifications for ENs, including course work competencies for medicines administration and intravenous fluid administration and management |

*Note,* Adapted from Department of Human Services, 2008; Department of Human Services, 2001; Nursing and Midwifery Board of Australia, 2015.

# Appendix C: Flyer Advertising the Study

RMIT
UNIVERSITY

*Volunteers needed to participate in a nursing research project*

**NURSES, ARE YOU INCREASINGLY WORKING WITH OLDER, SICKER AND MORE COMPLEX PATIENTS??**

*Has the education and training you received helped you deal with this?*

**If you are aged between 22 and 65, a registered or enrolled nurse, you may be**

**eligible to participate in this study.**

**You will be asked to participate in a 20 to 30-minute interview to discuss nursing**

**curriculums, scope of practice and the future of nursing.**

**The information you share will improve your clinical practice conditions in the**

**future and benefit your patients.**

**To find out more phone Rachel Cardwell on ▮▮▮▮▮▮▮
or email ▮▮▮▮▮▮▮▮▮▮▮▮▮▮**

## Appendix D: Semi-structured Interview Guide

1. What patient age group stands out to you as the most common during your nursing shifts?
2. How prepared do you feel nursing an aging patient with lots of health issues? Did your training prepare you?
3. What does your workload mostly consist of during a shift?
4. What limitations do you find in your nursing practice?
5. What changes do you believe need to happen in education and teaching of clinical skills to help you meet the needs of an aging population with complex health issues?

# Appendix E: Participant Profile

**RMIT**
UNIVERSITY

**STUDY:** Experience of Registered and Enrolled Nurses in a Victorian Hospital: Expectations versus reality.

_____

PARTICIPANT PROFILE   Participant:
                    Unique identifier

SEMI-STRUCTURED INTERVIEW NUMBER:

**Thank you for indicating you are willing to be interviewed about** your experience of the changing scope of practice of Victorian nurses in an aging society.

**Your details will not be revealed to anyone else, but will be aggregated to give an overview of the background of the participants of this study.**

**Reports that come from the study will only include aggregated de-identified data.**

(a)  I understand that my participation is voluntary and that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied (unless follow-up is needed for safety).

(b)  The project is for the purpose of research. It may not be of direct benefit to me.

(c)   The privacy of the personal information I provide will be safeguarded and only disclosed where I have consented to the disclosure or as required by law.

(d)  The security of the research data will be protected during and after completion of the study. The data collected during the study may be published and a report of the project outcomes will form part of a submission for the award of Bachelor of Health Science (Masters) at RMIT University. Any information which will identify me will not be used.

(e)  Outcomes of this research will be presented in publications, presentations at public/professional seminars and conferences.

**Please circle the most correct answer for each of the following:**

| | | | | | |
|---|---|---|---|---|---|
| Gender | Male | Female | | | |
| Are you a | RN | EN | | | |
| Age range | 22–35 yrs | 35–45 yrs | 45–55 yrs | 55+ yrs | |
| How long have you been working in a setting that provides care to aging clients? | 1 yr | 2–5 yrs | 5–10 yrs | 10–15 yrs | 15+ yrs |
| Have you any additional related nursing qualifications? | | | | | |

# Appendix F: Informed Consent RN/EN

## Participant Information and Consent Form

**Experience of Registered and Enrolled Nurses in a Victorian Hospital: expectations versus reality.**

### REGISTERED NURSE CONSENT/ENROLLED NURSE CONSENT

Dear _____

You are invited to take part in a small research study that aims to understand your thoughts about the changing scope of practice of Victorian nurses from the perspective of the registered nurse. The information provided explains what is involved and will help you decide if you want to take part in the research. Please read this information carefully. Ask questions about anything that you don't understand or want to know more about. Before deciding whether or not to take part, you might want to talk about it with a relative or friend.

**The research**

The participants of this study will be asked to share their perceptions and experiences of the changing scope of practice of the nurse from a registered nurse's perspective. They will be asked to share their experiences of:
- How did the nursing curriculum you undertook prepare you for issues you are now encountering when nursing an increasingly aging society with complex healthcare needs?
- What do you understand is your current scope of practice
- In what ways do you see your current scope of practice reflected in your current registration requirements?
- What facilitators do you foresee in regards to employment in the future?
- What barriers do you foresee in regard to employment in the future?
- What changes do you believe need to happen in regard to a) education and b) training, to help you meet the needs of the aging population and the complexity of their healthcare needs?

If you consent you will be asked to undertake a private and confidential face-to-face interview, which will last for approximately 20 to 30 minutes. The interview will be audio-recorded only with your permission. If you do not agree to this, please tell the researcher prior to signing this consent form.
If you agree to participate in the study you will be allocated a number that will be used to identify you during the study. Only the researcher will know who the numbers identify.

You will be asked to provide basic demographic information such as age and gender.

You will be sent a copy of the transcription of your interview. You will be asked to read the transcript to ensure that you agree with what has been written. You may clarify or add extra information at this time. You will be asked to sign and date and then return the document to the researcher.

At the end of the study, on request, you will receive a letter informing you of the outcomes of this study.

You will not be paid for your participation in this research.

**What are the possible benefits?**

There will be no clear benefit to you from your participation in this research. However, through this research the researchers hope to translate the results of the research into information that will be effective in regard to health policy, nursing service provision and nursing education for Victorian nurses and support an appreciation of issues of importance for nurses caring for an increasingly aging population.

**What are the possible risks?**

The researchers do not foresee any risks to you from participating in this study. However, if you become upset or distressed as a result of your participation in the research, the researcher is able to arrange for counselling or other appropriate support. Any counselling or support will be provided by staff who are not members of the research team. In addition, you may prefer to suspend or end your participation in the research if distress occurs.

**Do I have to take part in this research project?**

Participation in any research project is voluntary. If you do not wish to take part, you don't have to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage.

**What if I withdraw from this research project?**

If you decide to withdraw, please notify a member of the research team before you withdraw. If you decide to leave the project, the researchers would like to keep the information you provided to them. This is to help them make sure that the results of the research can be measured properly. If you do not want them to do this, you must tell them before you join the research project. Please be advised that if you decline or withdraw from the research you will not be disadvantaged.

**Could this research project be stopped unexpectedly?**

The researchers do not foresee any reasons this project should be stopped unexpectedly. However, if this does occur you will be notified by the researchers.

**How will I be informed of the results of this research project?**

On request, you will be provided with a letter detailing the outcomes of this study on the completion of the study.

**What will happen to information about me?**

Any information obtained in connection with this research project that can identify you will remain confidential and will only be used for the purpose of this research project. It will only be disclosed with your permission, except as required by law.

In any publication and/or presentation, information will be provided in such a way that you cannot be identified, except with your permission. A numbered coding system will be used to ensure confidentiality. You will be allocated a five-digit participant number by the researchers. Any data collected in this study will be kept in a locked and secure location for the duration of the study. Only the researchers will have access to this information for the duration of the study. Any electronic files will be password protected. All data collected in this study will be securely stored at RMIT University for a period of seven years post the completion of this study. Information collected as part of this study will not be used for other studies.

**How can I access my information?**

In accordance with relevant Australian and/or Victorian privacy and other relevant laws, you have the right to access the information about you collected and stored by the researchers. You also have the right to request that any information with which you disagree should be corrected. Please contact one of the researchers named at the end of this document if you would like to access your information.

**What happens if I am injured as a result of participating in this research project?**

If you suffer an injury as a result of participating in this research project, hospital care and treatment will be provided by the public health service at no extra cost to you if you elect to be treated as a public patient.

**Is this research project approved?**

The ethical aspects of this research project have been approved by the Human Research Ethics Committees of RMIT University.

This project will be carried out according to the *National statement on ethical conduct in human research* (2007) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies. Details of the demographic that will be collected from participants will be provided. Demographic sheet attached.

Participation in this research is voluntary. If you don't wish to take part, you don't have to.

If you decide you want to take part in the research project, you will be asked to sign the consent section. By signing it you are telling us that you:
• understand what you have read or heard
• consent to take part in the research project
• consent to participate in the research processes that are described
• consent to the use of your personal information as described.

You will be given a copy of this Participant Information and Consent Form to keep.

**Consent**

I have read, or have had read to me in a language that I understand, this document.

I understand the purposes, procedures and risks of this research project as described within it.

I have had an opportunity to ask questions and I am satisfied with the answers I have received.

I freely agree to participate in this research project as described.

I understand that I will be given a signed copy of this document to keep.


I request a letter detailing the outcomes of this study on the completion of the study. Yes or No


**Participant's name** (printed) …………………………………………………………..

**Signature**                                                    Date

**Name of witness to participant's signature** (printed)
………………………………

**Signature**                                                    Date

Declaration by researcher*: I have given a verbal explanation of the research project, its procedures and risks and I believe that the participant has understood that explanation.


**Researcher's name** (printed)
………………………………………………………

**Signature**                                                    Date


*A senior member of the research team must provide the explanation and provision of information concerning the research project.*

*Note: All parties signing the consent section must date their own signature.*

# References

Aiken, L., Clarke, S., Cheung, R., Sloane, D., & Silber, J. (2003). Educational levels of hospital nurses and surgical patient mortality. *JAMA* 290(12), 1617–1623.

Altun, I. (2002). Burnout and nurses' personal and professional values. *Nursing Ethics*, 9(3), 269–278.

Armstrong, D. K. (2016, April). Supporting Faculty During Pedagogical Change Through Reflective Teaching Practice: Perceptions of Faculty Facilitators. In *STTI/NLN Nursing Education Research Conference*. STTI.

Australian Bureau of Statistics. (2014). *Population by age and sex, Australia, states and territories.* Australian Bureau of Statistics. Retrieved from http://www.abs.gov.au/ausstats/abs@.nsf/0/1CD2B1952AFC5E7ACA257298000F2E76?OpenDocument

Australian Commission on Safety and Quality in Health Care. (2010). *Patient-centred care: Improving quality and safety by focusing care on patients and consumers*. Retrieved from http://www.safetyandquality.gov.au/wp-content/uploads/2012/01/PCCC-DiscussPaper.pdf

Australia's Demographic Challenges. (2013). *The economic implications of an ageing population*. Retrieved from http://demographics.treasury.gov.au/content/_download/australias_demographic_challenges/html/adc-04.asp

Australian Government Productivity Commission. (2013). *An ageing Australia: Preparing for the future: Productivity commission research paper.* Productivity Commission. Retrieved from http://www.pc.gov.au/research/completed/ageing-australia/ageing-australia-overview.pdf

Australian Government, Department of Health. (2013). Appendix iv: *History of Commonwealth involvement in the nursing and midwifery workforce*. The Department of Health. Retrieved from: http://www.health.gov.au/internet/publications/publishing.nsf/Content/work-review-australian-government-health-workforce-programs-toc~appendices~appendix-iv-history-commonwealth-involvement-nursing-midwifery-workforce

Australian Health Practitioner Regulation Agency. (2011). *Annual report of the Australian health practitioner regulation agency and the National Boards reporting on the*

*national registration and accreditation scheme*. Australian Health Practitioner

Regulation Agency. Retrieved from http://www.ahpra.gov.au/News/2011-11-1-

AHPRA-annual-report-released.aspx

Australian Health Practitioner Regulatory Agency. (2012). *Regulating Australia's nurses and*

*midwives*. Nursing and Midwifery Board of Australia. Retrieved from

www.nursingmidwiferyboard.gov.au

Australian Health Practitioner Regulation Agency. (2014). *Accreditation.* Nursing and

Midwifery Board of Australia. Retrieved from

http://www.nursingmidwiferyboard.gov.au/Accreditation.aspx

Australian Health Practitioner Regulation Agency. (2015). *About the National Scheme*.

Australian Health Practitioner Regulation Agency. Retrieved from

http://www.ahpra.gov.au/About-AHPRA/What-We-Do/FAQ.aspx

Australian Institute of Health and Welfare. (2016). *Australia's health 2016*: Retrieved from

http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129555788

Australian Institute of Health and Welfare. (2015). *Emergency department care 2014-2015:*

*Australian hospital statistics.* Australian Institute of Health and Welfare. Retrieved

from http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129553618

Australian Institute of Health and Welfare. (2009). *Nursing and midwifery labour force 2007*.

Australian Institute of Health and Welfare. Retrieved from

http://www.aihw.gov.au/publications/hwl/hwl-44-10724/hwl-44-10724.pdf

Australian Institute of Health and Welfare. (2013). *Nursing workforce definitions. Australian*

*Institute of Health and Welfare.* Retrieved from http://www.aihw.gov.au/nursing-

workforce-definitions/

Australian Nursing and Midwifery Accreditation Council. (2013). *Accreditation standards*

*for registered nurses.* Australian Nursing and Midwifery Accreditation Council.

Retrieved from

http://www.anmac.org.au/sites/default/files/documents/First%20Consultation%20Pap

er%20The%20Review%20of%20Accreditation%20Standards%20Registered%20Nur

se%20Re-entry%20Programs%20and%20EPIQ-RN.pdf

Australian Nursing and Midwifery Federation. (2009) Fact Sheet 3  *A snapshot of nursing*

*careers, qualifications and experience.* Australian Nursing and Midwifery Federation.

Retrieved from

http://anmf.org.au/documents/reports/Fact_Sheet_Snap_Shot_Nursing_Career_Paths.
pdf

Aydin, C., Donaldson, N., Stotts, N., Fridman, M., & Brown, D. (2015). Modeling
hospital-acquired pressure ulcer prevalence on medical-surgical units: Nurse
workload, expertise, and clinical processes of care. *Health Services Research*, 50(2),
351–373.

Bååth, C., Wilde-Larsson, B., Idvall, E., & Hall-Lord, M. (2012). Assessments of patients'
pain, nutrition and skin in clinical practice: Registered and enrolled nurses'
perceptions. *International Journal of Orthopaedic and Trauma Nursing*, 16(1), 3–12.

Bakker, A., Killmer, C., Siegrist, J., & Schaufeli, W. (2000). Effort–reward imbalance and
burnout among nurses. *Journal of Advanced Nursing,* 31(4), 884–891.

Baranek, P. (2005). *A review of scopes of practice of health professionals in Canada: A
balancing act. Toronto:* Health Council of Canada.

Benner P. Sutphen M. Leonard V. Day L. (2010). *Educating nurses: A call for radical
transformation.* San Francisco, CA : Jossey-Bass.

Bishop, B. J. (2007). Methodology, values and quantitative world-views in qualitative
research in community psychology. *The Australian Community Psychologist*, 19(1),
9-18.

Bourgeault, I., Dingwall, R., &Vries, R. (2010). *The Sage handbook of qualitative methods in
health research*. Los Angeles, CA: Sage.

Braun, V. & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research
in Psychology,* 3(2), 77–101. doi.org/10.1191/1478088706qp063oa

Bryant, S. (2016). *Effects of unfolding case studies on nursing students' understanding and
transfer of oxygenation* (Doctoral dissertation, THE UNIVERSITY OF ALABAMA).

Buerhaus, P., Donelan, K., Ulrich, B., Norman, L., Williams, M., & Dittus, R. (2005).
Hospital RNs' and CNOs' perceptions of the impact of the nursing shortage on the
quality of care. *Nursing Economics*, 23(5), 214–221.

Campbell, D. (1955). The informant in quantitative research. *The American Journal of
Sociology* ,60, 339–342.

Cambridge Dictionary. (2016). *Epistemology definition*. Retrieved from
http://dictionary.cambridge.org/

Carney, M. (2015). Regulation of advanced nurse practice: Its existence and regulatory dimensions from an international perspective. *Journal of Nursing Management*. doi: 10.1111/jonm.122278

Chaboyer, W., Wallis, M., Duffield, C., Courtney, M., Seaton, P., Holzhauser, K. & Bost, N. (2008). A comparison of activities undertaken by enrolled and registered nurses on medical wards in Australia: An observational study. *International Journal of Nursing Studies,* 45(9), 1274–1284.

Cho, S., Ketefian, S., Barkauskas, V., & Smith, D. (2003). The effects of nurse staffing on adverse events, morbidity, mortality, and medical costs. *Nursing Research*, 52(2), 71–79.

Chua, W., Mackey, S., Ng, E., & Liaw, S. (2013). Front line nurses' experiences with deteriorating ward patients: A qualitative study. *International Nursing Review*, 60(4), 501–509.

Conway, J. (2007). The changing skill mix and scope of practice of health care workers in New South Wales: Implications of education and training reforms for registered nurse practice, performance and education. *Contemporary Nurse*, 26(2), 221–224. doi:10.5555/conu.2007.26.2.221

Corley, M. C., Minick, P., Elswick, R. K., & Jacobs, M. (2005). Nurse moral distress and ethical work environment. *Nursing Ethics,* 12(4), 381-390.

Cowling, W. (2015). Evolving and enduring topics in holistic nursing. *Journal of Holistic Nursing,* 33(1), 4–5.

Cowman, S., Farrelly, M., & Gilheany, P. (2001). An examination of the role and function of psychiatric nurses in clinical practice in Ireland. *Journal of Advanced Nursing,* 34(6), 745–753.

Creswell, J. (2012). *Qualitative inquiry and research design: Choosing amongst five approaches*. (5th ed.) Los Angeles: Sage.

Department of Health. (2013). *Patients First and Foremost: The Initial Government Response to the Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry* (Vol. 8576). The Stationery Office.

Department of Human Services. (2001). *Nurse recruitment and retention committee. Department of Human Services*. Retrieved from http://www.health.vic.gov.au/__data/assets/pdf_file/0008/17657/recruit.pdf

Department of Human Services. (2008). *Registered Nurses Division 2 and intravenous administration: A primer paper.* Department of Human Services. Retrieved from http://www.health.vic.gov.au/__data/assets/pdf_file/0020/243605/Revised-DHS-Primer-Paper---June-2008.pdf

Duffield, C., Diers, D., O'Brien-Pallas, L., Aisbett, C., Roche, M., King, M., & Aisbett, K. (2011). Nursing staffing, nursing workload, the work environment and patient outcomes. *Applied Nursing Research*, 24(4), 244-255.

Duffield, C., Roche, M., Twigg, D., Williams, A., & Clarke, S. (2016). A protocol to assess the impact of adding nursing support workers to ward staffing. *Journal of advanced nursing*, 72(9), 2218-2225.

Eagar, S., Cowin, L., Gregory, L., &Firtko, A. (2010). Scope of practice conflict in nursing: A new war or just the same battle? *Contemporary Nurse*, 36(1–2), 86–95.

Feingold, C. & Calaluce, M. (2004). Computerised patient model and simulated clinical experiences: Evaluation with baccalaureate nursing students. *Journal of Nursing Education,* 43(4), 156-163.

Fereday, J. & Muir-Cochrane, E. (2008). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods,* 5(1), 80–92.

Fernandez, R., Griffiths, R., Aguilar, V., Tran, D., & Chester, R. (2008). Administration of medications by enrolled nurses: Perceptions of metropolitan and non-metropolitan registered nurses and nursing unit managers. *Contemporary Nurse,* 27(2), 237–245.

FitzGerald, K., Seale, N., Kerins, C., & McElvaney, R. (2008). The critical incident technique: A useful tool for conducting qualitative research. *Journal of Dental Education*, 72(3), 299–304.

Flick, U. (2014). *The Sage handbook of qualitative data analysis*. London: Sage.

Gibbs, G. (2007). *Thematic coding and categorizing: Analysing qualitative data*. London: Sage.

Gibson, T., Heartfield, M., & Cheek, J. (2002). *An examination of the role and function of the enrolled nurse and revision of competency standards.* Dickson: Australian Nursing Council Inc.

Given, L. (2008). *The SAGE encyclopedia of qualitative research methods*. Canada: Sage.

Greenglass, E., Burke, R., & Fiksenbaum, L. (2001). Workload and burnout in nurses. *Journal of Community and Applied Social Psychology,* 11(3), 211–215.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82.

Hajjar, E. R., Cafiero, A. C., & Hanlon, J. T. (2007). Polypharmacy in elderly patients. *The American journal of geriatric pharmacotherapy*, 5(4), 345-351.

Halcomb, E., Salamonson, Y., Davidson, P., Kaur, R., & Young, S. (2014). The evolution of nursing in Australian general practice: A comparative analysis of workforce surveys ten years on. *BMC Family Practice*, 15(1), 52-62.

Hanson, J., Balmer, D., & Giardino, A. (2011). Qualitative research methods for medical educators. *Academic Pediatrics*, 5, 375–386. doi:10.1016/j.acap.2011.05.001.

Hayes, B., Douglas, C., & Bonner, A. (2015). Work environment, job satisfaction, job stress and burnout among haemodialysis nurses. *Journal of Nursing Management*, 23(5), 588–598.

Health Workforce Australia. (2013). *Australia's health workforce series: Nurses in focus. Health Workforce Australia.* Retrieved from https://www.hwa.gov.au/sites/default/files/Nurses-in-Focus-FINAL.pdf

Hofler, L., & Thomas, K. (2016). Transition of New Graduate Nurses to the Workforce Challenges and Solutions in the Changing Health Care Environment. *North Carolina medical journal*, *77*(2), 133-136.

Holloway, I. (2008). *AZ of qualitative research in nursing and healthcare*. Wiley-Blackwell.

Holloway, I. & Wheeler, S. (2003). *Qualitative research in nursing* (2nd ed.). Oxford, UK: Blackwell.

Hoodless, M. & Bourke, L. (2009). Expanding the scope of practice for enrolled nurses working in an Australian rural health service: Implications for job satisfaction. *Nurse Education Today,* 29(4), 432–438.

Hussain, T., Allen, A., Halbert, J., Anderson, C., Boonyasai, R., & Cooper, L. (2015). Provider perspectives on essential functions for care management in the collaborative treatment of hypertension: The PARTNER framework. *Journal of General Internal Medicine,* 30(4), 454–461.

Hussey, P. A., & Kennedy, M. A. (2016). Instantiating informatics in nursing practice for integrated patient centred holistic models of care: a discussion paper. *Journal of Advanced Nursing,* 72(5), 1030-1041.

Irvine, F., Roberts, G., & Bradbury-Jones, C. (2008). The researcher as insider versus the researcher as outsider: Enhancing rigour through language and cultural sensitivity. In

P. Liampattong (Ed.), *Doing cross-cultural research: Ethical and methodological perspectives* (pp. 35–48). Springer: Netherlands.

Jacob, E., McKenna, L., & D'Amore, A. (2014). Comparisons of the educational preparation of registered and enrolled nurses in Australia: The educators' perspectives. *Nurse Education in Practice.* 14(6), 648-653.

Jameton, A. (1984). *Nursing practice: The ethical issues.* Englewood Cliffs, NJ: Prentice Hall.

Jacob, E., Barnett, A., Sellick, K., & McKenna, L. (2013). Scope of practice for Australian enrolled nurses: Evolution and practice issues. Contemporary Nurse: *A Journal for The Australian Nursing Profession,* 45(2), 155–163. doi:10.5172/conu.2013.45.2.155

Jourdain, G. & Chênevert, D. (2010). Job demands–resources, burnout and intention to leave the nursing profession: A questionnaire survey. *International Journal of Nursing Studies*, 47(6), 709–722.

Kane, R., Shamliyan, T., Mueller, C., Duval, S., & Wilt, T. (2007). The association of registered nurse staffing levels and patient outcomes: Systematic review and meta-analysis. *Medical Care*, 45(12), 1195–1204.

Kenny, A. & Duckett, S. (2005). An online study of Australian enrolled nurse conversion. *Journal of Advanced Nursing*, 49(4), 423–431.

Kennedy, C., O'Reilly, P., Fealy, G., Casey, M., Brady, A. M., McNamara, M., Prizeman, G., Rohde, D. & Hegarty, J. (2015). Comparative analysis of nursing and midwifery regulatory and professional bodies' scope of practice and associated decision-making frameworks: a discussion paper. *Journal of Advanced Nursing*, 71(8), 1797-1811.

Kerr, D., Lu, S., Mill, D., & McKinlay, L. (2012). Medication administration by enrolled nurses: Opinions of nurses in an Australian healthcare organization. *Nursing Forum,* 47(4), 203–209.

Kiekkas, P., Aretha, D., Karga, M., & Karanikolas, M. (2009). Self report may lead to underestimation of 'wrong dose' medication errors. *British Journal of Clinical Pharmacology,* 68(6), 963–964.

Kleinpell, R., Scanlon, A., Hibbert, D., Ganz, F., East, L., Fraser, D., & Beauchesne, M. (2014). Addressing issues impacting advanced nursing practice worldwide. *Online Journal of Issues in Nursing*, 19 (1).

Knopp-Sihota, J., Niehaus, L., Squires, J., Norton, P., & Estabrooks, C. (2015). Factors associated with rushed and missed resident care in western Canadian nursing homes:

A cross-sectional survey of health care aides. *Journal of Clinical Nursing*. 24.19-20 (2015): 2815-2825.

Lake, E. (2007). The nursing practice environment: Measurement and evidence. *Medical Care research and Review*. 64(2). 104S-122S.

Lau, R., Willetts, G., Hood, K., & Cross, W. (2014). Development of self-efficacy of newly graduated registered nurses in an aged care program. *Australasian Journal on Ageing*. 34(4), 224-228

Laurant, M., Reeves, D., Hermens, R., Braspenning, J., Grol, R., & Sibbald, B. (2005). Substitution of doctors by nurses in primary care. *Cochrane Database Systematic Review*, 2 (2).

Liaw, S., Wong, L., Chan, S., Ho, J., Mordiffi, S., Ang, S., & Ang, E. (2015). Designing and evaluating an interactive multimedia web-based simulation for developing nurses' competencies in acute nursing care: Randomized controlled trial. *Journal of Medical Internet Research,* 17(1). doi: 10.1136/bmjqs-2015-004073.

Lubbe, J. & Roets, L. (2014). Nurses' scope of practice and the implication for quality nursing care. *Journal of Nursing Scholarship,* 46(1), 58–64.

Macnee, C. (2004). *Understanding nursing research: Reading and using research in practice. Philadelphia,* PA: Lippincott, Williams & Wilkins.

Manojlovich, M., Harrod, M., Holtz, B., Hofer, T., Kuhn, L., & Krein, S. (2015). The use of multiple qualitative methods to characterize communication events between physicians and nurses. *Health Communication*, 30(1), 61–69.

Mathers, N., & Paynton, D. (2016). Rhetoric and reality in person-centred care: introducing the House of Care framework. *British Journal of General Practice,* 66(642), 12-13.

Marks, D. F. & Yardley, L. (2004). *Research methods for clinical and health psychology.* London: Sage.

Maslach, C. & Leiter., M. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it.* San Francisco, CA: Jossey-Bass.

McCaughey, C. & Traynor, M. (2010). The role of simulation in nurse education. *Nurse Education Today,* 30(8), 827–832.

McCoppin, B. & Gardiner, H. (1994). *Tradition and reality: Nursing and politics in Australia.* Melbourne: Churchill Livingstone.

McGrath, P. & Anastasi, J. (2006). Collaborative voices: Ongoing reflections on nursing competencies. *Contemporary Nurse*, 22(1), 48.

Medley, C. & Horne, C. (2005). Using simulation technology for undergraduate nursing education. *Journal of Nursing Education*, 44(1), 31–34.

Moore, C., Ewing, G., Gardener, C., White, P., Burge, P., Mahadeva, R., Howson, S., Booth, S., Ling, T., Farquhar, M. and Living with Breathlessness study team, 2016. Modifiable barriers to meeting care and support needs of patients with advanced chronic obstructive pulmonary disease (COPD) and their informal carers. *BMJ Supportive & Palliative Care,* 6(3), 399-400.

Morgan, T. K., Williamson, M., Pirotta, M., Stewart, K., Myers, S. P., & Barnes, J. (2012). A national census of medicines use: a 24-hour snapshot of Australians aged 50 years and older. *Med J Aust*, 196(1), 50-53.

Morphet, J., McKenna, L., & Considine, J. (2008). The career development year: Responding to the emergency nursing shortage in Australia. *Australasian Emergency Nursing Journal,* 11(1), 32–38.

Needleman, J., Buerhaus, P., Mattke, S., Stewart, M., & Zelevinsky, K. (2002). Nurse-staffing levels and the quality of care in hospitals. *New England Journal of Medicine,* 346(22), 1715–1722

Northern Health, (2012). Northern Health Annual report, 2012. Retrieved from. http://www.nh.org.au/documents/publications/NH-Annual-Report-2012.pdf

Northern Health, (2016). The Northern Hospital. Retrieved from http://www.nh.org.au/locations/the-northern-hospital

Northern Health, (2015). About us. Retrieved from http://www.nh.org.au/about-us

Numminen, O., Ruoppa, E., Leino-Kilpi, H., Isoaho, H., Hupli, M., & Meretoja, R. (2016). Practice environment and its association with professional competence and work-related factors: perception of newly graduated nurses. *Journal of nursing management*, 24(1), E1-E11.

Nurses Board of South Australia. (2002). Discussion paper: Unregulated care workers. Retrieved from http://www.nursesboard.sa.gov.au/pdf/nbsa_ discussion_paper_uhcw_june_2002.pdf

Nurses' Registration Act, Schedule (F), 37 (Australia). (1924). Australasian Legal Information Institute. Retrieved from http://www5.austlii.edu.au/au/legis/nsw/num_act/nra1924n37281.pdf

Nursing and Midwifery Board of Australia. (2013*). National competency standards for the enrolled nurses.* Nursing and Midwifery Board of Australia. Retrieved from

http://www.nursingmidwiferyboard.gov.au/Search.aspx?q=national%20competency%20standards%20for%20the%20enrolled%20nurse

Nursing and Midwifery Board of Australia. (2014a). *Continuing professional development for the registered nurse.* Nursing and Midwifery Board of Australia. Retrieved from http://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/FAQ/CPD-FAQ-for-nurses-and-midwives.aspx

Nursing and Midwifery Board of Australia. (2014b). *Enrolled nurses and medication administration.* Nursing and Midwifery Board of Australia. Retrieved from http://www.nursingmidwiferyboard.gov.au/Search.aspx?q=enrolled%20nurses%20and%20medication%20administration

Nursing and Midwifery Board of Australia. (2015). *Enrolled nurses and medication administration*. Fact sheet. Nursing and Midwifery Board of Australia. Retrieved from http://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/FAQ/Enrolled-nurses-and-medicine-administration.aspx

Parliament of Australia. (2008*). Practice nursing in Australia 2007–2008*. Parliament of Australia. Retrieved from http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary Library/pubs/rp/RP0708/08rp10

Patton, M. (1990). *Qualitative evaluation and research methods*. Newbury Park, CA: Sage.

Perez, B., Cummings, L., Schrag, J., Mead, H., Jewers, M. (2013). Facilitators and barriers to providing patient-centred chronic disease care to patient populations at risk for health and health care disparities in safety net settings. Retrieved from http://www.pcori.org/assets/2014/01/PCORI-Facilitators-Barriers-Providing-Patient-Centered-Chronic-Disease-Care-120613.pdf

Perry, M., Carpenter, I., Challis, D., & Hope, K. (2003). Understanding the roles of registered general nurses and care assistants in UK nursing homes. *Journal of Advanced Nursing,* 42(5), 497–505.

Pryor, J. & Buzio, A. (2013). Do 'two types' of ENs work in rehabilitation in Australia? *Journal of the Australasian Rehabilitation Nurses Association,* 16(1), 14.

Rigby, M. (2014) The core vision of person-centred care in a modern information-based society. In Achieving Integrated Care Beyond the Silos in the Advances in Healthcare (Myer I., M€uller S. & Kubitschke L., eds), IGI Global book series *Advances in*

*Healthcare Information Systems and Administration (AHISA)*, Hershey, PA: IGI Global. doi:10.4018/978-1-4666-6138-7, 1-2121.

Rocker, C. (2008). Addressing nurse-to-nurse bullying to promote nurse retention. Online *Journal of Issues in Nursing,* 13(3), 11.

Royal College of Nursing. (2014). *Specialist nurses, changing lives, saving money.* Royal College of Nursing. Retrieved from https://www.rcn.org.uk/__data/assets/pdf_file/0008/302489/003581.pdf

Ryan, D. (2009). *Enrolled nurses: Standards and criteria for the accreditation of nursing and midwifery courses leading to registration, enrolment, endorsement and authorisation in Australia – with evidence guide.* Australian Nursing and Midwifery Accreditation Council.

Ryan, D. (2010*). Enrolled nurses: Standards and criteria for the accreditation of nursing and midwifery courses leading to registration, enrolment, endorsement and authorisation in Australia – with evidence guide.* Australian Nursing and Midwifery Accreditation Council.

Sandelowski, M. (2004). *Using qualitative research. Qualitative Health Research,* 14(10), 1366–1386.

Saumure, K. & Given, L. (2008). Data saturation. *The Sage Encyclopedia of Qualitative Methods,* 1, 195–196.

Saunders, P., Huynh, A., & Goodman-Delhunty, J. (2007). Defining workplace bullying behaviour professional lay definitions of workplace bullying. *International Journal of Law and Psychiatry*, 30, 340–354.

Schluter, J., Seaton, P., & Chaboyer, W. (2008). Critical incident technique: A user's guide for nurse researchers. *Journal of Advanced Nursing*, 61(1), 107–114.

Schluter, J., Seaton, P., & Chaboyer, W. (2011). Understanding nursing scope of practice: A qualitative study. *International Journal of Nursing Studies,* 48(10), 1211–1222.

Senior, E. (2008). How general practice nurses view their expanding role. *Australian Journal of Advanced Nursing,* 26(1), 8–15.

Sidani, S., Doran, D., Porter, H., LeFort, S., O'Brien-Pallas, L., Zahn, C., & Sarkissian, S. (2006). Processes of care: Comparison between nurse practitioners and physician residents in acute care. *Nursing Leadership*, 19(1), 69–85.

Silverman, D. (Ed.). (2016). *Qualitative research.* Thousand Oaks: Sage.

Spilsbury, K. & Meyer, J. (2005). Making claims on nursing work. *Journal of Research in Nursing,* 10(1), 65–83.

Streubert, H. J. (1999). Philosophy and theory: Foundations of qualitative research. In H. J. Streubert & D. R. Carpenter (Eds.), *Qualitative research in nursing: Advancing the humanistic imperative* (2nd ed.), pp.1–13. Philadelphia, PA: Lippincott, Williams & Wilkins.

Trembath, R., & Hellier, D. (1987). *All care and responsibility: A history of nursing in Victoria 1850-1934.* Melbourne: Florence Nightingale Committee Australia Victorian Branch.

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing and Health Sciences,* 15(3), 398–405.

Van Bogaert, P., Dilles, T., Wouters, K., & Van Rompaey, B. (2014). Practice environment, work characteristics and levels of burnout as predictors of nurse reported job outcomes, quality of care and patient adverse events: A study across residential aged care services. *Scientific Research Publishing,* 4(5), 343-355. doi: http://dx.doi.org/10.4236/ojn.2014.45040

Venes, D. (2013). *Taber's cyclopedic medical dictionary*. FA Davis.

White, D., Oelke, N., Besner, J., Doran, D., Hall, L., & Giovannetti, P. (2008). Nursing scope of practice: Descriptions and challenges. *Nursing Leadership: Academy of Canadian Executive Nurses,* 21(1), 44.

Willis, W. (2007*). Foundations of qualitative research*. Thousand Oaks: Sage.

World Health Organization. (2014). *Global health and aging. World Health Organization.* Retrieved from http://www.who.int/ageing/publications/global_health.pdf

World Health Organization. (2015). *Global health observatory: World health statistics 2015*. World Health Organization. Retrieved from http://apps.who.int/iris/bitstream/10665/170250/1/9789240694439_eng.pdf?ua=1&ua=1